Application

Kennecott
Eagle Minerals

Humboldt Mill

Mining Permit Application
Volume IIG

Environmental Impact Assessment
Appendix I (1 of 4)

Project I.D.: 06W003

Kennecott Eagle Minerals Company
Ishpeming, Michigan

December 2008

Foth

Appendix I

Supplemental Hydrological and Biological Data Report

Report

Kennecott
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Project I.D.: 06W003

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Humboldt Mill
Supplemental Hydrological and Biological Data Report

Project ID: 06W003

Prepared for

Kennecott Eagle Minerals Company

ISO 14001:2004 Registered System

Prepared by

Foth Infrastructure & Environment, LLC

December 2008

Foth Infrastructure & Environment, LLC 2008

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Humboldt Mill
Supplemental Hydrological and Biological Data Report

Contents

Page

List of Abbreviations, Acronyms, and Symbols iv
1. Introduction 1
2. Biological Resources 2
   2.1 Aquatic Resources 2
      2.1.1 2007 Aquatic Resources 2
      2.1.2 2008 Aquatic Resources 2
   2.2 Terrestrial Biology 3
      2.2.1 2007 Terrestrial Biology 3
      2.2.2 2008 Terrestrial Biology 3
      2.2.3 HTDF Wetland Delineation 3
3. Groundwater 4
4. Surface Water 5
5. Basin Integrity and Vertical Stability of the HTDF 6
6. References 7

Tables

Table 3-1 Groundwater Quality Monitoring Program Parameter List
Table 3-2 2008 Groundwater Results Compared to the Drinking Water Criteria
Table 3-3 2008 Groundwater Results Compared to the GSIC
Table 4-1 Surface Water Quality Monitoring Program Parameter List
Table 4-2 Surface Water Monitoring Sites – Monitoring Requirements
Table 4-3 2008 Surface Water Results with Exceedances

Figures

Figure 1-1 Project Location
Figure 3-1 2008 Groundwater Monitoring Well Sample Locations Near the Mill
Figure 3-2 Groundwater Sample Locations Near the HTDF
Figure 3-3 May 2008 Groundwater Contours
Figure 4-1 2008 Regional Surface Water Sample Locations
Figure 4-2 2008 Surface Water Sample Locations Near the HTDF
Figure 4-3 HTDF Profile Data – February 2008
Figure 4-4 HTDF Profile Data – April 2008
Figure 4-5 HTDF Profile Data – July 2008
Figure 4-5 HTDF Profile Data – October 2008
Figure 4-7 HTDF Chemical Profiles

Appendices

Appendix A Aquatics Summary Reports
- A-1 Aquatic Survey Report – 2007
- A-2 Aquatic Survey Report – 2008
- A-3 Fish Tissue Analysis – 2008

Appendix B Terrestrial Biology Reports
- B-1 Terrestrial Biology Report – 2007
- B-2 Terrestrial Biology Reports – 2008
- B-3 HTDF Wetland Delineation

Appendix C North Jackson Groundwater Sampling Field Reports
Appendix D 2008 Groundwater Laboratory Reports
Appendix E 2008 Groundwater Database
Appendix F North Jackson Surface Water Sampling Field Reports
Appendix G 2008 Surface Water Laboratory Reports
Appendix H 2008 Surface Water Database
Appendix I Report on Basin Integrity and Vertical Stability of the HTDF

List of Abbreviations, Acronyms, and Symbols

AEM	Advanced Ecological Management
AST	aboveground storage tank
BTEX	benzene, toluene, ethylbenzene, xylene
CCI	Cleveland Cliffs, Inc.
EIA	Environmental Impact Assessment
Foth	Foth Infrastructure & Environment, LLC
GLEAS	Great Lakes and Environmental Assessment Section
GSIC	Groundwater Surface Water Interface Criteria
HTDF	Humboldt Tailings Disposal Facility
KEMC	Kennecott Eagle Minerals Company
LLHg	low level mercury
MDEQ	Michigan Department of Environmental Quality
mg/l	milligrams per liter
Mill	Humboldt Mill
ORP	oxidation reduction potential
P-51	Procedure Number 51
RCDWC	Residential/Commercial Drinking Water Criteria
ug/l	micrograms per liter
US	United States
VOC	volatile organic compound

1. Introduction

Kennecott Eagle Minerals Company (KEMC) is proposing to use the former Humboldt Mill (Mill) for processing nickel and copper ore. Tailings generated from the milling operation will be placed into the existing Humboldt Tailings Disposal Facility (HTDF). On behalf of KEMC, Foth Infrastructure & Environment, LLC (Foth) has conducted a series of environmental investigations at the site between March 2006 and October 2008. Baseline data on groundwater, surface water, and biological resources has been previously reported by Advanced Ecological Management (AEM) (2007a, 2007b, 2007c, and 2007d), Foth (2007) and King & MacGregor Environmental, Inc. (KME) (2007a and 2007b). The purpose of this data report is to provide additional groundwater, surface water, and biological resource data. The data reported herein, plus the data reported in the citations noted above, surpasses the data requirements for groundwater, surface water, and biological resources as specified in R 425.202.

The Project Site is located at 4567 County Road 601 in Humboldt Township, Marquette County, Michigan, about 24 miles west of the City of Marquette as shown in Figure 1-1. Major highways leading to the site include State Highway 95, located approximately one mile to the west and United States (US) 41/State Highway 28, located approximately one mile to the north. Access to the Mill is from County Road 601, which intersects State Highway 95.

2. Biological Resources

This section summarizes data on baseline biological resources as documented in reports provided in Appendix A and Appendix B.

2.1 Aquatic Resources

In 2007 and 2008, AEM completed environmental baseline surveys for KEMC to provide a description of the aquatic communities in the waters surrounding the Mill. Stream stations located on tributaries to the Black River, the middle branch of the Escanaba River, and Wetland Complex EE were surveyed for fish, macroinvertebrates, and habitat community rating according to the metrics outlined in the Great Lakes and Environmental Assessment Section (GLEAS) Procedure Number 51 (P-51). In addition to the stream locations, Lake Lory, the HTDF, and the Heron Rookery Pond were evaluated.

The objectives of the survey were to provide a general characterization of aquatic communities; record any threatened and endangered aquatic species encountered, and supplement findings from the previous studies (AEM, 2007a, 2007b, 2007c and 2007d).

2.1.1 2007 Aquatic Resources

Four stream locations were evaluated in 2007. Station 1 was located on the west branch of the Black River and had acceptable fish communities and macroinvertebrate communities and excellent stream habitat. Station 2, located on the east branch of the Black River, and Stations 3 and 4, located on the main branch of the Escanaba River had poor fish communities, acceptable macroinvertebrate communities, and an excellent stream habitat.

The fish community in the HTDF was predominantly comprised of suckers, shiners, minnows, and pike. In Lake Lory, the fish community was predominantly comprised of warm water species such as bluegill, largemouth bass, smallmouth bass, and black crappie. The fish community in the Heron Rookery Pond was predominantly minnows, which provide a food supply for nesting blue herons. No threatened or endangered fish species were observed in the HTDF, Lake Lory, or the Heron Rookery Pond. The complete report from AEM is provided in Appendix A-1 (AEM, 2008a).

2.1.2 2008 Aquatic Resources

Five stream locations were evaluated in 2008. Stations 1 through 5 had poor fish communities and acceptable macroinvertebrate communities. Stations 1 through 4 had excellent stream habitats and Station 5 had good stream habitat.

The fish community in the HTDF was predominantly comprised of suckers, shiners, minnows, and pike. In Lake Lory, the fish community was predominantly comprised of warm water species such as perch, bluegill, largemouth bass, and white suckers. The fish community in the Heron Rookery Pond was predominantly minnows, which provide a food supply for nesting blue herons. In Wetland Complex EE, the fish community was comprised of central mud minnows and smaller-bodied bluegill (less than two inches in length). No threatened or endangered fish species were observed in the HTDF, Lake Lory, the Heron Rookery Pond, or Wetland Complex EE. The complete report from AEM is provided in Appendix A-2 (AEM, 2008b).

In 2008, fish were collected from the HTDF and Lake Lory for anlaysis of metal content in the fish. These data are contained in Appendix A-3 (AEM, 2008c).

2.2 Terrestrial Biology

In 2007 and 2008 KME completed biological surveys for KEMC under contract to Foth in the area around the Mill and HTDF. These surveys supplement the previous biological surveys completed by KME (2007a and 2007b). The biological surveys included an evaluation of birds, mammals, frogs, and toads, threatened and endangered species, and wetland communities.

2.2.1 2007 Terrestrial Biology

In 2007, surveys for birds, small mammals, large mammals, and frogs and toads were conducted within the study area established in 2006. A total of 74 bird species were identified on site, including two state threatened species, the bald eagle and common loon. Observations of a great blue heron nesting colony and bald eagle nest were conducted. A total of five small mammal species and two large mammal species were directly identified on site. Five species of frogs and one species of toad were identified on site. All of the bird, mammal, and frog species identified are typical of those species associated with the vegetative communities on site.

The wetland determination conducted in 2006 within the detailed study area was confirmed with modifications by the MDEQ. A wetland determination was conducted north of the HTDF. One wetland appears to be regulated by the MDEQ. A preliminary wetland evaluation was conducted within an area west of the Humboldt Mill Site and is referred to as the Black River Wetland Area. The complete report from KME is provided in Appendix B-1 (KME, 2008a).

2.2.2 2008 Terrestrial Biology

KME conducted environmental surveys for KEMC to compare to baseline environmental information gathered in 2006 and supplemental surveys conducted in 2007 within the study area.

Surveys for birds, small mammals, large mammals, and frogs and toads were conducted within the study area. In the spring of 2008, 61 bird species were identified, including two state-threatened species, the bald eagle and the common loon. During the fall of 2008, 28 bird species were identified. Three small mammal and two large mammal species were directly identified on site. Three species of frogs and one species of toad were identified on site. All of the bird, mammal, frog, and toad species identified are typical of those species associated with the vegetative communities in the study area.

Indirect evidence of a large canine was observed. This indirect evidence may indicate the presence of the gray wolf. Observations of a great blue heron nesting colony and a bald eagle nest were conducted. No threatened of endangered plant species or potential habitats were identified during the surveys. The complete reports from KME are provided in Appendix B-2 (KME, 2008b and 2008c).

2.2.3 HTDF Wetland Delineation

In 2008, KME delineated wetland areas between the HTDF and Wetland EE. The documentation of this work is provided in Appendix B-3 (KME, 2008d).

3. Groundwater

Groundwater monitoring was completed at select monitoring wells around the Mill and HTDF in 2008. Groundwater samples were collected quarterly from the selected monitoring wells in March, May, July, and October during 2008. The sampled locations are shown on Figures 3-1 and 3-2. A potentiometric surface map using groundwater elevation data from May is provided as Figure
3-3.

Groundwater samples were analyzed for the parameters listed in Table 3-1 during each sampling event. In addition, MW-5 was sampled for benzene, toluene, ethylebenzene, and xylenes (BTEX). Only a partial sample could be collected from MW-102 in March due to insufficient water. The partial sample was analyzed for metals and low-level mercury (LLHg).

The groundwater sampling field reports are provided in Appendix C. Laboratory reports are provided in Appendix D. A table summarizing all groundwater data collected in 2008 is provided in Appendix E. Results from all events were compared to the R 299.5744 Residential/Commercial Drinking Water Criteria (RCDWC) and Groundwater Surface Water Interface Criteria (GSIC). Exceedances of these criteria were evaluated and are presented in Tables 3-2 and 3-3.

4. Surface Water

Surface water monitoring was completed at surface water locations around the Mill and HTDF in 2008. Surface water samples were collected quarterly from the locations listed below in February, April, July, and October during 2008:

- Collected surface water samples from EBR-001, MBR-001, WBR-001, WBR-002, WBR-003, MER-001, MER-002, MER-003, WLD-001NW, WLD-001SE, WLD-001, WLD-002, WLD-003, HMP-004, HMP-005, HMP-006, HMP-007, HMP-009, HTP-001, HTP-002, LKL-001 and LKL-002.

- Measured flow at EBR-001, MBR-001, WBR-001, WBR-002, WBR-003, MER-001, MER-002, MER-003, WLD-001NW and WLD-001SE.

- Collected flow data for Weir 1 & Weir 2.

- Measured water levels at HMP locations.

- Collected surface water samples from the pit at HPL-003 & HPL-004 (at depths of 3', 15', 60', 120' & 175').

- Collected additional ferrous iron measurements made just above pit bottom at HPL-003 and HPL-004.

- Completed field parameter water column profiles at 3-ft intervals at HPL-001 through HPL-007.

These locations are shown on Figures 4-1 and 4-2.

Surface water samples were analyzed per the specifications listed in Tables 4-1 and 4-2. No sample was collected during the February and October sampling events at WLD-001NW because it was dry and no samples were collected from WLD-001SE, HMP-006, or HTP-001 because they were frozen. No samples were collected during the July and October sampling events at HMP-006 during the October sampling event at HMP-007 due to insufficient water.

The surface water sampling field reports are provided in Appendix F. The surface water sampling laboratory reports are provided in Appendix G. A table summarizing all of the surface water quality data is provided in Appendix H. Results from all events were compared to the lowest value of the Rule 57 Water Quality Standards. Exceedances of these criteria were evaluated and are presented in Table 4-3.

Water column measurements of dissolved oxygen, oxidation reduction potential, pH, specific conductance, and temperature were recorded on three foot intervals at seven locations within the HTDF. The sampling locations are shown on Figure 4-2. The tabulated data are presented in Appendix H. Graphical representation of the data is presented on Figures 4-3 through 4-7.

5. Basin Integrity and Vertical Stability of the HTDF

In 2008, KEMC completed a study to document the basin integrity and vertical stability of the HTDF. The report documenting the results from this study is provided in Appendix I and demonstrates that the HTDF will comply with R 425.409(b).

6. References

Advanced Ecological Management. 2007a. *Humboldt Mill Aquatic Survey Report.*

Advanced Ecological Management. 2007b. *Aquatic Survey of the Humboldt Tailings Disposal Facility.*

Advanced Ecological Management. 2007c. *Summary of Fish Contaminant Data Sampled from Lake Lory and the HTDF.*

Advanced Ecological Management. 2007d. *Aquatic Survey of Wetland EE Complex.*

Advanced Ecological Management. 2008a. *Humboldt Mill Aquatic Survey Report 2007.* (Appendix A-1).

Advanced Ecological Management. 2008b. *Humboldt Mill Aquatic Survey Report 2008.* (Appendix A-2).

Advanced Ecological Management. 2008c. *Humboldt Project – Lake Lory and HTDF Summary of 2008 Fish Metals Data.* (Appendix A-3).

Foth Infrastructure and Environment, LLC, 2007. *Humboldt Mill Hydrogeological Report.*

King & MacGregor Environmental, Inc. 2007a. *Biological Survey: Plant Communities, Wildlife and Wetland Evaluation.*

King & MacGregor Environmental, Inc. 2007b. *Wetland Evaluation - Black River Wetland and Wetland EE Survey.*

King & MacGregor Environmental, Inc. 2008a. *Biological Survey Supplement: Plant Communities, Wildlife and Wetland Evaluation* (Appendix B-1).

King & MacGregor Environmental, Inc. 2008b. *Biological Survey Supplement 2008: Plant Communities and Wildlife Evaluation* (Appendix B-2).

King & MacGregor Environmental, Inc. 2008c. *Humboldt Mill – Fall Migrating Bird Survey, September 2008* (Appendix B-2).

King & MacGregor Environmental, Inc. 2008c. *Humboldt Mill Site – WWTP Discharge Wetlands.*

Tables

Table 3-1
Groundwater Quality Monitoring Program
Parameter List

Parameter	Units
Field	
Groundwater Elevation	ft MSL
Temperature	^{o}C
Dissolved Oxygen	mg/L
Specific Conductance	umhos/cm
Oxidation Reduction Potential (ORP)	mV
pH	S.U.
Turbidity	--
Metals	
Aluminum	ug/L
Antimony	ug/L
Arsenic	ug/L
Barium	ug/L
Beryllium	ug/L
Boron	ug/L
Cadmium	ug/L
Chromium	ug/L
Copper	ug/L
Cobalt	ug/L
Iron	ug/L
Lead	ug/L
Lithium	ug/L
Manganese	ug/L
Molybdenum	ug/L
Nickel	ug/L
Selenium	ug/L
Silver	ug/L
Zinc	ug/L
Mercury (low level)	ng/L
Thallium	ug/L
Vanadium	ug/L
Anions	
Alkalinity, Bicarbonate	mg/L
Alkalinity, Carbonate	mg/L
Chloride	mg/L
Fluoride	mg/L
Nitrate	ug/L
Nitrite	ug/L
Nitrogen, Ammonia	ug/L
Sulfate	ug/L
Sulfide	mg/L

Table 3-1 (*con't*)

Parameter	Units
Cations	
Calcium	mg/L
Sodium	mg/L
Magnesium	mg/L
Potassium	mg/L
Others	
Cyanide	ug/L
Hardness (calc) as CaCO3	mg/L
Organic Parameters (MW-5 only)	
Benzene	ug/L
Toluene	ug/L
Ethylbenzene	ug/L
Xylenes (total)	ug/L

Prepared by: JSL
Checked by: SVF

°C – Degrees Celsius
calc – calculated
D.O. – dissolved oxygen
ft – feet
mg/L – milligrams/Liter
msl – mean sea level
mV – millivolt
ng/L – nanograms/Liter
S.U. – standard units
umhos/cm – micromohs/centimeter
ug/L – micrograms/Liter
US – United States

Table 3-2

Groundwater Compared to Residential/Commercial Drinking Water Criteria

EventDate	Parameter	Units	Data Level	HW-1	HW-1A	HW-1A	HW-2	HW-2	HW-3	HW-4	HW-4	HW-5	HW-5	HW-5A	HW-5A	HW-6	HW-6	HW-6A	HYG-1	KMW-10	KMW-10	KMW-2	KMW-3
				HW-1	HW-1A	Dup	HW-2	Dup	HW-3	HW-4	Dup	HW-5	Dup	HW-5A	Dup	HW-6	Dup	HW-6A	HYG-1	KMW-10	Dup	KMW-2	KMW-3
3/11/2008	**Metal**																						
	Aluminum	ug/L	Tier 1	15.1 J	5.2 J		8.2 J		**192**	6.4 J	5 J	9.1 J		<4.4 U		17.8 J	5.1 J	8.3 J	4.8 J	**113**	**136**	**940**	38.2 J
	Antimony	ug/L	Tier 1	<0.10 U	**8.6**		**7.5**		0.11 J	<0.10 U	0.1 J	<0.10 U		**10.4**		<0.10 U	**8.2**	**8.0**	**11.7**	<0.10 U	<0.10 U	0.23 J	<0.10 U
	Arsenic	ug/L	Tier 1	1.5	0.32 J		0.38 J		0.81 J	3.9	4.2	6.3		0.23 J		3.6	0.21 J	0.29 J	0.27 J	4.0	3.8	**30.6**	**15.4**
	Beryllium	ug/L	Tier 1	<0.070 U	<0.070 U		<0.070 U		0.21 J	<0.070 U	<0.070 U	<0.070 U		<0.070 U		<0.070 U	<0.070 U	<0.070 U	<0.070 U	<0.070 U	<0.070 U	0.09 J	<0.070 U
	Boron	ug/L	Tier 1	92	47.7		69.9		10.3	74.2	79	91.5		52.9		74.4	110	114	51.2	50.7	46.7	42	42.5
	Cadmium	ug/L	Tier 1	<0.098 U	<0.098 U		<0.098 U		0.21 J	0.11 J	<0.098 U	<0.098 U		<0.098 U		<0.098 U	<0.098 U	<0.098 U	<0.098 U	<0.098 U	<0.098 U	0.11 J	<0.098 U
	Chromium	ug/L	Tier 1	8.2	<0.43 U		<0.43 U		<0.43 U	0.55 J	0.58 J	<0.43 U		<0.43 U		<0.43 U	2.8	2.3	<0.43 U	0.67 J	<0.43 U	4.4	<0.43 U
	Cobalt	ug/L	Tier 1	4.1	2.5		2.1		11	0.09 J	0.1 J	0.48 J		2.9		0.46 J	1.4	1.5	2.6	3.0	3.1	4.5	3.7
	Copper	ug/L	Tier 1	4.0	1.2		0.5 J		13.6	0.24 J	0.26 J	0.26 J		0.98 J		0.4 J	1.1	1.2	1.8	2.1	2.1	5.4	0.46 J
	Iron	ug/L	Tier 1	**5240**	**5060**		**1400**		**1610**	**27600**	**29300**	**5950**		**3180**		**2300**	**1320**	**1320**	116	**5620**	**5850**	**33700**	**29700**
	Lead	ug/L	Tier 1	<0.044 U	0.06 J		<0.044 U		0.05 J	2.4	2.6	0.08 J		<0.044 U		0.06 J	0.08 J	0.08 J	0.08 J	0.12 J	0.11 J	0.96 J	0.11 J
	Lithium	ug/L	Tier 1	2.3	<0.085 U		0.74 J		1.9	2.3	2.6	3.2		<0.085 U		4.1	0.12 J	<0.085 U	<0.085 U	1.8	1.7	1.8	1.5
	Manganese	ug/L	Tier 1	**415**	31.7		**308**		47.2	**874**	**929**	**431**		19.8		**319**	35.3	37.8	0.68 J	**1580**	**1550**	**6240**	**5280**
	Nickel	ug/L	Tier 1	9.7	0.59 J		0.89 J		38.9	0.27 J	0.3 J	0.53 J		25.6		0.58 J	1.2	<0.074 U	0.57 J	2.1	1.9	8.2	0.63 J
	Vanadium	ug/L	Tier 1	<0.41 U	0.74 J		<0.41 U		1.0	1.2	1.3	<0.41 U		0.56 J		<0.41 U	0.43 J	0.47 J	0.76 J	0.68 J	0.7 J	4.4	0.58 J
	Zinc	ug/L	Tier 1	7.3 J	6.2 J		6.3 J		16.3	5.6 J	6.9 J	5.1 J		7.3 J		5.7 J	3.6 J	6.4 J	7.0 J	5 J	4.4 J	11.8	8.6 J
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U	<0.50 U		<0.50 U		<0.50 U	1.1	1.2	<0.50 U		<0.50 U		<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	0.7 J
	Nitrogen, Nitrite	mg/L	Tier 1	<0.036 U	<0.036 U		0.11		<0.036 U	<0.036 U	<0.036 U	<0.036 U		<0.036 U		<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U	0.44
	Sulfate	mg/L	Tier 1	125	146		139		36.3	6.1	6.1	137		138		111	127	129	136	18	17.8	168	155
5/20/2008	**Metal**																						
	Aluminum	ug/L	Tier 1	**356**	<10.0 U	<10.0 U	<10.0 U		**142**	<10.0 U		<10.0 U		<10.0 U		<10.0 U		<10.0 U	<10.0 U	**239**		**60.9**	<10.0 U
	Antimony	ug/L	Tier 1	<0.25 U	**6.4**	**6.1**	**6.5**		<0.25 U	<0.25 U		<0.25 U		**9.3**		<0.25 U		**9.6**	**8.6**	<0.25 U		0.74	<0.25 U
	Arsenic	ug/L	Tier 1	1.0	<0.50 U	<0.50 U	<0.50 U		0.58 J	3.4		5.9		<0.50 U		3.7		<0.50 U	<0.50 U	3.0		**22.3**	**15.3**
	Beryllium	ug/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U		<0.50 U	<0.50 U		<0.50 U		<0.50 U		<0.50 U		<0.50 U	<0.50 U	<0.50 U		<0.50 U	<0.50 U
	Cadmium	ug/L	Tier 1	<0.25 U	<0.25 U	<0.25 U	<0.25 U		<0.25 U	<0.25 U		<0.25 U		<0.25 U		<0.25 U		<0.25 U	<0.25 U	<0.25 U		0.55	<0.25 U
	Chromium	ug/L	Tier 1	1.5 J	<1.2 U	<1.2 U	<1.2 U		<1.2 U	<1.2 U		<1.2 U		<1.2 U		<1.2 U		<1.2 U	<1.2 U	<1.2 U		<1.2 U	<1.2 U
	Cobalt	ug/L	Tier 1	2.2	3.4	3.2	2.5		6.0	<0.25 U		0.51		3.4		0.43 J		1.8	3.3	2.3		**101**	3.1
	Copper	ug/L	Tier 1	1.7	1.1	0.91 J	0.66 J		9.3	<0.50 U		<0.50 U		0.97 J		<0.50 U		2.5	1.0	2.2		2.4	<0.50 U
	Iron	ug/L	Tier 1	**4700**	**2360**	**2080**	**2700**		**1930**	**26700**		**5830**		**3750**		**2220**		**1950**	<125 U	**3510**		**76800**	**23900**
	Lead	ug/L	Tier 1	0.26 J	<0.25 U	<0.25 U	<0.25 U		<0.25 U	**5.9**		<0.25 U		<0.25 U		<0.25 U		0.44 J	<0.25 U	<0.25 U		0.26 J	<0.25 U
	Lithium	ug/L	Tier 1	2.6	<0.25 U	<0.25 U	0.66		1.6	3.4		3.0		<0.25 U		4.1		<0.25 U	<0.25 U	1.4		1.7	1.7
	Magnesium	ug/L	Tier 1	20500	24800	22800	21700		1740	21800		22200		23700		18100		21800	23700	5350		38800	17800
	Manganese	ug/L	Tier 1	**365**	35.2	13.6	**328**		31.9	**794**		**431**		20.6		**300**		41.8	<1.2 U	**855**		**12400**	**5220**
	Nickel	ug/L	Tier 1	4.4	0.56	0.37 J	0.95		22.6	0.35 J		0.59		26.2		0.41 J		0.55	0.41 J	1.5		**259**	0.66
	Vanadium	ug/L	Tier 1	1.2	0.62	0.52	0.27 J		0.9	0.86		<0.25 U		0.46 J		<0.25 U		0.34 J	0.54	0.61		0.45 J	0.39 J
	Zinc	ug/L	Tier 1	<12.5 U	<12.5 U	<12.5 U	<12.5 U		<12.5 U	<12.5 U		<12.5 U		<12.5 U		<12.5 U		<12.5 U	<12.5 U	<12.5 U		76	<12.5 U
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U		<0.50 U	1.2		<0.50 U		<0.50 U		<0.50 U		<0.50 U	<0.50 U	<0.50 U		0.92 J	0.77 J
	Sulfate	mg/L	Tier 1	123	142	145	143		30.8	7.8		143		141		114		133	146	16.2		**520**	154
	VOC																						
	Xylenes	ug/L	Tier 1																				
7/15/2008	**Metal**																						
	Aluminum	ug/L	Tier 1	**65.2**	2.9 J		2.2 J		**411**	3.1 J		<2.0 U	3.1 J	3.4 J		<2.0 U		2.1 J	5.7	13.4		44.4	**54**
	Antimony	ug/L	Tier 1	0.13 J	**6.2**		**7.3**		0.14	<0.050 U		<0.050 U	<0.050 U	**10**		<0.050 U		**11.3**	**7.8**	0.066 J		<0.050 U	<0.050 U
	Arsenic	ug/L	Tier 1	0.75 J	0.25		0.33		0.91	3.7		6.7	7.0	0.23		4.3		0.18 J	0.23	3.8		**40.1**	**18**
	Beryllium	ug/L	Tier 1	<0.070 U	<0.10 U		<0.10 U		0.28	<0.10 U		<0.10 U	<0.10 U	<0.10 U		<0.10 U		<0.10 U	<0.10 U	<0.10 U		<0.10 U	<0.10 U
	Boron	ug/L	Tier 1	75.9	70		79.1		11	69.8		89.4	92.8	78.8		67.4		82.8	61.2	49		72.6	40.9
	Cadmium	ug/L	Tier 1	<0.048 U	<0.050 U		<0.050 U		0.3	<0.050 U		<0.050 U	<0.050 U	<0.050 U		<0.050 U		<0.050 U	<0.050 U	<0.050 U		0.41	<0.050 U
	Chromium	ug/L	Tier 1	1.0	<0.25 U		<0.25 U		<0.25 U	0.5		<0.25 U	<0.25 U	<0.25 U		<0.25 U		<0.25 U	0.33 J	<0.25 U		0.73	0.49 J
	Cobalt	ug/L	Tier 1	2.4	3.1		2.7		12.5	0.11		0.42	0.47	3.7		0.42		2.2	3.4	2.7		**81.3**	2.9
	Copper	ug/L	Tier 1	0.92	1.0		0.43		63.6	<0.10 U		<0.10 U	<0.10 U	0.99		<0.10 U		1.3	1.1	1.0		0.48	0.33
	Iron	ug/L	Tier 1	**396**	**438**		**591**		**1400**	**38300**		**1480**	**1490**	**1970**		**2050**		**1220**	<25.0 U	**5020**		**122000**	**24700**
	Lead	ug/L	Tier 1	<0.28 U	<0.050 U		<0.050 U		0.14	**38.1**		<0.050 U	<0.050 U	0.12		<0.050 U		<0.050 U	<0.050 U	<0.050 U		0.068 J	0.093 J
	Lithium	ug/L	Tier 1	2.2	0.093 J		0.85		1.7	2.9		2.9	3.1	0.084 J		4.2		0.089 J	0.1	1.7		2.3	1.7
	Magnesium	ug/L	Tier 1	22400	22400		23500		3670	25600		24000	24100	31000		20200		23700	27200	8510		43900	17100
	Manganese	ug/L	Tier 1	**356**	8.0		**363**		46.9	**922**		**460**	**457**	12.8		**324**		39.6	7.2	**1600**		**13500**	**5180**

Prepared by: MCC2
Checked by: SVF

Table 3-2

Groundwater Compared to Residential/Commercial Drinking Water Criteria

EventDate	Parameter	Units	Data Level	HW-1	HW-1A	HW-1A	HW-2	HW-2	HW-3	HW-4	HW-4	HW-5	HW-5	HW-5A	HW-5A	HW-6	HW-6	HW-6A	HYG-1	KMW-10	KMW-10	KMW-2	KMW-3
				HW-1	HW-1A	Dup	HW-2	Dup	HW-3	HW-4	Dup	HW-5	Dup	HW-5A	Dup	HW-6	Dup	HW-6A	HYG-1	KMW-10	Dup	KMW-2	KMW-3
	Molybdenum	ug/L	Tier 1	6.6	11.4		8.4		0.063 J	0.3		13.8	14	8.8		3.6		12.4	9.9	2.3		1.1	1.1
	Nickel	ug/L	Tier 1	4.3	0.55		0.67		49.1	0.065 J		0.27	0.26	29.5		0.22		0.3	0.3	1.3		**181**	0.44
	Vanadium	ug/L	Tier 1	0.41 J	0.52		0.24		0.57	0.95		<0.050 U	<0.050 U	0.57		<0.050 U		0.36	0.54	0.54		0.58	0.69
	Zinc	ug/L	Tier 1	<2.8 U	<2.5 U		<2.5 U		21.4	<2.5 U		<2.5 U	<2.5 U	<2.5 U		<2.5 U		<2.5 U	<2.5 U	2.5 J		70	<2.5 U
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U	<0.50 U		<0.50 U		<0.50 U	0.98 J		<0.50 U	<0.50 U	<0.50 U		<0.50 U		<0.50 U	<0.50 U	<0.50 U		1.2	0.6 J
	Sulfate	mg/L	Tier 1	119	117		132		43.6	6.6		139	137	137		106		131	140	14.1		**562**	109
	VOC																						
	Xylenes	ug/L	Tier 1																				
10/13/2008																							
	Metal																						
	Aluminum	ug/L	Tier 1	26.4 J	10.5 J		<4.5 U	<4.5 U	218 J	5.9 J		49.8 J		<4.5 U	<4.5 U	<4.5 U		4.7 J	24.0 J	18.3 J		161 J	5.4 J
	Antimony	ug/L	Tier 1	<0.071 U	**11.6**		**8.8**	**8.6**	<0.071 U	<0.071 U		<0.071 U		**11.6**	**11.2**	<0.071 U		**13.4**	**11.8**	<0.071 U		<0.071 U	<0.071 U
	Arsenic	ug/L	Tier 1	0.68 J	0.60 J		0.34 J	0.34 J	0.41 J	3.3		0.51 J		0.60 J	0.48 J	4.6		0.39 J	0.73 J	4.7		**37.6**	**18.1**
	Beryllium	ug/L	Tier 1	<0.41 U	<0.41 U		<0.41 U	<0.41 U	<0.41 U	<0.41 U		<0.41 U		<0.41 U	<0.41 U	<0.41 U		<0.41 U	<0.41 U	<0.41 U		<0.41 U	<0.41 U
	Boron	ug/L	Tier 1	80.5	101		113	110	8.9	76.1		68.7		129	128	66.3		48	128	49.4		58.4	42.4
	Cadmium	ug/L	Tier 1	<0.087 U	<0.087 U		<0.087 U	<0.087 U	0.088 J	<0.087 U		<0.087 U		<0.087 U	<0.087 U	<0.087 U		<0.087 U	<0.087 U	<0.087 U		<0.087 U	<0.087 U
	Chromium	ug/L	Tier 1	<0.30 U	<0.30 U		<0.30 U	<0.30 U	<0.30 U	0.81 J		0.71 J		0.88 J	<0.30 U	<0.30 U		0.45 J	0.43 J	0.37 J		1.2	0.77 J
	Cobalt	ug/L	Tier 1	0.84 J	2.2		1.7	1.7	9.3	0.13 J		0.86 J		2.3	2.3	0.38 J		3.3	2.4	5		6.6	3.2
	Copper	ug/L	Tier 1	<0.50 U	1.7		<0.50 U	<0.50 U	20.4	<0.50 U		1.2		1	0.98 J	<0.50 U		1.4	1.7	0.83 J		0.66 J	<0.50 U
	Iron	ug/L	Tier 1	**3170**	246 J		**479**	**443**	**1560**	**53000**		**4040**		244 J	239 J	**2250**		**1320**	232 J	**6430**		**40900**	**30000**
	Lead	ug/L	Tier 1	<0.50 U	<0.50 U		<0.50 U	<0.50 U	<0.50 U	**77.8**		<0.50 U		<0.50 U	<0.50 U	<0.50 U		<0.50 U	<0.50 U	<0.50 U		<0.50 U	<0.50 U
	Lithium	ug/L	Tier 1	2.4	<0.13 U		0.99 J	1	1.9	2.6		4.1		0.15 J	<0.13 U	4.2		<0.13 U	<0.13 U	1.8		1.7	2
	Magnesium	ug/L	Tier 1	21600	23700		22600	21500	3060	25600		18700		25100	24100	19100		24900	22500	9930		23200	21700
	Manganese	ug/L	Tier 1	**406**	7.4		**349**	**332**	36.2	**914**		**75.2**		12.9	12.8	**341**		17.6	17.9	**1870**		**6880**	**6060**
	Nickel	ug/L	Tier 1	1	0.87 J		0.94 J	0.99 J	38.3	0.52 J		2.8		25.4	24.9	0.37 J		0.63 J	1.2	1.4		11.4	0.51 J
	Selenium	ug/L	Tier 1	<0.25 U	<0.25 U		<0.25 U	<0.25 U	0.44 J	<0.25 U		<0.25 U		<0.25 U	<0.25 U	<0.25 U		<0.25 U	<0.25 U	<0.25 U		<0.25 U	<0.25 U
	Vanadium	ug/L	Tier 1	<0.45 U	1.1		<0.45 U	<0.45 U	0.52 J	0.73 J		<0.45 U		0.76 J	0.64 J	<0.45 U		0.47 J	0.81 J	0.96 J		0.62 J	<0.45 U
	Zinc	ug/L	Tier 1	3.0 J	3.1 J		2.2 J	2.7 J	13.6	6		5.8		3.5 J	3.3 J	2.7 J		3.3 J	3.4 J	3.0 J		5.3	3.1 J
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U	<0.50 U		0.21	0.1	<0.50 U	1		<0.50 U		<0.50 U	<0.50 U	4.7		<0.50 U	<0.50 U	**15.6**		0.61	0.63 J
	Nitrogen, Nitrite	mg/L	Tier 1	<0.036 U	<0.036 U		<0.036 U	<0.036 U	<0.036 U	<0.036 U		<0.036 U		<0.036 U	<0.036 U	<0.036 U		<0.036 U	<0.036 U	<0.036 U		<0.036 U	<0.036 U
	Sulfate	mg/L	Tier 1	127	130		134	133	28.4	2.4 J		17.2		132	131	111		143	132	10.3		229	178
	VOC																						
	Benzene	ug/L	Tier 1																				
	Xylenes, o	ug/l	Tier 1																				

Table 3-2

Groundwater Compared to Residential/Commercial Drinking Water Criteria

EventDate	Parameter	Units	Data Level	KMW-3	KMW-4	KMW-5	KMW-7	KMW-9	KMW-9	KMW-9P	KMW-9P	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	MW-601	MW-602	MW-602	MW-603	MW-604
				Dup	KMW-4	KMW-5	KMW-7	KMW-9	Dup	KMW-9P	Dup	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	Dup	MW-602	Dup	MW-603	MW-604
3/11/2008	**Metal**																						
	Aluminum	ug/L	Tier 1	40.7 J	73.4	941	23.6 J	20 J		<44.3 U	<44.3 U	689	269000	35.6 J	1280	16.3 J	203	22300		6.1 J		13.7 J	18.7 J
	Antimony	ug/L	Tier 1	0.13 J	<0.10 U	0.12 J	<0.10 U	<0.10 U		<1.0 U	<1.0 U	0.1 J	7.4 J	<0.10 U	0.15 J	<0.10 U	0.37 J	1.1 J		<0.10 U		<0.10 U	<0.10 U
	Arsenic	ug/L	Tier 1	15.8	2.0	4.1	4.1	3.8		6 J	3.8 J	19.8	891	13.7	11.1	8.8	16.4	90.9		1.2		4.3	2.6
	Beryllium	ug/L	Tier 1	0.070 J	<0.070 U	0.34 J	0.19 J	0.08 J		<0.70 U	<0.70 U	0.17 J	28.3	<0.070 U	3.3	<0.070 U	<0.070 U	1.5 J		<0.070 U		<0.070 U	0.1 J
	Boron	ug/L	Tier 1	46.6	68.7	70.6	80.7	59.3		75.9 J	94.4 J	107	107	42.4	14.8	38.9	8.6 J	523		31.4		38	59
	Cadmium	ug/L	Tier 1	<0.098 U	<0.098 U	<0.098 U	0.1 J	<0.098 U		<0.98 U	<0.98 U	0.15 J	46.5	<0.098 U	<0.098 U	<0.098 U	0.48 J	<0.98 U		<0.098 U		<0.098 U	<0.098 U
	Chromium	ug/L	Tier 1	1.6	<0.43 U	4.5	1.4	1.0		<4.3 U	<4.3 U	2.0	4330	1.1	9.6	<0.43 U	1.7	57.7		<0.43 U		<0.43 U	<0.43 U
	Cobalt	ug/L	Tier 1	3.6	2.8	230	128	7.8		20.4	19.4	0.79 J	4940	0.7 J	11.1	0.22 J	1.7	29		0.06 J		14.8	0.64 J
	Copper	ug/L	Tier 1	0.49 J	0.96 J	1.9	0.85 J	0.9 J		1.3 J	<1.2 U	1.6	7880	1.4	2110	2.9	4.7	96.1		0.13 J		0.3 J	0.69 J
	Iron	ug/L	Tier 1	28700	4210	25600	177000	7530		183000	173000	33800	3830000	69000	274000	10100	4500	126000		10800		4180	13000
	Lead	ug/L	Tier 1	0.17 J	0.07 J	1.4	0.12 J	0.17 J		<0.44 U	<0.44 U	0.4 J	6.5 J	0.09 J	58.5	0.12 J	17.9	28.9		<0.044 U		<0.044 U	0.13 J
	Lithium	ug/L	Tier 1	1.8	0.58 J	8.8	3.1	0.28 J		4 J	5.7 J	0.68 J	255	0.91 J	1.5	1.2	0.3 J	21.1		8.8		9.0	3.3
	Manganese	ug/L	Tier 1	5630	4320	1610	19900	10300		28400	27100	6760	15700	5350	18800	973	79.6	8560		6240		2850	2370
	Nickel	ug/L	Tier 1	0.88 J	4.8	18	92	13.1		<0.74 U	<0.74 U	1.5	12200	1.3	4.8	0.17 J	5.2	73.6		0.64 J		109	0.43 J
	Vanadium	ug/L	Tier 1	0.74 J	0.47 J	1.8	4.4	2.1		<4.1 U	<4.1 U	4.0	186	2.4	17.9	0.65 J	1.6	89.5		<0.41 U		<0.41 U	0.54 J
	Zinc	ug/L	Tier 1	5.4 J	5.2 J	11.9	12	16.7		44.2 J	35.7 J	9 J	6520	10.5	441	5.4 J	594	220		4.1 J		5.5 J	4.8 J
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1	0.64 J	0.5 J	<0.50 U	1.7	0.56 J		1.3	1.2	<0.50 U		1.1	17	0.61 J	<0.50 U	6.2		<0.50 U		<0.50 U	<0.50 U
	Nitrogen, Nitrite	mg/L	Tier 1	0.42	<0.036 U	<0.036 U	1.2	0.44		<0.036 U	1.0	<0.036 U		<0.036 U	<0.36 U	0.48	0.08 J	<0.036 U		<0.036 U		<0.036 U	<0.036 U
	Sulfate	mg/L	Tier 1	154	89.8	104	846	198		1020	1040	<0.51 U		243	912	10	2.7 J	5.4		62.3		31.8	2.0 J
5/20/2008	**Metal**																						
	Aluminum	ug/L	Tier 1		12 J	3900	46.1	11.1 J		<10.0 U		66.7	507000	13 J	833	19.4 J	637	5270		32.1		30.6	321
	Antimony	ug/L	Tier 1		<0.25 U	<2.5 U	<0.25 U	<0.25 U		<0.25 U		0.56	13	<0.25 U	<0.25 U	<0.25 U	<2.5 U	<2.5 U		0.75		<0.25 U	0.55
	Arsenic	ug/L	Tier 1		1.4	6.2 J	3.6	3.7		3.9		20.1	502	12.9	10.3	8.9	79	72.7		0.6 J		2.6	1.9
	Beryllium	ug/L	Tier 1		<0.50 U	<5.0 U	<0.50 U	<0.50 U		<0.50 U		<0.50 U	82.7	<0.50 U	<0.50 U	0.94 J	<5.0 U	<5.0 U		<0.50 U		<0.50 U	<0.50 U
	Cadmium	ug/L	Tier 1		<0.25 U	<2.5 U	<0.25 U	<0.25 U		<0.25 U		<0.25 U	129	<0.25 U	<0.25 U	<0.25 U	<2.5 U	<2.5 U		<0.25 U		<0.25 U	<0.25 U
	Chromium	ug/L	Tier 1		<1.2 U	12.5 J	4.8	1.3 J		1.2 J		1.2 J	5100	<1.2 U	8.9	<1.2 U	<12.5 U	<12.5 U		<1.2 U		<1.2 U	<1.2 U
	Cobalt	ug/L	Tier 1		2.6	174	102	10.6		14.9		<0.25 U	6500	0.37 J	9.8	0.42 J	7.1	14.9		0.49 J		11.7	0.56
	Copper	ug/L	Tier 1		1.5	33.9	1.8	<0.50 U		1.5		<0.50 U	20400	0.65 J	10.6	1680	8.8 J	28.3		0.58 J		<0.50 U	2.3
	Iron	ug/L	Tier 1		3620	23500	131000	8750		199000		42900	4350000	71400	256000	9950	116000	104000		4870		2930	12100
	Lead	ug/L	Tier 1		<0.25 U	6.4	<0.25 U	<0.25 U		<0.25 U		<0.25 U	<2.5 U	<0.25 U	0.62	80.6	9.1	6.5		<0.25 U		<0.25 U	0.62
	Lithium	ug/L	Tier 1		0.49 J	12.6	3.5	0.44 J		5.1		0.61	536	1.2	1.7	1.4	<2.5 U	5.0		6.5		8.4	2.4
	Magnesium	ug/L	Tier 1		12800	15100	42200	26300		77300		8950	493000	24300	95300	12500	11500	21500		7040		7280	7470
	Manganese	ug/L	Tier 1		3980	936	15700	12100		28300		7120	17900	5870	19600	979	3560	9450		2790		2000	1150
	Nickel	ug/L	Tier 1		4.6	32.6	79.9	17.3		1.0		<0.25 U	18200	1.6	10.6	0.43 J	24	22.4		10.9		99	<0.25 U
	Vanadium	ug/L	Tier 1		<0.25 U	3.4 J	2.4	1.9		1.1		3.0	311	0.94	15.6	0.54	11.6	19.2		<0.25 U		<0.25 U	0.48 J
	Zinc	ug/L	Tier 1		<12.5 U	<125 U	<12.5 U	<12.5 U		<12.5 U		<12.5 U	9470	<12.5 U	<12.5 U	168	<125 U	<125 U		<12.5 U		<12.5 U	<12.5 U
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1		0.51 J	<0.50 U	1.4	<0.50 U		1.2		1.7	<0.50 U	1.1	16.9	0.73 J	9.4	7.4		<0.50 U		<0.50 U	<0.50 U
	Sulfate	mg/L	Tier 1		85.6	115	646	253		1100		<0.51 U	14800	273	895	8.9	26.9	7.8		49.2		29.6	11.1
	VOC																						
	Xylenes	ug/L	Tier 1														595						
7/15/2008	**Metal**																						
	Aluminum	ug/L	Tier 1		13 J	1530	24.5	14.4 J	13.8 J	10.7 J		462	491000	8.8	1160	9.0	442	8000	7320	8.9		19.1	53.8
	Antimony	ug/L	Tier 1		<0.25 U	1.2	<0.25 U	<0.25 U	<0.25 U	<0.25 U		0.1 J	17.8	<0.050 U	0.18	<0.050 U	0.18	0.6	0.52	<0.050 U		<0.050 U	<0.25 U
	Arsenic	ug/L	Tier 1		1.5	5.4	4.6	4.1	4.2	3.7		23.2	455	12.8	8.7	9.4	141	135	122	0.42		1.5	4.6
	Beryllium	ug/L	Tier 1		<0.50 U	0.2 J	<0.50 U	<0.50 U	<0.50 U	<0.50 U		0.085 J	58.2	<0.10 U	<0.070 U	7.2	<0.070 U	0.66	0.51	<0.10 U		<0.10 U	<0.50 U
	Boron	ug/L	Tier 1		58.4	71.4	70.5	58.4	55.9	89.7		84.2	297	41.8	15.8	32	299	546	506	26.4		33.4	47.2
	Cadmium	ug/L	Tier 1		<0.25 U	0.13 J	<0.25 U	<0.25 U	<0.25 U	<0.25 U		<0.048 U	124	<0.050 U	0.05 J	<0.050 U	0.12 J	0.37	0.35	<0.050 U		<0.050 U	<0.25 U
	Chromium	ug/L	Tier 1		<1.2 U	12	<1.2 U	<1.2 U	<1.2 U	<1.2 U		2.1	6350	0.83	9.9	0.28 J	8.9	25.8	21.9	0.45 J		<0.25 U	<1.2 U
	Cobalt	ug/L	Tier 1		3.2	189	123	11	11.3	22.3		0.64	7670	0.51	10.6	1.7	6.2	18.8	14.9	0.44		9.7	0.9
	Copper	ug/L	Tier 1		<0.50 U	7.9	<0.50 U	<0.50 U	<0.50 U	<0.50 U		1.4	16500	<0.10 U	5.0	7270	1.6	37.1	29.5	0.5		0.35	2.2
	Iron	ug/L	Tier 1		3690	15500	152000	10700	10900	186000		38800	5440000	81600	264000	10500	120000	112000	111000	4680		1700	14800
	Lead	ug/L	Tier 1		<0.25 U	1.9	<0.25 U	<0.25 U	<0.25 U	<0.25 U		0.28 J	0.92 J	<0.050 U	0.81 J	146	4.5	9	8.4	<0.050 U		<0.050 U	<0.25 U
	Lithium	ug/L	Tier 1		0.63	10	3.6	0.35 J	0.38 J	5.1		0.86	462	0.94	2.6	1.4	0.31	6.8	6.5	6.2		7.6	3.8
	Magnesium	ug/L	Tier 1		14000	19100	55800	32800	33500	82000		9420	563000	26100	88600	13000	13300	25400	22800	6980		7050	11000
	Manganese	ug/L	Tier 1		4020	977	17400	12100	12100	30800		5970	21000	6440	17500	1210	3530	8320	8340	2920		1470	1500

Table 3-2

Groundwater Compared to Residential/Commercial Drinking Water Criteria

EventDate	Parameter	Units	Data Level	KMW-3	KMW-4	KMW-5	KMW-7	KMW-9	KMW-9	KMW-9P	KMW-9P	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	MW-601	MW-602	MW-602	MW-603	MW-604
				Dup	KMW-4	KMW-5	KMW-7	KMW-9	Dup	KMW-9P	Dup	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	Dup	MW-602	Dup	MW-603	MW-604
	Molybdenum	ug/L	Tier 1		0.88	7.6	<0.25 U	0.48 J	0.4 J	<0.25 U		0.9	8.4	0.45	0.3	99.3	4.2	8.8	7.9	3.7		2.1	2.3
	Nickel	ug/L	Tier 1		4.9	21.9	108	17.9	17.6	0.32 J		0.94	20500	0.1	1.2	0.67	14.8	31.1	21	12.3		103	0.42 J
	Vanadium	ug/L	Tier 1		0.31 J	2.7	4.0	1.8	1.8	1.3		4.2	378	2.2	15.6	0.52	19.2	33.3	30.7	0.081 J		0.1	0.5
	Zinc	ug/L	Tier 1		<12.5 U	3.7 J	<12.5 U	<12.5 U	<12.5 U	<12.5 U		<2.8 U	9910	<2.5 U	<2.8 U	146	18.8	57.6	46.4	<2.5 U		2.9 J	<12.5 U
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1		<0.50 U	<0.50 U	1.4	0.56 J	0.53 J	1.5		2.1	<0.50 U	1.0	17.5	0.63 J	10.6	9.5	9.1	<0.50 U		<0.50 U	<0.50 U
	Sulfate	mg/L	Tier 1		80.4	102	679	264	266	977		2.2 J	17400	287	886	9.5	2.4 J	17.8	5.2	37.2		23.2	7.4
	VOC																						
	Xylenes	ug/L	Tier 1														506						
10/13/2008																							
	Metal																						
	Aluminum	ug/L	Tier 1		8.6 J	462	21.8 J	9.7 J	26.5 J	<4.5 U		263	368000	14.3 J	904	<4.5 U	489	10800		6.3 J	5.8 J	15.4 J	39.4 J
	Antimony	ug/L	Tier 1		<0.071 U	1.3	<0.071 U	<0.071 U	0.088 J	<0.071 U		<0.071 U	34.9	<0.071 U	<0.071 U	<0.071 U	2.1	0.98 J		<0.071 U	<0.071 U	<0.071 U	<0.071 U
	Arsenic	ug/L	Tier 1		1.3	4.1	4.7	3.7	4.3	3.3		27.8	491	13.8	9.7	10.5	137	368		<0.17 U	<0.17 U	2	5.5
	Beryllium	ug/L	Tier 1		<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U		<0.41 U	49.9	<0.41 U	<0.41 U	<0.41 U	<0.41 U	0.77 J		<0.41 U	<0.41 U	<0.41 U	<0.41 U
	Boron	ug/L	Tier 1		53.4	64.5	78.6	59.6	58.4	80.4		90.9	282	43.8	25.8 J	35.6	215	1060		29.9	31.4	31.3	53.6
	Cadmium	ug/L	Tier 1		<0.087 U	<0.087 U	<0.087 U	<0.087 U	<0.087 U	<0.087 U		<0.087 U	77.6	<0.087 U	<0.087 U	<0.087 U	<0.087 U	0.24 J		<0.087 U	<0.087 U	<0.087 U	<0.087 U
	Chromium	ug/L	Tier 1		0.58 J	4.2	1.3	0.99 J	1.2	0.69 J		1.8	2950	0.70 J	9.4	0.49 J	10.1	28.7		<0.30 U	<0.30 U	0.41 J	0.49 J
	Cobalt	ug/L	Tier 1		3.4	169	116	6.7	6.8	23.3		0.37 J	6030	0.32 J	10.3	0.30 J	2.8	13.2		0.52 J	0.54 J	9	0.70 J
	Copper	ug/L	Tier 1		0.89 J	4.5	<0.50 U	<0.50 U	<0.50 U	<0.50 U		218	7710	<0.50 U	1.4	156	1.3	36.2		<0.50 U	<0.50 U	<0.50 U	0.51 J
	Iron	ug/L	Tier 1		3460	10000	156000	5690	5960	172000		35200	4190000	66300	245000	10000	140000	117000		3400	3550	1890	15200
	Lead	ug/L	Tier 1		<0.50 U	0.73 J	<0.50 U	<0.50 U	<0.50 U	<0.50 U		9.9	47.1	<0.50 U	<0.50 U	3.1	2.6	10.9		<0.50 U	<0.50 U	<0.50 U	<0.50 U
	Lithium	ug/L	Tier 1		0.38 J	8.7	5	0.28 J	0.36 J	5.1		0.83 J	406	0.97 J	2.1	1.7	0.78 J	10		8.4	8.5	8.9	4.3
	Magnesium	ug/L	Tier 1		15200	16500	53300	21000	21500	71600		8630	510000	22500	86800	12900	13200	18100		9000	9250	5860	10200
	Manganese	ug/L	Tier 1		4670	858	17600	8580	9120	24900		6170	28700	5260	18300	1000	3830	7820		3620	3750	1670	1700
	Nickel	ug/L	Tier 1		5.8	23.7	103	11.4	11.3	0.46 J		0.85 J	16600	0.25 J	1.3	0.23 J	25.3	33.5		15.9	16.1	91.1	0.38 J
	Selenium	ug/L	Tier 1		<0.25 U	<0.25 U	1.1	<0.25 U	0.52 J	0.28 J		0.29 J	79.5	<0.25 U	1.1	<0.25 U	1.1	2.9		0.78 J	0.74 J	1.6	<0.25 U
	Vanadium	ug/L	Tier 1		<0.45 U	0.49 J	3.8	1.7	2	0.67 J		3.4	187	1.8	16.5	0.49 J	20.7	45.6		<0.45 U	<0.45 U	0.75 J	<0.45 U
	Zinc	ug/L	Tier 1		3.8 J	180	9.1	12.4	12.6	2.9 J		106	11000	3.6 J	7.2	11.1	24.9	72.1		6.8	7.8	6.3	3.7 J
	Inorganics																						
	Nitrogen, Ammonia	mg/L	Tier 1		<0.50 U	<0.50 U	1.4	<0.50 U	<0.50 U	1.2		1.5	<0.50 U	0.96 J	15.3	0.57 J	14.9	6.3		<0.50 U	<0.50 U	<0.50 U	<0.50 U
	Nitrogen, Nitrite	mg/L	Tier 1		<0.036 U	0.060 J	<0.036 U	<0.036 U	<0.036 U	<0.036 U		<0.036 U	1.1	<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U		<0.036 U	<0.036 U	<0.036 U	<0.036 U
	Sulfate	mg/L	Tier 1		107	119	684	180	174	880		1.9 J	14000	251	724	8.6	<0.51 U	2.2 J		51.3	52.2	24.4	3.5 J
	VOC																						
	Benzene	ug/L	Tier 1														5.5						
	Xylenes, o	ug/l	Tier 1														290						

Prepared by: MCC2
Checked by: SVF

Table 3-2

Groundwater Compared to Residential/Commercial Drinking Water Criteria

EventDate	Parameter	Units	Data Level	MW-605	MW-605	MW-606	P-602	P-604	P-604	P-605	PW-2	Residential Commercial Drinking Water Criteria	Residential Commercial Code
				MW-605	Dup	MW-606	P-602	P-604	Dup	P-605	PW-2		
3/11/2008	**Metal**												
	Aluminum	ug/L	Tier 1	**2120**		**209**	15.6 J	**678**	**560**	23.8 J	**11100**	**50**	V
	Antimony	ug/L	Tier 1	0.19 J		<0.10 U	<0.10 U	<0.10 U	0.21 J	<0.10 U	<1.0 U	**6**	A
	Arsenic	ug/L	Tier 1	7.4		1.3	7.8	0.39 J	0.47 J	7.5	**20.9**	**10**	A
	Beryllium	ug/L	Tier 1	0.12 J		0.19 J	<0.070 U	0.13 J	0.18 J	<0.070 U	<0.70 U	**4**	A
	Boron	ug/L	Tier 1	46		34.3	39.6	26.4	26.5	49.3	96.7 J	**500**	F
	Cadmium	ug/L	Tier 1	0.17 J		<0.098 U	<0.098 U	<0.098 U	<0.098 U	<0.098 U	**6.2 J**	**5**	A
	Chromium	ug/L	Tier 1	5.1		0.95 J	<0.43 U	1.4	1.1	<0.43 U	16.8	**100**	A
	Cobalt	ug/L	Tier 1	3.5		1.4	0.12 J	1.5	1.5	1.4	**229**	**40**	
	Copper	ug/L	Tier 1	18.6		54.3	0.55 J	27	26.3	0.3 J	50.6	**1000**	E
	Iron	ug/L	Tier 1	**6710**		**4300**	**3600**	**1810**	**1680**	**4970**	**24300**	**300**	E
	Lead	ug/L	Tier 1	1.8		1.7	0.06 J	1.3	0.96 J	0.2 J	**9.2 J**	**4**	L
	Lithium	ug/L	Tier 1	4.0		5.3	3.2	1.4	1.4	1.7	14.2	**170**	
	Manganese	ug/L	Tier 1	**4160**		**1500**	**1800**	39.5	37.1	**3080**	**6280**	**50**	E
	Nickel	ug/L	Tier 1	10.7		11.7	0.23 J	2.1	1.9	0.54 J	**615**	**100**	A
	Vanadium	ug/L	Tier 1	**5.3**		0.69 J	<0.41 U	1.7	1.5	0.48 J	**29.1**	**4.5**	
	Zinc	ug/L	Tier 1	20.7		15.4	4.9 J	13.6	11.1	4 J	243	**2400**	
	Inorganics												
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U		<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	**10**	N
	Nitrogen, Nitrite	mg/L	Tier 1	<0.036 U		<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U	**1**	A,N
	Sulfate	mg/L	Tier 1	9.9		28.1	1.8 J	8.0	8.1	7.2	151	**250**	E
5/20/2008	**Metal**												
	Aluminum	ug/L	Tier 1	39	30.7	27.3	**125**	**59.2**	**65.9**	10 J	12.1 J	**50**	V
	Antimony	ug/L	Tier 1	<0.25 U	<0.25 U	<0.25 U	<0.25 U	0.27 J	<0.25 U	<0.25 U	0.53	**6**	A
	Arsenic	ug/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	6.6	0.51 J	<0.50 U	9.9	<0.50 U	**10**	A
	Beryllium	ug/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	**4**	A
	Cadmium	ug/L	Tier 1	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	2.8	**5**	A
	Chromium	ug/L	Tier 1	<1.2 U	1.3 J	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	**100**	A
	Cobalt	ug/L	Tier 1	1.2	1.3	0.51	0.37 J	0.9	0.9	1.8	18.5	**40**	
	Copper	ug/L	Tier 1	3.3	1.7	1.2	1.3	2.0	1.4	<0.50 U	2.8	**1000**	E
	Iron	ug/L	Tier 1	150 J	174 J	**1300**	**2560**	**351**	**340**	**5870**	<125 U	**300**	E
	Lead	ug/L	Tier 1	0.42 J	<0.25 U	<0.25 U	0.31 J	<0.25 U	<0.25 U	<0.25 U	<0.25 U	**4**	L
	Lithium	ug/L	Tier 1	1.9	2.1	4.5	4.4	0.4 J	0.45 J	1.9	7.4	**170**	
	Magnesium	ug/L	Tier 1	10300	9640	11300	6410	7850	8010	11800	27700	**400000**	
	Manganese	ug/L	Tier 1	**1690**	**1730**	**569**	**1770**	18	17.7	**3680**	**2060**	**50**	E
	Nickel	ug/L	Tier 1	3.8	2.9	3.6	0.51	0.97	1.2	0.3 J	73.4	**100**	A
	Vanadium	ug/L	Tier 1	<0.25 U	0.33 J	<0.25 U	0.41 J	0.7	0.72	0.52	0.36 J	**4.5**	
	Zinc	ug/L	Tier 1	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	47.4	**2400**	
	Inorganics												
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	**10**	N
	Sulfate	mg/L	Tier 1	11.4	11.4	29	2.1 J	11	11	4.3	181	**250**	E
	VOC												
	Xylenes	ug/L	Tier 1									**280**	E
7/15/2008	**Metal**												
	Aluminum	ug/L	Tier 1	<10.0 U		33.9	**189**	46.4		30.2	18.6	**50**	V
	Antimony	ug/L	Tier 1	<0.25 U		0.095 J	<0.050 U	<0.25 U		<0.25 U	0.092 J	**6**	A
	Arsenic	ug/L	Tier 1	<0.50 U		0.21	8.1	<0.50 U		**10.2**	0.2	**10**	A
	Beryllium	ug/L	Tier 1	<0.50 U		<0.10 U	0.1 J	<0.50 U		<0.50 U	<0.10 U	**4**	A
	Boron	ug/L	Tier 1	36.7		27.8	34.8	17.1		43.6	83.3	**500**	F
	Cadmium	ug/L	Tier 1	<0.25 U		<0.050 U	<0.050 U	<0.25 U		<0.25 U	1.5	**5**	A
	Chromium	ug/L	Tier 1	<1.2 U		0.32 J	0.85	<1.2 U		<1.2 U	<0.25 U	**100**	A
	Cobalt	ug/L	Tier 1	0.76		0.48	0.65	0.64		1.6	16.6	**40**	
	Copper	ug/L	Tier 1	1.1		1.5	2.0	0.88 J		<0.50 U	1.6	**1000**	E
	Iron	ug/L	Tier 1	<125 U		**501**	**3120**	173 J		**5680**	70.1	**300**	E
	Lead	ug/L	Tier 1	<0.25 U		<0.050 U	0.32	<0.25 U		<0.25 U	<0.050 U	**4**	L
	Lithium	ug/L	Tier 1	2.2		3.8	5	0.28 J		2.1	7.8	**170**	
	Magnesium	ug/L	Tier 1	9060		8850	6490	8360		13200	35500	**400000**	
	Manganese	ug/L	Tier 1	**1050**		**612**	**1880**	8		**3080**	**490**	**50**	E

Table 3-2

Groundwater Compared to Residential/Commercial Drinking Water Criteria

EventDate	Parameter	Units	Data Level	MW-605	MW-605	MW-606	P-602	P-604	P-604	P-605	PW-2	Residential Commercial Drinking Water Criteria	Residential Commercial Code
				MW-605	Dup	MW-606	P-602	P-604	Dup	P-605	PW-2		
	Molybdenum	ug/L	Tier 1	1.8		7.9	4.0	3.1		5.3	0.26	**73**	
	Nickel	ug/L	Tier 1	2.1		5.7	1.2	1.1		0.48 J	71	**100**	A
	Vanadium	ug/L	Tier 1	<0.25 U		0.23	0.51	0.65		0.5	0.16	**4.5**	
	Zinc	ug/L	Tier 1	<12.5 U		<2.5 U	<2.5 U	<12.5 U		<12.5 U	37.7	**2400**	
	Inorganics												
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U		<0.50 U	<0.50 U	<0.50 U		<0.50 U	<0.50 U	**10**	N
	Sulfate	mg/L	Tier 1	8.4		27.3	2.2 J	10.7		5.0	177	**250**	E
	VOC												
	Xylenes	ug/L	Tier 1									**280**	E
10/13/2008													
	Metal												
	Aluminum	ug/L	Tier 1	5.5 J	5.3 J	36.4 J	141 J	5.9 J		15.4 J	**2420**	**50**	V
	Antimony	ug/L	Tier 1	0.18 J	0.16 J	<0.071 U	<0.071 U	<0.071 U		<0.071 U	0.21 J	**6**	A
	Arsenic	ug/L	Tier 1	0.67 J	0.79 J	<0.17 U	7.9	<0.17 U		8.3	7.4	**10**	A
	Beryllium	ug/L	Tier 1	<0.41 U	<0.41 U	<0.41 U	<0.41 U	<0.41 U		<0.41 U	<0.41 U	**4**	A
	Boron	ug/L	Tier 1	49.9	47.6	26	33	24.7		48	87.2	**500**	F
	Cadmium	ug/L	Tier 1	0.29 J	0.26 J	<0.087 U	<0.087 U	<0.087 U		<0.087 U	2.5	**5**	A
	Chromium	ug/L	Tier 1	<0.30 U	0.65 J	<0.30 U	1.4	0.34 J		<0.30 U	4.2	**100**	A
	Cobalt	ug/L	Tier 1	1.4	1.4	0.11 J	0.30 J	0.40 J		1.9	32.4	**40**	
	Copper	ug/L	Tier 1	1.9	2	1.1	1.1	0.59 J		<0.50 U	16.7	**1000**	E
	Iron	ug/L	Tier 1	112 J	130 J	129 J	**5050**	37.1 J		**5520**	**5010**	**300**	E
	Lead	ug/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U		<0.50 U	1.5	**4**	L
	Lithium	ug/L	Tier 1	2.2	2.1	3.7	4.5	0.34 J		1.9	10.1	**170**	
	Magnesium	ug/L	Tier 1	10800	10800	8010	6400	9310		11400	37500	**400000**	
	Manganese	ug/L	Tier 1	**4070**	**4090**	**422**	**2180**	6.5		**3050**	**1470**	**50**	E
	Nickel	ug/L	Tier 1	3.7	4	3.2	1.1	1		0.42 J	**132**	**100**	A
	Selenium	ug/L	Tier 1	<0.25 U	0.38 J	12.6	<0.25 U	<0.25 U		<0.25 U	0.64 J	**50**	A
	Vanadium	ug/L	Tier 1	<0.45 U	<0.45 U	<0.45 U	<0.45 U	<0.45 U		<0.45 U	**6.8**	**4.5**	
	Zinc	ug/L	Tier 1	4.4 J	4.3 J	4.8 J	3.5 J	4.7 J		4.2 J	61.2	**2400**	
	Inorganics												
	Nitrogen, Ammonia	mg/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U		1	<0.50 U	**10**	N
	Nitrogen, Nitrite	mg/L	Tier 1	<0.036 U	<0.036 U	<0.036 U	<0.036 U	<0.036 U		<0.036 U	<0.036 U	**1**	A,N
	Sulfate	mg/L	Tier 1	7.5	7.6	22.9	2.2 J	10.2		5.4	172	**250**	E
	VOC												
	Benzene	ug/L	Tier 1									**5**	A
	Xylenes, o	ug/l	Tier 1									**280**	E

Notes:

ug/L = micrograms/liter

VOC = volatile organic compound

A = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

E = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Nat Res & EPA Act, 1994 PA 451, as amended.

F = Criterion is based on adverse impacts to plant life and phytotxicity.

J = Concentration detected equal to or greater than the method detection limit but less than the reporting limit.

L = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(10) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specified rules.

N = The concentrations of all potential sources of nitrate-nitrogen (e.g., ammonia-N, nitrite-N, nitrate-N) in groundwater that is used as a source of drinking water shall not, when added together, exceed the nitrate drinking water criterion of 10,000 ug/

U = The analyte was not detected at or above the reporting limit.

V = Criterion is the aesthetic drinking water value as required by Section 20120(a)(5) of the NREPA. Concentrations up to 200 ug/L may be acceptable, and still allow for drinking water use, as part of a site-specific cleanup under Section 20120a(2) of the

Residential Commercial I drinking water criteria source = MDEQ Part 201 generic cleanup criteria and screening levels

Results were compared to the MDEQ res/com I DW criteria. Exceedances are highlighted.

Table 3-3

Groundwater Results Compared to the Groundwater Surface Water Interface

EventDate	Parameter	Units	Data Level	HW-1	HW-1A	HW-1A	HW-2	HW-2	HW-3	HW-4	HW-4	HW-5	HW-5	HW-5A	HW-5A	HW-6	HW-6	HW-6A	HYG-1	KMW-10	KMW-10	KMW-2
				HW-1	HW-1A	Dup	HW-2	Dup	HW-3	HW-4	Dup	HW-5	Dup	HW-5A	Dup	HW-6	Dup	HW-6A	HYG-1	KMW-10	Dup	KMW-2
3/11/2008	**Metal**																					
	Arsenic	ug/L	Tier 1	1.5	0.32 J		0.38 J		0.81 J	3.9	4.2	6.3		0.23 J		3.6	0.21 J	0.29 J	0.27 J	4.0	3.8	30.6
	Barium	ug/L	Tier 1	14.4	78.9		15		13.3	148	158	113		52.2		36.6	42.9	43.5	55.9	17.5	17.4	**247**
	Beryllium	ug/L	Tier 1	<0.070 U	<0.070 U		<0.070 U		0.21 J	<0.070 U	<0.070 U	<0.070 U		<0.070 U		<0.070 U	<0.070 U	<0.070 U	<0.070 U	<0.070 U	<0.070 U	0.09 J
	Cadmium	ug/L	Tier 1	<0.098 U	<0.098 U		<0.098 U		0.21 J	0.11 J	<0.098 U	<0.098 U		<0.098 U		<0.098 U	<0.098 U	<0.098 U	<0.098 U	<0.098 U	<0.098 U	0.11 J
	Chromium	ug/L	Tier 1	8.2	<0.43 U		<0.43 U		<0.43 U	0.55 J	0.58 J	<0.43 U		<0.43 U		<0.43 U	2.8	2.3	<0.43 U	0.67 J	<0.43 U	4.4
	Cobalt	ug/L	Tier 1	4.1	2.5		2.1		11	0.09 J	0.1 J	0.48 J		2.9		0.46 J	1.4	1.5	2.6	3	3.1	4.5
	Copper	ug/L	Tier 1	4.0	1.2		0.5 J		**13.6**	0.24 J	0.26 J	0.26 J		0.98 J		0.4 J	1.1	1.2	1.8	2.1	2.1	**5.4**
	Cyanide	mg/L	Tier 1	<0.0060 P,U	**0.015 J**		**0.019 J**		<0.0060 P,U	**0.015 J**	**0.016 J**	**0.021**		**0.018 J**		**0.019 J**	**0.023**	**0.022**	**0.016 J**	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U
	Lead	ug/L	Tier 1	<0.044 U	0.06 J		<0.044 U		0.05 J	2.4	2.6	0.08 J		<0.044 U		0.06 J	0.08 J	0.08 J	0.08 J	0.12 J	0.11 J	0.96 J
	Manganese	ug/L	Tier 1	415	31.7		308		47.2	874	929	431		19.8		319	35.3	37.8	0.68 J	**1580**	**1550**	**6240**
	Mercury - low level	ng/L	Tier 1	0.758	0.803		**1.44**		0.21 J	0.416 J	0.495 J	0.223 J		0.666		0.276 J	0.812	0.717	0.934	0.771	0.577	**5.45**
	Nickel	ug/L	Tier 1	9.7	0.59 J		0.89 J		**38.9**	0.27 J	0.3 J	**0.53 J**		25.6		0.58 J	1.2	<0.074 U	0.57 J	2.1	1.9	8.2
	Selenium	ug/L	Tier 1	0.32 J	0.28 J		0.26 J		<0.15 U	<0.15 U	0.22 J	0.16 J		0.25 J		<0.15 U	<0.15 U	0.51 J	<0.15 U	<0.15 U	0.54 J	0.35 J
	Silver	ug/L	Tier 1	<1.1 P,U	<1.1 P,U		<1.1 P,U		<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U		<1.1 P,U		<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	**0.25 J**
	Vanadium	ug/L	Tier 1	<0.41 U	0.74 J		<0.41 U		1.0	1.2	1.3	<0.41 U		0.56 J		<0.41 U	0.43 J	0.47 J	0.76 J	0.68 J	0.7 J	4.4
	Zinc	ug/L	Tier 1	7.3 J	6.2 J		6.3 J		16.3	5.6 J	6.9 J	5.1 J		7.3 J		5.7 J	3.6 J	6.4 J	7 J	5.0 J	4.4 J	11.8
	VOC																					
	Ethylbenzene	ug/L	Tier 1																			
	Xylenes, m + p	ug/L	Tier 1																			
	xylenes, o	ug/L	Tier 1																			
5/20/2008	**Metal**																					
	Arsenic	ug/L	Tier 1	1.0	<0.50 U	<0.50 U	<0.50 U		0.58 J	3.4		5.9		<0.50 U		3.7		<0.50 U	<0.50 U	3.0		22.3
	Barium	ug/L	Tier 1	17.1	52.4	50.9	16.3		8.9	136		99.4		48.1		33.8		52.2	52.6	12.1		**426**
	Beryllium	ug/L	Tier 1	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U		<0.50 P,U	<0.50 P,U		<0.50 P,U		<0.50 P,U		<0.50 P,U		<0.50 P,U	<0.50 P,U	<0.50 P,U		<0.50 P,U
	Cadmium	ug/L	Tier 1	<0.25 U	<0.25 U	<0.25 U	<0.25 U		<0.25 U	<0.25 U		<0.25 U		<0.25 U		<0.25 U		<0.25 U	<0.25 U	<0.25 U		0.55
	Chromium	ug/L	Tier 1	1.5 J	<1.2 U	<1.2 U	<1.2 U		<1.2 U	<1.2 U		<1.2 U		<1.2 U		<1.2 U		<1.2 U	<1.2 U	<1.2 U		<1.2 U
	Cobalt	ug/L	Tier 1	2.2	3.4	3.2	2.5		6.0	<0.25 U		0.51		3.4		0.43 J		1.8	3.3	2.3		**101**
	Copper	ug/L	Tier 1	1.7	1.1	0.91 J	0.66 J		**9.3**	<0.50 U		<0.50 U		0.97 J		<0.50 U		2.5	1.0	2.2		2.4
	Cyanide	mg/L	Tier 1	<0.0060 P,U	**0.011 J**	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U		**0.0085 J**		**0.0086 J**		<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U
	Lead	ug/L	Tier 1	0.26 J	<0.25 U	<0.25 U	<0.25 U		<0.25 U	**5.9**		<0.25 U		<0.25 U		<0.25 U		0.44 J	<0.25 U	<0.25 U		0.26 J
	Lithium	ug/L	Tier 1	2.6	<0.25 U	<0.25 U	0.66		1.6	3.4		3.0		<0.25 U		4.1		<0.25 U	<0.25 U	1.4		1.7
	Manganese	ug/L	Tier 1	365	35.2	13.6	328		31.9	794		431		20.6		300		41.8	<1.2 U	855		**12400**
	Mercury - low level	ng/L	Tier 1	1.24	0.581	0.913	**1.3**		0.438 J	0.996		0.506		0.621		0.419 J		**1.45**	0.996	**1.82**		**2.57**
	Nickel	ug/L	Tier 1	4.4	0.56	0.37 J	0.95		22.6	0.35 J		0.59		26.2		0.41 J		0.55	0.41 J	1.5		**259**
	Selenium	ug/L	Tier 1	<1.2 U	<1.2 U	<1.2 U	<1.2 U		<1.2 U	<1.2 U		<1.2 U		<1.2 U		<1.2 U		<1.2 U	<1.2 U	<1.2 U		<1.2 U
	Silver	ug/L	Tier 1	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U		<0.50 P,U	<0.50 P,U		**0.6 J**		<0.50 P,U		<0.50 P,U		<0.50 P,U	<0.50 P,U	<0.50 P,U		<0.50 P,U
	Vanadium	ug/L	Tier 1	1.2	0.62	0.52	0.27 J		0.9	0.86		<0.25 U		0.46 J		<0.25 U		0.34 J	0.54	0.61		0.45 J
	Zinc	ug/L	Tier 1	<12.5 U	<12.5 U	<12.5 U	<12.5 U		<12.5 U	<12.5 U		<12.5 U		<12.5 U		<12.5 U		<12.5 U	<12.5 U	<12.5 U		**76**
	VOC																					
	Ethylbenzene	ug/L	Tier 1																			
	Xylenes	ug/L	Tier 1																			
	VOC-PAH																					
	Naphthalene	ug/L	Tier 1																			
7/15/2008	**Metal**																					
	Arsenic	ug/L	Tier 1	0.75 J	0.25		0.33		0.91	3.7		6.7	7	0.23		4.3		0.18 J	0.23	3.8		40.1
	Barium	ug/L	Tier 1	15.4	38.4		17.4		17.6	145		106	106	47.8		36.7		61.7	44.5	18.5		**407**
	Beryllium	ug/L	Tier 1	<0.070 U	<0.10 U		<0.10 U		0.28	<0.10 U		<0.10 U	<0.10 U	<0.10 U		<0.10 U		<0.10 U	<0.10 U	<0.10 U		<0.10 U
	Cadmium	ug/L	Tier 1	<0.048 U	<0.050 U		<0.050 U		0.3	<0.050 U		<0.050 U	<0.050 U	<0.050 U		<0.050 U		<0.050 U	<0.050 U	<0.050 U		0.41
	Chromium	ug/L	Tier 1	1.0	<0.25 U		<0.25 U		<0.25 U	0.5		<0.25 U	<0.25 U	<0.25 U		<0.25 U		<0.25 U	0.33 J	<0.25 U		0.73
	Cobalt	ug/L	Tier 1	2.4	3.1		2.7		12.5	0.11		0.42	0.47	3.7		0.42		2.2	3.4	2.7		81.3
	Copper	ug/L	Tier 1	0.92	1.0		0.43		**63.6**	<0.10 U		<0.10 U	<0.10 U	0.99		<0.10 U		1.3	1.1	1.0		0.48
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U		<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U
	Lead	ug/L	Tier 1	<0.28 U	<0.050 U		<0.050 U		0.14	**38.1**		<0.050 U	<0.050 U	0.12		<0.050 U		<0.050 U	<0.050 U	<0.050 U		0.068 J
	Manganese	ug/L	Tier 1	356	8.0		363		46.9	922		460	457	12.8		324		39.6	7.2	**1600**		**13500**
	Mercury - low level	ng/L	Tier 1	0.896	**1.46**		**1.58**		0.32 J	**1.35**		**3.67**	0.604	**1.49**		0.69		0.907	**1.49**	0.74		**1.81**
	Nickel	ug/L	Tier 1	4.3	0.55		0.67		**49.1**	0.065 J		0.27	0.26	**29.5**		0.22		0.3	0.3	1.3		**181**
	Selenium	ug/L	Tier 1	<0.38 U	<0.25 U		<0.25 U		0.87	<0.25 U		<0.25 U	<0.25 U	<0.25 U		<0.25 U		<0.25 U	<0.25 U	<0.25 U		<0.25 U
	Silver	ug/L	Tier 1	<0.10 U	<0.10 U		<0.10 U		<0.10 U	<0.10 U		<0.10 U	<0.10 U	<0.10 U		<0.10 U		<0.10 U	<0.10 U	0.13 J		<0.10 U
	Vanadium	ug/L	Tier 1	0.41 J	0.52		0.24		0.57	0.95		<0.050 U	<0.050 U	0.57		<0.050 U		0.36	0.54	0.54		0.58
	Zinc	ug/L	Tier 1	<2.8 U	<2.5 U		<2.5 U		21.4	<2.5 U		<2.5 U	<2.5 U	<2.5 U		<2.5 U		<2.5 U	<2.5 U	2.5 J		**70**
	VOC																					
	Ethylbenzene	ug/L	Tier 1																			
	Xylenes	ug/L	Tier 1																			
	VOC-PAH																					
	Naphthalene	ug/L	Tier 1																			

Table 3-3

Groundwater Results Compared to the Groundwater Surface Water Interface

EventDate	Parameter	Units	Data Level	HW-1	HW-1A	HW-1A	HW-2	HW-2	HW-3	HW-4	HW-4	HW-5	HW-5	HW-5A	HW-5A	HW-6	HW-6	HW-6A	HYG-1	KMW-10	KMW-10	KMW-2
				HW-1	HW-1A	Dup	HW-2	Dup	HW-3	HW-4	Dup	HW-5	Dup	HW-5A	Dup	HW-6	Dup	HW-6A	HYG-1	KMW-10	Dup	KMW-2
10/13/2008																						
	Metal																					
	Arsenic	ug/L	Tier 1	0.68 J	0.60 J		0.34 J	0.34 J	0.41 J	3.3		0.51 J		0.60 J	0.48 J	4.6		0.39 J	0.73 J	4.7		37.6
	Barium	ug/L	Tier 1	22.1	53		20.1	19	10.3	136		7.6		42.7	42.2	35.9		61	42.2	24.1		**360**
	Beryllium	ug/L	Tier 1	<0.41 P,U	<0.41 P,U		<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U		<0.41 P,U		<0.41 P,U	<0.41 P,U	<0.41 P,U		<0.41 P,U	<0.41 P,U	<0.41 P,U		<0.41 P,U
	Cadmium	ug/L	Tier 1	<0.087 U	<0.087 U		<0.087 U	<0.087 U	0.088 J	<0.087 U		<0.087 U		<0.087 U	<0.087 U	<0.087 U		<0.087 U	<0.087 U	<0.087 U		<0.087 U
	Chromium	ug/L	Tier 1	<0.30 U	<0.30 U		<0.30 U	<0.30 U	<0.30 U	0.81 J		0.71 J		0.88 J	<0.30 U	<0.30 U		0.45 J	0.43 J	0.37 J		1.2
	Cobalt	ug/L	Tier 1	0.84 J	2.2		1.7	1.7	9.3	0.13 J		0.86 J		2.3	2.3	0.38 J		3.3	2.4	5		6.6
	Copper	ug/L	Tier 1	<0.50 U	1.7		<0.50 U	<0.50 U	**20.4**	<0.50 U		1.2		1	0.98 J	<0.50 U		1.4	1.7	0.83 J		0.66 J
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U
	Lead	ug/L	Tier 1	<0.50 U	<0.50 U		<0.50 U	<0.50 U	<0.50 U	**77.8**		<0.50 U		<0.50 U	<0.50 U	<0.50 U		<0.50 U	<0.50 U	<0.50 U		<0.50 U
	Lithium	ug/L	Tier 1	2.4	<0.13 U		0.99 J	1	1.9	2.6		4.1		0.15 J	<0.13 U	4.2		<0.13 U	<0.13 U	1.8		1.7
	Manganese	ug/L	Tier 1	406	7.4		349	332	36.2	914		75.2		12.9	12.8	341		17.6	17.9	**1870**		**6880**
	Mercury - low level	ng/L	Tier 1	0.528	0.768		**1.43**	**1.7**	0.179 J	0.841		0.354 J		0.603	0.605	0.246 J		1.01	1.06	0.642		0.843
	Nickel	ug/L	Tier 1	1	0.87 J		0.94 J	0.99 J	**38.3**	0.52 J		2.8		25.4	24.9	0.37 J		0.63 J	1.2	1.4		11.4
	Selenium	ug/L	Tier 1	<0.25 U	<0.25 U		<0.25 U	<0.25 U	0.44 J	<0.25 U		<0.25 U		<0.25 U	<0.25 U	<0.25 U		<0.25 U	<0.25 U	<0.25 U		<0.25 U
	Silver	ug/L	Tier 1	<0.25 P,U	<0.25 P,U		<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U		<0.25 P,U		<0.25 P,U	<0.25 P,U	<0.25 P,U		<0.25 P,U	<0.25 P,U	<0.25 P,U		<0.25 P,U
	Vanadium	ug/L	Tier 1	<0.45 U	1.1		<0.45 U	<0.45 U	0.52 J	0.73 J		<0.45 U		0.76 J	0.64 J	<0.45 U		0.47 J	0.81 J	0.96 J		0.62 J
	Zinc	ug/L	Tier 1	3.0 J	3.1 J		2.2 J	2.7 J	13.6	6		5.8		3.5 J	3.3 J	2.7 J		3.3 J	3.4 J	3.0 J		5.3
	VOC																					
	Ethylbenzene	ug/l	Tier 1																			
	Xylenes, m + p	ug/L	Tier 1																			
	Xylenes, o	ug/l	Tier 1																			

Table 3-3

Groundwater Results Compared to the Groundwater Surface Water Interface

EventDate	Parameter	Units	Data Level	KMW-3	KMW-3	KMW-4	KMW-5	KMW-7	KMW-9	KMW-9P	KMW-9P	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	MW-601	MW-602	MW-602	MW-603
				KMW-3	Dup	KMW-4	KMW-5	KMW-7	KMW-9	KMW-9P	Dup	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	Dup	MW-602	Dup	MW-603
3/11/2008	**Metal**																					
	Arsenic	ug/L	Tier 1	15.4	15.8	2.0	4.1	4.1	3.8	6 J	3.8 J	19.8	891	13.7	11.1	8.8	16.4	90.9		1.2		4.3
	Barium	ug/L	Tier 1	78.8	78.4	41	16.3	49	66.4	42.7	41.1	74.1	6.5 J	89.8	374	29.2	14.7	405		13.8		8.6
	Beryllium	ug/L	Tier 1	<0.070 U	0.070 J	<0.070 U	0.34 J	0.19 J	0.08 J	<0.70 P,U	<0.70 P,U	0.17 J	28.3	<0.070 U	3.3	<0.070 U	<0.070 U	1.5 J		<0.070 U		<0.070 U
	Cadmium	ug/L	Tier 1	<0.098 U	<0.098 U	<0.098 U	<0.098 U	0.1 J	<0.098 U	<0.98 U	<0.98 U	0.15 J	46.5	<0.098 U	<0.098 U	<0.098 U	0.48 J	<0.98 U		<0.098 U		<0.098 U
	Chromium	ug/L	Tier 1	<0.43 U	1.6	<0.43 U	4.5	1.4	1.0	<4.3 U	<4.3 U	2.0	4330	1.1	9.6	<0.43 U	1.7	57.7		<0.43 U		<0.43 U
	Cobalt	ug/L	Tier 1	3.7	3.6	2.8	230	128	7.8	20.4	19.4	0.79 J	4940	0.7 J	11.1	0.22 J	1.7	29		0.06 J		14.8
	Copper	ug/L	Tier 1	0.46 J	0.49 J	0.96 J	1.9	0.85 J	0.9 J	1.3 J	<1.2 U	1.6	7880	1.4	2110	2.9	4.7	96.1		0.13 J		0.3 J
	Cyanide	mg/L	Tier 1	0.0093 J	0.012 J	<0.0060 P,U	0.017 J	0.012 J	0.0088 J	<0.0060 P,U	<0.0060 P,U	0.012 J		<0.0060 P,U	0.013 J	0.013 J	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U		<0.0060 P,U
	Lead	ug/L	Tier 1	0.11 J	0.17 J	0.07 J	1.4	0.12 J	0.17 J	<0.44 U	<0.44 U	0.4 J	6.5 J	0.09 J	58.5	0.12 J	17.9	28.9		<0.044 U		<0.044 U
	Manganese	ug/L	Tier 1	5280	5630	4320	1610	19900	10300	28400	27100	6760	15700	5350	18800	973	79.6	8560		6240		2850
	Mercury - low level	ng/L	Tier 1	0.64	0.359 J	1.14	1.42	0.243 J	0.409 J	0.481 J	0.339 J	2.01	114	0.423 J	27.1	<0.16 U	2.62	21		0.356 J		0.297 J
	Nickel	ug/L	Tier 1	0.63 J	0.88 J	4.8	18	92	13.1	<0.74 U	<0.74 U	1.5	12200	1.3	4.8	0.17 J	5.2	73.6		0.64 J		109
	Selenium	ug/L	Tier 1	0.28 J	0.45 J	<0.15 U	<0.15 U	1.2	0.24 J	<1.5 U	3.1 J	0.35 J	11.2	<0.15 U	2.0	0.25 J	0.17 J	7.8 J		<0.15 U		0.72 J
	Silver	ug/L	Tier 1	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	2.7 J	<1.1 P,U	<1.1 P,U	0.12 J	<1.1 P,U	<1.1 P,U		<1.1 P,U		<1.1 P,U
	Vanadium	ug/L	Tier 1	0.58 J	0.74 J	0.47 J	1.8	4.4	2.1	<4.1 U	<4.1 U	4.0	186	2.4	17.9	0.65 J	1.6	89.5		<0.41 U		<0.41 U
	Zinc	ug/L	Tier 1	8.6 J	5.4 J	5.2 J	11.9	12	16.7	44.2 J	35.7 J	9 J	6520	10.5	441	5.4 J	594	220		4.1 J		5.5 J
	VOC																					
	Ethylbenzene	ug/L	Tier 1														21.3					
	Xylenes, m + p	ug/L	Tier 1														208					
	xylenes, o	ug/L	Tier 1														206					
5/20/2008	**Metal**																					
	Arsenic	ug/L	Tier 1	15.3		1.4	6.2 J	3.6	3.7	3.9		20.1	502	12.9	10.3	8.9	79	72.7		0.6 J		2.6
	Barium	ug/L	Tier 1	76.1		37.1	24.3	41.2	80.3	47.7		84.8	<7.5 U	102	413	32.9	135	284		15.3		12.3
	Beryllium	ug/L	Tier 1	<0.50 P,U		<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U		<0.50 P,U	82.7	<0.50 P,U	<0.50 P,U	0.94 J	<0.50 P,U	<0.50 P,U		<0.50 P,U		<0.50 P,U
	Cadmium	ug/L	Tier 1	<0.25 U		<0.25 U	<2.5 U	<0.25 U	<0.25 U	<0.25 U		<0.25 U	129	<0.25 U	<0.25 U	<0.25 U	<2.5 U	<2.5 U		<0.25 U		<0.25 U
	Chromium	ug/L	Tier 1	<1.2 U		<1.2 U	12.5 J	4.8	1.3 J	1.2 J		1.2 J	5100	<1.2 U	8.9	<1.2 U	<12.5 U	<12.5 U		<1.2 U		<1.2 U
	Cobalt	ug/L	Tier 1	3.1		2.6	174	102	10.6	14.9		<0.25 U	6500	0.37 J	9.8	0.42 J	7.1	14.9		0.49 J		11.7
	Copper	ug/L	Tier 1	<0.50 U		1.5	33.9	1.8	<0.50 U	1.5		<0.50 U	20400	0.65 J	10.6	1680	8.8 J	28.3		0.58 J		<0.50 U
	Cyanide	mg/L	Tier 1	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		0.0066 J	<0.036 P,U	<0.0060 P,U	0.0084 J	0.0064 J	0.007 J	0.0071 J		<0.0060 P,U		<0.0060 P,U
	Lead	ug/L	Tier 1	<0.25 U		<0.25 U	6.4	<0.25 U	<0.25 U	<0.25 U		<0.25 U	<2.5 U	<0.25 U	0.62	80.6	9.1	6.5		<0.25 U		<0.25 U
	Lithium	ug/L	Tier 1	1.7		0.49 J	12.6	3.5	0.44 J	5.1		0.61	536	1.2	1.7	1.4	<2.5 U	5		6.5		8.4
	Manganese	ug/L	Tier 1	5220		3980	936	15700	12100	28300		7120	17900	5870	19600	979	3560	9450		2790		2000
	Mercury - low level	ng/L	Tier 1	0.957		0.577	4.71	0.703	0.404 J	0.328 J		0.946	37.7	0.421 J	3.24	0.318 J	5.04	18		0.208 J		0.305 J
	Nickel	ug/L	Tier 1	0.66		4.6	32.6	79.9	17.3	1.0		<0.25 U	18200	1.6	10.6	0.43 J	24	22.4		10.9		99
	Selenium	ug/L	Tier 1	<1.2 U		<1.2 U	<12.5 P,U	1.5 J	<1.2 U	<1.2 U		<1.2 U	15.2 J	1.2 J	1.4 J	<1.2 U	<12.5 P,U	<12.5 P,U		6.3		2.1 J
	Silver	ug/L	Tier 1	<0.50 P,U		<0.50 P,U	<5.0 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U		<0.50 P,U	<5.0 P,U	0.57 J	<0.50 P,U	<0.50 P,U	<5.0 P,U	<5.0 P,U		<0.50 P,U		<0.50 P,U
	Vanadium	ug/L	Tier 1	0.39 J		<0.25 U	3.4 J	2.4	1.9	1.1		3	311	0.94	15.6	0.54	11.6	19.2		<0.25 U		<0.25 U
	Zinc	ug/L	Tier 1	<12.5 U		<12.5 U	<125 U	<12.5 U	<12.5 U	<12.5 U		<12.5 U	9470	<12.5 U	<12.5 U	168	<125 U	<125 U		<12.5 U		<12.5 U
	VOC																					
	Ethylbenzene	ug/L	Tier 1														45.7					
	Xylenes	ug/L	Tier 1														595					
	VOC-PAH																					
	Naphthalene	ug/L	Tier 1														17					
7/15/2008	**Metal**																					
	Arsenic	ug/L	Tier 1	18		1.5	5.4	4.6	4.1	3.7		23.2	455	12.8	8.7	9.4	141	135	122	0.42		1.5
	Barium	ug/L	Tier 1	73.2		37.5	19.2	46.2	87.8	45.8		77.2	1.2	112	394	33	166	343	313	13.2		11.9
	Beryllium	ug/L	Tier 1	<0.10 U		<0.50 P,U	0.2 J	<0.50 P,U	<0.50 P,U	<0.50 P,U		0.085 J	58.2	<0.10 U	<0.070 U	7.2	<0.070 U	0.66	0.51	<0.50 P,U		<0.50 P,U
	Cadmium	ug/L	Tier 1	<0.050 U		<0.25 U	0.13 J	<0.25 U	<0.25 U	<0.25 U		<0.048 U	124	<0.050 U	0.05 J	<0.050 U	0.12 J	0.37	0.35	<0.050 U		<0.050 U
	Chromium	ug/L	Tier 1	0.49 J		<1.2 U	12	<1.2 U	<1.2 U	<1.2 U		2.1	6350	0.83	9.9	0.28 J	8.9	25.8	21.9	0.45 J		<0.25 U
	Cobalt	ug/L	Tier 1	2.9		3.2	189	123	11	22.3		0.64	7670	0.51	10.6	1.7	6.2	18.8	14.9	0.44		9.7
	Copper	ug/L	Tier 1	0.33		<0.50 U	7.9	<0.50 U	<0.50 U	<0.50 U		1.4	16500	<0.10 U	5.0	7270	1.6	37.1	29.5	0.5		0.35
	Cyanide	mg/L	Tier 1	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U
	Lead	ug/L	Tier 1	0.093 J		<0.25 U	1.9	<0.25 U	<0.25 U	<0.25 U		0.28 J	0.92 J	<0.050 U	0.81 J	146	4.5	9.0	8.4	<0.050 U		<0.050 U
	Manganese	ug/L	Tier 1	5180		4020	977	17400	12100	30800		5970	21000	6440	17500	1210	3530	8320	8340	2920		1470
	Mercury - low level	ng/L	Tier 1	1.15		1.09	2.11	0.992	1.12	0.636		1.49	95.4	0.389 J	26.3	1.41	5.72	7.4	7.49	1.19		0.317 J
	Nickel	ug/L	Tier 1	0.44		4.9	21.9	108	17.9	0.32 J		0.94	20500	0.1	1.2	0.67	14.8	31.1	21	12.3		103
	Selenium	ug/L	Tier 1	<0.25 U		<1.2 U	0.42 J	<1.2 U	<1.2 U	<1.2 U		<0.38 U	21.6	<0.25 U	0.92 J	<0.25 U	0.87 J	1.8	1.6	1.7		2.0
	Silver	ug/L	Tier 1	<0.10 U		<0.50 P,U	<0.10 U	<0.50 P,U	<0.50 P,U	<0.50 P,U		0.2 J	1.4	<0.10 U	<0.10 U	<0.10 U	<0.10 U	0.43	0.1 J	0.12 J		0.11 J
	Vanadium	ug/L	Tier 1	0.69		0.31 J	2.7	4.0	1.8	1.3		4.2	378	2.2	15.6	0.52	19.2	33.3	30.7	0.081 J		0.1
	Zinc	ug/L	Tier 1	<2.5 U		<12.5 U	3.7 J	<12.5 U	<12.5 U	<12.5 U		<2.8 U	9910	<2.5 U	<2.8 U	146	18.8	57.6	46.4	<2.5 U		2.9 J
	VOC																					
	Ethylbenzene	ug/L	Tier 1														54.3					
	Xylenes	ug/L	Tier 1														506					
	VOC-PAH																					
	Naphthalene	ug/L	Tier 1														18.7					

Table 3-3

Groundwater Results Compared to the Groundwater Surface Water Interface

EventDate	Parameter	Units	Data Level	KMW-3	KMW-3	KMW-4	KMW-5	KMW-7	KMW-9	KMW-9P	KMW-9P	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	MW-601	MW-602	MW-602	MW-603
				KMW-3	Dup	KMW-4	KMW-5	KMW-7	KMW-9	KMW-9P	Dup	MW-101	MW-102	MW-103	MW-11	MW-12	MW-5	MW-601	Dup	MW-602	Dup	MW-603
10/13/2008																						
	Metal																					
	Arsenic	ug/L	Tier 1	18.1		1.3	4.1	4.7	3.7	3.3		27.8	**491**	13.8	9.7	10.5	137	**368**		<0.17 U	<0.17 U	2
	Barium	ug/L	Tier 1	90.7		40.5	15.3	46.8	55.4	39.2		77.5	27.8	98.5	**398**	33.9	200	**274**		10.6	11.6	8.5
	Beryllium	ug/L	Tier 1	<0.41 P,U		<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U		<0.41 P,U	**49.9**	<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U	0.77 J		<0.41 P,U	<0.41 P,U	<0.41 P,U
	Cadmium	ug/L	Tier 1	<0.087 U		<0.087 U	<0.087 U	<0.087 U	<0.087 U	<0.087 U		<0.087 U	**77.6**	<0.087 U	<0.087 U	<0.087 U	<0.087 U	0.24 J		<0.087 U	<0.087 U	<0.087 U
	Chromium	ug/L	Tier 1	0.77 J		0.58 J	4.2	1.3	0.99 J	0.69 J		1.8	**2950**	0.70 J	9.4	0.49 J	10.1	**28.7**		<0.30 U	<0.30 U	0.41 J
	Cobalt	ug/L	Tier 1	3.2		3.4	**169**	**116**	6.7	23.3		0.37 J	**6030**	0.32 J	10.3	0.30 J	2.8	13.2		0.52 J	0.54 J	9
	Copper	ug/L	Tier 1	<0.50 U		0.89 J	4.5	<0.50 U	<0.50 U	<0.50 U		**218**	**7710**	<0.50 U	1.4	**156**	1.3	**36.2**		<0.50 U	<0.50 U	<0.50 U
	Cyanide	mg/L	Tier 1	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U
	Lead	ug/L	Tier 1	<0.50 U		<0.50 U	0.73 J	<0.50 U	<0.50 U	<0.50 U		**9.9**	**47.1**	<0.50 U	<0.50 U	3.1	2.6	**10.9**		<0.50 U	<0.50 U	<0.50 U
	Lithium	ug/L	Tier 1	2		0.38 J	8.7	5	0.28 J	5.1		0.83 J	**406**	0.97 J	2.1	1.7	0.78 J	10		8.4	8.5	8.9
	Manganese	ug/L	Tier 1	**6060**		**4670**	858	**17600**	**8580**	**24900**		**6170**	**28700**	**5260**	**18300**	1000	**3830**	**7820**		**3620**	**3750**	**1670**
	Mercury - low level	ng/L	Tier 1	0.242 J		0.574	0.818	0.414 J	0.393 J	0.313 J		1.15	**112**	0.165 J	**6.53**	0.248 J	**2.82**	**1.91**		0.266 J	0.268 J	0.197 J
	Nickel	ug/L	Tier 1	0.51 J		5.8	23.7	**103**	11.4	0.46 J		0.85 J	**16600**	0.25 J	1.3	0.23 J	25.3	**33.5**		15.9	16.1	**91.1**
	Selenium	ug/L	Tier 1	<0.25 U		<0.25 U	<0.25 U	1.1	<0.25 U	0.28 J		0.29 J	**79.5**	<0.25 U	1.1	<0.25 U	1.1	2.9		0.78 J	0.74 J	1.6
	Silver	ug/L	Tier 1	<0.25 P,U		<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U		<0.25 P,U	**4.0 J**	<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U		<0.25 P,U	<0.25 P,U	<0.25 P,U
	Vanadium	ug/L	Tier 1	<0.45 U		<0.45 U	0.49 J	3.8	1.7	0.67 J		3.4	**187**	1.8	**16.5**	0.49 J	**20.7**	**45.6**		<0.45 U	<0.45 U	0.75 J
	Zinc	ug/L	Tier 1	3.1 J		3.8 J	**180**	9.1	12.4	2.9 J		**106**	**11000**	3.6 J	7.2	11.1	24.9	**72.1**		6.8	7.8	6.3
	VOC																					
	Ethylbenzene	ug/l	Tier 1														**50.2**					
	Xylenes, m + p	ug/L	Tier 1														**252**					
	Xylenes, o	ug/l	Tier 1														**290**					

Table 3-3

Groundwater Results Compared to the Groundwater Surface Water Interface

EventDate	Parameter	Units	Data Level	MW-604	MW-605	MW-605	MW-606	P-602	P-604	P-604	P-605	PW-2	GSI Protection	GSI Protection Code
				MW-604	MW-605	Dup	MW-606	P-602	P-604	Dup	P-605	PW-2		
3/11/2008	**Metal**													
	Arsenic	ug/L	Tier 1	2.6	7.4		1.3	7.8	0.39 J	0.47 J	7.5	20.9	150	X
	Barium	ug/L	Tier 1	28.4	51.2		15.2	25.1	20.8	17.9	29.8	107	210	G,X
	Beryllium	ug/L	Tier 1	0.1 J	0.12 J		0.19 J	<0.070 U	0.13 J	0.18 J	<0.070 U	<0.70 P,U	0.41	G
	Cadmium	ug/L	Tier 1	<0.098 U	0.17 J		<0.098 U	<0.098 U	<0.098 U	<0.098 U	<0.098 U	**6.2 J**	1.3	G,X
	Chromium	ug/L	Tier 1	<0.43 U	5.1		0.95 J	<0.43 U	1.4	1.1	<0.43 U	**16.8**	11	
	Cobalt	ug/L	Tier 1	0.64 J	3.5		1.4	0.12 J	1.5	1.5	1.4	**229**	100	
	Copper	ug/L	Tier 1	0.69 J	**18.6**		**54.3**	0.55 J	**27**	**26.3**	0.3 J	**50.6**	5	G
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	**0.013 J**	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	0.0052	
	Lead	ug/L	Tier 1	0.13 J	1.8		1.7	0.06 J	1.3	0.96 J	0.2 J	**9.2 J**	4.8	G,X
	Manganese	ug/L	Tier 1	**2370**	**4160**		**1500**	**1800**	39.5	37.1	**3080**	**6280**	1050	G,X
	Mercury - low level	ng/L	Tier 1	0.643	**6.33**		0.654	0.294 J	0.949	0.929	0.396 J	**8.62**	1.3	
	Nickel	ug/L	Tier 1	0.43 J	10.7		11.7	0.23 J	2.1	1.9	0.54 J	**615**	28.9	G
	Selenium	ug/L	Tier 1	0.26 J	<0.15 U		<0.15 U	<0.15 U	<0.15 U	<0.15 U	<0.15 U	4.7 J	5	
	Silver	ug/L	Tier 1	<1.1 P,U	<1.1 P,U		<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	<1.1 P,U	0.2	M
	Vanadium	ug/L	Tier 1	0.54 J	5.3		0.69 J	<0.41 U	1.7	1.5	0.48 J	**29.1**	12	
	Zinc	ug/L	Tier 1	4.8 J	20.7		15.4	4.9 J	13.6	11.1	4.0 J	**243**	66	G
	VOC													
	Ethylbenzene	ug/L	Tier 1										18	
	Xylenes, m + p	ug/L	Tier 1										35	
	xylenes, o	ug/L	Tier 1										35	
5/20/2008	**Metal**													
	Arsenic	ug/L	Tier 1	1.9	<0.50 U	<0.50 U	<0.50 U	6.6	0.51 J	<0.50 U	9.9	<0.50 U	150	X
	Barium	ug/L	Tier 1	26.5	21.1	21.3	10.9	20.6	10.1	10	32	23.8	210	G,X
	Beryllium	ug/L	Tier 1	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	0.41	G
	Cadmium	ug/L	Tier 1	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	<0.25 U	**2.8**	1.3	G,X
	Chromium	ug/L	Tier 1	<1.2 U	<1.2 U	1.3 J	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	11	
	Cobalt	ug/L	Tier 1	0.56	1.2	1.3	0.51	0.37 J	0.9	0.9	1.8	18.5	100	
	Copper	ug/L	Tier 1	2.3	3.3	1.7	1.2	1.3	2.0	1.4	<0.50 U	2.8	5	G
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	**0.0064 J**	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	0.0052	
	Lead	ug/L	Tier 1	0.62	0.42 J	<0.25 U	<0.25 U	0.31 J	<0.25 U	<0.25 U	<0.25 U	<0.25 U	4.8	G,X
	Lithium	ug/L	Tier 1	2.4	1.9	2.1	4.5	4.4	0.4 J	0.45 J	1.9	7.4	96	
	Manganese	ug/L	Tier 1	**1150**	**1690**	**1730**	569	**1770**	18	17.7	**3680**	**2060**	1050	G,X
	Mercury - low level	ng/L	Tier 1	1.26	0.95	0.851	0.659	0.671	0.7	0.68	0.201 J	**1.33**	1.3	
	Nickel	ug/L	Tier 1	<0.25 U	3.8	2.9	3.6	0.51	0.97	1.2	0.3 J	**73.4**	28.9	G
	Selenium	ug/L	Tier 1	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	<1.2 U	5	
	Silver	ug/L	Tier 1	<0.50 P,U	**1.5**	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	<0.50 P,U	0.2	M
	Vanadium	ug/L	Tier 1	0.48 J	<0.25 U	0.33 J	<0.25 U	0.41 J	0.7	0.72	0.52	0.36 J	12	
	Zinc	ug/L	Tier 1	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	<12.5 U	47.4	66	G
	VOC													
	Ethylbenzene	ug/L	Tier 1										18	
	Xylenes	ug/L	Tier 1										35	
	VOC-PAH													
	Naphthalene	ug/L	Tier 1										13	
7/15/2008	**Metal**													
	Arsenic	ug/L	Tier 1	4.6	<0.50 U		0.21	8.1	<0.50 U		10.2	0.2	150	X
	Barium	ug/L	Tier 1	36.1	16		14.4	18.6	8.2		30.9	22.4	210	G,X
	Beryllium	ug/L	Tier 1	<0.50 P,U	<0.50 P,U		<0.10 U	0.1 J	<0.50 P,U		<0.50 P,U	<0.10 U	0.41	G
	Cadmium	ug/L	Tier 1	<0.25 U	<0.25 U		<0.050 U	<0.050 U	<0.25 U		<0.25 U	**1.5**	1.3	G,X
	Chromium	ug/L	Tier 1	<1.2 U	<1.2 U		0.32 J	0.85	<1.2 U		<1.2 U	<0.25 U	11	
	Cobalt	ug/L	Tier 1	0.9	0.76		0.48	0.65	0.64		1.6	16.6	100	
	Copper	ug/L	Tier 1	2.2	1.1		1.5	2.0	0.88 J		<0.50 U	1.6	5	G
	Cyanide	mg/L	Tier 1	**0.0066 J**	**0.0063 J**		<0.0060 P,U	<0.0060 P,U	**0.0074 J**		<0.0060 P,U	<0.0060 P,U	0.0052	
	Lead	ug/L	Tier 1	<0.25 U	<0.25 U		<0.050 U	0.32	<0.25 U		<0.25 U	<0.050 U	4.8	G,X
	Manganese	ug/L	Tier 1	**1500**	**1050**		612	**1880**	8		**3080**	490	1050	G,X
	Mercury - low level	ng/L	Tier 1	1.05	0.918		0.653	1.22	1.16		0.555	1.02	1.3	
	Nickel	ug/L	Tier 1	0.42 J	2.1		5.7	1.2	1.1		0.48 J	**71**	28.9	G
	Selenium	ug/L	Tier 1	<1.2 U	<1.2 U		**13.5**	<0.25 U	<1.2 U		<1.2 U	<0.25 U	5	
	Silver	ug/L	Tier 1	<0.50 P,U	<0.50 P,U		0.1 J	<0.10 U	<0.50 P,U		<0.50 P,U	<0.10 U	0.2	M
	Vanadium	ug/L	Tier 1	0.5	<0.25 U		0.23	0.51	0.65		0.5	0.16	12	
	Zinc	ug/L	Tier 1	<12.5 U	<12.5 U		<2.5 U	<2.5 U	<12.5 U		<12.5 U	37.7	66	G
	VOC													
	Ethylbenzene	ug/L	Tier 1										18	
	Xylenes	ug/L	Tier 1										35	
	VOC-PAH													
	Naphthalene	ug/L	Tier 1										13	

Prepared by: MCC2
Checked by: SVF

Table 3-3

Groundwater Results Compared to the Groundwater Surface Water Interface

EventDate	Parameter	Units	Data Level	MW-604	MW-605	MW-605	MW-606	P-602	P-604	P-604	P-605	PW-2	GSI Protection	GSI Protection Code
				MW-604	MW-605	Dup	MW-606	P-602	P-604	Dup	P-605	PW-2		
10/13/2008														
	Metal													
	Arsenic	ug/L	Tier 1	5.5	0.67 J	0.79 J	<0.17 U	7.9	<0.17 U		8.3	7.4	150	X
	Barium	ug/L	Tier 1	35.1	28.2	28.7	12.9	19.4	8.8		27.6	45.7	210	G,X
	Beryllium	ug/L	Tier 1	<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U	<0.41 P,U		<0.41 P,U	<0.41 P,U	0.41	G
	Cadmium	ug/L	Tier 1	<0.087 U	0.29 J	0.26 J	<0.087 U	<0.087 U	<0.087 U		<0.087 U	**2.5**	1.3	G,X
	Chromium	ug/L	Tier 1	0.49 J	<0.30 U	0.65 J	<0.30 U	1.4	0.34 J		<0.30 U	4.2	11	
	Cobalt	ug/L	Tier 1	0.70 J	1.4	1.4	0.11 J	0.30 J	0.40 J		1.9	32.4	100	
	Copper	ug/L	Tier 1	0.51 J	1.9	2	1.1	1.1	0.59 J		<0.50 U	**16.7**	5	G
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	0.0052	
	Lead	ug/L	Tier 1	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U	<0.50 U		<0.50 U	1.5	4.8	G,X
	Lithium	ug/L	Tier 1	4.3	2.2	2.1	3.7	4.5	0.34 J		1.9	10.1	96	
	Manganese	ug/L	Tier 1	**1700**	**4070**	**4090**	422	**2180**	6.5		**3050**	**1470**	1050	G,X
	Mercury - low level	ng/L	Tier 1	0.304 J	**1.35**	1.26	0.349 J	0.244 J	0.332 J		0.369 J	**3.02**	1.3	
	Nickel	ug/L	Tier 1	0.38 J	3.7	4	3.2	1.1	1		0.42 J	**132**	28.9	G
	Selenium	ug/L	Tier 1	<0.25 U	<0.25 U	0.38 J	**12.6**	<0.25 U	<0.25 U		<0.25 U	0.64 J	5	
	Silver	ug/L	Tier 1	<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U	<0.25 P,U		<0.25 P,U	<0.25 P,U	0.2	M
	Vanadium	ug/L	Tier 1	<0.45 U	<0.45 U	<0.45 U	<0.45 U	<0.45 U	<0.45 U		<0.45 U	6.8	12	
	Zinc	ug/L	Tier 1	3.7 J	4.4 J	4.3 J	4.8 J	3.5 J	4.7 J		4.2 J	61.2	66	G
	VOC													
	Ethylbenzene	ug/l	Tier 1										18	
	Xylenes, m + p	ug/L	Tier 1										35	
	Xylenes, o	ug/l	Tier 1										35	

Notes:

mg/L = milligram/liter

ng/L = nanograms/Liter

ug/L = micrograms/Liter

VOC = volatile organic compound

G = GSI criterion depends on the pH or water hardness, or both, ot the receiving surface water. The final chronic value for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water.

GSI = Groundwater Surface Water Interface

M = Calculated criterian is below the analytical target detection limit, therefore, the criterian defaults to the target detection limit.

P = Analyte not detected above the method detection limit. The detection limit is above the criteria due to sample dilution

U = The analyte was not detected at or above the reporting limit.

X = The GSI criterian shown in the generic clean up criteria tables is not protective for surface water that is to be used as a drinking water source.

< = All the analyte was not detected at or above the reporting limit

Residential Commercial I drinking water criteria source = MDEQ Part 201 generic cleanup criteria and screening levels

Results were compared to the MDEQ res/com I DW criteria. Exceedances are highlighted.

Table 4-1
Surface Water Quality Monitoring Program
Parameter List

Parameter	Units
Field	
Temperature	^{o}C
Dissolved Oxygen	mg/L
Specific Conductance	umhos/cm
pH	S.U.
Iron (ferrous) (HPL-003 and -004 only)	ug/L
Oxidation-Reduction potential (ORP)	mV
Ice Thickness (HTDF only)	Feet
Metals	
Aluminum	ug/L
Lithium	ug/L
Antimony	ug/L
Arsenic	ug/L
Barium	ug/L
Iron	ug/L
Iron (ferric)	ug/L
Beryllium	ug/L
Boron	ug/L
Cadmium	ug/L
Chromium	ug/L
Copper	ug/L
Cobalt	ug/L
Lead	ug/L
Manganese	ug/L
Molybdenum	ug/L
Nickel	ug/L
Selenium	ug/L
Silver	ug/L
Zinc	ug/L
Mercury (low level)	ng/L
Thallium	ug/L
Vanadium	ug/L
Anions	
Alkalinity, Bicarbonate	mg/L
Alkalinity, Carbonate	mg/L
Chloride	mg/L
Fluoride	mg/L
Nitrate	mg/L
Nitrite	mg/L
Nitrogen, Ammonia	mg/L
Sulfate	mg/L

Table 4-1 *(con't)*

Parameter	Units
Sulfide	mg/L
Cyanide	mg/L
Cations	
Calcium	mg/L
Potassium	mg/L
Magnesium	mg/L
Sodium	mg/L
General Chemistry	
Hardness (calc) as CaCO3	mg/L
Total Dissolved Solids	mg/L
Total Suspended Solids	mg/L
Alkalinity, Total	mg/L
Chemical oxygen demand	mg/L
Carbon, Dissolved Organic	mg/L
Carbon, Total Organic	mg/L
Turbidity	mg/L
Gross-Alpha	pCi/L
Gross-Beta	pCi/L

^{o}C = degrees Celsius
EPA = Environmental protection agency
mg/L = milligrams per liter
msl = mean sea level
mV = millivolt
NA = not applicable
ng/L = nanograms per liter
pCi/L = picocuries per liter
SM = Standard method
S.U. = standard unit
ug/L = micrograms per liter
umhos/cm = micromohs per centimeter

Prepared by: JSL
Checked by: SVF

Table 4-2
Surface Water Monitoring Sites – Monitoring Requirements

Location ID	Flow Measurements	Staff Gauge	Field Measurements	Water Quality Monitoring	Water Column Profile	Ferrous Iron (Hach 8146)
HMP-004		X	X	X		
HMP-005		X	X	X		
HMP-006		X	X	X		
HMP-007		X	X	X		
HMP-008		X				
HMP-009		X	X	X		
Weir 1	X					
Weir 2	X					
MER-001	X		X	X		
MER-002	X		X	X		
MER-003	X		X	X		
WLD-001			X	X		
WLD-001NW	X		X	X		
WLD-001SE	X		X	X		
WLD-002			X	X		
WLD-003			X	X		
WBR-001	X		X	X		
WBR-002	X		X	X		
WBR-003	X		X	X		
MBR-001	X		X	X		
EBR-001	X		X	X		
LKL-001			X	X		
LKL-002			X	X		
HTP-001			X	X		
HTP-002			X	X		
HPL-001					X	
HPL-002					X	
HPL-003			X	X	X	X
HPL-004			X	X	X	X
HPL-005					X	
HPL-006					X	
HPL-007					X	

Prepared by: JSL
Checked by: SVF

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	EBR-001	HMP-004	HMP-005	HMP-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	HMP-009	HMP-009	HMP-009	HMP-009	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-004	HPL-004
			Field ID	EBR-001	HMP-004	Dup-003	Dup-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	Dup-005	HMP-009	HMP-009	HMP-009	Dup-003	Dup-004	Dup-004	HPL-003 120'	HPL-003 15'	HPL-003 175'	HPL-003 3'	HPL-003 60'	HPL-003 120'	HPL-003 15'	HPL-003 183'	Dup-004	Dup-004
			Sample Depth	NA	NA	NA	0.2	NA	0.2	NA	NA	NA	0.2	NA	0.2	0.4	60	60	175	120	15	175	3	60	120	15	183	175	3
2/18/2008																													
	Metals																												
	Magnesium	ug/L	Tier 1	4500	25000			17000			4900			25000			25000			24900	25600	31900	25200	23700				29600	
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1	61																									
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1								**1600**																		
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1					1100																					
	Manganese	ug/L	Tier 1																					318					
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																	316									
	Manganese	ug/L	Tier 1														321												
	Manganese	ug/L	Tier 1																				209						
	Manganese	ug/L	Tier 1																		221								
	Manganese	ug/L	Tier 1		11									26															
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																									2990	
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																			2640							
	Mercury - low level	ng/L	Tier 1	1.01	0.406 B			0.507			**5.2**			0.603			0.464 J			0.737	0.362 J	0.635	0.395 J	0.367 J				0.631	
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1	1																									
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1								1.3																		
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1					10																					
	Nickel	ug/L	Tier 1																					17.9					
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																	17.8									
	Nickel	ug/L	Tier 1														17.8												
	Nickel	ug/L	Tier 1																				16.7						
	Nickel	ug/L	Tier 1																		17.7								
	Nickel	ug/L	Tier 1		21									7.5															
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																									**334**	
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																			**287**							
	Inorganics																												
	Cyanide, total	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U			<0.0060 P,U			<0.0060 P,U			<0.0060 P,U			**0.0075 J**			**0.016 J**	**0.01 J**	**0.017 J**	**0.0077 J**	**0.0069 J**				**0.014 J**	
4/30/2008																													
	Metals																												
	Beryllium	ug/L	Tier 1							**0.1 J**																			
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1	<0.070 U																									
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1								<0.070 U																		
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1		<0.070 U																								
	Beryllium	ug/L	Tier 1					<0.070 U																					
	Beryllium	ug/L	Tier 1																										<0.070 U
	Beryllium	ug/L	Tier 1																		<0.070 U								
	Beryllium	ug/L	Tier 1																				<0.070 U						
	Beryllium	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	EBR-001	HMP-004	HMP-005	HMP-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	HMP-009	HMP-009	HMP-009	HMP-009	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-004	HPL-004
			Field ID	EBR-001	HMP-004	Dup-003	Dup-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	Dup-005	HMP-009	HMP-009	HMP-009	Dup-003	Dup-004	Dup-004	HPL-003 120'	HPL-003 15'	HPL-003 175'	HPL-003 3'	HPL-003 60'	HPL-003 120'	HPL-003 15'	HPL-003 183'	Dup-004	Dup-004
			Sample Depth	NA	NA	NA	0.2	NA	0.2	NA	NA	NA	0.2	NA	0.2	0.4	60	60	175	120	15	175	3	60	120	15	183	175	3
	Beryllium	ug/L	Tier 1												<0.070 U														
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																					<0.070 U					
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																	<0.070 U									
	Beryllium	ug/L	Tier 1																			<0.070 U							
	Beryllium	ug/L	Tier 1																										
	Mercury - low level	ng/L	Tier 1	**1.89**	**5.94**			0.362 J		**3.76**	0.935				0.668					0.519	**2.22**	0.274 J	0.389 J	0.446 J					**2.74**
	Nickel	ug/L	Tier 1							1.2																			
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1	0.91 J																									
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1								0.67 J																		
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1		26.2																								
	Nickel	ug/L	Tier 1					15.7																					
	Nickel	ug/L	Tier 1																										17
	Nickel	ug/L	Tier 1																		16.6								
	Nickel	ug/L	Tier 1																				16.1						
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1												17.9														
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																					18.8					
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																	**219**									
	Nickel	ug/L	Tier 1																			**333**							
	Nickel	ug/L	Tier 1																										
	Silver	ug/L	Tier 1	<0.11 P,U	<0.11 P,U			<0.11 P,U		**0.2 J**	<0.11 P,U				<0.11 P,U					<0.11 P,U	<0.11 P,U	<0.11 P,U	<0.11 P,U	<0.11 P,U					<0.11 P,U
	Zinc	ug/L	Tier 1							8.4 J																			
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1	4.6 J																									
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1								6 J																		
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1		8.2 J																								
	Zinc	ug/L	Tier 1					6.8 J																					
	Zinc	ug/L	Tier 1																										5.4 J
	Zinc	ug/L	Tier 1																		4.4 J								
	Zinc	ug/L	Tier 1																				4.8 J						
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1												5.8 J														
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																					3.8 J					
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																	6.4 J									
	Zinc	ug/L	Tier 1																			6 J							
	Zinc	ug/L	Tier 1																										
	Inorganics																												
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U			<0.0060 P,U		<0.0060 P,U	<0.0060 P,U				<0.0060 P,U					**0.008 J**	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U					<0.0060 P,U
7/1/2008																													
	Metals																												
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	EBR-001	HMP-004	HMP-005	HMP-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	HMP-009	HMP-009	HMP-009	HMP-009	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-004	HPL-004
			Field ID	EBR-001	HMP-004	Dup-003	Dup-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	Dup-005	HMP-009	HMP-009	HMP-009	Dup-003	Dup-004	Dup-004	HPL-003 120'	HPL-003 15'	HPL-003 175'	HPL-003 3'	HPL-003 60'	HPL-003 120'	HPL-003 15'	HPL-003 183'	Dup-004	Dup-004
			Sample Depth	NA	NA	NA	0.2	NA	0.2	NA	NA	NA	0.2	NA	0.2	0.4	60	60	175	120	15	175	3	60	120	15	183	175	3
	Cadmium	ug/L	Tier 1								<0.050 U																		
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1	<0.050 U																									
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1		<0.050 U																								
	Cadmium	ug/L	Tier 1																		<0.050 U								
	Cadmium	ug/L	Tier 1						<0.050 U																				
	Cadmium	ug/L	Tier 1																					<0.050 U					
	Cadmium	ug/L	Tier 1													<0.050 U													
	Cadmium	ug/L	Tier 1																				<0.050 U						
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1										<0.050 U																
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																	<0.050 U									
	Cadmium	ug/L	Tier 1																0.079 J										
	Cadmium	ug/L	Tier 1																			0.087 J							
	Cadmium	ug/L	Tier 1																										
	Cobalt	ug/L	Tier 1	0.18	1.5				3.7		1.2		2.7			2.7			17.3	4.5	3.2	23.6	4.8	3.3					
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1								0.56																		
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1	0.44																									
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1		1.4																								
	Copper	ug/L	Tier 1																		1.4								
	Copper	ug/L	Tier 1						0.32																				
	Copper	ug/L	Tier 1																					1.4					
	Copper	ug/L	Tier 1													3.4													
	Copper	ug/L	Tier 1																				1.4						
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1										2.6																
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																	2.0									
	Copper	ug/L	Tier 1																2.9										
	Copper	ug/L	Tier 1																			3.8							
	Copper	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1								**1820**																		
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1	226																									
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1		63.4																								
	Manganese	ug/L	Tier 1																		126								
	Manganese	ug/L	Tier 1						1440																				
	Manganese	ug/L	Tier 1																					139					
	Manganese	ug/L	Tier 1													24.5													
	Manganese	ug/L	Tier 1																				111						
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1										20.7																
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																	356									
	Manganese	ug/L	Tier 1																1750										
	Manganese	ug/L	Tier 1																			2590							
	Manganese	ug/L	Tier 1																										
	Mercury - low level	ng/L	Tier 1	**4.75**	**6.49**				0.33 J		**2.48**		0.611			0.742			0.58	0.371 J	1.26	0.725	0.501	0.3 J					
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	EBR-001	HMP-004	HMP-005	HMP-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	HMP-009	HMP-009	HMP-009	HMP-009	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-004	HPL-004
			Field ID	EBR-001	HMP-004	Dup-003	Dup-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	Dup-005	HMP-009	HMP-009	HMP-009	Dup-003	Dup-004	Dup-004	HPL-003 120'	HPL-003 15'	HPL-003 175'	HPL-003 3'	HPL-003 60'	HPL-003 120'	HPL-003 15'	HPL-003 183'	Dup-004	Dup-004
			Sample Depth	NA	NA	NA	0.2	NA	0.2	NA	NA	NA	0.2	NA	0.2	0.4	60	60	175	120	15	175	3	60	120	15	183	175	3
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1								1.2																		
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1	2.0																									
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1		22.7																								
	Nickel	ug/L	Tier 1																		11								
	Nickel	ug/L	Tier 1						8.6																				
	Nickel	ug/L	Tier 1																					10.9					
	Nickel	ug/L	Tier 1													6.8													
	Nickel	ug/L	Tier 1																				13						
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1										5.7																
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																	20.5									
	Nickel	ug/L	Tier 1																**203**										
	Nickel	ug/L	Tier 1																			**288**							
	Nickel	ug/L	Tier 1																										
	Silver	ug/L	Tier 1	<0.10 P,U	**0.15 J**				<0.10 P,U		<0.10 P,U		<0.10 P,U			<0.10 P,U			<0.10 P,U	<0.10 P,U	<0.10 P,U	<0.10 P,U	<0.10 P,U	<0.10 P,U					
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1								2.8 J																		
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1	5.8																									
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1		37.9																								
	Zinc	ug/L	Tier 1																		2.6 J								
	Zinc	ug/L	Tier 1						43.1																				
	Zinc	ug/L	Tier 1																					<2.5 U					
	Zinc	ug/L	Tier 1													**232**													
	Zinc	ug/L	Tier 1																				<2.5 U						
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1										3.2 J																
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																	2.6 J									
	Zinc	ug/L	Tier 1																4.8 J										
	Zinc	ug/L	Tier 1																			4.2 J							
	Zinc	ug/L	Tier 1																										
	Inorganics																												
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U				<0.0060 P,U		<0.0060 P,U		**0.0075 J**			**0.007 J**			**0.017 J**	**0.011 J**	**0.0089 J**	**0.012 J**	**0.0088 J**	**0.008 J**					
10/3/2008																													
	Metals																												
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1	<0.087 U																									
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1					<0.087 U																					
	Cadmium	ug/L	Tier 1			<0.087 U																							
	Cadmium	ug/L	Tier 1		<0.087 U																								
	Cadmium	ug/L	Tier 1																		<0.087 U								
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																				0.094 J						
	Cadmium	ug/L	Tier 1																					<0.087 U					
	Cadmium	ug/L	Tier 1															<0.087 U											
	Cadmium	ug/L	Tier 1											<0.087 U															
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																	<0.087 U									
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																			<0.087 U							
	Calcium	ug/L	Tier 1	23600	43400	44100		42000						51800				50500		53000	47200	53200	49800	49900					
	Copper	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	EBR-001	HMP-004	HMP-005	HMP-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	HMP-009	HMP-009	HMP-009	HMP-009	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-004	HPL-004
			Field ID	EBR-001	HMP-004	Dup-003	Dup-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	Dup-005	HMP-009	HMP-009	HMP-009	Dup-003	Dup-004	Dup-004	HPL-003 120'	HPL-003 15'	HPL-003 175'	HPL-003 3'	HPL-003 60'	HPL-003 120'	HPL-003 15'	HPL-003 183'	Dup-004	Dup-004
			Sample Depth	NA	NA	NA	0.2	NA	0.2	NA	NA	NA	0.2	NA	0.2	0.4	60	60	175	120	15	175	3	60	120	15	183	175	3
	Copper	ug/L	Tier 1																									

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	EBR-001	HMP-004	HMP-005	HMP-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	HMP-009	HMP-009	HMP-009	HMP-009	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-003	HPL-004	HPL-004
			Field ID	EBR-001	HMP-004	Dup-003	Dup-005	HMP-005	HMP-005	HMP-006	HMP-007	HMP-008	Dup-005	HMP-009	HMP-009	HMP-009	Dup-003	Dup-004	Dup-004	HPL-003 120'	HPL-003 15'	HPL-003 175'	HPL-003 3'	HPL-003 60'	HPL-003 120'	HPL-003 15'	HPL-003 183'	Dup-004	Dup-004
			Sample Depth	NA	NA	NA	0.2	NA	0.2	NA	NA	NA	0.2	NA	0.2	0.4	60	60	175	120	15	175	3	60	120	15	183	175	3
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1	1.1																									
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1					16.9																					
	Nickel	ug/L	Tier 1			15.4																							
	Nickel	ug/L	Tier 1		15																								
	Nickel	ug/L	Tier 1																		7.7								
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																				9.5						
	Nickel	ug/L	Tier 1																					23.6					
	Nickel	ug/L	Tier 1															24.4											
	Nickel	ug/L	Tier 1											6.9															
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																	**212**									
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																			**296**							
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1	4.2 J																									
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1					5																					
	Zinc	ug/L	Tier 1			4.8 J																							
	Zinc	ug/L	Tier 1		**218**																								
	Zinc	ug/L	Tier 1																		3.9 J								
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																				3.7 J						
	Zinc	ug/L	Tier 1																					5					
	Zinc	ug/L	Tier 1															4.2 J											
	Zinc	ug/L	Tier 1											3.8 J															
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																	4.7 J									
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																			4.7 J							
Inorganics																													
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U						<0.0060 P,U				<0.0060 P,U		**0.010 J**	<0.0060 P,U	**0.010 J**	<0.0060 P,U	**0.0078 J**					

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	LKL-001	LKL-001	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Field ID	Dup-005	HPL-004 120'	HPL-004 15'	HPL-004 175'	HPL-004 3'	HPL-004 60'	HPL-004 186'	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	Dup-002	Dup-005	HTP-002	HTP-002	HTP-002	Dup-003	Dup-003	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Sample Depth	3	120	15	175	3	60	186	0.5	0.76	NA	0.64	0.76	1.1	2.3	1.1	1.2	2.3	4.8	5.2	4.8	5.2	7.5	4.8	5.8	6
2/18/2008																												
	Metals																											
	Magnesium	ug/L	Tier 1		29100	23500	31000	23600	23400								7300			6880					3310			
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																						152			
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																	454								
	Manganese	ug/L	Tier 1														497											
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1						332																			
	Manganese	ug/L	Tier 1			217																						
	Manganese	ug/L	Tier 1					219																				
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1		1650																							
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1				2770																					
	Manganese	ug/L	Tier 1																									
	Mercury - low level	ng/L	Tier 1		0.458 J	0.713	0.348 J	0.453 J	0.318 J								**1.41**			**1.45**					0.507			
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																						1.4			
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																	1.8								
	Nickel	ug/L	Tier 1														1.9											
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1						19.1																			
	Nickel	ug/L	Tier 1			17.7																						
	Nickel	ug/L	Tier 1					18.4																				
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1		**234**																							
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1				**303**																					
	Nickel	ug/L	Tier 1																									
	Inorganics																											
	Cyanide, total	mg/L	Tier 1		**0.019 J**	**0.014 J**	**0.023**	**0.0099 J**	**0.012 J**								**0.0079 J**			**0.0084 J**					**0.0082 J**			
4/30/2008																												
	Metals																											
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																				<0.070 U					
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																		<0.070 U							
	Beryllium	ug/L	Tier 1																									**0.16 J**
	Beryllium	ug/L	Tier 1															<0.070 U										
	Beryllium	ug/L	Tier 1											<0.070 U														
	Beryllium	ug/L	Tier 1													0.08 J												
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1					<0.070 U																				

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	LKL-001	LKL-001	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Field ID	Dup-005	HPL-004 120'	HPL-004 15'	HPL-004 175'	HPL-004 3'	HPL-004 60'	HPL-004 186'	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	Dup-002	Dup-005	HTP-002	HTP-002	HTP-002	Dup-003	Dup-003	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Sample Depth	3	120	15	175	3	60	186	0.5	0.76	NA	0.64	0.76	1.1	2.3	1.1	1.2	2.3	4.8	5.2	4.8	5.2	7.5	4.8	5.8	6
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1						<0.070 U																			
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1			<0.070 U																						
	Beryllium	ug/L	Tier 1		<0.070 U																							
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1																									
	Beryllium	ug/L	Tier 1				<0.070 U																					
	Mercury - low level	ng/L	Tier 1		0.253 J	0.457 J	0.476 J	0.527	0.216 J					**2.01**		**1.32**		1.28			1.11		1.09					1.18
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																				0.82 J					
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																		1.9							
	Nickel	ug/L	Tier 1																									1.8
	Nickel	ug/L	Tier 1															2.1										
	Nickel	ug/L	Tier 1											0.61 J														
	Nickel	ug/L	Tier 1													1.3												
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1					16.6																				
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1						19.7																			
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1			17.4																						
	Nickel	ug/L	Tier 1		**219**																							
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1				**286**																					
	Silver	ug/L	Tier 1		<0.11 P,U	<0.11 P,U	<0.11 P,U	<0.11 P,U	<0.11 P,U					<0.11 P,U		<0.11 P,U		<0.11 P,U			<0.11 P,U		**0.15 J**					**0.18 J**
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																				5.0 J					
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																		4.2 J							
	Zinc	ug/L	Tier 1																									4.5 J
	Zinc	ug/L	Tier 1															5.5 J										
	Zinc	ug/L	Tier 1											**82.2**														
	Zinc	ug/L	Tier 1													6.0 J												
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1					3.8 J																				
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1						4.8 J																			
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1			4.8 J																						
	Zinc	ug/L	Tier 1		5.5 J																							
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1				9 J																					
	Inorganics																											
	Cyanide	mg/L	Tier 1		**0.0077 J**	<0.0060 P,U	**0.011 J**	<0.0060 P,U	<0.0060 P,U					<0.0060 P,U		<0.0060 P,U		<0.0060 P,U			<0.0060 P,U		<0.0060 P,U					<0.0060 P,U
7/1/2008																												
	Metals																											
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																					<0.050 U				
	Cadmium	ug/L	Tier 1																			<0.050 U						
	Cadmium	ug/L	Tier 1																								<0.050 U	
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																<0.050 U									
	Cadmium	ug/L	Tier 1																									

Table 4-3
2008 Surface Water Results

EventDate	Parameter	Units	Data Level	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	LKL-001	LKL-001	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Field ID	Dup-005	HPL-004 120'	HPL-004 15'	HPL-004 175'	HPL-004 3'	HPL-004 60'	HPL-004 186'	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	Dup-002	Dup-005	HTP-002	HTP-002	HTP-002	Dup-003	Dup-003	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Sample Depth	3	120	15	175	3	60	186	0.5	0.76	NA	0.64	0.76	1.1	2.3	1.1	1.2	2.3	4.8	5.2	4.8	5.2	7.5	4.8	5.8	6
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1									<0.050 U																
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1												<0.050 U													
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1			<0.050 U																						
	Cadmium	ug/L	Tier 1					<0.050 U																				
	Cadmium	ug/L	Tier 1						<0.050 U																			
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1																									
	Cadmium	ug/L	Tier 1		<0.050 U																							
	Cadmium	ug/L	Tier 1				0.082 J																					
	Cobalt	ug/L	Tier 1		16.5	3.1	24.6	3.8	4.7			0.1			0.1				0.086 J			<0.050 U		<0.050 U			<0.050 U	
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																					0.14 J				
	Copper	ug/L	Tier 1																			0.13 J						
	Copper	ug/L	Tier 1																								0.14 J	
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																<0.10 U									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1									1.5																
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1												1.5													
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1			1.5																						
	Copper	ug/L	Tier 1					1.4																				
	Copper	ug/L	Tier 1						2.0																			
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1		2.9																							
	Copper	ug/L	Tier 1				4																					
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																					22.3				
	Manganese	ug/L	Tier 1																			23.3						
	Manganese	ug/L	Tier 1																								23.8	
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																68									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1									11.9																
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1												10.6													
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1			118																						
	Manganese	ug/L	Tier 1					105																				
	Manganese	ug/L	Tier 1						339																			
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1		1650																							
	Manganese	ug/L	Tier 1				2550																					
	Mercury - low level	ng/L	Tier 1		0.885	0.435 J	0.622	0.577	0.527			**1.32**			**1.73**				**1.31**			1.05		**1.64**			1.02	
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																					1.1				
	Nickel	ug/L	Tier 1																			1.0						
	Nickel	ug/L	Tier 1																								0.96	
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									

Table 4-3
2008 Surface Water Results

EventDate	Parameter	Units	Data Level	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	LKL-001	LKL-001	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Field ID	Dup-005	HPL-004 120'	HPL-004 15'	HPL-004 175'	HPL-004 3'	HPL-004 60'	HPL-004 186'	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	Dup-002	Dup-005	HTP-002	HTP-002	HTP-002	Dup-003	Dup-003	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Sample Depth	3	120	15	175	3	60	186	0.5	0.76	NA	0.64	0.76	1.1	2.3	1.1	1.2	2.3	4.8	5.2	4.8	5.2	7.5	4.8	5.8	6
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																1.4										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1			10.4																							
	Nickel	ug/L	Tier 1					12.1																					
	Nickel	ug/L	Tier 1						21.8																				
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1		**202**																								
	Nickel	ug/L	Tier 1				**303**																						
	Silver	ug/L	Tier 1		<0.10 P,U	<0.10 P,U	<0.10 P,U	<0.10 P,U	<0.10 P,U			<0.10 P,U			<0.10 P,U				<0.10 P,U			<0.10 P,U		<0.10 P,U			<0.10 P,U	
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																					<2.5 U					
	Zinc	ug/L	Tier 1																			<2.5 U							
	Zinc	ug/L	Tier 1																								<2.5 U		
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																<2.5 U										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1									<2.5 U																	
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1												<2.5 U														
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1			2.6 J																							
	Zinc	ug/L	Tier 1					2.6 J																					
	Zinc	ug/L	Tier 1						3.6 J																				
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1		3.1 J																								
	Zinc	ug/L	Tier 1				3.7 J																						
	Inorganics																												
	Cyanide	mg/L	Tier 1		**0.011 J**	**0.0067 J**	**0.011 J**	**0.0065 J**	**0.0077 J**			<0.0060 P,U			<0.0060 P,U				<0.0060 P,U			<0.0060 P,U		<0.0060 P,U			<0.0060 P,U	
10/3/2008																													
	Metals																												
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																							<0.087 U			
	Cadmium	ug/L	Tier 1																					<0.087 U					
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																<0.087 U										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1								<0.087 U																		
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1					<0.087 U																					
	Cadmium	ug/L	Tier 1	<0.087 U																									
	Cadmium	ug/L	Tier 1			<0.087 U																							
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1						<0.087 U																				
	Cadmium	ug/L	Tier 1		<0.087 U																								
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1				<0.087 U																						
	Cadmium	ug/L	Tier 1																										
	Calcium	ug/L	Tier 1	48800	51600	49100	53000	48600	50900		11500								11800					8170		7980			
	Copper	ug/L	Tier 1																										

Table 4-3
2008 Surface Water Results

EventDate	Parameter	Units	Data Level	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	LKL-001	LKL-001	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Field ID	Dup-005	HPL-004 120'	HPL-004 15'	HPL-004 175'	HPL-004 3'	HPL-004 60'	HPL-004 186'	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	Dup-002	Dup-005	HTP-002	HTP-002	HTP-002	Dup-003	Dup-003	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Sample Depth	3	120	15	175	3	60	186	0.5	0.76	NA	0.64	0.76	1.1	2.3	1.1	1.2	2.3	4.8	5.2	4.8	5.2	7.5	4.8	5.8	6
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																							<0.50 U		
	Copper	ug/L	Tier 1																					1.1				
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																<0.50 U									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1								0.79 J																	
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1					1.3																				
	Copper	ug/L	Tier 1	1.3																								
	Copper	ug/L	Tier 1			1.3																						
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1						1.8																			
	Copper	ug/L	Tier 1		2.8																							
	Copper	ug/L	Tier 1																									
	Copper	ug/L	Tier 1				3.2																					
	Copper	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																							<0.50 U		
	Lead	ug/L	Tier 1																					<0.50 U				
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																1.1									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1								<0.50 U																	
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1					<0.50 U																				
	Lead	ug/L	Tier 1	<0.50 U																								
	Lead	ug/L	Tier 1			<0.50 U																						
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1						<0.50 U																			
	Lead	ug/L	Tier 1		<0.50 U																							
	Lead	ug/L	Tier 1																									
	Lead	ug/L	Tier 1				<0.50 U																					
	Lead	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																							156		
	Manganese	ug/L	Tier 1																					156				
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																17.2									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1								6.5																	
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1					62.5																				
	Manganese	ug/L	Tier 1	63.3																								
	Manganese	ug/L	Tier 1			62.8																						
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1						354																			
	Manganese	ug/L	Tier 1		1420																							
	Manganese	ug/L	Tier 1																									
	Manganese	ug/L	Tier 1				2500																					
	Manganese	ug/L	Tier 1																									
	Mercury - low level	ng/L	Tier 1	0.386 J	1	0.287 J	0.308 J	0.208 J	0.160 J		0.664								0.629					0.89		1.03		
	Nickel	ug/L	Tier 1																									

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HPL-004	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	HTP-002	HTP-002	HTP-002	HTP-002	HTP-002	LKL-001	LKL-001	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Field ID	Dup-005	HPL-004 120'	HPL-004 15'	HPL-004 175'	HPL-004 3'	HPL-004 60'	HPL-004 186'	HTP-001	HTP-001	HTP-001	HTP-001	HTP-001	Dup-002	Dup-005	HTP-002	HTP-002	HTP-002	Dup-003	Dup-003	LKL-001	LKL-001	LKL-001	LKL-002	LKL-002	LKL-002
			Sample Depth	3	120	15	175	3	60	186	0.5	0.76	NA	0.64	0.76	1.1	2.3	1.1	1.2	2.3	4.8	5.2	4.8	5.2	7.5	4.8	5.8	6
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																							1.1		
	Nickel	ug/L	Tier 1																					0.86 J				
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																1.3									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1								3																	
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1					7.9																				
	Nickel	ug/L	Tier 1	8																								
	Nickel	ug/L	Tier 1			8																						
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1						24.4																			
	Nickel	ug/L	Tier 1		**194**																							
	Nickel	ug/L	Tier 1																									
	Nickel	ug/L	Tier 1				**297**																					
	Nickel	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																							5.1		
	Zinc	ug/L	Tier 1																					3.4 J				
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																3.0 J									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1								2.7 J																	
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1					9																				
	Zinc	ug/L	Tier 1	4.0 J																								
	Zinc	ug/L	Tier 1			3.0 J																						
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1						3.5 J																			
	Zinc	ug/L	Tier 1		5.8																							
	Zinc	ug/L	Tier 1																									
	Zinc	ug/L	Tier 1				5.1																					
	Zinc	ug/L	Tier 1																									
Inorganics																												
	Cyanide	mg/L	Tier 1	<0.0060 P,U	**0.0067 J**	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U								<0.0060 P,U					<0.0060 P,U		<0.0060 P,U		

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	LKL-002	MBR-001	MBR-001	MBR-001	MBR-001	MER-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WBR-003	Weir #1	Weir #2	Weir #1	Weir #1	Weir #1	Weir #1	Weir #1	Weir #2	Weir #2	Weir #2	Weir #2	Weir #2
			Field ID	LKL-002	Dup-001	Dup-002	Dup-006	MBR-001	Dup-001	MER-001	Dup-001	MER-002	MER-003	WBR-001	WBR-002	Dup-002	WBR-003	Weir #1	Weir #2	Weir #1-0416	Weir #1-0422	Weir #1-0423	Weir #1-0425	Weir #1-0710	Weir #2-0416	Weir #2-0422	Weir #2-0423	Weir #2-0425	Weir #2-0710
			Sample Depth	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2/18/2008																													
	Metals																												
	Magnesium	ug/L	Tier 1	3230			4990	5220	2600	2600		2500	3300	2500	4900	5200	5300												
	Manganese	ug/L	Tier 1											120															
	Manganese	ug/L	Tier 1						66	65																			
	Manganese	ug/L	Tier 1	214																									
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1									95																	
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1										100																
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1												**1200**														
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1				302																						
	Manganese	ug/L	Tier 1													**1300**													
	Manganese	ug/L	Tier 1														**1300**												
	Manganese	ug/L	Tier 1					336																					
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Mercury - low level	ng/L	Tier 1	0.561			**1.63**	**2.03**	**2.5**	**2.43**		**2.26**	**2.2**	**6.16**	**2.74**	**1.86**	**2.04**												
	Nickel	ug/L	Tier 1											0.71 B															
	Nickel	ug/L	Tier 1						0.51 B	0.55 B																			
	Nickel	ug/L	Tier 1	1.7																									
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1									0.71 B																	
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1										0.82 B																
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1												2.2														
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1				1.3																						
	Nickel	ug/L	Tier 1													2.9													
	Nickel	ug/L	Tier 1														3.0												
	Nickel	ug/L	Tier 1					1.4																					
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Inorganics																												
	Cyanide, total	mg/L	Tier 1	**0.0092 J**			**0.01 J**	**0.01 J**	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	**0.0098 B**	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U												
4/30/2008																													
	Metals																												
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1									<0.070 P,U																	
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1											<0.070 P,U															
	Beryllium	ug/L	Tier 1							<0.070 P,U																			
	Beryllium	ug/L	Tier 1										<0.070 P,U																
	Beryllium	ug/L	Tier 1										<0.070 P,U																
	Beryllium	ug/L	Tier 1					**0.07 J**																					
	Beryllium	ug/L	Tier 1		**0.1 J**										<0.070 P,U														
	Beryllium	ug/L	Tier 1														<0.070 U												
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	LKL-002	MBR-001	MBR-001	MBR-001	MBR-001	MER-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WBR-003	Weir #1	Weir #2	Weir #1	Weir #1	Weir #1	Weir #1	Weir #1	Weir #2	Weir #2	Weir #2	Weir #2	Weir #2
			Field ID	LKL-002	Dup-001	Dup-002	Dup-006	MBR-001	Dup-001	MER-001	Dup-001	MER-002	MER-003	WBR-001	WBR-002	Dup-002	WBR-003	Weir #1	Weir #2	Weir #1-0416	Weir #1-0422	Weir #1-0423	Weir #1-0425	Weir #1-0710	Weir #2-0416	Weir #2-0422	Weir #2-0423	Weir #2-0425	Weir #2-0710
			Sample Depth	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Beryllium	ug/L	Tier 1																										
	Mercury - low level	ng/L	Tier 1		**2.92**			**3.21**		**5.46**		**5.8**	**5.62**	**7.53**	**3.07**		**2.92**												
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1									0.69 J																	
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1											0.52 J															
	Nickel	ug/L	Tier 1							0.49 J																			
	Nickel	ug/L	Tier 1										0.85 J																
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1					1.0																					
	Nickel	ug/L	Tier 1		1.7										1.2														
	Nickel	ug/L	Tier 1														1.6												
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Silver	ug/L	Tier 1		<0.11 P,U			<0.11 P,U		<0.11 P,U		<0.11 P,U	<0.11 P,U	<0.11 P,U	<0.11 P,U		<0.11 P,U												
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1									6.3 J																	
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1											9.5 J															
	Zinc	ug/L	Tier 1							6.9 J																			
	Zinc	ug/L	Tier 1										6.4 J																
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1					5.6 J																					
	Zinc	ug/L	Tier 1		6.4 J										6.3 J														
	Zinc	ug/L	Tier 1														7.8 J												
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
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	Zinc	ug/L	Tier 1																										
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	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Inorganics																												
	Cyanide	mg/L	Tier 1		<0.0060 P,U			<0.0060 P,U		<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U												
7/1/2008																													
	Metals																												
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1											0.053 J															
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1							<0.050 U																			
	Cadmium	ug/L	Tier 1												<0.050 U														
	Cadmium	ug/L	Tier 1									<0.050 U																	
	Cadmium	ug/L	Tier 1										<0.050 U																
	Cadmium	ug/L	Tier 1			<0.050 U																							
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1					**21.4**																					

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	LKL-002	MBR-001	MBR-001	MBR-001	MBR-001	MER-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WBR-003	Weir #1	Weir #2	Weir #1	Weir #1	Weir #1	Weir #1	Weir #1	Weir #2	Weir #2	Weir #2	Weir #2	Weir #2
			Field ID	LKL-002	Dup-001	Dup-002	Dup-006	MBR-001	Dup-001	MER-001	Dup-001	MER-002	MER-003	WBR-001	WBR-002	Dup-002	WBR-003	Weir #1	Weir #2	Weir #1-0416	Weir #1-0422	Weir #1-0423	Weir #1-0425	Weir #1-0710	Weir #2-0416	Weir #2-0422	Weir #2-0423	Weir #2-0425	Weir #2-0710
			Sample Depth	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1														<0.050 U												
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cobalt	ug/L	Tier 1			0.54		0.58		0.25		0.39	0.43	0.82	0.21		2.2												
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1											0.91															
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1							0.47																			
	Copper	ug/L	Tier 1												0.58														
	Copper	ug/L	Tier 1									0.48																	
	Copper	ug/L	Tier 1										0.49																
	Copper	ug/L	Tier 1			0.63																							
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1					0.68																					
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1														0.49												
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
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	Copper	ug/L	Tier 1																										
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	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
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	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1											225															
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1							125																			
	Manganese	ug/L	Tier 1												137														
	Manganese	ug/L	Tier 1									145																	
	Manganese	ug/L	Tier 1										151																
	Manganese	ug/L	Tier 1			311																							
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1					339																					
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1														**1940**												
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Mercury - low level	ng/L	Tier 1			**5.73**		**9.04**		**4.8**		**4.58**	**4.53**	**13.8**	**3.26**		**5.72**												
	Nickel	ug/L	Tier 1											1.4															
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1							0.97																			
	Nickel	ug/L	Tier 1												1.9														

Table 4-3
2008 Surface Water Results

EventDate	Parameter	Units	Data Level	LKL-002	MBR-001	MBR-001	MBR-001	MBR-001	MER-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WBR-003	Weir #1	Weir #2	Weir #1	Weir #1	Weir #1	Weir #1	Weir #1	Weir #2	Weir #2	Weir #2	Weir #2	Weir #2
			Field ID	LKL-002	Dup-001	Dup-002	Dup-006	MBR-001	Dup-001	MER-001	Dup-001	MER-002	MER-003	WBR-001	WBR-002	Dup-002	WBR-003	Weir #1	Weir #2	Weir #1-0416	Weir #1-0422	Weir #1-0423	Weir #1-0425	Weir #1-0710	Weir #2-0416	Weir #2-0422	Weir #2-0423	Weir #2-0425	Weir #2-0710
			Sample Depth	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	ug/L	Tier 1									1.0																	
	Nickel	ug/L	Tier 1										1.4																
	Nickel	ug/L	Tier 1			2.6																							
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1					2.6																					
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1														2.6												
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Silver	ug/L	Tier 1			<0.10 P,U		<0.10 P,U		<0.10 P,U		<0.10 P,U	<0.10 P,U	<0.10 P,U	<0.10 P,U		<0.10 P,U												
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1											8.6															
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1							<2.5 U																			
	Zinc	ug/L	Tier 1												<2.5 U														
	Zinc	ug/L	Tier 1									<2.5 U																	
	Zinc	ug/L	Tier 1										<2.5 U																
	Zinc	ug/L	Tier 1			3.4 J																							
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1					4.9 J																					
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1														2.8 J												
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
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	Zinc	ug/L	Tier 1																										
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	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Zinc	ug/L	Tier 1																										
	Inorganics																												
	Cyanide	mg/L	Tier 1			<0.0060 P,U		<0.0060 P,U		<0.0060 P,U		<0.0060 P,U	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U												
10/3/2008																													
	Metals																												
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1											**0.14 J**															
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1														<0.087 U												
	Cadmium	ug/L	Tier 1													<0.087 U													
	Cadmium	ug/L	Tier 1												<0.087 U														
	Cadmium	ug/L	Tier 1					<0.087 U																					
	Cadmium	ug/L	Tier 1							**0.20 J**																			
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1									<0.087 U	<0.087 U																
	Cadmium	ug/L	Tier 1								0.088 J																		
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
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	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Cadmium	ug/L	Tier 1																										
	Calcium	ug/L	Tier 1					11800		14200	16900	16800	16700	6700	11200	11000	10800												
	Copper	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	LKL-002	MBR-001	MBR-001	MBR-001	MBR-001	MER-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WBR-003	Weir #1	Weir #2	Weir #1	Weir #1	Weir #1	Weir #1	Weir #1	Weir #2	Weir #2	Weir #2	Weir #2	Weir #2
			Field ID	LKL-002	Dup-001	Dup-002	Dup-006	MBR-001	Dup-001	MER-001	Dup-001	MER-002	MER-003	WBR-001	WBR-002	Dup-002	WBR-003	Weir #1	Weir #2	Weir #1-0416	Weir #1-0422	Weir #1-0423	Weir #1-0425	Weir #1-0710	Weir #2-0416	Weir #2-0422	Weir #2-0423	Weir #2-0425	Weir #2-0710
			Sample Depth	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1											3.3															
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1														<0.50 U												
	Copper	ug/L	Tier 1													<0.50 U													
	Copper	ug/L	Tier 1												0.74 J														
	Copper	ug/L	Tier 1					0.93 J																					
	Copper	ug/L	Tier 1							<0.50 U																			
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1									0.53 J	<0.50 U																
	Copper	ug/L	Tier 1								<0.50 U																		
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
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	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Copper	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1											4.3															
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1														<0.50 U												
	Lead	ug/L	Tier 1													<0.50 U													
	Lead	ug/L	Tier 1												<0.50 U														
	Lead	ug/L	Tier 1					0.90 J																					
	Lead	ug/L	Tier 1							<0.50 U																			
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1									<0.50 U	<0.50 U																
	Lead	ug/L	Tier 1								<0.50 U																		
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1								<0.50 U																		
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Lead	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1											343															
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1														264												
	Manganese	ug/L	Tier 1													269													
	Manganese	ug/L	Tier 1												872														
	Manganese	ug/L	Tier 1					1980																					
	Manganese	ug/L	Tier 1							71.9																			
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1									181	158																
	Manganese	ug/L	Tier 1								182																		
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Manganese	ug/L	Tier 1																										
	Mercury - low level	ng/L	Tier 1					1.48		1.14	1.33	1.79	1.34	12.2	0.842	1.29	1.27												
	Nickel	ug/L	Tier 1																										

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	LKL-002	MBR-001	MBR-001	MBR-001	MBR-001	MER-001	MER-001	MER-002	MER-002	MER-003	WBR-001	WBR-002	WBR-003	WBR-003	Weir #1	Weir #2	Weir #1	Weir #1	Weir #1	Weir #1	Weir #1	Weir #2	Weir #2	Weir #2	Weir #2	Weir #2
			Field ID	LKL-002	Dup-001	Dup-002	Dup-006	MBR-001	Dup-001	MER-001	Dup-001	MER-002	MER-003	WBR-001	WBR-002	Dup-002	WBR-003	Weir #1	Weir #2	Weir #1-0416	Weir #1-0422	Weir #1-0423	Weir #1-0425	Weir #1-0710	Weir #2-0416	Weir #2-0422	Weir #2-0423	Weir #2-0425	Weir #2-0710
			Sample Depth	8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1											2.8															
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1														0.71 J												
	Nickel	ug/L	Tier 1													0.77 J													
	Nickel	ug/L	Tier 1												3														
	Nickel	ug/L	Tier 1					2.1																					
	Nickel	ug/L	Tier 1							0.88 J																			
	Nickel	ug/L	Tier 1																										
	Nickel	ug/L	Tier 1									0.67 J	0.92 J																
	Nickel	ug/L	Tier 1								0.82 J																		
	Nickel	ug/L	Tier 1							

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	AMV	FAV	FCV	HCV	HNV	WV
			Field ID	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003						
			Sample Depth	NA	NA	NA	NA	1.2	1.34	1.42	2.5	0.92	0.92	1	1.2	1.34	2.6						
2/18/2008																							
	Metals																						
	Magnesium	ug/L	Tier 1	10000							1980						2060						
	Manganese	ug/L	Tier 1															1232	2464	571		59000	
	Manganese	ug/L	Tier 1															1614	3228	748		59000	
	Manganese	ug/L	Tier 1															1618	3236	750		59000	
	Manganese	ug/L	Tier 1														**2010**	1643	3286	762		59000	
	Manganese	ug/L	Tier 1															1647	3294	763		59000	
	Manganese	ug/L	Tier 1															1656	3311	767		59000	
	Manganese	ug/L	Tier 1								253							1714	3427	794		59000	
	Manganese	ug/L	Tier 1															1943	3886	901		59000	
	Manganese	ug/L	Tier 1															2145	4290	994		59000	
	Manganese	ug/L	Tier 1															2185	4370	1013		59000	
	Manganese	ug/L	Tier 1															2265	4529	1050		59000	
	Manganese	ug/L	Tier 1															2273	4545	1053		59000	
	Manganese	ug/L	Tier 1															2304	4609	1068		59000	
	Manganese	ug/L	Tier 1															2344	4688	1086		59000	
	Manganese	ug/L	Tier 1															2368	4736	1097		59000	
	Manganese	ug/L	Tier 1															2802	5603	1298		59000	
	Manganese	ug/L	Tier 1															2967	5934	1375		59000	
	Manganese	ug/L	Tier 1	**2200**														4163	8326	1930		59000	
	Manganese	ug/L	Tier 1															6291	12582	2916		59000	
	Manganese	ug/L	Tier 1															8355	16710	3872		59000	
	Manganese	ug/L	Tier 1															8422	16842	3903		59000	
	Manganese	ug/L	Tier 1															8455	16909	3919		59000	
	Manganese	ug/L	Tier 1															8719	17438	4041		59000	
	Manganese	ug/L	Tier 1															8752	17504	4057		59000	
	Manganese	ug/L	Tier 1															8818	17636	4087		59000	
	Manganese	ug/L	Tier 1															8917	17834	4133		59000	
	Manganese	ug/L	Tier 1															8983	17965	4163		59000	
	Manganese	ug/L	Tier 1															9540	19078	4421		59000	
	Manganese	ug/L	Tier 1															9572	19144	4436		59000	
	Manganese	ug/L	Tier 1															9832	19664	4557		59000	
	Manganese	ug/L	Tier 1															10059	20118	4662		59000	
	Mercury - low level	ng/L	Tier 1	0.918							**3.37**						1.24	1400	2800	770		1.8	1.3
	Nickel	ug/L	Tier 1															145	290	16		210000	
	Nickel	ug/L	Tier 1															188	376	21		210000	
	Nickel	ug/L	Tier 1															188	377	21		210000	
	Nickel	ug/L	Tier 1														0.29 J	191	382	21		210000	
	Nickel	ug/L	Tier 1															192	383	21		210000	
	Nickel	ug/L	Tier 1															193	385	21		210000	
	Nickel	ug/L	Tier 1								0.33 J							199	398	22		210000	
	Nickel	ug/L	Tier 1															225	450	25		210000	
	Nickel	ug/L	Tier 1															247	494	27		210000	
	Nickel	ug/L	Tier 1															252	503	28		210000	
	Nickel	ug/L	Tier 1															260	521	29		210000	
	Nickel	ug/L	Tier 1															261	523	29		210000	
	Nickel	ug/L	Tier 1															265	530	29		210000	
	Nickel	ug/L	Tier 1															269	539	30		210000	
	Nickel	ug/L	Tier 1															272	544	30		210000	
	Nickel	ug/L	Tier 1															320	639	36		210000	
	Nickel	ug/L	Tier 1															338	676	38		210000	
	Nickel	ug/L	Tier 1	3.7														468	936	52		210000	
	Nickel	ug/L	Tier 1															697	1394	77		210000	
	Nickel	ug/L	Tier 1															916	1832	102		210000	
	Nickel	ug/L	Tier 1															923	1846	103		210000	
	Nickel	ug/L	Tier 1															926	1853	103		210000	
	Nickel	ug/L	Tier 1															954	1909	106		210000	
	Nickel	ug/L	Tier 1															958	1915	106		210000	
	Nickel	ug/L	Tier 1															965	1929	107		210000	
	Nickel	ug/L	Tier 1															975	1950	108		210000	
	Nickel	ug/L	Tier 1															982	1964	109		210000	
	Nickel	ug/L	Tier 1															1041	2081	116		210000	
	Nickel	ug/L	Tier 1															1044	2088	116		210000	
	Nickel	ug/L	Tier 1															1071	2143	119		210000	
	Nickel	ug/L	Tier 1															1095	2190	122		210000	
	Inorganics																						
	Cyanide, total	mg/L	Tier 1	<0.0060 P,U							**0.0087 J**						**0.0091 J**	0.022	0.044	0.0052		48	
4/30/2008																							
	Metals																						
	Beryllium	ug/L	Tier 1															0.053	0.11	0.006		1200	
	Beryllium	ug/L	Tier 1															0.15	0.29	0.016		1200	
	Beryllium	ug/L	Tier 1						<0.070 P,U									0.17	0.34	0.019		1200	
	Beryllium	ug/L	Tier 1															0.19	0.38	0.021		1200	
	Beryllium	ug/L	Tier 1															0.20	0.39	0.022		1200	
	Beryllium	ug/L	Tier 1															0.20	0.41	0.023		1200	
	Beryllium	ug/L	Tier 1										<0.070 P,U					0.27	0.53	0.030		1200	
	Beryllium	ug/L	Tier 1															0.59	1.18	0.066		1200	
	Beryllium	ug/L	Tier 1															0.60	1.21	0.067		1200	
	Beryllium	ug/L	Tier 1															0.82	1.65	0.092		1200	
	Beryllium	ug/L	Tier 1															1.1	2.2	0.12		1200	
	Beryllium	ug/L	Tier 1															1.2	2.4	0.13		1200	
	Beryllium	ug/L	Tier 1															1.2	2.5	0.14		1200	
	Beryllium	ug/L	Tier 1															1.2	2.5	0.14		1200	
	Beryllium	ug/L	Tier 1															2.2	4.5	0.25		1200	
	Beryllium	ug/L	Tier 1															2.4	4.7	0.26		1200	
	Beryllium	ug/L	Tier 1															2.4	4.8	0.27		1200	
	Beryllium	ug/L	Tier 1															3.2	6.4	0.35		1200	
	Beryllium	ug/L	Tier 1		<0.070 U													7.7	15	0.86		1200	
	Beryllium	ug/L	Tier 1			<0.070 U												12	23	1.3		1200	
	Beryllium	ug/L	Tier 1	<0.070 U														16	31	1.7		1200	
	Beryllium	ug/L	Tier 1															24	48	2.6		1200	
	Beryllium	ug/L	Tier 1															42	84	4.6		1200	
	Beryllium	ug/L	Tier 1															109	218	12.1		1200	
	Beryllium	ug/L	Tier 1															126	252	14.0		1200	
	Beryllium	ug/L	Tier 1															129	258	14.3		1200	
	Beryllium	ug/L	Tier 1															140	281	15.6		1200	

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	AMV	FAV	FCV	HCV	HNV	WV
			Field ID	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003						
			Sample Depth	NA	NA	NA	NA	1.2	1.34	1.42	2.5	0.92	0.92	1	1.2	1.34	2.6						
	Beryllium	ug/L	Tier 1															144	288	16.0		1200	
	Beryllium	ug/L	Tier 1															147	295	16.4		1200	
	Beryllium	ug/L	Tier 1															154	309	17.2		1200	
	Beryllium	ug/L	Tier 1															160	320	17.8		1200	
	Beryllium	ug/L	Tier 1															179	358	19.9		1200	
	Beryllium	ug/L	Tier 1															181	362	20.1		1200	
	Beryllium	ug/L	Tier 1															229	459	25.5		1200	
	Beryllium	ug/L	Tier 1															265	530	29.5		1200	
	Mercury - low level	ng/L	Tier 1	1.14	**6.2**	**1.79**			**2.65**				**1.72**					1400	2800	770		1.8	1.3
	Nickel	ug/L	Tier 1															63	126	7		210000	
	Nickel	ug/L	Tier 1															88	176	10		210000	
	Nickel	ug/L	Tier 1						0.51 J									92	185	10		210000	
	Nickel	ug/L	Tier 1															96	192	11		210000	
	Nickel	ug/L	Tier 1															97	194	11		210000	
	Nickel	ug/L	Tier 1															98	197	11		210000	
	Nickel	ug/L	Tier 1										0.64 J					108	215	12		210000	
	Nickel	ug/L	Tier 1															140	281	16		210000	
	Nickel	ug/L	Tier 1															141	283	16		210000	
	Nickel	ug/L	Tier 1															157	314	17		210000	
	Nickel	ug/L	Tier 1															172	344	19		210000	
	Nickel	ug/L	Tier 1															179	357	20		210000	
	Nickel	ug/L	Tier 1															180	359	20		210000	
	Nickel	ug/L	Tier 1															180	360	20		210000	
	Nickel	ug/L	Tier 1															219	439	24		210000	
	Nickel	ug/L	Tier 1															224	448	25		210000	
	Nickel	ug/L	Tier 1															225	450	25		210000	
	Nickel	ug/L	Tier 1															247	494	27		210000	
	Nickel	ug/L	Tier 1		1.9													332	664	37		210000	
	Nickel	ug/L	Tier 1			0.44 J												381	761	42		210000	
	Nickel	ug/L	Tier 1	0.48 J														420	840	47		210000	
	Nickel	ug/L	Tier 1															484	968	54		210000	
	Nickel	ug/L	Tier 1															585	1169	65		210000	
	Nickel	ug/L	Tier 1															806	1612	90		210000	
	Nickel	ug/L	Tier 1															845	1690	94		210000	
	Nickel	ug/L	Tier 1															852	1705	95		210000	
	Nickel	ug/L	Tier 1															877	1754	97		210000	
	Nickel	ug/L	Tier 1															884	1768	98		210000	
	Nickel	ug/L	Tier 1															891	1782	99		210000	
	Nickel	ug/L	Tier 1															905	1811	101		210000	
	Nickel	ug/L	Tier 1															916	1832	102		210000	
	Nickel	ug/L	Tier 1															951	1902	106		210000	
	Nickel	ug/L	Tier 1															954	1909	106		210000	
	Nickel	ug/L	Tier 1															1034	2067	115		210000	
	Nickel	ug/L	Tier 1															1085	2170	121		210000	
	Silver	ug/L	Tier 1	<0.11 P,U	<0.11 P,U	<0.11 P,U			<0.11 P,U				<0.11 P,U					0.54	1.1	0.06		11000	
	Zinc	ug/L	Tier 1															16	31	16		16000	
	Zinc	ug/L	Tier 1															22	44	22		16000	
	Zinc	ug/L	Tier 1						9.2 J									23	46	23		16000	
	Zinc	ug/L	Tier 1															24	48	24		16000	
	Zinc	ug/L	Tier 1															24	49	24		16000	
	Zinc	ug/L	Tier 1															25	49	25		16000	
	Zinc	ug/L	Tier 1										5.3 J					27	54	27		16000	
	Zinc	ug/L	Tier 1															35	70	35		16000	
	Zinc	ug/L	Tier 1															35	71	36		16000	
	Zinc	ug/L	Tier 1															39	78	40		16000	
	Zinc	ug/L	Tier 1															43	86	43		16000	
	Zinc	ug/L	Tier 1															45	89	45		16000	
	Zinc	ug/L	Tier 1															45	90	45		16000	
	Zinc	ug/L	Tier 1															45	90	45		16000	
	Zinc	ug/L	Tier 1															55	110	55		16000	
	Zinc	ug/L	Tier 1															56	112	56		16000	
	Zinc	ug/L	Tier 1															56	113	57		16000	
	Zinc	ug/L	Tier 1															62	123	62		16000	
	Zinc	ug/L	Tier 1		4.3 J													83	166	84		16000	
	Zinc	ug/L	Tier 1			13.6												95	190	96		16000	
	Zinc	ug/L	Tier 1	8.1 J														105	210	106		16000	
	Zinc	ug/L	Tier 1															121	242	122		16000	
	Zinc	ug/L	Tier 1															146	293	148		16000	
	Zinc	ug/L	Tier 1															202	404	204		16000	
	Zinc	ug/L	Tier 1															212	423	213		16000	
	Zinc	ug/L	Tier 1															213	427	215		16000	
	Zinc	ug/L	Tier 1															220	439	222		16000	
	Zinc	ug/L	Tier 1															221	443	223		16000	
	Zinc	ug/L	Tier 1															223	447	225		16000	
	Zinc	ug/L	Tier 1															227	454	229		16000	
	Zinc	ug/L	Tier 1															229	459	231		16000	
	Zinc	ug/L	Tier 1															238	476	240		16000	
	Zinc	ug/L	Tier 1															239	478	241		16000	
	Zinc	ug/L	Tier 1															259	518	261		16000	
	Zinc	ug/L	Tier 1															272	544	274		16000	
	Inorganics																						
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U	<0.0060 P,U			<0.0060 P,U				<0.0060 P,U					0.022	0.044	0.0052		48	
7/1/2008																							
	Metals																						
	Cadmium	ug/L	Tier 1							<0.050 U								0.65	1.3	0.62		130	
	Cadmium	ug/L	Tier 1											<0.050 U				0.72	1.4	0.66		130	
	Cadmium	ug/L	Tier 1															0.85	1.7	0.74		130	
	Cadmium	ug/L	Tier 1															1.2	2.4	0.94		130	
	Cadmium	ug/L	Tier 1															1.2	2.4	0.94		130	
	Cadmium	ug/L	Tier 1															1.2	2.4	0.94		130	
	Cadmium	ug/L	Tier 1															1.3	2.6	1.00		130	
	Cadmium	ug/L	Tier 1															1.4	2.8	1.0		130	
	Cadmium	ug/L	Tier 1															1.4	2.9	1.1		130	
	Cadmium	ug/L	Tier 1															1.6	3.3	1.2		130	
	Cadmium	ug/L	Tier 1															2.0	4.0	1.3		130	
	Cadmium	ug/L	Tier 1															2.0	4.0	1.3		130	
	Cadmium	ug/L	Tier 1															2.1	4.2	1.4		130	

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	AMV	FAV	FCV	HCV	HNV	WV
			Field ID	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003						
			Sample Depth	NA	NA	NA	NA	1.2	1.34	1.42	2.5	0.92	0.92	1	1.2	1.34	2.6						
	Cadmium	ug/L	Tier 1															2.3	4.6	1.5		130	
	Cadmium	ug/L	Tier 1															2.3	4.7	1.5		130	
	Cadmium	ug/L	Tier 1															2.4	4.7	1.5		130	
	Cadmium	ug/L	Tier 1															2.4	4.8	1.5		130	
	Cadmium	ug/L	Tier 1															2.5	4.9	1.5		130	
	Cadmium	ug/L	Tier 1		0.15													3.8	7.6	2.1		130	
	Cadmium	ug/L	Tier 1	<0.050 U														4.1	8.1	2.2		130	
	Cadmium	ug/L	Tier 1				<0.050 U											4.1	8.2	2.2		130	
	Cadmium	ug/L	Tier 1															4.5	9.0	2.3		130	
	Cadmium	ug/L	Tier 1															9.6	19	3.9		130	
	Cadmium	ug/L	Tier 1															9.8	20	3.9		130	
	Cadmium	ug/L	Tier 1															9.9	20	4.0		130	
	Cadmium	ug/L	Tier 1															10.1	20	4.0		130	
	Cadmium	ug/L	Tier 1															10.1	20	4.0		130	
	Cadmium	ug/L	Tier 1															10.2	20	4.0		130	
	Cadmium	ug/L	Tier 1															10.2	20	4.1		130	
	Cadmium	ug/L	Tier 1															10.7	21	4.2		130	
	Cadmium	ug/L	Tier 1															10.8	22	4.2		130	
	Cadmium	ug/L	Tier 1															11.3	23	4.3		130	
	Cadmium	ug/L	Tier 1															11.9	24	4.5		130	
	Cadmium	ug/L	Tier 1															12.4	25	4.6		130	
	Cobalt	ug/L	Tier 1	0.23	8.6		0.42			<0.050 U				0.075 J				370	740	100			
	Copper	ug/L	Tier 1							<0.10 U								2.6	5.3	2.0		38000	
	Copper	ug/L	Tier 1											0.31				2.9	5.7	2.2		38000	
	Copper	ug/L	Tier 1															3.3	6.6	2.5		38000	
	Copper	ug/L	Tier 1															4.4	8.9	3.3		38000	
	Copper	ug/L	Tier 1															4.5	8.9	3.3		38000	
	Copper	ug/L	Tier 1															4.5	9.0	3.3		38000	
	Copper	ug/L	Tier 1															4.8	9.6	3.5		38000	
	Copper	ug/L	Tier 1															5.0	10	3.7		38000	
	Copper	ug/L	Tier 1															5.2	10	3.8		38000	
	Copper	ug/L	Tier 1															5.8	12	4.2		38000	
	Copper	ug/L	Tier 1															6.9	14	4.9		38000	
	Copper	ug/L	Tier 1															7.0	14	4.9		38000	
	Copper	ug/L	Tier 1															7.2	14	5.1		38000	
	Copper	ug/L	Tier 1															7.9	16	5.5		38000	
	Copper	ug/L	Tier 1															8.0	16	5.6		38000	
	Copper	ug/L	Tier 1															8.0	16	5.6		38000	
	Copper	ug/L	Tier 1															8.1	16	5.7		38000	
	Copper	ug/L	Tier 1															8.3	17	5.8		38000	
	Copper	ug/L	Tier 1		**11.6**													12	24	8.2		38000	
	Copper	ug/L	Tier 1	0.13 J														13	26	8.6		38000	
	Copper	ug/L	Tier 1				0.35											13	26	8.7		38000	
	Copper	ug/L	Tier 1															14	28	9.3		38000	
	Copper	ug/L	Tier 1															27	54	17		38000	
	Copper	ug/L	Tier 1															28	55	17		38000	
	Copper	ug/L	Tier 1															28	56	17		38000	
	Copper	ug/L	Tier 1															28	57	18		38000	
	Copper	ug/L	Tier 1															28	57	18		38000	
	Copper	ug/L	Tier 1															29	57	18		38000	
	Copper	ug/L	Tier 1															29	57	18		38000	
	Copper	ug/L	Tier 1															30	60	18		38000	
	Copper	ug/L	Tier 1															30	60	19		38000	
	Copper	ug/L	Tier 1															31	63	19		38000	
	Copper	ug/L	Tier 1															33	66	20		38000	
	Copper	ug/L	Tier 1															34	68	21		38000	
	Manganese	ug/L	Tier 1							18								910	1819	422		59000	
	Manganese	ug/L	Tier 1											154				981	1963	455		59000	
	Manganese	ug/L	Tier 1															1123	2246	521		59000	
	Manganese	ug/L	Tier 1															1480	2959	686		59000	
	Manganese	ug/L	Tier 1															1492	2985	692		59000	
	Manganese	ug/L	Tier 1															1497	2993	694		59000	
	Manganese	ug/L	Tier 1															1593	3186	738		59000	
	Manganese	ug/L	Tier 1															1668	3336	773		59000	
	Manganese	ug/L	Tier 1															1718	3435	796		59000	
	Manganese	ug/L	Tier 1															1915	3829	887		59000	
	Manganese	ug/L	Tier 1															2249	4497	1042		59000	
	Manganese	ug/L	Tier 1															2257	4513	1046		59000	
	Manganese	ug/L	Tier 1															2328	4656	1079		59000	
	Manganese	ug/L	Tier 1															2537	5074	1176		59000	
	Manganese	ug/L	Tier 1															2557	5113	1185		59000	
	Manganese	ug/L	Tier 1															2576	5152	1194		59000	
	Manganese	ug/L	Tier 1															2604	5207	1207		59000	
	Manganese	ug/L	Tier 1															2666	5332	1236		59000	
	Manganese	ug/L	Tier 1		**3640**													3784	7568	1754		59000	
	Manganese	ug/L	Tier 1	370														3995	7989	1851		59000	
	Manganese	ug/L	Tier 1				**2190**											4028	8055	1867		59000	
	Manganese	ug/L	Tier 1															4346	8691	2014		59000	
	Manganese	ug/L	Tier 1															8022	16044	3718		59000	
	Manganese	ug/L	Tier 1															8156	16311	3780		59000	
	Manganese	ug/L	Tier 1															8222	16444	3811		59000	
	Manganese	ug/L	Tier 1															8355	16710	3872		59000	
	Manganese	ug/L	Tier 1															8388	16776	3888		59000	
	Manganese	ug/L	Tier 1															8422	16842	3903		59000	
	Manganese	ug/L	Tier 1															8455	16909	3919		59000	
	Manganese	ug/L	Tier 1															8752	17504	4057		59000	
	Manganese	ug/L	Tier 1															8818	17636	4087		59000	
	Manganese	ug/L	Tier 1															9180	18359	4255		59000	
	Manganese	ug/L	Tier 1															9572	19144	4436		59000	
	Manganese	ug/L	Tier 1															9897	19794	4587		59000	
	Mercury - low level	ng/L	Tier 1	0.9	**10.3**		**2.09**			**1.68**				**1.39**				1400	2800	770		1.8	1.3
	Nickel	ug/L	Tier 1															133	265	15		210000	
	Nickel	ug/L	Tier 1															173	346	19		210000	
	Nickel	ug/L	Tier 1															174	349	19		210000	
	Nickel	ug/L	Tier 1															175	350	19		210000	
	Nickel	ug/L	Tier 1															186	371	21		210000	
	Nickel	ug/L	Tier 1															194	388	22		210000	

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	AMV	FAV	FCV	HCV	HNV	WV
			Field ID	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003						
			Sample Depth	NA	NA	NA	NA	1.2	1.34	1.42	2.5	0.92	0.92	1	1.2	1.34	2.6						
	Nickel	ug/L	Tier 1															200	399	22		210000	
	Nickel	ug/L	Tier 1															222	443	25		210000	
	Nickel	ug/L	Tier 1															259	517	29		210000	
	Nickel	ug/L	Tier 1															260	519	29		210000	
	Nickel	ug/L	Tier 1															268	535	30		210000	
	Nickel	ug/L	Tier 1															291	581	32		210000	
	Nickel	ug/L	Tier 1															293	586	33		210000	
	Nickel	ug/L	Tier 1															298	596	33		210000	
	Nickel	ug/L	Tier 1		16.5													427	854	47		210000	
	Nickel	ug/L	Tier 1	0.34														450	900	50		210000	
	Nickel	ug/L	Tier 1				0.32											454	907	50		210000	
	Nickel	ug/L	Tier 1															488	976	54		210000	
	Nickel	ug/L	Tier 1															881	1761	98		210000	
	Nickel	ug/L	Tier 1															895	1790	99		210000	
	Nickel	ug/L	Tier 1															902	1804	100		210000	
	Nickel	ug/L	Tier 1															916	1832	102		210000	
	Nickel	ug/L	Tier 1															919	1839	102		210000	
	Nickel	ug/L	Tier 1															923	1846	103		210000	
	Nickel	ug/L	Tier 1															926	1853	103		210000	
	Nickel	ug/L	Tier 1															958	1915	106		210000	
	Nickel	ug/L	Tier 1															965	1929	107		210000	
	Nickel	ug/L	Tier 1															1003	2006	111		210000	
	Nickel	ug/L	Tier 1															1044	2088	116		210000	
	Nickel	ug/L	Tier 1															1078	2156	120		210000	
	Silver	ug/L	Tier 1	<0.10 P,U	<0.10 P,U		<0.10 P,U			<0.10 P,U				<0.10 P,U				0.54	1.1	0.06		11000	
	Zinc	ug/L	Tier 1							<2.5 U								27	54	27		16000	
	Zinc	ug/L	Tier 1											<2.5 U				29	58	29		16000	
	Zinc	ug/L	Tier 1															33	66	33		16000	
	Zinc	ug/L	Tier 1															43	86	44		16000	
	Zinc	ug/L	Tier 1															44	87	44		16000	
	Zinc	ug/L	Tier 1															44	87	44		16000	
	Zinc	ug/L	Tier 1															46	93	47		16000	
	Zinc	ug/L	Tier 1															48	97	49		16000	
	Zinc	ug/L	Tier 1															50	100	50		16000	
	Zinc	ug/L	Tier 1															55	111	56		16000	
	Zinc	ug/L	Tier 1															65	129	65		16000	
	Zinc	ug/L	Tier 1															65	130	65		16000	
	Zinc	ug/L	Tier 1															67	134	67		16000	
	Zinc	ug/L	Tier 1															73	145	73		16000	
	Zinc	ug/L	Tier 1															73	146	74		16000	
	Zinc	ug/L	Tier 1															74	148	74		16000	
	Zinc	ug/L	Tier 1															75	149	75		16000	
	Zinc	ug/L	Tier 1															76	152	77		16000	
	Zinc	ug/L	Tier 1		253													107	214	108		16000	
	Zinc	ug/L	Tier 1	<2.5 U														113	225	114		16000	
	Zinc	ug/L	Tier 1				14.6											113	227	114		16000	
	Zinc	ug/L	Tier 1															122	244	123		16000	
	Zinc	ug/L	Tier 1															221	441	222		16000	
	Zinc	ug/L	Tier 1															224	448	226		16000	
	Zinc	ug/L	Tier 1															226	452	228		16000	
	Zinc	ug/L	Tier 1															229	459	231		16000	
	Zinc	ug/L	Tier 1															230	461	232		16000	
	Zinc	ug/L	Tier 1															231	462	233		16000	
	Zinc	ug/L	Tier 1															232	464	234		16000	
	Zinc	ug/L	Tier 1															240	480	242		16000	
	Zinc	ug/L	Tier 1															242	483	244		16000	
	Zinc	ug/L	Tier 1															251	502	253		16000	
	Zinc	ug/L	Tier 1															262	523	264		16000	
	Zinc	ug/L	Tier 1															270	540	272		16000	
	Inorganics																						
	Cyanide	mg/L	Tier 1	<0.0060 P,U	<0.0060 P,U		<0.0060 P,U			<0.0060 P,U				<0.0060 P,U				0.022	0.044	0.0052		48	
10/3/2008																							
	Metals																						
	Cadmium	ug/L	Tier 1					<0.087 U										0.7881	1.5763	0.70683		130	
	Cadmium	ug/L	Tier 1												<0.087 U			0.8166	1.6332	0.72416		130	
	Cadmium	ug/L	Tier 1															1.0634	2.1268	0.86732		130	
	Cadmium	ug/L	Tier 1															1.3064	2.6127	0.99817		130	
	Cadmium	ug/L	Tier 1															1.3359	2.6719	1.01355		130	
	Cadmium	ug/L	Tier 1															1.8545	3.709	1.2679		130	
	Cadmium	ug/L	Tier 1															1.8762	3.7523	1.27801		130	
	Cadmium	ug/L	Tier 1															1.9719	3.9437	1.32214		130	
	Cadmium	ug/L	Tier 1															2.0242	4.0484	1.346		130	
	Cadmium	ug/L	Tier 1															2.0592	4.1183	1.36182		130	
	Cadmium	ug/L	Tier 1															2.1117	4.2233	1.38543		130	
	Cadmium	ug/L	Tier 1															2.4687	4.9373	1.54129		130	
	Cadmium	ug/L	Tier 1															2.4908	4.9817	1.55072		130	
	Cadmium	ug/L	Tier 1															2.513	5.0261	1.56014		130	
	Cadmium	ug/L	Tier 1															4.1397	8.2795	2.19313		130	
	Cadmium	ug/L	Tier 1	<0.087 U														4.1582	8.3164	2.19979		130	
	Cadmium	ug/L	Tier 1			<0.087 U												4.6352	9.2705	2.36894		130	
	Cadmium	ug/L	Tier 1															8.4485	16.897	3.56708		130	
	Cadmium	ug/L	Tier 1															8.7407	17.481	3.65072		130	
	Cadmium	ug/L	Tier 1															8.936	17.872	3.7061		130	
	Cadmium	ug/L	Tier 1															9.6217	19.243	3.89765		130	
	Cadmium	ug/L	Tier 1															9.8675	19.735	3.96523		130	
	Cadmium	ug/L	Tier 1															9.9167	19.833	3.9787		130	
	Cadmium	ug/L	Tier 1															9.9659	19.932	3.99215		130	
	Cadmium	ug/L	Tier 1															10.163	20.326	4.04579		130	
	Cadmium	ug/L	Tier 1															10.311	20.622	4.08586		130	
	Cadmium	ug/L	Tier 1															10.41	20.82	4.11249		130	
	Cadmium	ug/L	Tier 1															10.459	20.918	4.12578		130	
	Cadmium	ug/L	Tier 1															11.153	22.306	4.31029		130	
	Cadmium	ug/L	Tier 1															11.55	23.101	4.41445		130	
	Cadmium	ug/L	Tier 1															11.8	23.599	4.4791		130	
	Cadmium	ug/L	Tier 1															11.849	23.699	4.49199		130	
	Calcium	ug/L	Tier 1	22600		25500		6360							6370								
	Copper	ug/L	Tier 1					<0.50 U										3.1025	6.205	2.36974		38000	

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	AMV	FAV	FCV	HCV	HNV	WV
			Field ID	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003						
			Sample Depth	NA	NA	NA	NA	1.2	1.34	1.42	2.5	0.92	0.92	1	1.2	1.34	2.6						
	Copper	ug/L	Tier 1												<0.50 U			3.1994	6.3987	2.43676		38000	
	Copper	ug/L	Tier 1															4.023	8.046	2.99943		38000	
	Copper	ug/L	Tier 1															4.8094	9.6187	3.52662		38000	
	Copper	ug/L	Tier 1															4.9037	9.8074	3.58931		38000	
	Copper	ug/L	Tier 1															6.5187	13.037	4.64667		38000	
	Copper	ug/L	Tier 1															6.5849	13.17	4.68942		38000	
	Copper	ug/L	Tier 1															6.8756	13.751	4.87676		38000	
	Copper	ug/L	Tier 1															7.0338	14.068	4.97842		38000	
	Copper	ug/L	Tier 1															7.1391	14.278	5.04601		38000	
	Copper	ug/L	Tier 1															7.297	14.594	5.14709		38000	
	Copper	ug/L	Tier 1															8.3573	16.715	5.82101		38000	
	Copper	ug/L	Tier 1															8.4224	16.845	5.86216		38000	
	Copper	ug/L	Tier 1															8.4876	16.975	5.90326		38000	
	Copper	ug/L	Tier 1															13.097	26.194	8.74872		38000	
	Copper	ug/L	Tier 1	<0.50 U														13.148	26.295	8.77944		38000	
	Copper	ug/L	Tier 1			4												14.45	28.9	9.56451		38000	
	Copper	ug/L	Tier 1															24.36	48.721	15.3592		38000	
	Copper	ug/L	Tier 1															25.092	50.184	15.7772		38000	
	Copper	ug/L	Tier 1															25.579	51.159	16.0547		38000	
	Copper	ug/L	Tier 1															27.28	54.56	17.0199		38000	
	Copper	ug/L	Tier 1															27.886	55.772	17.3623		38000	
	Copper	ug/L	Tier 1															28.007	56.014	17.4306		38000	
	Copper	ug/L	Tier 1															28.128	56.256	17.4989		38000	
	Copper	ug/L	Tier 1															28.612	57.223	17.7717		38000	
	Copper	ug/L	Tier 1															28.974	57.948	17.9758		38000	
	Copper	ug/L	Tier 1															29.216	58.431	18.1116		38000	
	Copper	ug/L	Tier 1															29.336	58.673	18.1795		38000	
	Copper	ug/L	Tier 1															31.023	62.047	19.1251		38000	
	Copper	ug/L	Tier 1															31.985	63.97	19.6618		38000	
	Copper	ug/L	Tier 1															32.585	65.169	19.996		38000	
	Copper	ug/L	Tier 1															32.705	65.409	20.0627		38000	
	Lead	ug/L	Tier 1					<0.50 U										16.273	32.545	1.82812		190	
	Lead	ug/L	Tier 1												<0.50 U			16.884	33.768	1.89677		190	
	Lead	ug/L	Tier 1															22.204	44.407	2.49441		190	
	Lead	ug/L	Tier 1															27.463	54.925	3.08522		190	
	Lead	ug/L	Tier 1															28.104	56.208	3.15726		190	
	Lead	ug/L	Tier 1															39.367	78.735	4.42263		190	
	Lead	ug/L	Tier 1															39.839	79.678	4.47564		190	
	Lead	ug/L	Tier 1															41.92	83.84	4.70943		190	
	Lead	ug/L	Tier 1															43.059	86.117	4.83733		190	
	Lead	ug/L	Tier 1															43.819	87.638	4.92275		190	
	Lead	ug/L	Tier 1															44.961	89.923	5.05109		190	
	Lead	ug/L	Tier 1															52.727	105.45	5.92349		190	
	Lead	ug/L	Tier 1															53.209	106.42	5.97767		190	
	Lead	ug/L	Tier 1															53.692	107.38	6.03188		190	
	Lead	ug/L	Tier 1															88.972	177.94	9.99539		190	
	Lead	ug/L	Tier 1	<0.50 U														89.371	178.74	10.0402		190	
	Lead	ug/L	Tier 1			1.5												99.667	199.33	11.1968		190	
	Lead	ug/L	Tier 1															180.93	361.87	20.3265		190	
	Lead	ug/L	Tier 1															187.08	374.16	21.0174		190	
	Lead	ug/L	Tier 1															191.18	382.37	21.4782		190	
	Lead	ug/L	Tier 1															205.55	411.11	23.0925		190	
	Lead	ug/L	Tier 1															210.69	421.38	23.6695		190	
	Lead	ug/L	Tier 1															211.72	423.43	23.7849		190	
	Lead	ug/L	Tier 1															212.74	425.49	23.9003		190	
	Lead	ug/L	Tier 1															216.85	433.71	24.3621		190	
	Lead	ug/L	Tier 1															219.94	439.88	24.7085		190	
	Lead	ug/L	Tier 1															221.99	443.99	24.9395		190	
	Lead	ug/L	Tier 1															223.02	446.04	25.055		190	
	Lead	ug/L	Tier 1															237.42	474.84	26.6724		190	
	Lead	ug/L	Tier 1															245.65	491.3	27.5965		190	
	Lead	ug/L	Tier 1															250.79	501.59	28.1748		190	
	Lead	ug/L	Tier 1															251.82	503.64	28.2904		190	
	Manganese	ug/L	Tier 1					19.8										1061.4	2122.8	491.952		59000	
	Manganese	ug/L	Tier 1												47.7			1092.3	2184.5	506.26		59000	
	Manganese	ug/L	Tier 1															1352.4	2704.6	626.79		59000	
	Manganese	ug/L	Tier 1															1597.3	3194.4	740.303		59000	
	Manganese	ug/L	Tier 1															1626.5	3252.8	753.834		59000	
	Manganese	ug/L	Tier 1															2120.9	4241.5	982.975		59000	
	Manganese	ug/L	Tier 1															2140.9	4281.7	992.273		59000	
	Manganese	ug/L	Tier 1															2228.9	4457.6	1033.04		59000	
	Manganese	ug/L	Tier 1															2276.7	4553.2	1055.19		59000	
	Manganese	ug/L	Tier 1															2308.5	4616.7	1069.92		59000	
	Manganese	ug/L	Tier 1															2356	4711.8	1091.96		59000	
	Manganese	ug/L	Tier 1															2673.7	5347.1	1239.18		59000	
	Manganese	ug/L	Tier 1															2693.1	5386	1248.19		59000	
	Manganese	ug/L	Tier 1															2712.5	5424.8	1257.19		59000	
	Manganese	ug/L	Tier 1															4064.5	8128.6	1883.79		59000	
	Manganese	ug/L	Tier 1	994														4079.1	8157.9	1890.59		59000	
	Manganese	ug/L	Tier 1			**3070**												4454.6	8908.7	2064.58		59000	
	Manganese	ug/L	Tier 1															7248.8	14497	3359.65		59000	
	Manganese	ug/L	Tier 1															7451.6	14903	3453.65		59000	
	Manganese	ug/L	Tier 1															7586.4	15172	3516.12		59000	
	Manganese	ug/L	Tier 1															8055.6	16110	3733.59		59000	
	Manganese	ug/L	Tier 1															8222.3	16444	3810.83		59000	
	Manganese	ug/L	Tier 1															8255.5	16510	3826.25		59000	
	Manganese	ug/L	Tier 1															8288.8	16577	3841.66		59000	
	Manganese	ug/L	Tier 1															8421.6	16842	3903.23		59000	
	Manganese	ug/L	Tier 1															8521.1	17041	3949.32		59000	
	Manganese	ug/L	Tier 1															8587.3	17174	3980		59000	
	Manganese	ug/L	Tier 1															8620.4	17240	3995.33		59000	
	Manganese	ug/L	Tier 1															9081.6	18162	4209.1		59000	
	Manganese	ug/L	Tier 1															9343.7	18687	4330.58		59000	
	Manganese	ug/L	Tier 1															9507	19013	4406.27		59000	
	Manganese	ug/L	Tier 1															9539.6	19078	4421.39		59000	
	Mercury - low level	ng/L	Tier 1	0.278 J		1.09		0.552							0.78			1400	2800	770		1.8	1.3
	Nickel	ug/L	Tier 1					0.17 J										125.55	251.09	13.9444		210000	

Table 4-3

2008 Surface Water Results

EventDate	Parameter	Units	Data Level	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	AMV	FAV	FCV	HCV	HNV	WV
			Field ID	WLD-001	WLD-001 NW	WLD-001 SE	WLD-001 SE	WLD-002	WLD-002	WLD-002	WLD-002	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003	WLD-003						
			Sample Depth	NA	NA	NA	NA	1.2	1.34	1.42	2.5	0.92	0.92	1	1.2	1.34	2.6						
	Nickel	ug/L	Tier 1												<0.15 U			129.06	258.12	14.3348		210000	
	Nickel	ug/L	Tier 1															158.54	317.07	17.6084		210000	
	Nickel	ug/L	Tier 1															186.1	372.2	20.67		210000	
	Nickel	ug/L	Tier 1															189.38	378.75	21.0338		210000	
	Nickel	ug/L	Tier 1															244.53	489.07	27.1602		210000	
	Nickel	ug/L	Tier 1															246.76	493.52	27.4075		210000	
	Nickel	ug/L	Tier 1															256.52	513.04	28.4913		210000	
	Nickel	ug/L	Tier 1															261.81	523.63	29.0793		210000	
	Nickel	ug/L	Tier 1															265.33	530.66	29.4701		210000	
	Nickel	ug/L	Tier 1															270.59	541.19	30.0546		210000	
	Nickel	ug/L	Tier 1															305.65	611.3	33.9481		210000	
	Nickel	ug/L	Tier 1															307.79	615.57	34.1857		210000	
	Nickel	ug/L	Tier 1															309.92	619.85	34.423		210000	
	Nickel	ug/L	Tier 1															457.52	915.04	50.8161		210000	
	Nickel	ug/L	Tier 1	0.28 J														459.11	918.22	50.9928		210000	
	Nickel	ug/L	Tier 1			0.71 J												499.74	999.47	55.5053		210000	
	Nickel	ug/L	Tier 1															798.73	1597.5	88.7147		210000	
	Nickel	ug/L	Tier 1															820.25	1640.5	91.1042		210000	
	Nickel	ug/L	Tier 1															834.53	1669.1	92.6908		210000	
	Nickel	ug/L	Tier 1															884.19	1768.4	98.206		210000	
	Nickel	ug/L	Tier 1															901.8	1803.6	100.162		210000	
	Nickel	ug/L	Tier 1															905.31	1810.6	100.552		210000	
	Nickel	ug/L	Tier 1															908.83	1817.7	100.942		210000	
	Nickel	ug/L	Tier 1															922.85	1845.7	102.5		210000	
	Nickel	ug/L	Tier 1															933.34	1866.7	103.665		210000	
	Nickel	ug/L	Tier 1															940.32	1880.6	104.441		210000	
	Nickel	ug/L	Tier 1															943.81	1887.6	104.828		210000	
	Nickel	ug/L	Tier 1															992.4	1984.8	110.225		210000	
	Nickel	ug/L	Tier 1															1020	2039.9	113.287		210000	
	Nickel	ug/L	Tier 1															1037.1	2074.3	115.194		210000	
	Nickel	ug/L	Tier 1															1040.6	2081.1	115.574		210000	
	Zinc	ug/L	Tier 1					2.6 J										31.356	62.712	31.6124		16000	
	Zinc	ug/L	Tier 1												2.6 J			32.235	64.47	32.4988		16000	
	Zinc	ug/L	Tier 1															39.609	79.218	39.933		16000	
	Zinc	ug/L	Tier 1															46.507	93.015	46.8879		16000	
	Zinc	ug/L	Tier 1															47.327	94.654	47.7142		16000	
	Zinc	ug/L	Tier 1															61.136	122.27	61.6359		16000	
	Zinc	ug/L	Tier 1															61.694	123.39	62.1982		16000	
	Zinc	ug/L	Tier 1															64.137	128.27	64.6616		16000	
	Zinc	ug/L	Tier 1															65.463	130.93	65.9982		16000	
	Zinc	ug/L	Tier 1															66.344	132.69	66.8865		16000	
	Zinc	ug/L	Tier 1															67.662	135.32	68.215		16000	
	Zinc	ug/L	Tier 1															76.441	152.88	77.0665		16000	
	Zinc	ug/L	Tier 1															76.977	153.95	77.6067		16000	
	Zinc	ug/L	Tier 1															77.512	155.02	78.1463		16000	
	Zinc	ug/L	Tier 1															114.49	228.99	115.431		16000	
	Zinc	ug/L	Tier 1	3.3 J														114.89	229.79	115.833		16000	
	Zinc	ug/L	Tier 1			42.6												125.08	250.15	126.099		16000	
	Zinc	ug/L	Tier 1															200.05	400.11	201.691		16000	
	Zinc	ug/L	Tier 1															205.45	410.9	207.132		16000	
	Zinc	ug/L	Tier 1															209.04	418.07	210.745		16000	
	Zinc	ug/L	Tier 1															221.49	442.99	223.305		16000	
	Zinc	ug/L	Tier 1															225.91	451.82	227.759		16000	
	Zinc	ug/L	Tier 1															226.79	453.59	228.648		16000	
	Zinc	ug/L	Tier 1															227.67	455.35	229.536		16000	
	Zinc	ug/L	Tier 1															231.19	462.39	233.084		16000	
	Zinc	ug/L	Tier 1															233.83	467.65	235.738		16000	
	Zinc	ug/L	Tier 1															235.58	471.15	237.504		16000	
	Zinc	ug/L	Tier 1															236.45	472.9	238.387		16000	
	Zinc	ug/L	Tier 1															248.64	497.29	250.679		16000	
	Zinc	ug/L	Tier 1															255.56	511.13	257.654		16000	
	Zinc	ug/L	Tier 1															259.87	519.74	261.996		16000	
	Zinc	ug/L	Tier 1															260.73	521.46	262.863		16000	
Inorganics																							
	Cyanide	mg/L	Tier 1	<0.0060 P,U		<0.0060 P,U		<0.0060 P,U							<0.0060 P,U			0.022	0.044	0.0052		48	

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detected above the method detection limit. The detection limit is above the criteria due to sample dilu
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e was not detected at or above the reporting lin
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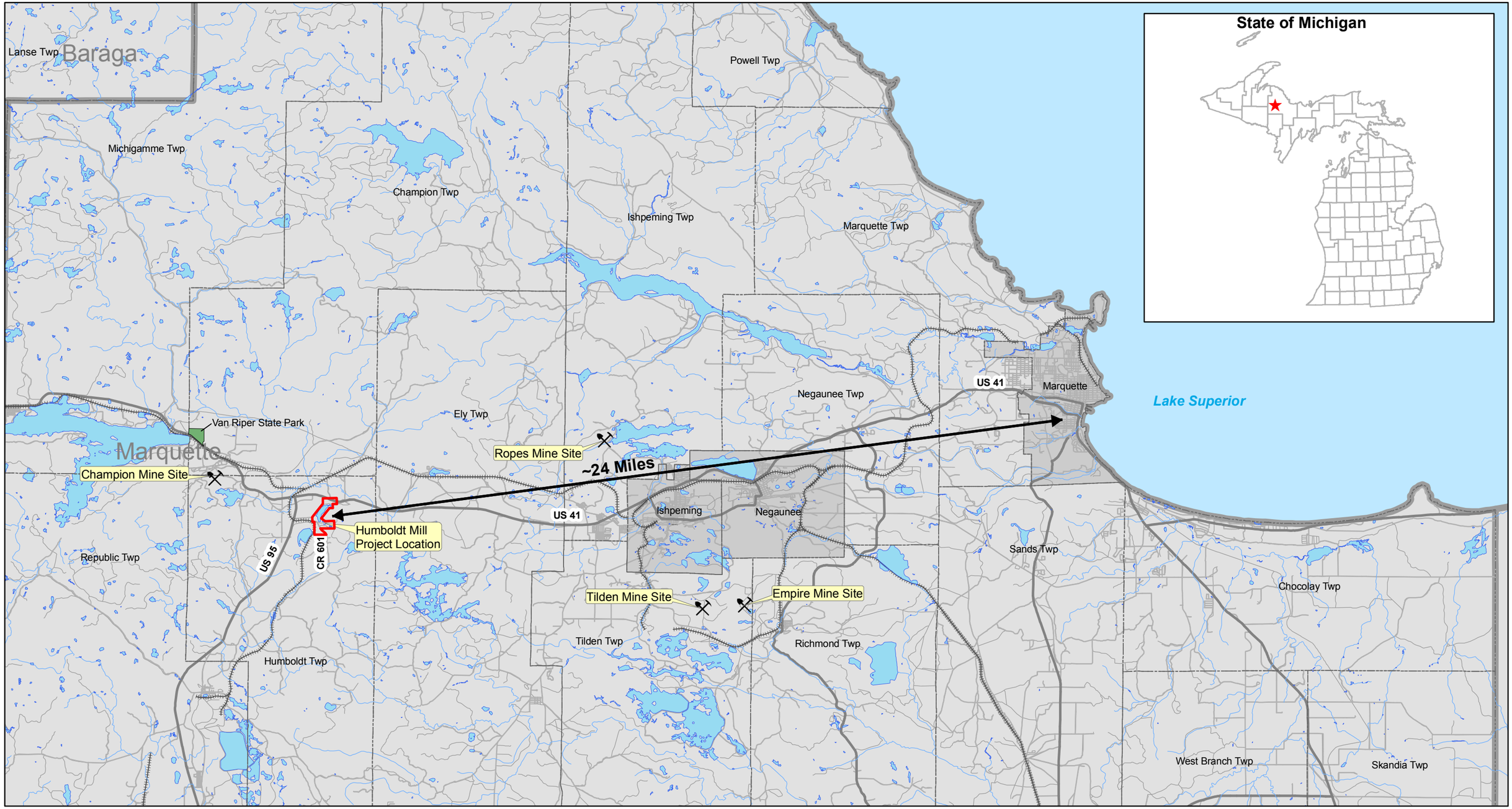
npared to the MDEQ res/com I DW criteria. Exceedances are highlighte

Figures



NOTES

1. Horizontal datum based on NAD 83/94.
   Horizontal coordinates based on UTM Zone 16.
2. All base information downloaded from Michigan Center of Geographic Information (http://www.michigan.gov/cgi).
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Counties
- Minor Civil Divisions
- Lakes and Rivers
- KEMC Project Location
- Highways
- Major Roads
- Minor Roads
- Railroads

N

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CHECKED BY:	AKM	DATE:NOV. '08	
APPROVED BY:	SVD1	DATE:NOV. '08	
APPROVED BY:		DATE:	

Kennecott
Eagle Minerals

FIGURE 1-1
PROJECT LOCATION

Scale: 0 1.5 3 Miles

Date: NOVEMBER, 2008

Prepared by: DAT

Project No: 06W003

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NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/96. Horizontal coordinates based on Michigan State Plane North.
3. Site Location - Project Site within Section 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.
4. In addition to the parameters listed in Table 3. Water samples from MW-5 will be collected and analyzed for the organic parameters listed in Table 4.

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LEGEND

MW-605	Existing Monitoring Well - Field and Laboratory Parameters
MW-9	Existing Monitoring Well - Water Level Only
TDP-001	Driven Point - Water Level Only
HMS-1	Staff Gauge - Water Level Only

N

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	SVF	DATE:	NOV. '08
APPROVED BY:	SVD1	DATE:	NOV. '08
APPROVED BY:		DATE:	

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Eagle Minerals

FIGURE 3-1

2008 GROUNDWATER MONITORING
WELL SAMPLE LOCATIONS NEAR MILL

Scale: 0 200 400 Feet

Date: NOVEMBER, 2008

Prepared by: DAT

Project No: 06W003

NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/96. Horizontal coordinates based on Michigan State Plane North.
3. Site Location - Project Site within Section 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

HW-4 Existing Monitoring Well - Field and Laboratory Parameters

KEMC Project Location

N

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CHECKED BY:	SVF	DATE: NOV. '08	
APPROVED BY:	SVD1	DATE: NOV. '08	
APPROVED BY:		DATE:	

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Eagle Minerals

FIGURE 3-2

2008 GROUNDWATER MONITORING
WELL SAMPLE LOCATIONS NEAR HTDF

Scale: 0 200 400 Feet

Date: NOVEMBER, 2008

Prepared by: DAT

Project No: 06W003

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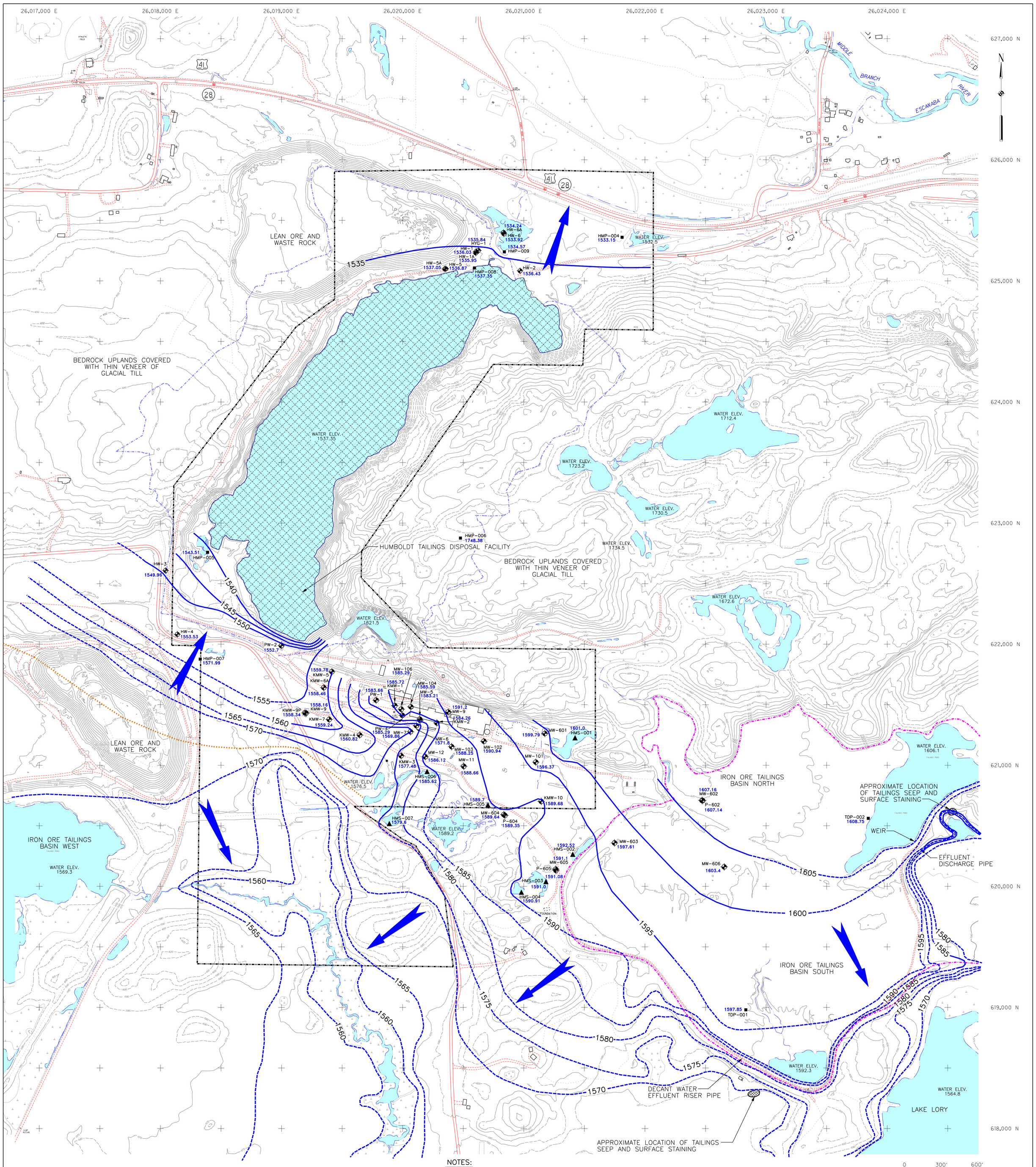

LEGEND

- EXISTING ELEV. CONTOUR IN FEET
- PAVED ROAD
- UNPAVED ROAD
- TRAIL
- FENCE
- SURFACE WATER
- SWAMP/WETLAND
- STREAM/LAKE
- BUILDING
- HUMBOLDT TAILINGS DISPOSAL FACILITY (HTDF)
- APPROXIMATE LIMITS OF PRE-EXISTING IRON ORE TAILINGS DISPOSAL FACILITY
- KEMC PROJECT LOCATION
- KMW-3 1577.48 — MONITORING WELL NUMBER, LOCATION AND GROUNDWATER ELEVATION
- 1570 — MAY 2008 GROUNDWATER CONTOUR (DASHED CONTOURS REPRESENT INFERRED)
- GROUNDWATER FLOW DIRECTION
- APPROXIMATE GROUNDWATER DIVIDE
- WATERSHED BOUNDARY

NOTES:

1. TOPOGRAPHIC AND PLANIMETRIC DATA SUPPLIED BY AERO-METRIC ENGINEERING, SHEBOYGAN, WISCONSIN. DATE OF PHOTOGRAPHY: APRIL 27, 2006.
2. CONTOUR INTERVAL BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. HORIZONTAL DATUM BASED ON NAD 83/96. HORIZONTAL COORDINATES BASED ON MICHIGAN STATE PLANE.
3. SITE LOCATION: PROJECT SITE WITHIN SECTIONS 2 AND 11, T47N, R29W, HUMBOLDT TOWNSHIP, MARQUETTE COUNTY, MICHIGAN.
4. GROUNDWATER CONTOUR INTERVAL SHOWN IS 5 FOOT. TOPOGRAPHIC CONTOUR INTERVAL IS 10 FEET.
5. LAKE/POND ELEVATIONS BASED ON APRIL 27, 2006 AERIAL PHOTOGRAPHY UNLESS OTHERWISE MEASURED BY STAFF GAUGE.

0 300' 600'
Scale:

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	SVF	DATE:	NOV. '08
APPROVED BY:	SVD1	DATE:	NOV. '08
APPROVED BY:		DATE:	

Kennecott Eagle Minerals

FIGURE 3-3
HUMBOLDT MILL
MAY 2008 GROUNDWATER CONTOURS

Scale:	AS SHOWN	Date:	NOVEMBER, 2008
Prepared By:	JRB2	Project No.	06W003

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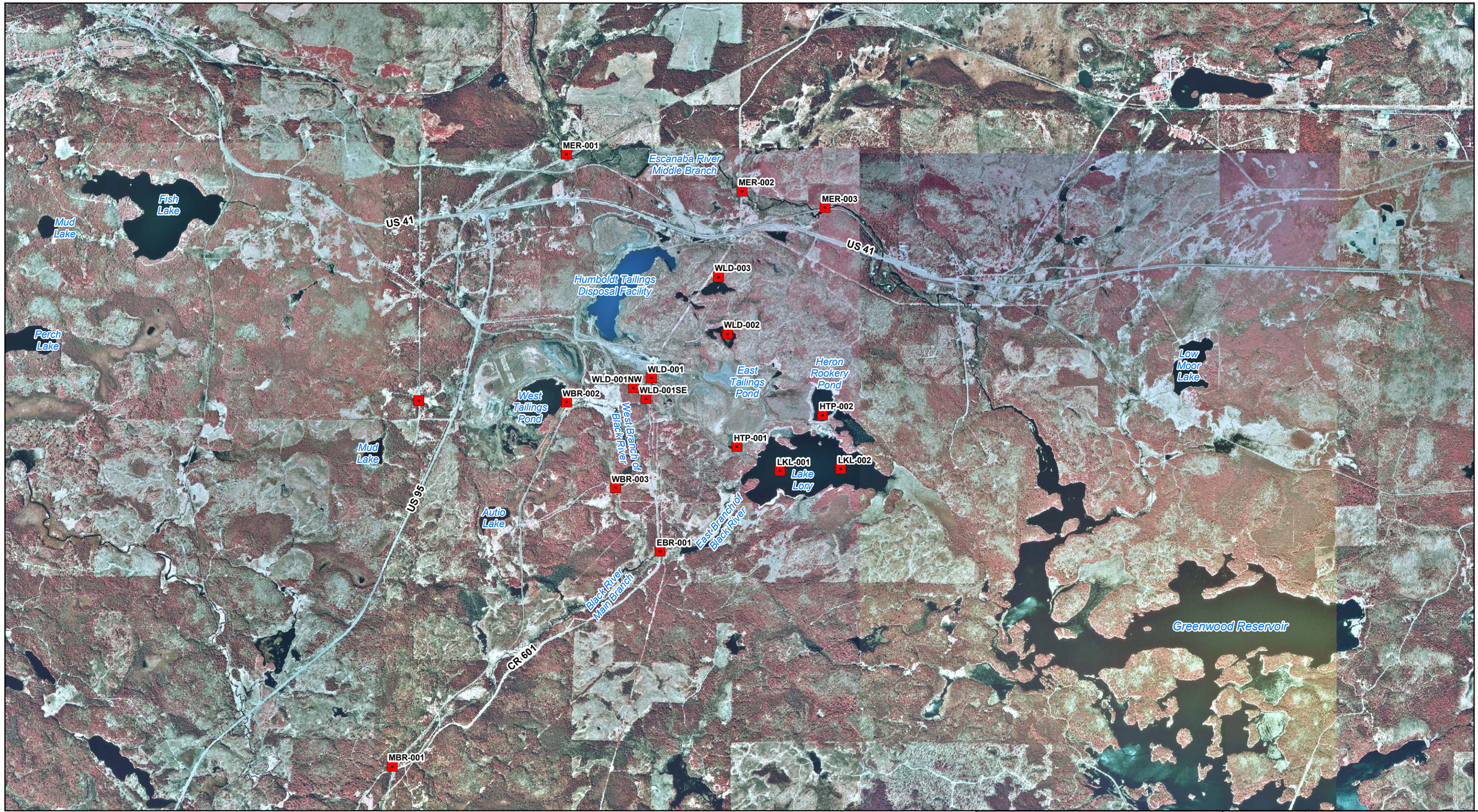

NOTES

1. 1998 Series USGS Digital Orthophoto Quadrangles supplied by Michigan Center of Geographic Information.
2. Horizontal datum based on NAD 83/96. Horizontal coordinates based on Michigan State Plane North.
3. Site Location - Project Site within Section 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

2008 Surface Water Monitoring Location- Field and Laboratory Parameters

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	SVF	DATE: NOV. '08	
APPROVED BY:	SVD1	DATE: NOV. '08	
APPROVED BY:		DATE:	

Kennecott Eagle Minerals

FIGURE 4-1

2008 REGIONAL SURFACE WATER SAMPLE LOCATIONS

Scale: 0 1,500 3,000 Feet

Date: NOVEMBER, 2008

Prepared by: DAT

Project No: 06W003

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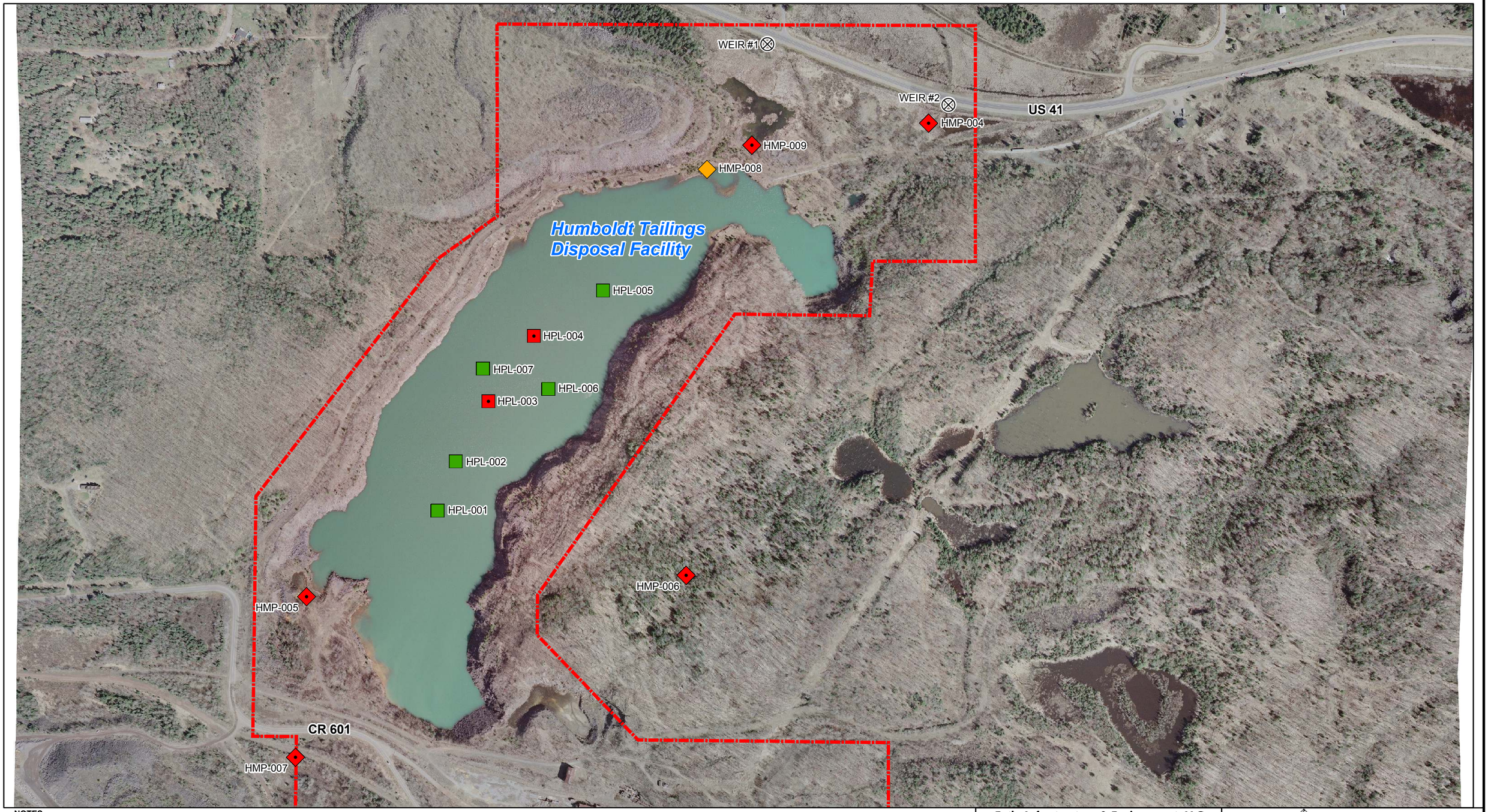

NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/96. Horizontal coordinates based on Michigan State Plane North.
3. Site Location - Project Site within Section 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- HMP-008 Staff Gauge Number and Location
- HPL-005 Surface Water Sample Point-Field Parameter Profile
- HMP-004 Staff Gauge Sample Point-Field and Laboratory Parameters
- HPL-003 Surface Water Sample Point-Field Parameters Profile and Laboratory Selected Intervals
- WEIR #1 Surface Water Monitoring Poin-Flow Only
- KEMC Project Location

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	SVF	DATE:	NOV. '08
APPROVED BY:	SVD1	DATE:	NOV. '08
APPROVED BY:		DATE:	

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FIGURE 4-2

2008 SURFACE WATER SAMPLE LOCATIONS NEAR HTDF

Scale: 0 250 500 Feet

Date: NOVEMBER, 2008

Prepared by: DAT

Project No: 06W003

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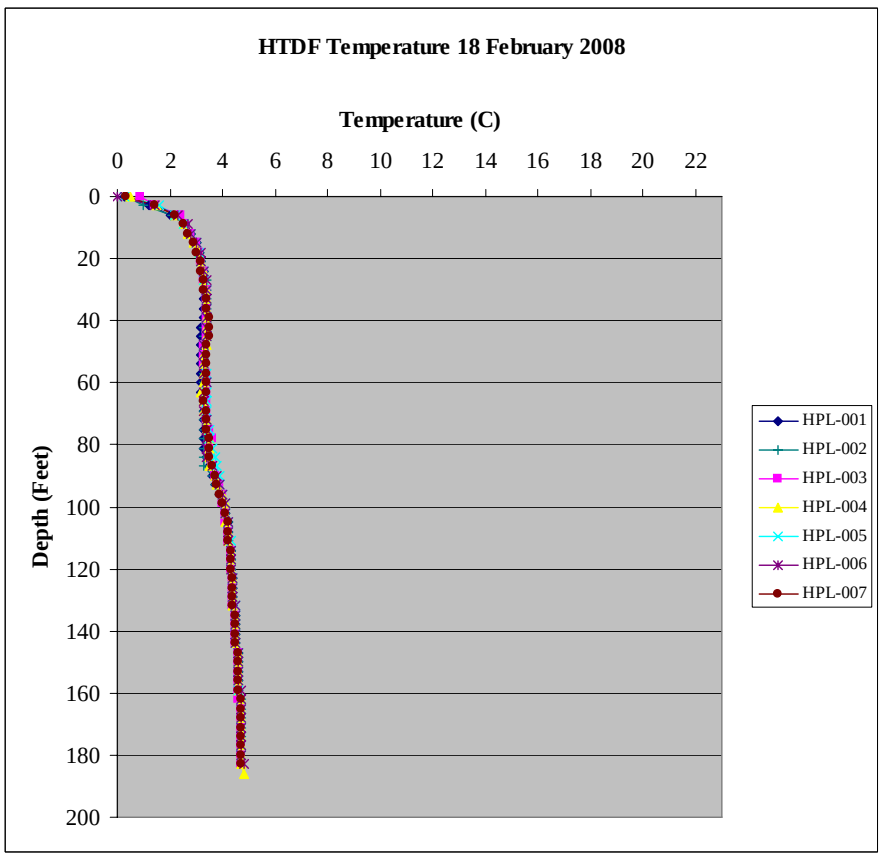

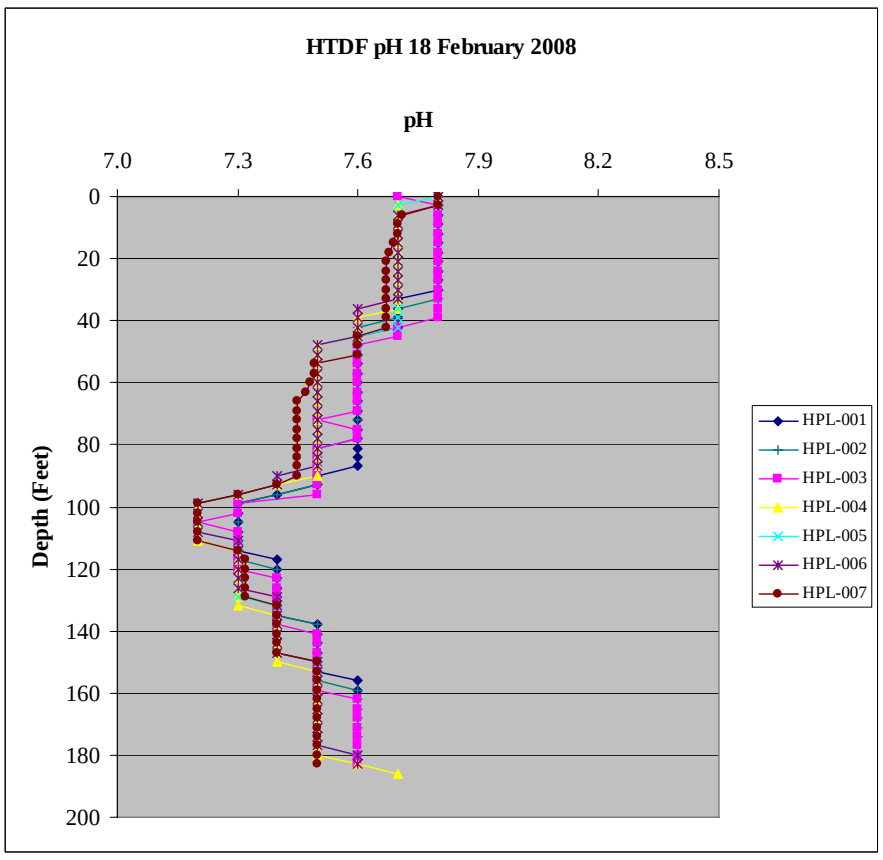

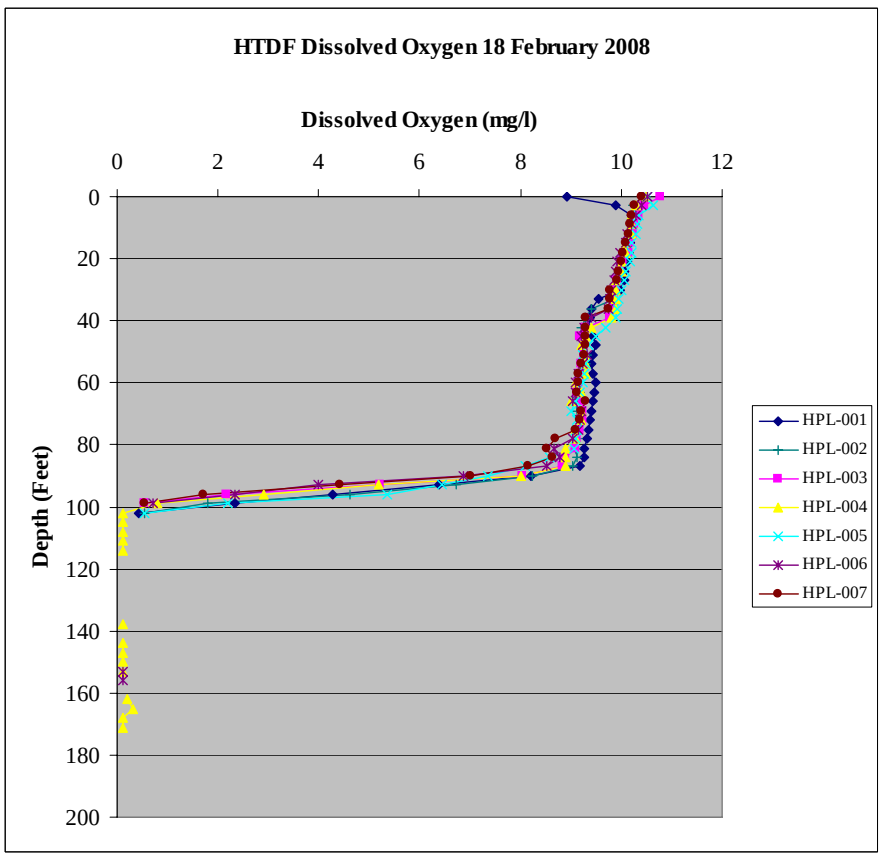

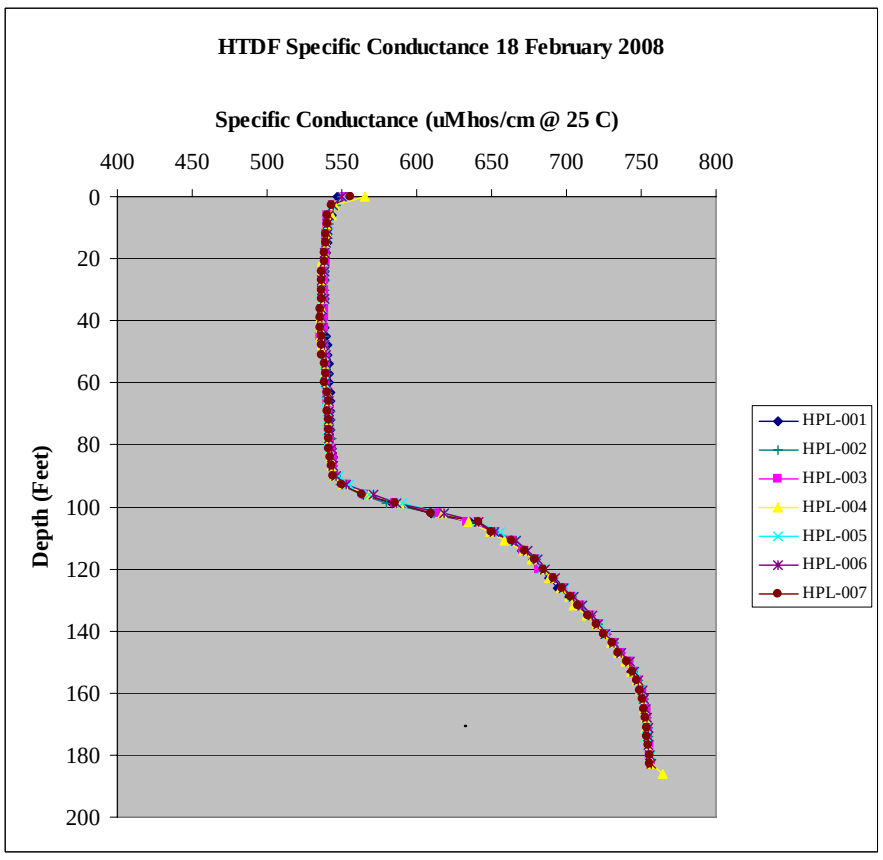

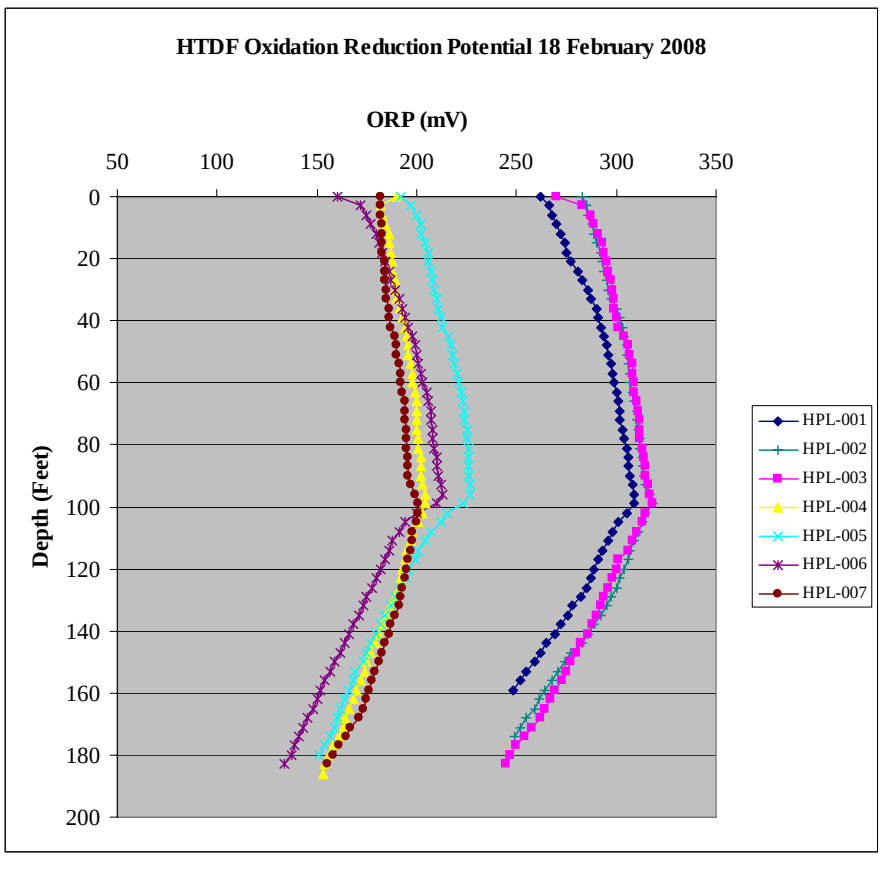

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CHECKED BY: GRE			DATE: 9/22/2008
APPROVED BY: SVD1			DATE: 9/22/2008
APPROVED BY:			DATE:

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Eagle Minerals

FIGURE 4-3
HTDF Profile Data - February 2008

Scale: NA	Date: SEPT 2008
Prepared by: JBM	Project No: 06W003

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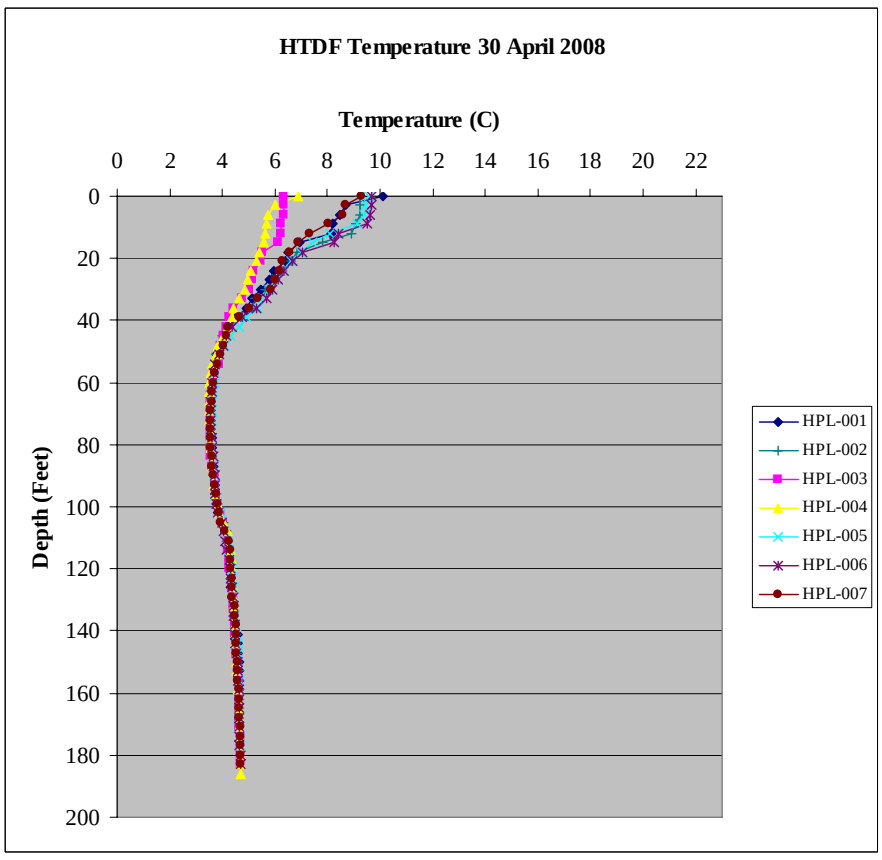

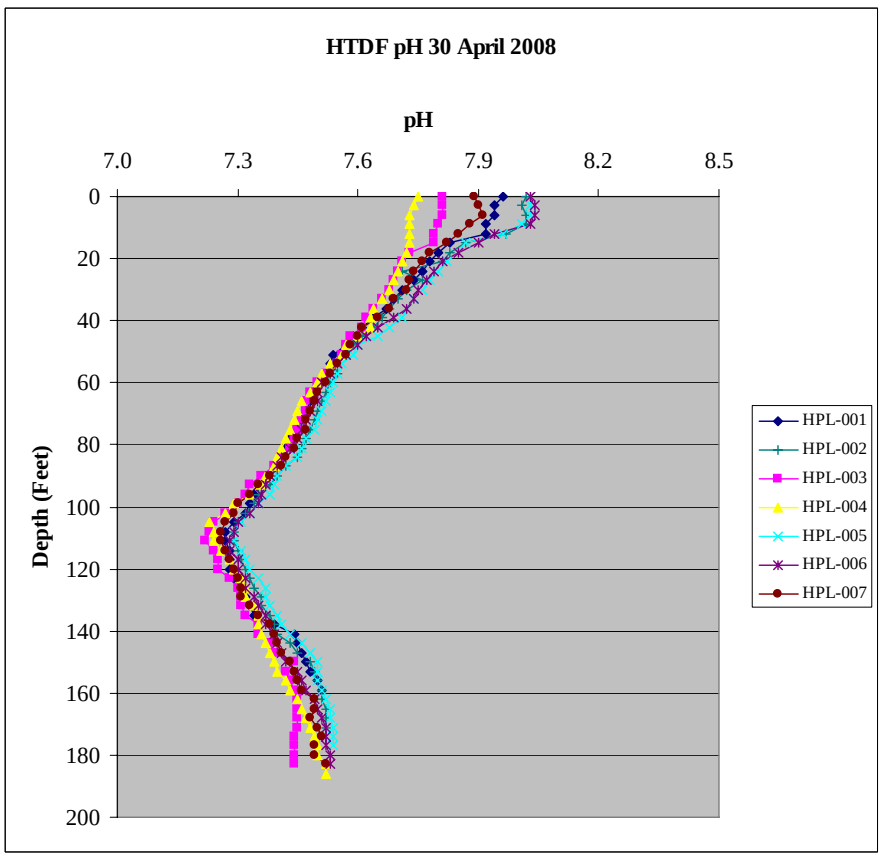

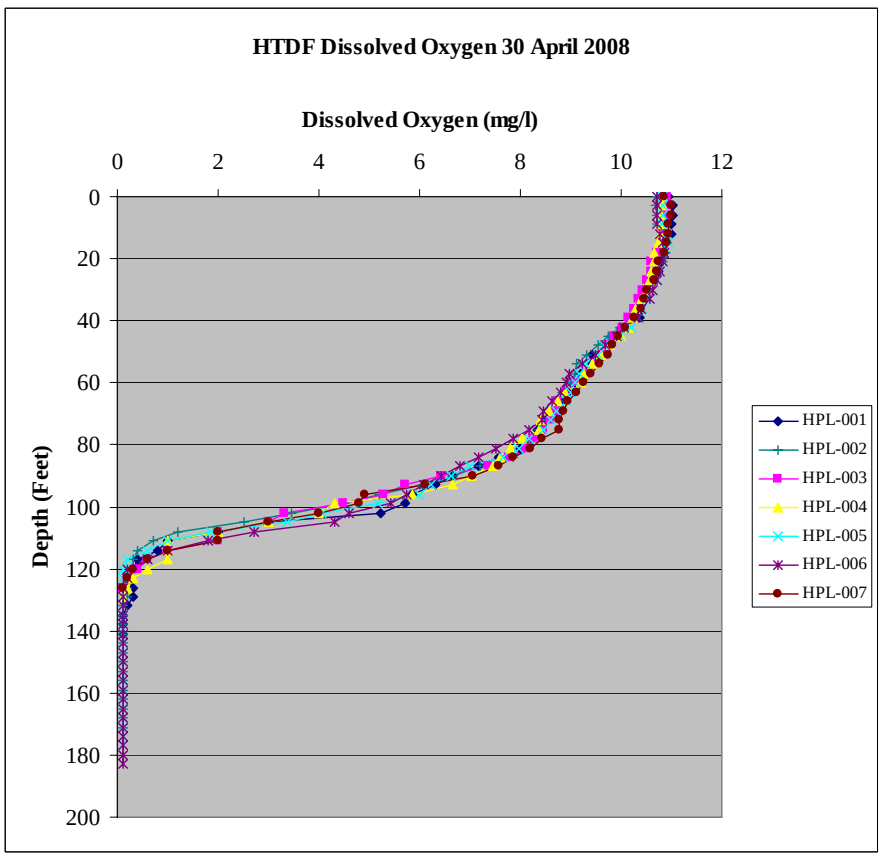

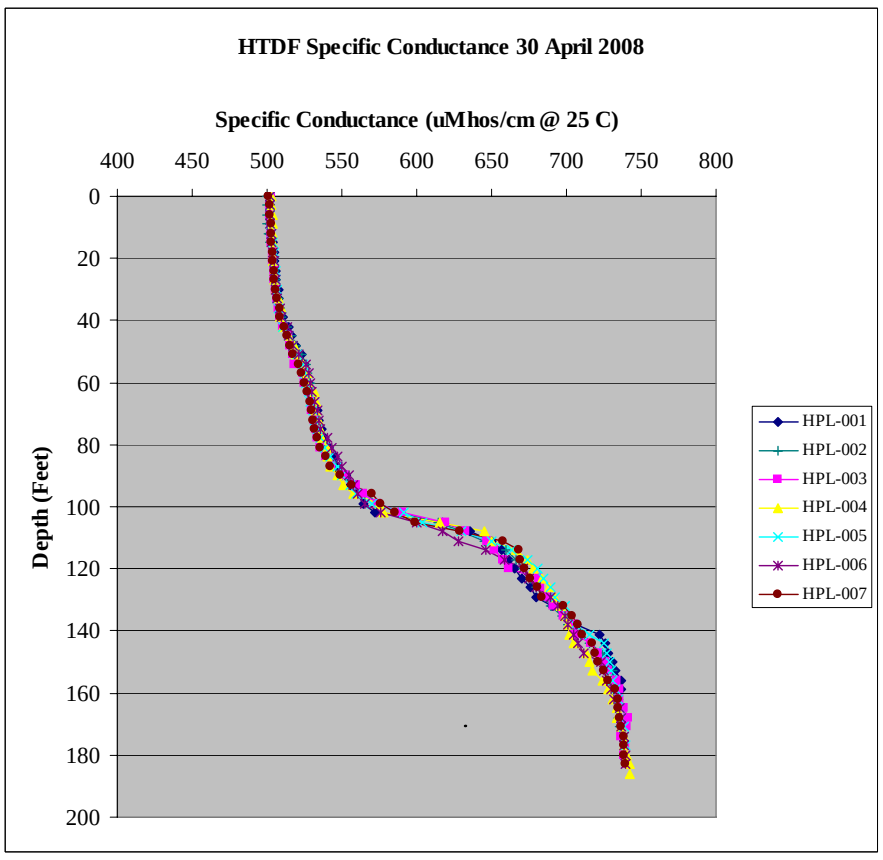

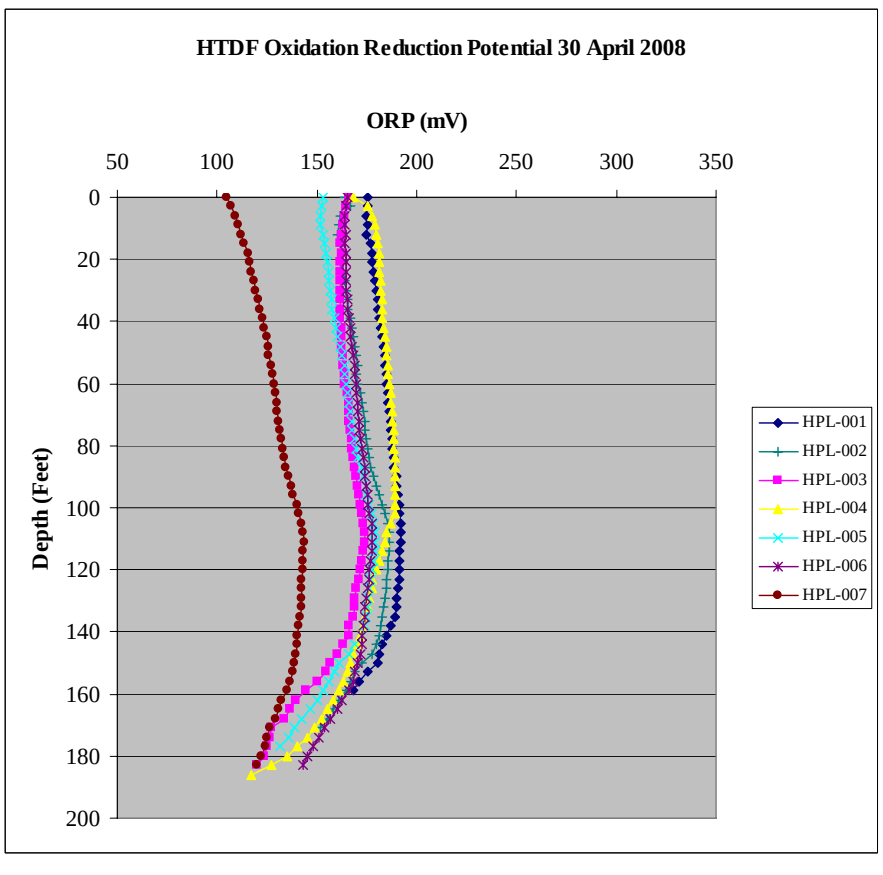

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FIGURE 4-4
HTDF Profile Data - April 2008

Scale: NA	Date: SEPT 2008
Prepared by: JBM	Project No: 06W003

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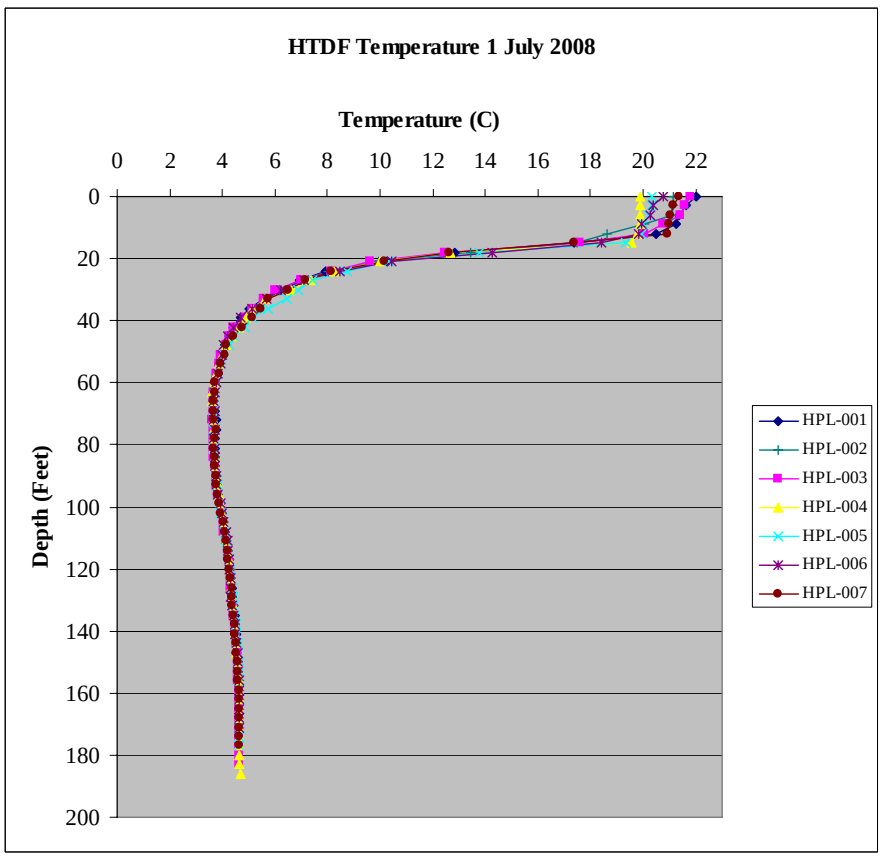

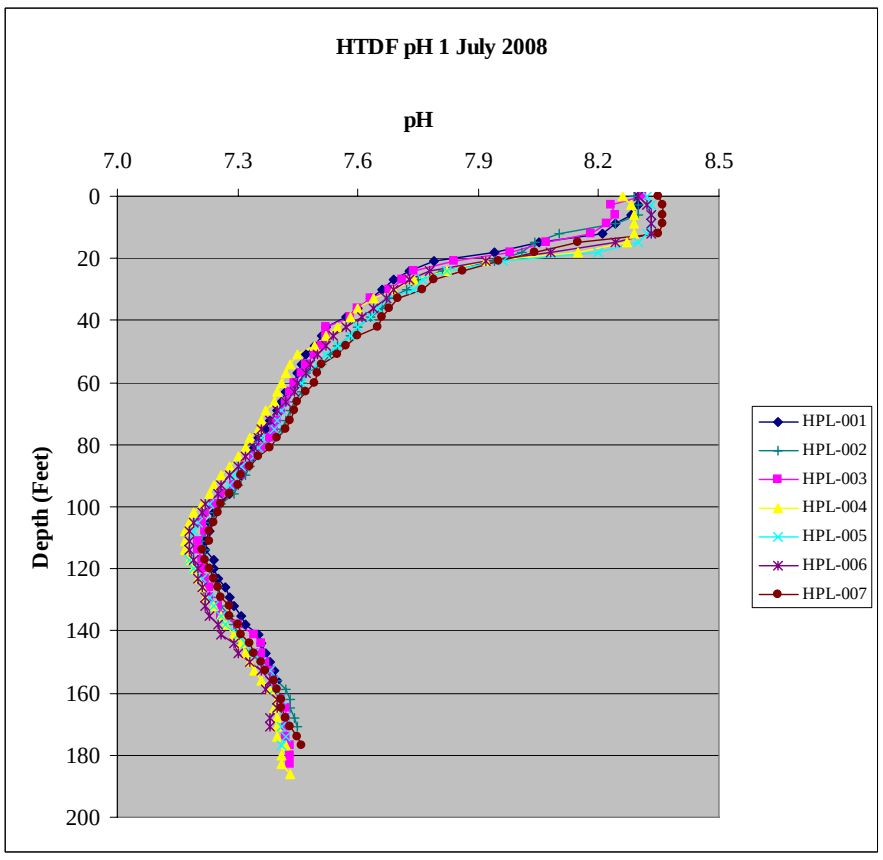

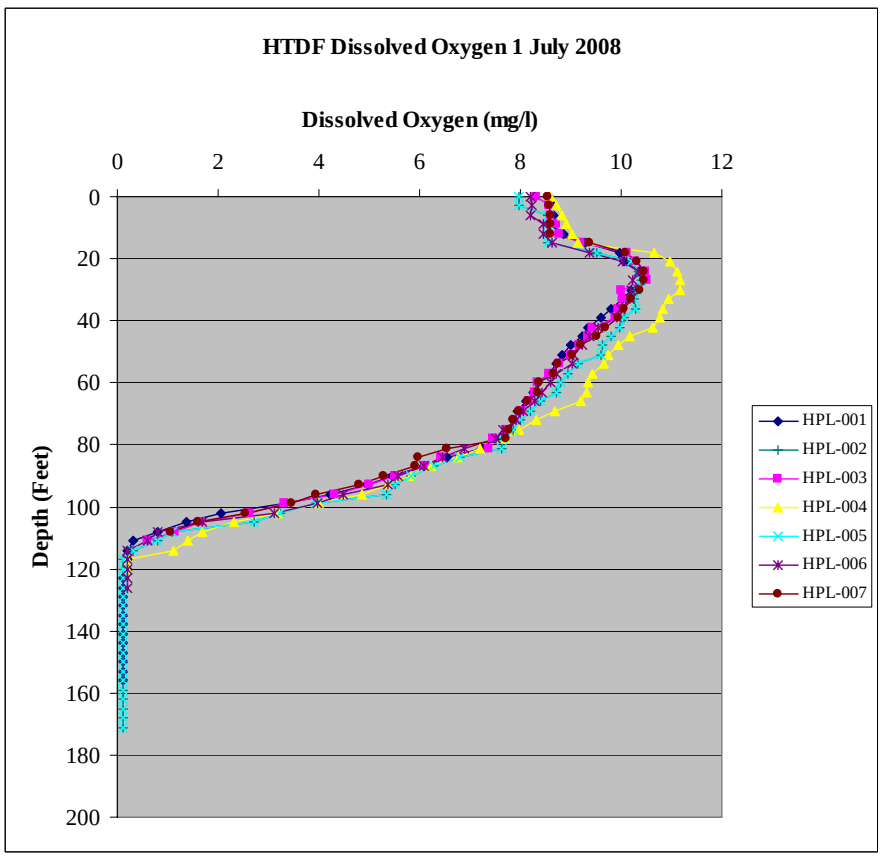

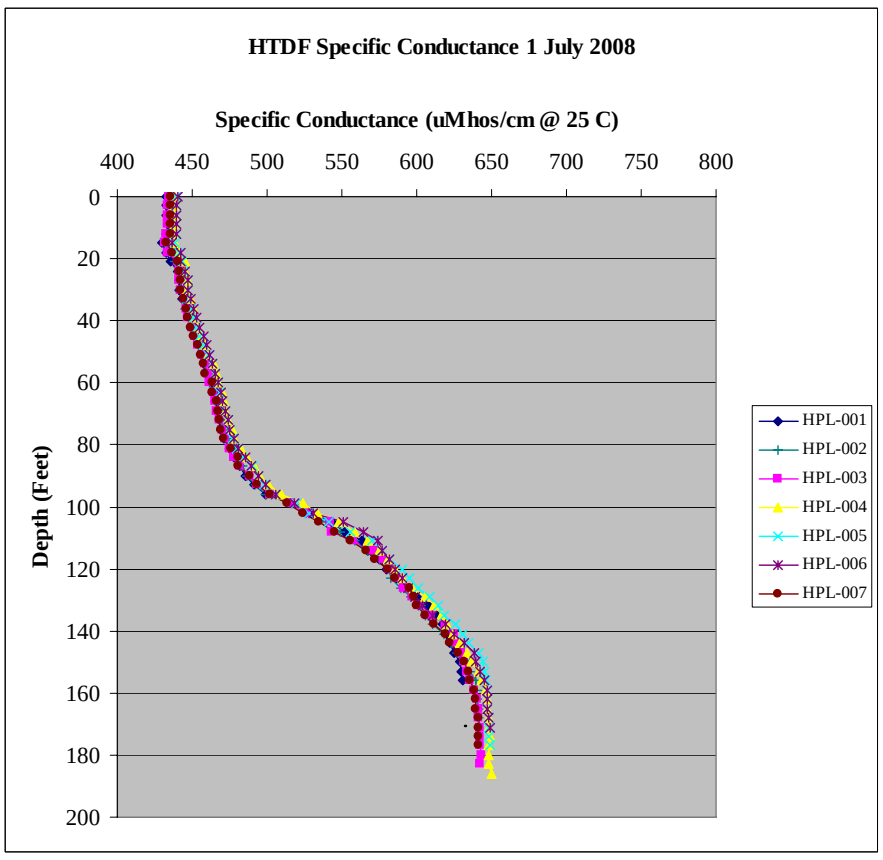

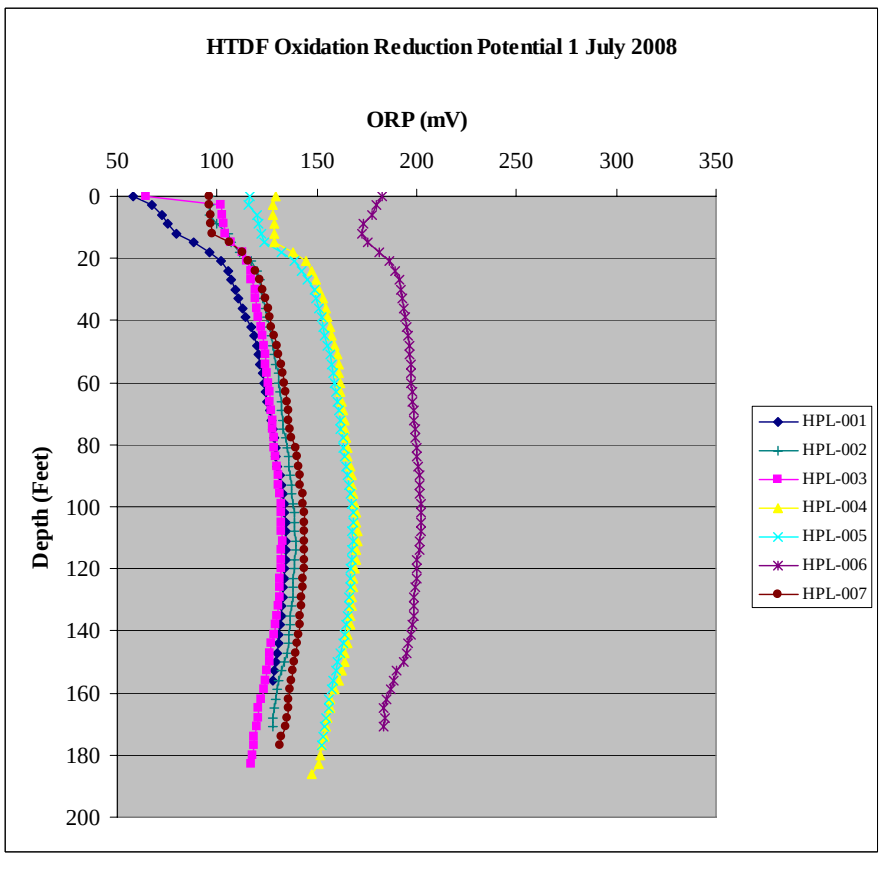

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APPROVED BY: SVD1			DATE: 9/22/2008
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FIGURE 4-5
HTDF Profile Data - July 2008

Scale: NA	Date: SEPT 2008
Prepared by: JBM	Project No: 06W003

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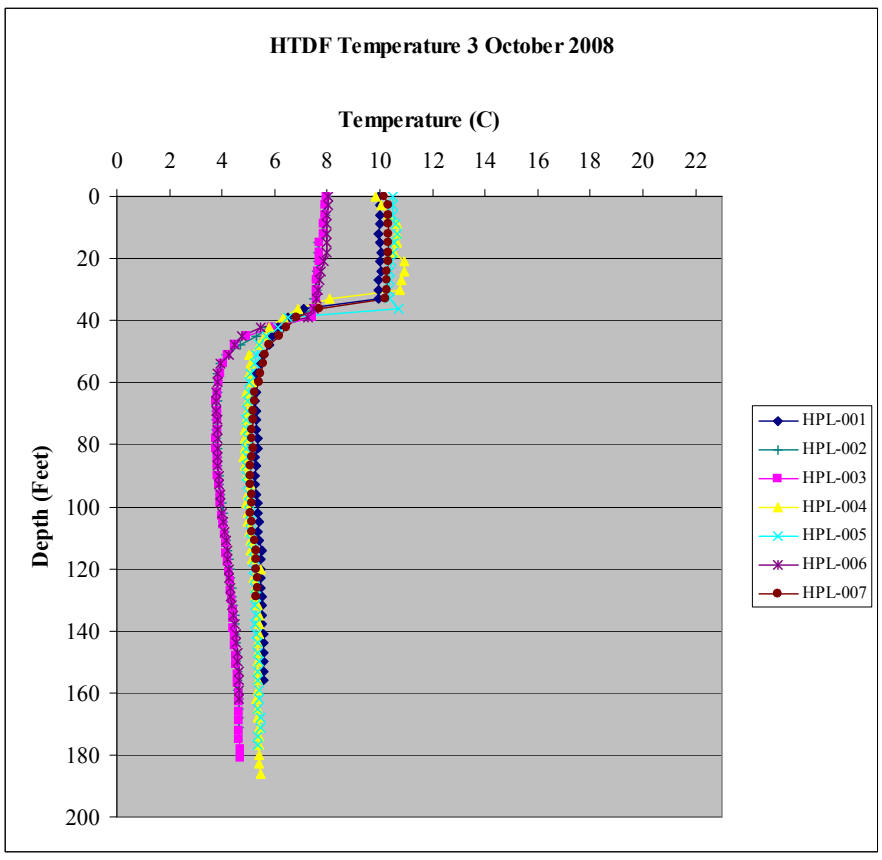

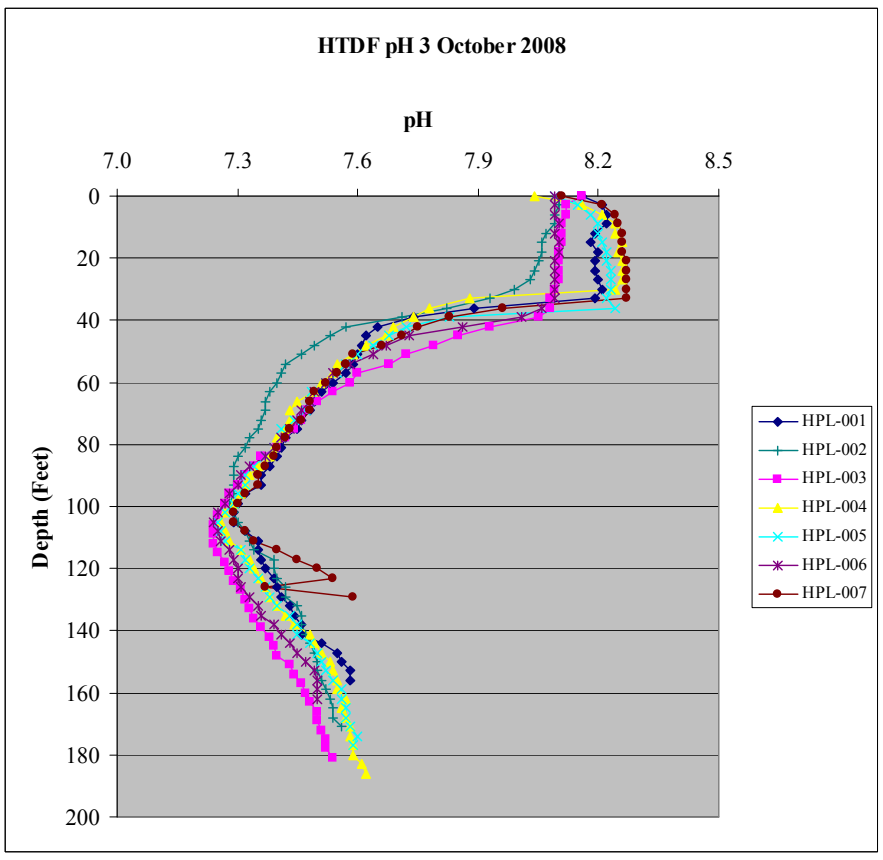

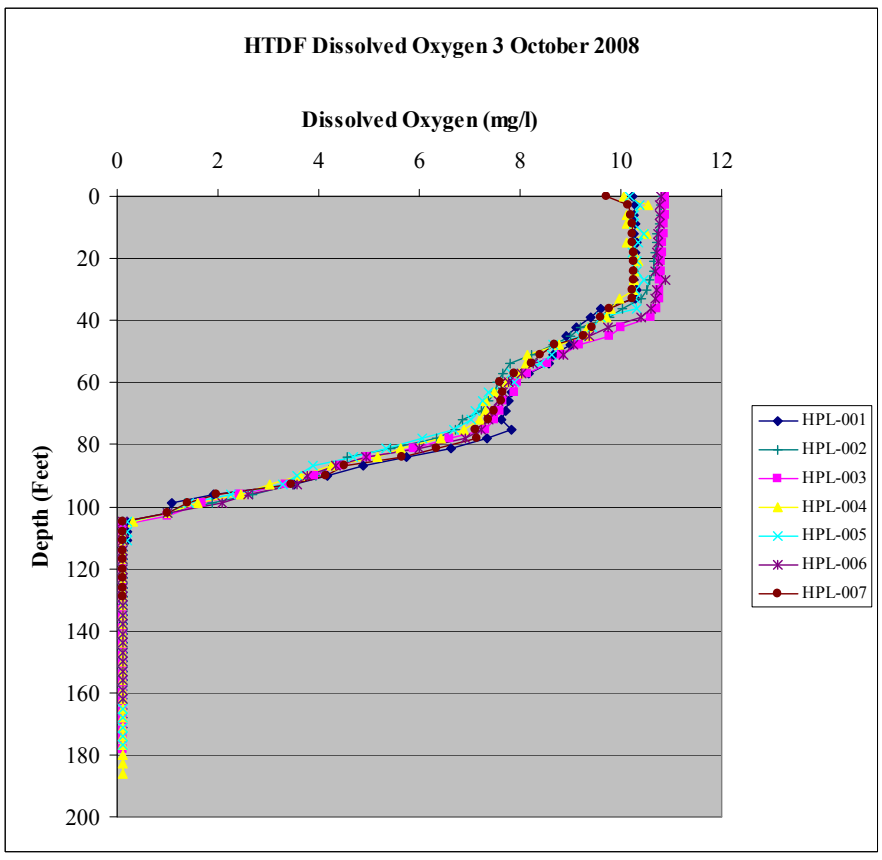

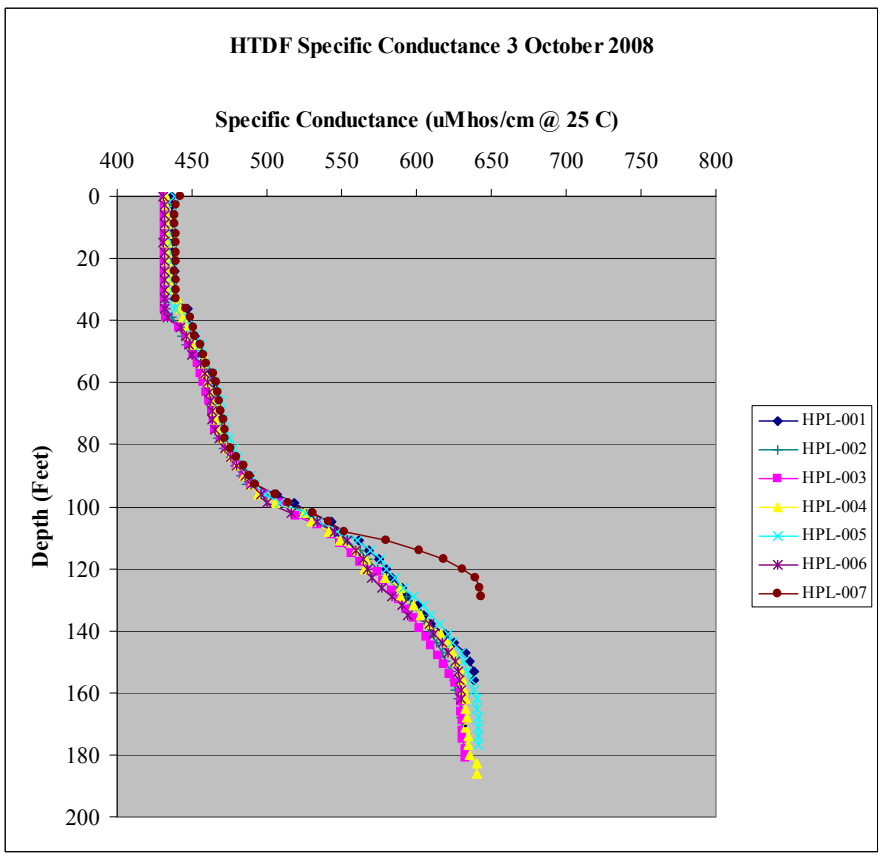

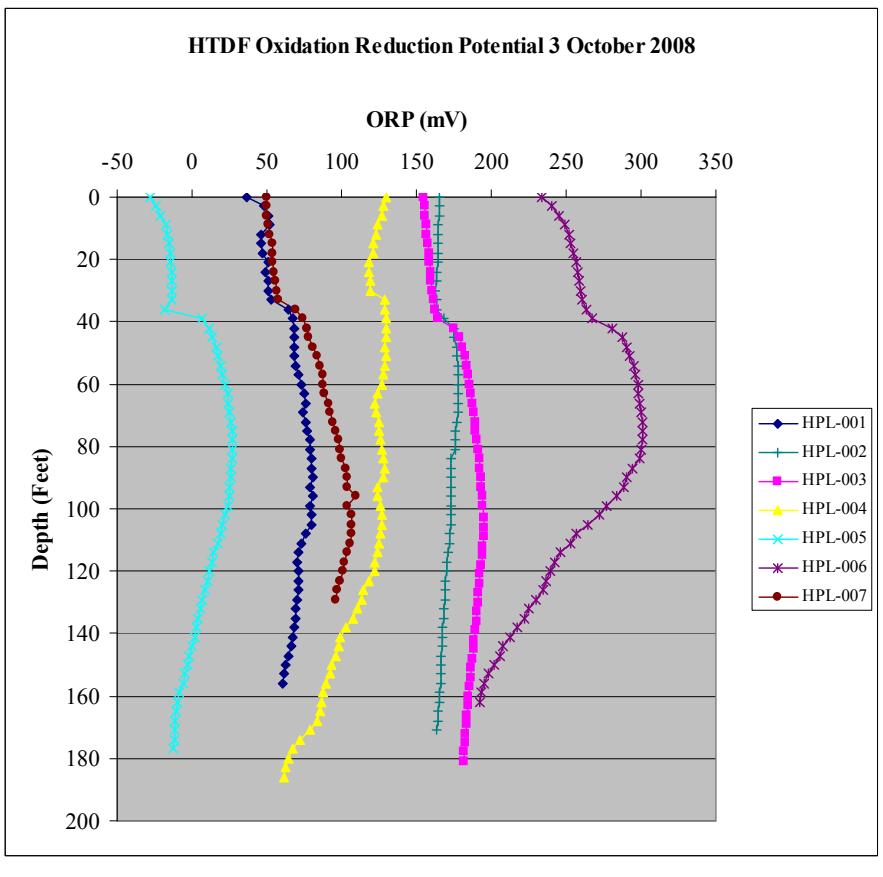

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APPROVED BY: KKB			DATE: 11/26/2008
APPROVED BY:			DATE:

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FIGURE 4-6
HTDF Profile Data - October 2008

Scale:	NA	Date:	NOV 2008
Prepared by:	JBM	Project No:	06W003

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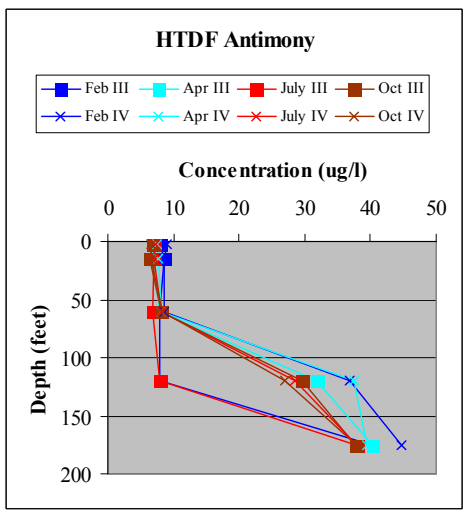

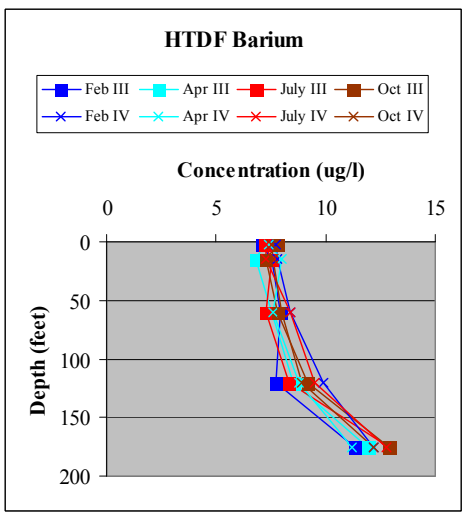

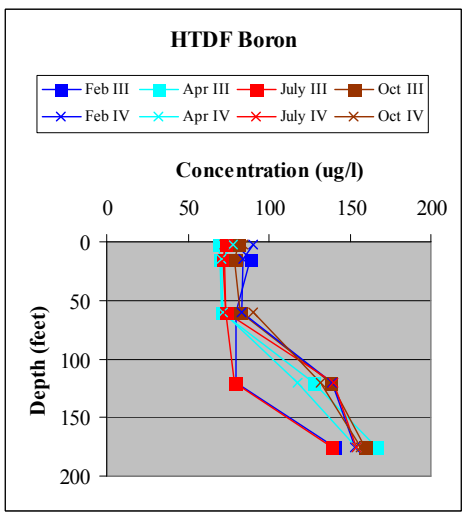

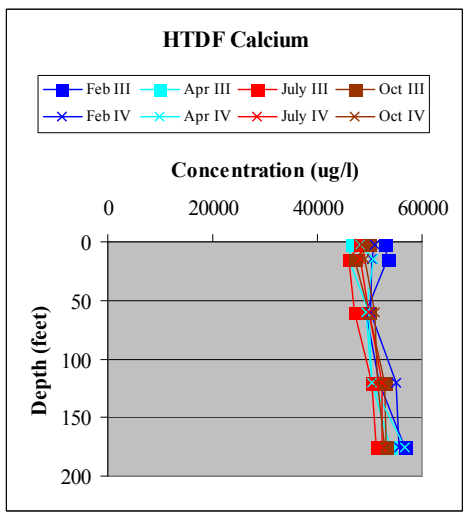

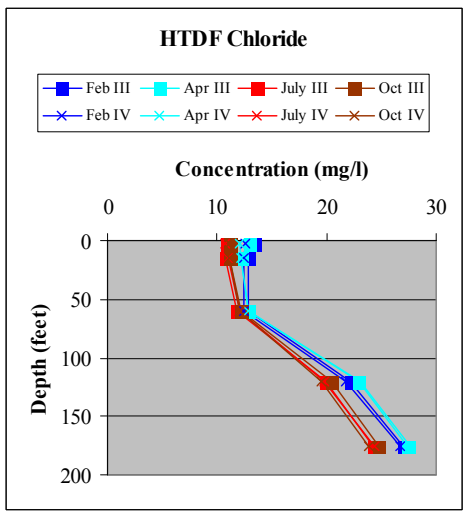

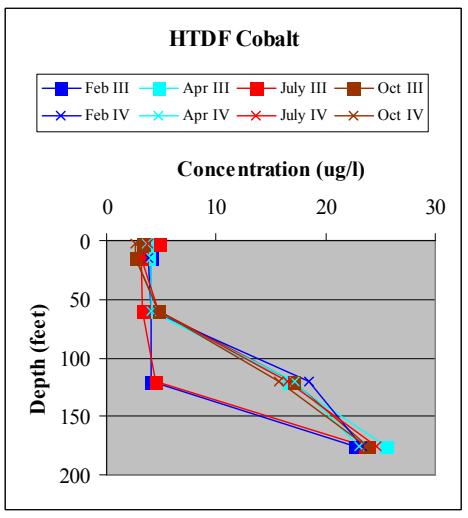

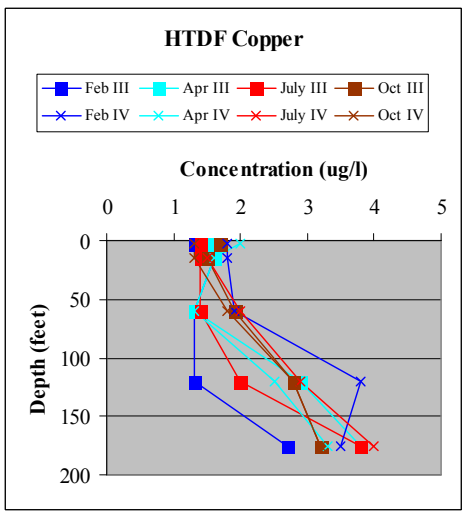

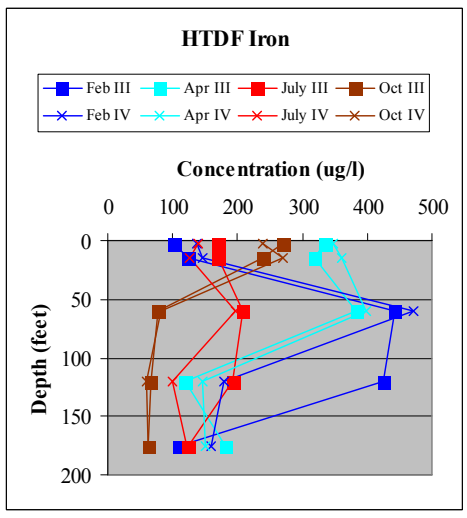

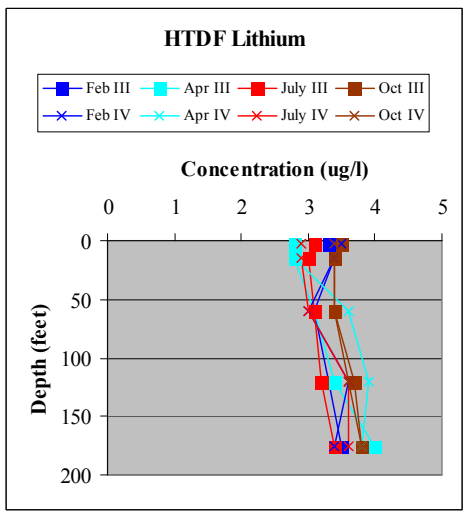

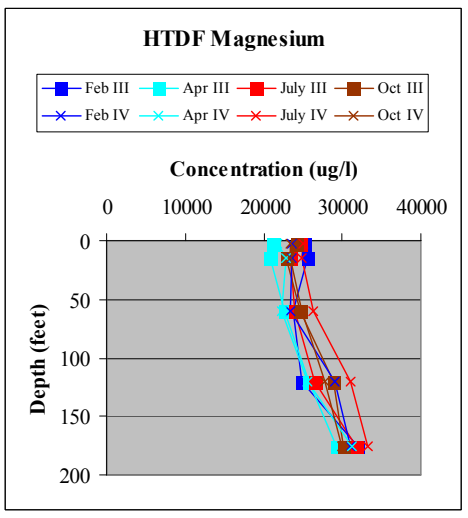

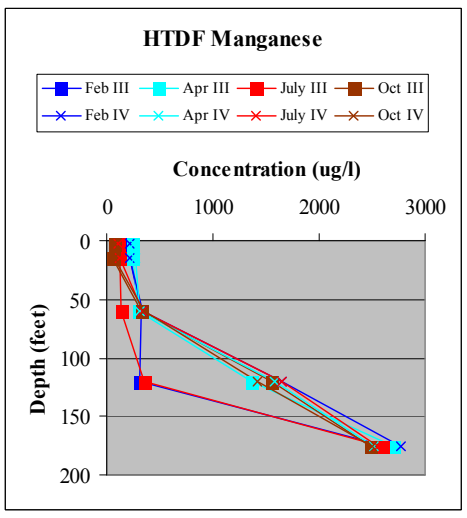

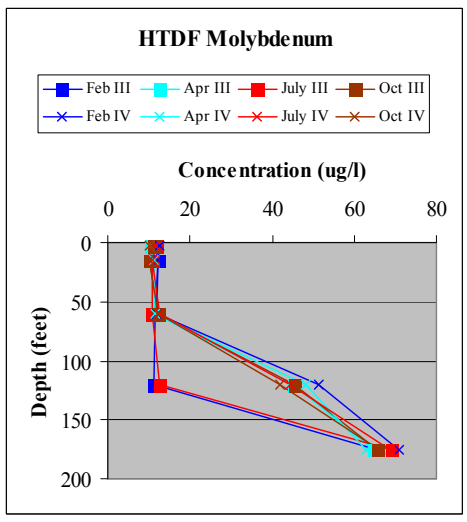

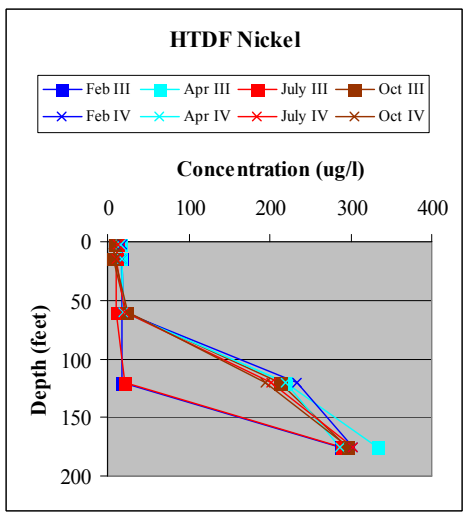

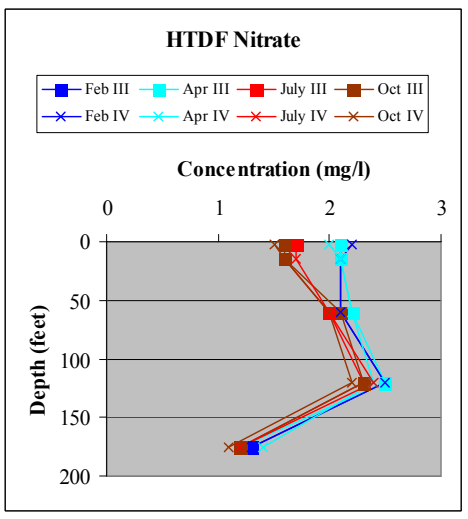

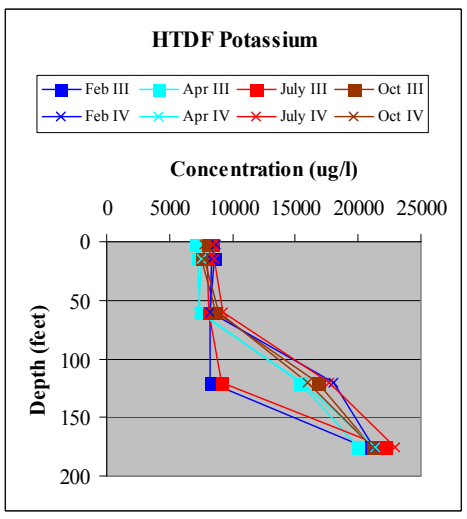

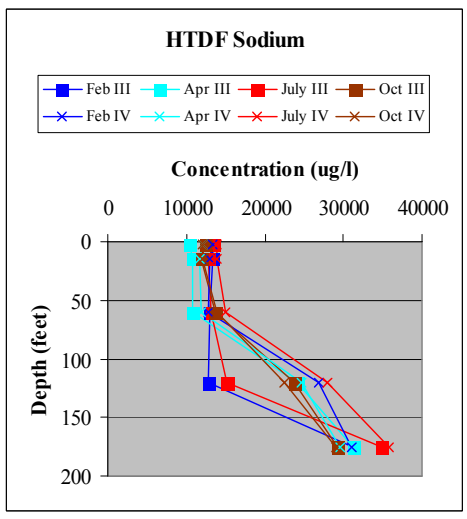

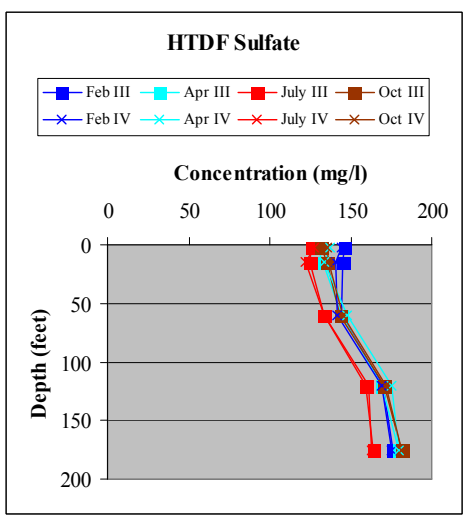

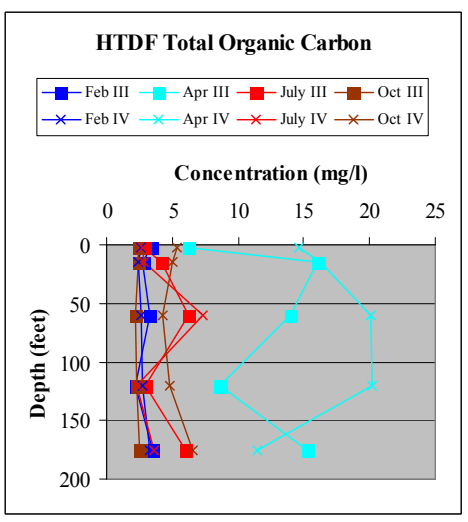

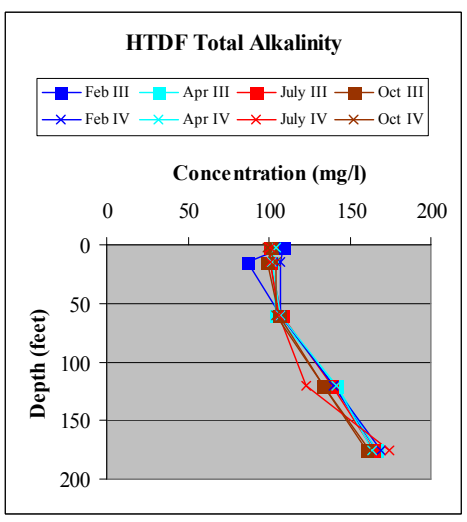

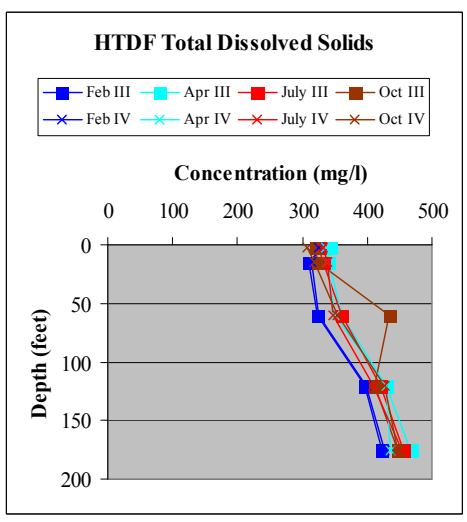

HTDF chemical parameters are measured at two locations on the surface of the HTDF (HPL-003 and HPL-004, labeled as III and IV above), and at four times during 2008. Sampling events associated with the above data began on February 18, April 30, July 1, and October 3, (labeled above as Feb, Apr, July, and Oct) and continued for several days. Specific sampling dates for each data set are contained within the HTDF database.

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APPROVED BY:		DATE:	

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FIGURE 4-7
HTDF Chemical Profiles

Scale:	NA	Date:	NOV 2008
Prepared by:	JBM	Project No:	06W003

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Appendix A

Aquatics Summary Reports

A-1
Aquatic Survey Report – 2007

Humboldt Mill Aquatic Survey Report 2007

April 30, 2008

Prepared for:
Foth Infrastructure & Environment, LLC
2737 South Ridge Road
Green Bay, WI 54304

Prepared by:
ADVANCED ECOLOGICAL MANAGEMENT
2692 165th Avenue
Morley, MI 49336

ADVANCED
ECOLOGICAL
MANAGEMENT

1.0 EXECUTIVE SUMMARY 1
2.0 INTRODUCTION 3
3.0 STUDY SITE 3
4.0 METHODS 7
4.1 Fish Collection 7
4.2 Macroinvertebrates 9
4.3 Stream Habitat Evaluation 10
5.1 Streams 12
5.1.1 Station 1 12
5.1.2 Station 2 13
5.1.3 Station 3 13
5.1.3 Station 4 14
5.2 HTDF, Lake Lory, and Heron Rookery Pond 15
5.2.1 HTDF 15
5.2.2 Lake Lory 16
5.2.3 Heron Rookery Pond 18

EXHIBIT A
REPORT FIGURES 21
Figure 1-1. Location of Humboldt Mill, Marquette County, Michigan 22
Figure 1-2. Stream Sample Locations, Station 1-4 23
Figure 1-3. Humboldt Tailings Disposal Facility Aquatic Survey Locations 23
Figure 1-4. Lake Lory, and Heron Rookery Pond Aquatic Survey Locations 24

EXHIBIT B
REPORT TABLES 26
Table 3-1. Stream Station Location Description 27
Table 5-1. Stream Fish Collection Data – Stations 1-4 28
Table 5-2. Stream Macroinvertebrate Collection Data – Stations 1-4 29
Table 5-2 (Continued). Stream Macroinvertebrate Collection Data – Stations 1-4 30
Table 5-3. Stream Macroinvertebrate Scores and Community Ratings – Station 1-4 31
Table 5-4. Stream Habitat Scores and Ratings – Station 1-4 32
Table 5-5. Stream Station Dimensions 33
Table 5-6. Water Quality Parameters – Stations 1-4 and surface water bodies 34
Table 5-7. Humboldt Tailings Disposal Facility (HTDF) Fish Collection Data 35
Table 5-8. Humboldt Tailings Disposal Facility Fish Size 36
Table 5-9. Lake Lory Fish Collection Data 36
Table 5-9. Lake Lory Fish Collection Data 37
Table 5-10. Lake Lory Fish Size 38
Table 5-11. Lake Lory Macroinvertebrates 39
Table 5-12. Electro-fishing Survey Data of Fish Collected from Heron Rookery Pond 40

EXHIBIT C

PHOTOGRAPHS 41
Photograph C-1. Station 1 – Upstream Extent. View looking south, downstream…….. 42
Photograph C-2. Station 1 – Downstream Extent. View looking west, upstream……42
Photograph C-3. Station 2 – Upstream Extent. View looking west, downstream……43
Photograph C-4. Station 2 – Downstream Extent. View looking east, upstream…….43
Photograph C-5. Station 3 – Upstream Extent. View to east, downstream……..44
Photograph C-6. Station 3 – Downstream Extent. View to west, upstream…….44
Photograph C-7. Station 4 – Upstream Extent. View to southeast, downstream……. 45
Photograph C-8. Station 4 – Downstream Extent. View to northeast, upstream……. 45
Photograph C-9. Humboldt Tailings Disposal Facility – View to the north…….46
Photograph C-10. Humboldt Tailings Disposal Facility – View to the south……...46
Photograph C-11. Lake Lory – View to the north…….47
Photograph C-12. Lake Lory – View to the west……..47
Photograph C-13. Heron Rookery Pond North of Lake Lory. View to the north…… 48

1.0 EXECUTIVE SUMMARY

Advanced Ecological Management (AEM) conducted an environmental baseline aquatics survey in June 2007 at the Humboldt Mill site for Kennecott Eagle Minerals Company (KEMC) under contract to Foth Infrastructure & Environment, LLC. The Humboldt Mill site is located in Upper Michigan, Marquette County as shown on Figure 1-1, Exhibit A. KEMC may conduct commercial activities at the site in the future. An aquatics survey at four stream stations included fish, macroinvertebrate, and habitat community ratings according to the metrics outlined in the Great Lakes and Environmental Assessment Section (GLEAS) Procedure Number 51 (P-51), a survey protocol for wadable streams and rivers. Complementary aquatics surveys were performed in 2007 at the Humboldt Tailings Disposal Facility (HTDF), Lake Lory, adjacent heron rookery pond, and Wetland EE complex north of the HTDF (AEM, 2007a; AEM, 2007b). Fish tissue sampling was performed from samples taken from the HTDF and Lake Lory (AEM, 2007c). The 2007 surveys follow the 2006 survey performed by AEM, (AEM, 2007d). Stream station and lake sampling survey locations for the 2007 survey are shown on Figures 1-2 and 1-3, Exhibit A, respectively.

A summary of the fish, macroinvertebrate, and habitat ratings for the four stream stations are summarized in the table below. Station 2, located on an unnamed tributary of the Black River, and Stations 3 and 4, located on the Middle Branch of the Escanaba River, had poor performance ratings for the fish communities, acceptable ratings for macroinvertebrate communities, and excellent ratings for stream habitat according to the P-51 protocol. Station 1 was rated as an acceptable fish community.

	Station 1	**Station 2**	**Station 3**	**Station 4**
Fish Community	Acceptable	Poor	Poor	Poor
Macroinvertebrate Community	Acceptable	Acceptable	Acceptable	Acceptable
Stream Habitat	Excellent	Excellent	Excellent	Excellent

No threatened or endangered species of fish or macroinvertebrates were observed within the four stream sample stations.

The fish community in HTDF was predominately comprised of suckers, shiners, minnows, and pike. In Lake Lory, the fish community was predominately comprised of warm water species such as bluegill, largemouth bass, smallmouth bass, and black crappie. The fish community in

the Heron Rookery Pond was predominately minnows, which provide a food supply for nesting blue herons. No threatened or endangered fish species were observed in HTDF, Lake Lory or the Heron Rookery Pond.

2.0 INTRODUCTION

Kennecott Eagle Minerals Company (KEMC) is investigating the Humboldt Mill in anticipation of using the mill to process ore. This aquatics survey was conducted by Advanced Ecological Management, LLC (AEM) in June 2007 to provide a description of the aquatic communities in the waters surrounding the Humboldt Mill. The objectives of this survey were to provide a general characterization of aquatic communities and record any threatened and endangered aquatic species encountered. This site-specific survey as well as background information, provides data meeting the requirements of R 425.202 (2) (y) of Michigan's Natural Resources and Environmental Protection Act 451 of 1994 as amended Part 632. This report is based on evaluations of fish, macroinvertebrates, and aquatic habitat that were surveyed during 2007.

3.0 STUDY SITE

The Humboldt Mill property is a former iron-ore mine and ore processing facility located southeast of Champion, Michigan. The mill property and study area are located in Sections 1, 10, 11, 12, 13, 14, and 15 of Humboldt Township (Township 47 North, Range 29 West), south of Highway 41 and east of County Road 95 in Marquette County, Michigan (Figure 1-1, Exhibit A). The aquatic investigations conducted by AEM included surveys of the Humboldt Tailings Disposal Facility (HTDF), Lake Lory, a man-made pond located north of Lake Lory that functions as a heron rookery (herein referred to as the Heron Rookery Pond), the Middle Branch of the Escanaba River located north of the mill property, and two streams in the vicinity of the mill, which are tributary to the Black River. The sample station locations are illustrated in Figures 1-2 and 1-3, Exhibit A. An additional water body appears in Figure 1-3 on the northeast side of Lake Lory between the Heron Rookery Pond and Lake Lory. This is a wetland that generally has water present throughout the year and is hydraulically connected to Lake Lory. This wetland habitat is represented by the sampling performed in Lake Lory and the Heron Rookery Pond.

Altogether, the sample stations included four stream locations, one lake, and two man-made bodies of water (HTDF and Heron Rookery Pond). These sample stations were chosen based on their proximity to the processing facility, their ability to provide representative habitat and biological diversity information, and their ability to be potentially impacted by the project.

The following is a description of individual sampling stations.

Station 1: Station 1 is located on the West Branch Black River that flows south from a former iron-ore tailings basin (Figure 1-2 Exhibit A). The upper end of Station 1 is located approximately 30 feet downstream from an unnamed east-west road that connects to County Road 601, and continues downstream (south) 100 feet. The station location was selected downstream of the road crossing to minimize the influence of beaver impoundments that are located upstream of the road crossing. Station 1 is a low-gradient reach located downstream of numerous beaver impoundments and empties into East Branch Black River that flows southwest from the outlet of Lake Lory.

The substrate was predominantly comprised of organic matter, silt, and woody debris. The predominant riparian vegetation consisted of tussock sedge (*Carex stricta*). Woody shrubs such as sweet gale (*Myrica gale*), speckled alder (*Alnus rugosa*), and sandbar willow (*Salix exigua*) were also observed along the stream bank within the station (Photographs C-1 and C-2, Exhibit C).

Station 2: The upstream extent of Station 2 is located approximately 80 feet downstream of the outlet of Lake Lory (Figure 1-2 Exhibit A). Station 2, which is located on the East Branch Black River, is approximately 150 feet long and flows in a southwest direction at this location.

The substrate was predominantly comprised of organic matter, silt, and woody debris. Much of the woody debris within Station 2 presumably occurred from beaver activity and displayed evidence of gnawing, or chewed markings. Similar to Station 1, the predominant riparian vegetation consisted of tussock sedge. Woody shrubs such as sweet gale and speckled alder were also observed along the stream bank within the station (Photographs C-3 and C-4, Exhibit C). Burreed (*Sparganium* sp.), spatterdock (*Nuphar* sp.), and rushes (*Juncus* sp.) were observed within the stream channel.

Station 3: Station 3 is located on the Middle Branch of the Escanaba River north of the Humbolt Mill. The upstream extent of the station is located approximately 85 feet downstream (east) of the Wolf Lake Road crossing (Figure 1-2, Exhibit A). Station 3 is approximately 300 feet long and the stream flows in a southeast direction at this location.

The substrate was predominantly comprised of gravel, silt, sand, and organic matter. The predominant riparian vegetation within Station 3 consisted of tussock sedge and speckled alder (Photographs C-5 and C-6, Exhibit C). A submerged pondweed (*Potamogeton* sp.) was abundant throughout the stream channel.

Station 4: Station 4 is located on the Middle Branch of the Escanaba River northeast of the Humboldt Mill. The downstream extent of the station is located approximately 2,680 feet upstream (north) of the Highway 41 (Figure 1-2, Exhibit A). Station 4 is approximately 300 feet long and the stream flows east at this location.

The substrate and riparian vegetation of Station 4 was similar to Station 3. However, an abandoned railroad grade comprised the south streambank along the entire length of the station. The streambank along the railroad grade was vegetated (Photographs C-7 and C-8, Exhibit C), and one culvert connected a wetland located south of the river channel to the river near the upstream extent of the station.

HTDF: The HTDF is a water-filled pit directly north of the existing mill facility. HTDF is approximately 3,400 feet long, 950 feet wide, and is located approximately 0.5 miles south of Highway 28 and 0.7 miles east of Highway 95 (Figure 1-2, Exhibit A). The bathymetry of the water body is characterized by steep slopes. Shallow littoral areas of approximately 15 feet deep or less are predominantly limited to the northern and southern extents of the HTDF. Exposed bedrock characterizes most of the shoreline (Photographs C-9 and C-10, Exhibit C). Aquatic vegetation is scarce throughout the HTDF and is confined to shallow areas located in the north and south extents.

Lake Lory: Lake Lory is approximately 128 acres in size and is located approximately 1.3 miles south of Highway 41 and approximately 1.9 miles east of County Road 95 (Figures 1-2 and 1-3, Exhibit A). Lake Lory drains to the Black River East Branch (Figure 1-2) along its southwestern boundary where an earthen berm controls the hydrology of the lake. Ponds located along the northern boundary of the lake drain into the lake and historically functioned as tailings basins for the iron ore mine. Photographs C-11 and C-12 of Exhibit C display views of the lake.

Heron Rookery Pond: The man-made water body containing the blue heron nesting habitat (rookery) is located north of Lake Lory and is approximately 15 acres in size (Figures 1-2 and 1-3, Exhibit A). The Heron Rookery Pond, approximately ¾ miles southeast of the processing facility, was formerly used as a tailings basin for iron ore processing. The hydrology of the pond is controlled by an earthen berm and culvert that are located along the southern boundary. Flooded timbers, located throughout the pond, provide nesting habitat for the great blue herons (Photograph C-13, Exhibit C).

Table 3-1 provides a summary of the location information for the four stream sample stations identified above. Depiction of the sampling locations for HTDF, Lake Lory and the Heron Rookery Pond appear on Figure 1-3.

4.0 METHODS

To characterize the quality of the streams within the vicinity of the mill, flowing water bodies were sampled according to the Michigan Department of Environmental Quality's Surface Water Quality Division Great Lakes and Environmental Assessment Section (GLEAS) *Procedure #51 Survey Protocols for Wadable Rivers* (MDEQ 2002). The GLEAS Procedure 51 (P-51) is a rapid bioassessment protocol that is used to evaluate stream quality based on fish, macroinvertebrates, and stream habitat characteristics.

Surface waters were sampled to characterize the fish communities and to provide a general description of the surface-water aquatic habitat. The HTDF, Lake Lory and Heron Rookery Pond (Figures 1-2 and 1-3, Exhibit A) were sampled using a variety of aquatic sampling methods, including the use of electroshocking gear, nets, and a sediment grabbing device to collect macroinvertebrates from unwadable water bodies.

4.1 Fish Collection

A backpack electroshocker was used in narrow (approximately ≤15 feet) or difficult-to-access stations (e.g., areas with abundant woody debris). A barge-mounted electroshocker was used to sample Stations 3 and 4, which were deep and wide enough to permit the passage of the barge unit. On all stations, one pass was conducted in an upstream direction and the duration of electroshocking charge time was recorded for each pass. Stunned fish were placed in a live well for identification and enumeration. Following collection and fish identification, the enumerated fish were released within each station.

Stream fish data were analyzed according to the P-51 metrics to produce a "fish score" that was used to rate the fish community as poor, neutral (acceptable), or excellent quality. There are ten metrics used to evaluate the fish community diversity and they are listed in the P-51 methodology (Creel et al.,, 1998). The score for each metric can range from –1 to +1 and are described as follows:

- -1 indicates the community is performing outside of (minus) two standard deviations from the average conditions found at excellent sites;

- 0 indicates the community is performing between the average condition and (minus) two standard deviations from the average condition found at excellent sites, and;
- +1 indicates the community is performing better (above two standard deviations) than the average condition found at excellent sites.

The summation of the fish scores can range from –10 to +10 using these metrics. Streams that score from +5 to +10 are considered excellent. Stations that score from –5 to –10 are considered poor, while streams that score from –5 to +5 (including zero) are considered acceptable in fish community structure (Creel et al., 1998).

The lake and pond sites were not evaluated for fish using the P-51 procedure because the approach is designed for wadable streams (MDEQ 2002). Since fish collection gear is not equally selective among sizes and species of fish, a combination of sampling gear, including a boom shocker, a backpack shocker, experimental gill nets, and hoop nets were used to capture fish at HTDF, Lake Lory and the Heron Rookery Pond. Gear and sample locations within HTDF and Lake Lory were selected to provide a broad sampling coverage of aquatic habitat and to minimize the bias created by gear selectivity and avoidance by fish.

A boat-mounted shocking unit and generator (boom shocker) were used to collect fish in shallow water, near-shore areas of HTDF and Lake Lory (Figure 1-3, Exhibit A). Pulsed direct current was used during the survey to minimize trauma to the fish. Electroshocking duration was automatically recorded as the total seconds of electricity that was discharged from the boom shocker in each transect. Boom shocking was conducted at night, which is more effective than shocking during daylight hours (Smith-Root, 2004).

Multiple panel monofilament gill nets of varying mesh size were fished in several locations throughout the HTDF (Figure 1-3). Each gill net consisted of five 6 by 25-foot panels ranging from 1.5- to 6-inch stretch mesh. The gill nets were set overnight throughout HTDF and Lake Lory, and were fished for approximately 12 hours (Figure 1-3, Exhibit A).

Hoop nets were placed throughout HTDF and Lake Lory (Figure 1-3, Exhibit A). Hoop nets were constructed of two-inch stretch mesh and the hoop diameter measured four feet with a 50-

foot long center lead, and two 6- by 25-foot wing leads. The hoop nets were fished overnight for approximately 12 hours.

The Heron Rookery Pond located to the north of Lake Lory functions as nesting habitat for great blue herons (*Ardea herodias*), which were nesting at the time of aquatic sampling. To minimize disturbance to these nesting birds, aquatic sampling was conducted along the south shoreline of the water body using a backpack electroshocker.

Catch-per-unit-effort (CPUE) is used as an index of fish abundance. Fish sampling efforts were standardized to units consistent with the Michigan Department of Natural Resources sampling protocol (Schneider et al., 2000). CPUE for the following gear was estimated as follows:

$$\text{CPUE} = \frac{N}{t}$$

Where,

N = number of fish caught

t = sample duration in hours (boom shocker)

t = sample duration in net nights (experimental gill net)

t = sample duration in net nights (hoop net).

As part of the enumeration process, the species, length, weight, and number of fish captured were recorded. One representative of each species that was not identifiable in the field was placed in a voucher jar containing 10% formalin for later identification. Each voucher jar was labeled according to the sample location and date. Fish were identified to species using various taxonomic references (Eddy and Underhill 1978; Becker 1983; Page and Burr 1991; Coon 1997; Pflieger 1997). The Marquette County Element List (MNFI 2007) was reviewed to determine if any threatened, endangered, or special concern aquatic species occurred within the vicinity of the project.

4.2 Macroinvertebrates

Macroinvertebrate sampling was conducted within the stream stations. Upon completion of fish sampling, aquatic macroinvertebrates, including mussels and decapods (crayfish), were collected

within each station using D-framed kick-nets (Merritt et al., 1996). Stations were sampled for 45 minutes using two kick nets (total sample time = 1.5 hours) and samples were collected in all habitat types within each station to characterize the macroinvertebrate community. Collected specimens were stored in 500 ml plastic wide-mouth jars containing 70% ethanol, and were identified using various taxonomic references (Peckarsky et al., 1990; Pennak, 1990; Cummings and Mayer, 1992; Bright, 2007; Merritt et al., 2008).

The macroinvertebrate data were analyzed according to nine metrics identified in the P-51 methodology. The sum of the macroinvertebrate scores can range from –9 to +9; and like the fish community, are graded as excellent, acceptable (slightly impaired) or poor according to the summation of the metric scores.

4.3 Stream Habitat Evaluation

Riparian and instream habitats were qualitatively described for each station. A description of stream morphology included run/riffle/pool/shallow pool configurations, substrate, substrate embeddedness, instream cover, vegetation, flow stability, and bank stability. Stream habitat was rated as excellent, good, marginal, or poor based on P-51 scores interpreted from 10 habitat metrics. Habitat was rated according to the following P-51 habitat scores (MDEQ, 2002):

Habitat Characterization	Total Point Score
1. Excellent	> 154
2. Good	105 – 154
3. Marginal	56 – 104
4. Poor	< 56

Wetted stream width was measured at the downstream extent, upstream extent, and middle of each sample station to describe the physical dimensions of each stream sample station at the time of the survey. The average depth of the sample station was determined from stream depth measured at 20 percent of the channel width, 80 percent of the channel width, and 50 percent of the channel width of the downstream extent, upstream extent, and middle of the station. Stream flow was measured using a Marsh McBirnie Flow Mate 2000™ to describe the stream discharge within the sample station at the time of the survey.

Photographs were taken at each station to illustrate the conditions during the sampling period (Exhibit C). Water temperature, pH, conductivity, and dissolved oxygen were measured as part of the stream habitat evaluation. These water quality parameters were measured using a Yellow Springs Instrument Model YSI 556 water quality meter.

5.0 DISCUSSION AND RESULTS

The aquatic sampling of the Humboldt Mill vicinity was conducted from 3 June 2007 through 7 June 2007. Stations 1 and 2 were sampled on 4 June 2007. Sampling of the HTDF, Lake Lory, and the Heron Rookery Pond were conducted from 4 June 2007 through 5 June 2007. The Middle Branch of the Escanaba River (Stations 3 and 4) was sampled on 7 June 2007.

5.1 Streams

All streams sampled within the project vicinity are located in a region that is classified as a Northern Lakes and Forests ecoregion (Creel et al., 1998). Therefore, all P-51 scoring was based on metrics that relied on typical data from this ecoregion.

5.1.1 Station 1

A total of 63 fish were observed in Station 1. The dominant species included central mudminnow (*Umbra limi*), creek chub (*Semotilus atromaculatus*), northern redbelly dace (*Phoxinus eos*), and finescale dace (*Phoxinus neogaeus*; Table 5-1, Exhibit B). The CPUE estimate was 7.7 fish/minute of backpack electroshocking for the reach. The site was considered "acceptable" quality with respect to fish (MDEQ, 2002) and no threatened, endangered, or special concern fish species were observed in Station 1.

A total of 96 macroinvertebrates were collected from Station 1, where clams were most abundant followed by lesser abundances of Odonata (dragonflies), Trichopterans (caddisflies), and Dipterans (true flies) (Table 5-2, Exhibit B). The macroinvertebrate community was rated as "acceptable" (Table 5-3, Exhibit B), and no threatened, endangered, or special macroinvertebrates were observed.

Station 1 was classified as a glide/pool habitat based on use of the P-51 protocol. The habitat was rated as "excellent" based on the total habitat metric score according to the P-51 protocol (Table 5-4, Exhibit B).

The average width of Station 1 was 4.1 feet (standard deviation, $s = 0.3$; sample size, $n = 3$) and the average depth was 1.0 feet ($s = 0.6$ feet; $n = 6$; Table 5-5). The discharge within Station 1 was 148 gallons per minute on 5 June 2007. The dissolved oxygen was 4.0 mg O_2/L (Table 5-6,

Exhibit B), and was the lowest among the 2007 sample stations. The conductivity was the highest among all stream locations sampled for this survey at 210 microSiemens per cm (µS/cm).

5.1.2 Station 2

A total of 43 fish were observed with an estimated CPUE of 5.4 fish/minute of backpack electroshocking in Station 2. Creek chubs and central mudminnows were the most abundant fish within this station (Table 5-1, Exhibit B). Because fewer than 50 fish were collected from Station 2, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 2.

A total of 179 macroinvertebrates were collected from Station 2. Ephemeropterans (mayflies) and caddisflies were most abundant, followed by lesser abundances of clams and dragonflies (Table 5-2, Exhibit B). The total macroinvertebrate community was rated as "acceptable" (Table 5-3, Exhibit B), and no threatened, endangered, or special concern macroinvertebrates were observed.

Station 2 was classified as a glide/pool habitat and was rated as "excellent" according to the P-51 total habitat metric score (Table 5-4, Exhibit B). The average width of Station 2 was 7.6 feet (s = 3.9; n = 3) and the average depth was 0.3 feet (s = 0.1 feet; n = 6; Table 5-5). Because of braided channel conditions and streamflow interaction with riparian wetland vegetation, streamflow was not measured within Station 2.

Water temperature within Station 2 was the warmest observed temperature (18.8 °C) among the stream sample stations (Table 5-6, Exhibit B). The conductivity (84 µS/cm) and pH (5.8) were the lowest among the sample stations.

5.1.3 Station 3

Station 3 was sampled using a barge-mounted electroshocker where a total of 49 fish representing 13 taxa were observed. Pumpkinseed sunfish (*Lepomis gibbosus*), mottled sculpin (*Cottus bairdii*), and black bullhead (*Ameiurus melas*) were the most frequently observed fish (Table 5-1, Exhibit B). The CPUE estimate for Station 3 was 15.4 fish/minute of barge electroshocking.

The Middle Branch of the Escanaba River is classified as a coldwater stream by the State of Michigan (MSWIMS, 2007). Because fewer than 50 fish and no salmonids were collected from Station 3, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 3.

A total of 207 macroinvertebrates were collected from Station 3. Dipterans, caddisflies, and mayflies were the most frequently observed organisms (Table 5-2, Exhibit B). The macroinvertebrate community was rated as "acceptable" (Table 5-3, Exhibit B), and no threatened, endangered, or special concern macroinvertebrate species were observed.

Station 3 was evaluated as a glide/pool habitat and was rated as "excellent" based on the P-51 total habitat metric score (Table 5-4, Exhibit B). The average width of Station 3 was 37.5 feet (s = 5.8 feet; n = 3) and the average depth was 1.5 feet (s = 0.4 feet; n = 6; Table 5-5). The discharge within Station 3 was 6,616 gallons per minute on 7 June 2007 (Table 5-6).

5.1.3 Station 4

Station 4 was sampled using a barge-mounted electroshocker where a total of 11 fish representing 6 taxa were observed. The black bullhead was the most frequently collected species and the CPUE estimate for Station 4 was 0.8 fish/minute of barge electroshocking. Because fewer than 50 fish and no salmonids were collected from Station 4, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 4.

A total of 248 macroinvertebrates were collected from Station 4. Dipterans, mayflies, and Plecopterans (stoneflies) were the most frequently observed organisms (Table 5-2, Exhibit B). The macroinvertebrate community was rated as "acceptable" (Table 5-3, Exhibit B) and no threatened, endangered, or special concern macroinvertebrate species were observed.

Station 4 was evaluated as a glide/pool habitat and was rated as "excellent" based on the P-51 total habitat metric score (Table 5-4, Exhibit B). The average width of Station 4 was 29.1 feet (s = 7.0 feet; n = 3) and the average depth was 0.8 feet (s = 0.3 feet; n = 6; Table 5-5). The discharge within Station 4 was 8,639 gallons per minute on 7 June 2007 (Table 5-6).

5.2 HTDF, Lake Lory, and Heron Rookery Pond

5.2.1 HTDF

One gill net and two hoop nets were fished in nearshore areas throughout the lake for approximately 14 hours (Figure 1-3, Exhibit A). Gill and hoop nets were fished from 5 June 2007 through 6 June 2007. Nets were set at approximately 22:00 and were checked the next day for fish at approximately 12:00.

Boom shocking was conducted along 4 transects that were situated parallel to the shoreline (Figure 1-3, Exhibit A). Transect lengths ranged from a minimum of 480 feet to a maximum of 1,303 feet.

A total of 302 fish were collected from HTDF including six different taxa (Table 5-7, Exhibit B). The fish community within the HTDF was predominantly comprised of minnow species and small white suckers (*Catostomus commersonii*), with the presence of large piscivorous northern pike (*Esox lucius*) that likely forage the minnow species and white suckers.

Common shiners (*Luxilus cornutus*) and white suckers were the most frequently collected fish, and were typically collected from rock piles and from cracks in bedrock along the shoreline. Northern pike were predominantly captured within the gill nets and one pike was collected during electroshocking. No threatened, endangered, or special concern fish species were observed in HTDF.

Most of the fish were collected using the boom shocker (Table 5-7, Exhibit B). The average total CPUE for the boom shocker was 9.2 fish per hour and varied among transects.

The total CPUE varied by location among all gill net locations, and ranged from 0 fish per net night in gill net 4, to a maximum of 5 fish per net night in gill net 3. The gill nets were the most effective means for capturing northern pike.

The average length of northern pike was 28.9 inches (standard deviation; s = 1.3 inches), and the average weight of northern pike was 5.7 pounds (s = 0.5 pounds; Table 5-8, Exhibit B). White suckers were small in size and ranged from 1.6 to 7.4 inches in length. The average length of the white suckers was 4.4 inches (s = 0.8 inches) and the average weight was 0.6 ounces (s = 0.4

ounces). The lack of habitat diversity, such as a well developed littoral component of submerged and emergent vegetation and woody debris may account for the lack of diversity of fish sizes and species.

Aquatic macroinvertebrate sampling was conducted on June 6, 2007 within HTDF. All macroinvertebrates were collected using the PONAR sediment grabbing device and none were collected along the shoreline in the D-framed dip nets. A total of 10 macroinvertebrates were collected. Midge larvae (Chironomidae) were the most frequently collected macroinvertebrate and one dragonfly comprised the only other Order observed among the HTDF macroinvertebrates.

The bedrock-dominated habitat in the littoral area of the HTDF and lack of habitat diversity, including few aquatic macrophytes, do not provide suitable conditions for the development of an abundant and diverse aquatic macroinvertebrate community within the HTDF. Low primary productivity, which is often associated with a bedrock-dominated aquatic system, may also contribute to low abundance and diversity by limiting the food supply available to macroinvertebrates.

Water temperature, pH, dissolved oxygen, and conductivity were measured on the surface of HTDF near the western shoreline on 5 June 2007. The conductivity of HTDF was the highest among all station (564 µS/cm). Dissolved oxygen on the surface was 7.3 mg O_2/L and pH was 7.8 (Table 5-6, Exhibit B).

5.2.2 Lake Lory

Six hoop nets were fished in nearshore areas throughout the lake, one day each, for approximately 12 hours (Figure 1-3, Exhibit A). Sampling took place from 3 June 2007 through 4 June 2007. Hoop nets were typically set late in the day at approximately 18:00 and were checked the next day for fish at approximately 14:00.

Gill nets were fished in three locations throughout the lake for approximately 12 hours of soak time for each net (Figure 1-3, Exhibit A). Gill nets were placed in the lake on 3 June 2007 at approximately 22:00 and were removed from the lake on 4 June 2007 at approximately 11:00 the next day.

Boom shocking was conducted along 5 transects that were situated parallel to the shoreline (Figure 1-3, Exhibit A). The transect length ranged from a minimum of 257 feet to a maximum of 483 feet.

A total of 152 fish were collected from Lake Lory including seven different taxa (Table 5-9, Exhibit B). Largemouth bass (*Micropterus salmoides*) were the most frequently observed species followed by white suckers, and bluegills (*Lepomis macrochirus*) among all sample gear. No threatened, endangered, or special concern fish species were observed in Lake Lory.

Most of the fish were collected using a boom shocker (Table 5-9, Exhibit B). The average total CPUE for the boom shocker was 189 fish/hour and varied among transects.

The total CPUE varied by location among all hoop net locations, and ranged from a minimum of 6 fish per net night in hoop net 6, to a maximum of 12 fish per net night in hoop net 4. The hoop nets were the most effective means for capturing white suckers. The total number of fish captured in gill nets ranged from zero fish in gill nets 1 and 2, to 8 fish in gill net 3.

The average length of largemouth bass was 8.5 inches (s = 3.1 inches), and the average weight of largemouth bass was 0.4 pounds (s = 0.4 pounds; Table 5-10, Exhibit B). Black crappie ranged in size from 7.5 to 11.0 inches and varied the least in length (s = 0.8 inches) among fish sampled in Lake Lory.

Many fish collected in Lake Lory appeared in good condition. However, black spot, which is caused by a parasite (larval trematode) that burrows into the skin of the fish, was frequently observed in the bluegills, black crappie, largemouth bass, smallmouth bass, and yellow perch.

A total of 45 macroinvertebrates were collected from Lake Lory (Table 5-11, Exhibit B). Dragonflies, mayflies and midge larvae were the most abundant macroinvertebrates. No threatened, endangered, or special concern macroinvertebrate species were observed in Lake Lory.

Floating, submerged, and emergent aquatic vegetation were observed in patches along the shoreline of Lake Lory. Burreed (*Sparganium* sp.), floating pondweed (*Potamogeton natans*), bigleaf pondweed (*Potamogeton amplifolius*), rushes, and water-starwort (*Callitriche* sp.) were the predominant species of aquatic vegetation that were observed along the shoreline (Photographs C-11 and C-12, Exhibit C). Large woody debris in the form of downed trees and submerged standing timber contributed to the aquatic habitat of Lake Lory.

Water temperature, pH, dissolved oxygen, and conductivity were measured on the surface of Lake Lory near the western shoreline on 5 June 2007. The surface water temperature (18.5 °C) was slightly cooler than the water temperature that was measured in Station 2 at the outlet of Lake Lory on 4 June 2007 (Table 5-6, Exhibit B). The conductivity of Lake Lory was low (94 µS/cm) and was consistent with Station 2. Dissoved oxygen in Lake Lory was only slightly higher than in Station 2, the outlet of Lake Lory.

5.2.3 Heron Rookery Pond

The Heron Rookery Pond was sampled for fish using a backpack shocker. A total of 28 fish were collected from the pond including four different taxa (Table 5-12, Exhibit B). The most abundant species were fathead minnows followed by central mudminnows, northern redbelly dace and brown bullhead (*Ameiurus nebulosus*). Minnows and dace likely serve as an important food source for the nesting blue herons. No threatened, endangered, or special concern fish species were observed in the pond.

In addition to the standing timber, aquatic vegetation was abundant along the south shoreline and appeared to be abundant throughout the pond. Common elodea (*Elodea canadensis*) was the predominant submerged aquatic vegetation. Common cattails (*Typha latifolia*) were abundant along the southwest shoreline, and spadderdock and arrowhead (*Saggitaria* sp.) were observed along the shoreline.

The warmest water temperature observed during the survey was recorded in the pond at 20.5 °C (Table 5-6, Exhibit B). Conductivity was low (117 µS/cm), and pH was 7.3. The dissolved oxygen was the highest level observed during this survey (8.3 mg O_2/L; Table 5-5).

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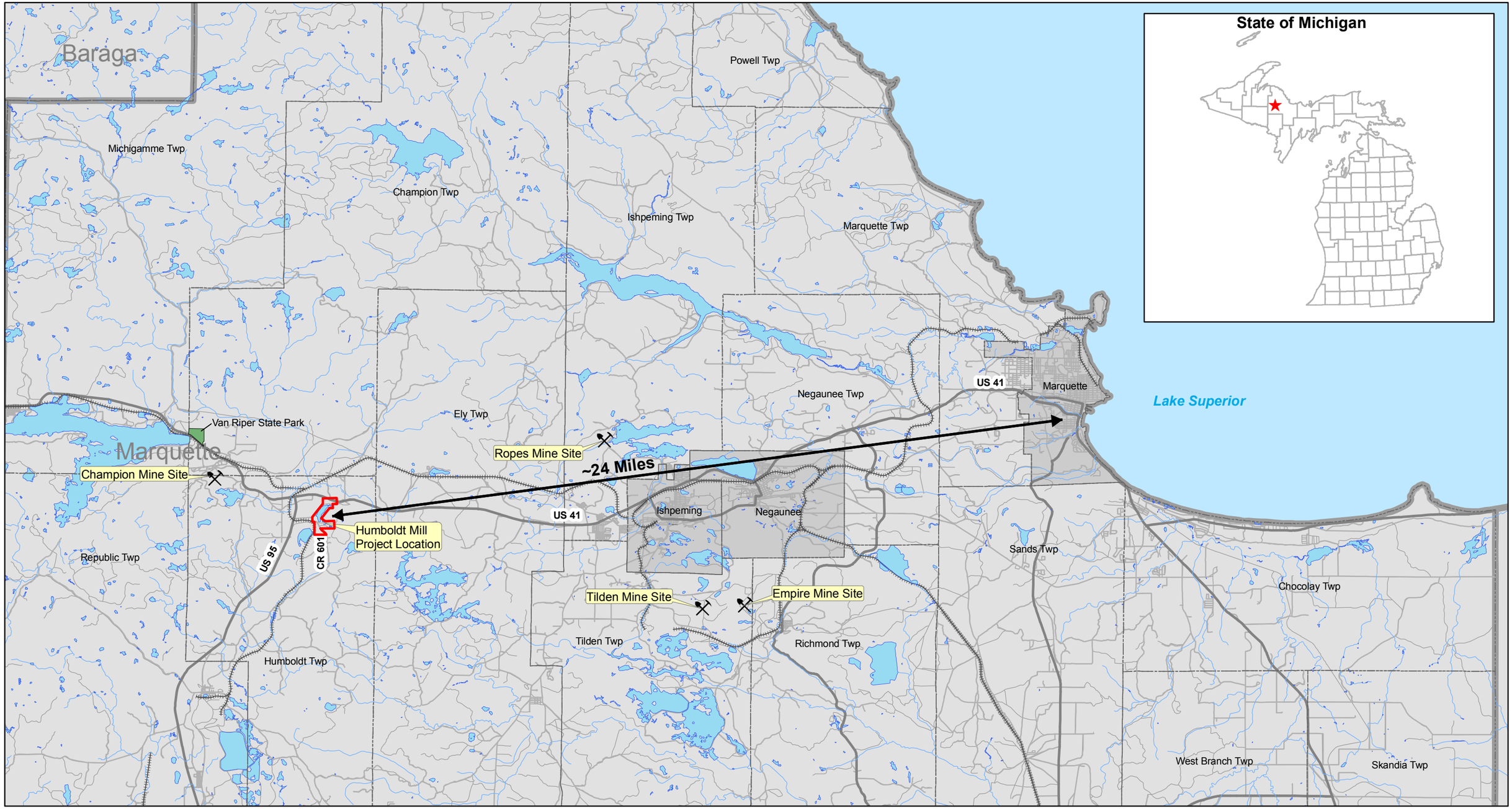
EXHIBIT A

REPORT FIGURES



NOTES

1. Horizontal datum based on NAD 83/94.
   Horizontal coordinates based on UTM Zone 16.
2. All base information downloaded from Michigan Center of Geographic Information (http://www.michigan.gov/cgi).
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Counties
- Minor Civil Divisions
- Lakes and Rivers
- KEMC Project Location
- Highways
- Major Roads
- Minor Roads
- Railroads

N

ADVANCED ECOLOGICAL MANAGEMENT

Foth
Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	AKM	DATE: APR. '08	
APPROVED BY:	SVD1	DATE: APR. '08	
APPROVED BY:		DATE:	

Kennecott
Eagle Minerals

FIGURE 1-1
HUMBOLDT MILL PROJECT
PROJECT LOCATION

Scale: 0 1.5 3 Miles

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

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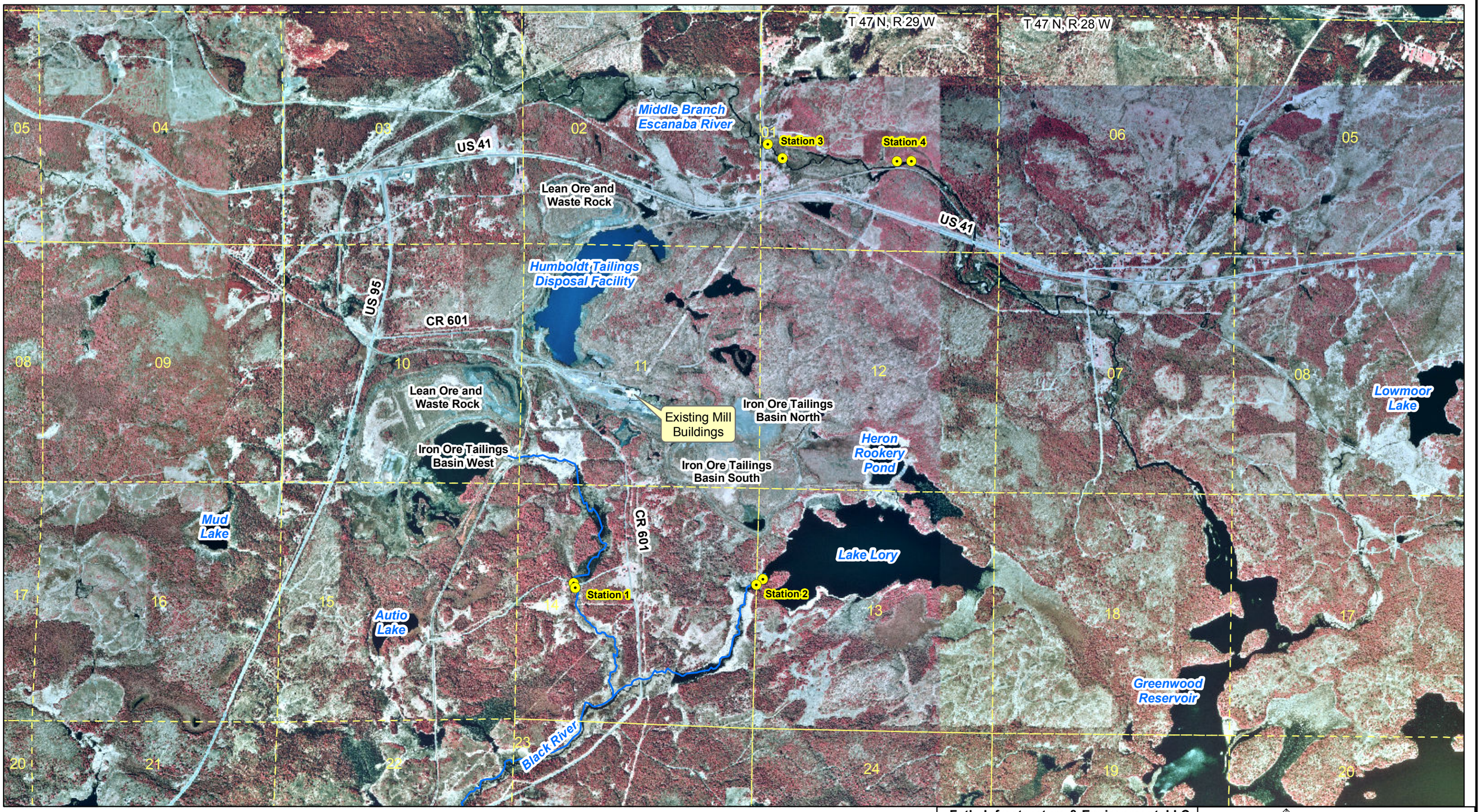

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

PLSS Sections

Sample Location Extents (upstream and downstream)

N

ADVANCED ECOLOGICAL MANAGEMENT

Foth
Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	AKM	DATE: APR. '08	
APPROVED BY:	SVD1	DATE: APR. '08	
APPROVED BY:		DATE:	

Kennecott
Eagle Minerals

FIGURE 1-2
HUMBOLDT MILL PROJECT
STREAM SAMPLE LOCATIONS

Scale: 0 1,000 2,000 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

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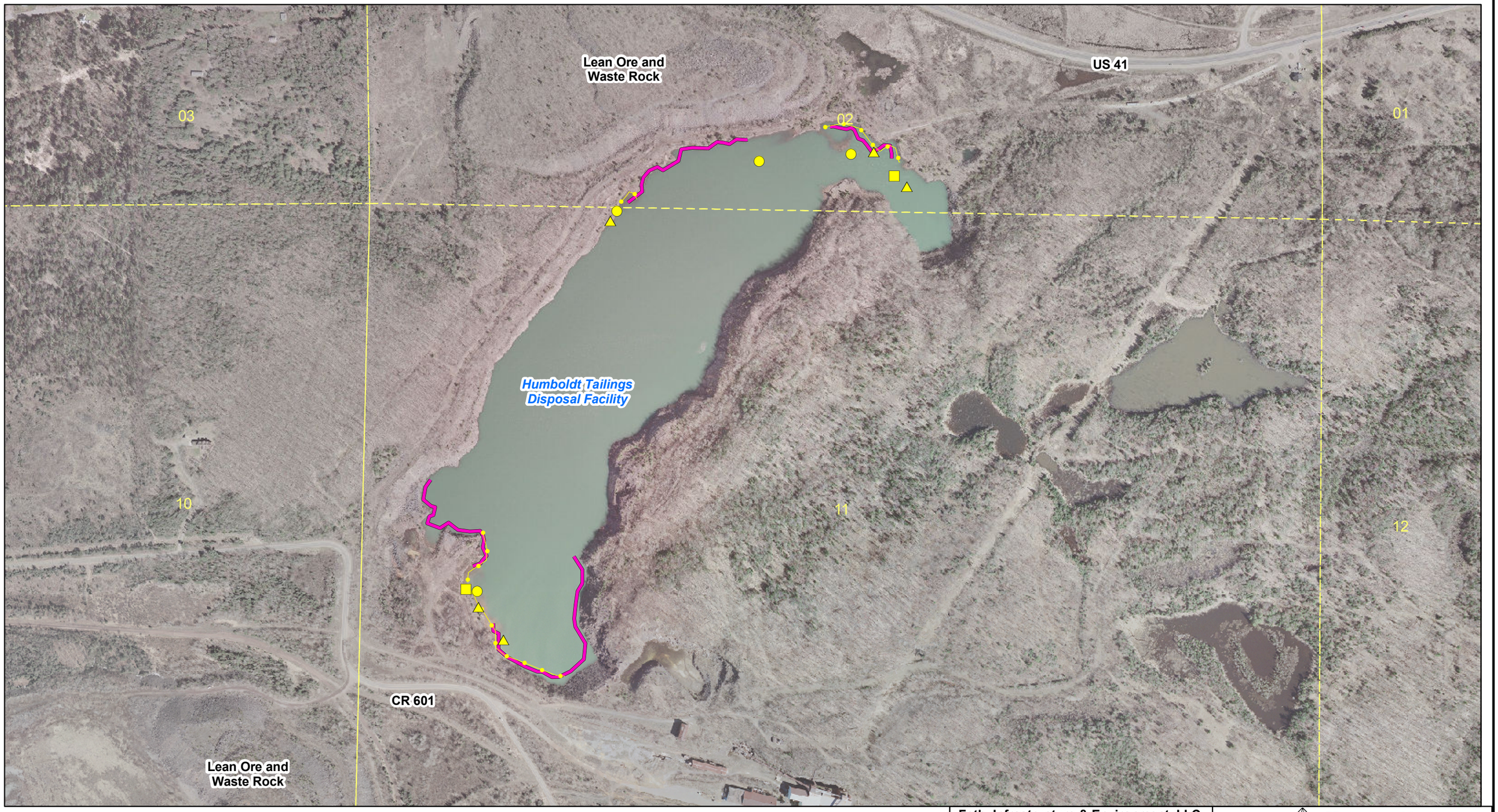

NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- PLSS Sections
- Hoop Net Locations
- Gill Net Locations
- Ponar Macro
- Pit Bug Transect
- Boom Shocker Transect

N

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APPROVED BY:		DATE:	

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FIGURE 1-3
HUMBOLDT MILL PROJECT
HUMBOLDT TAILINGS DISPOSAL FACILITY
AQUATIC SURVEY LOCATIONS

Scale: 0 250 500 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

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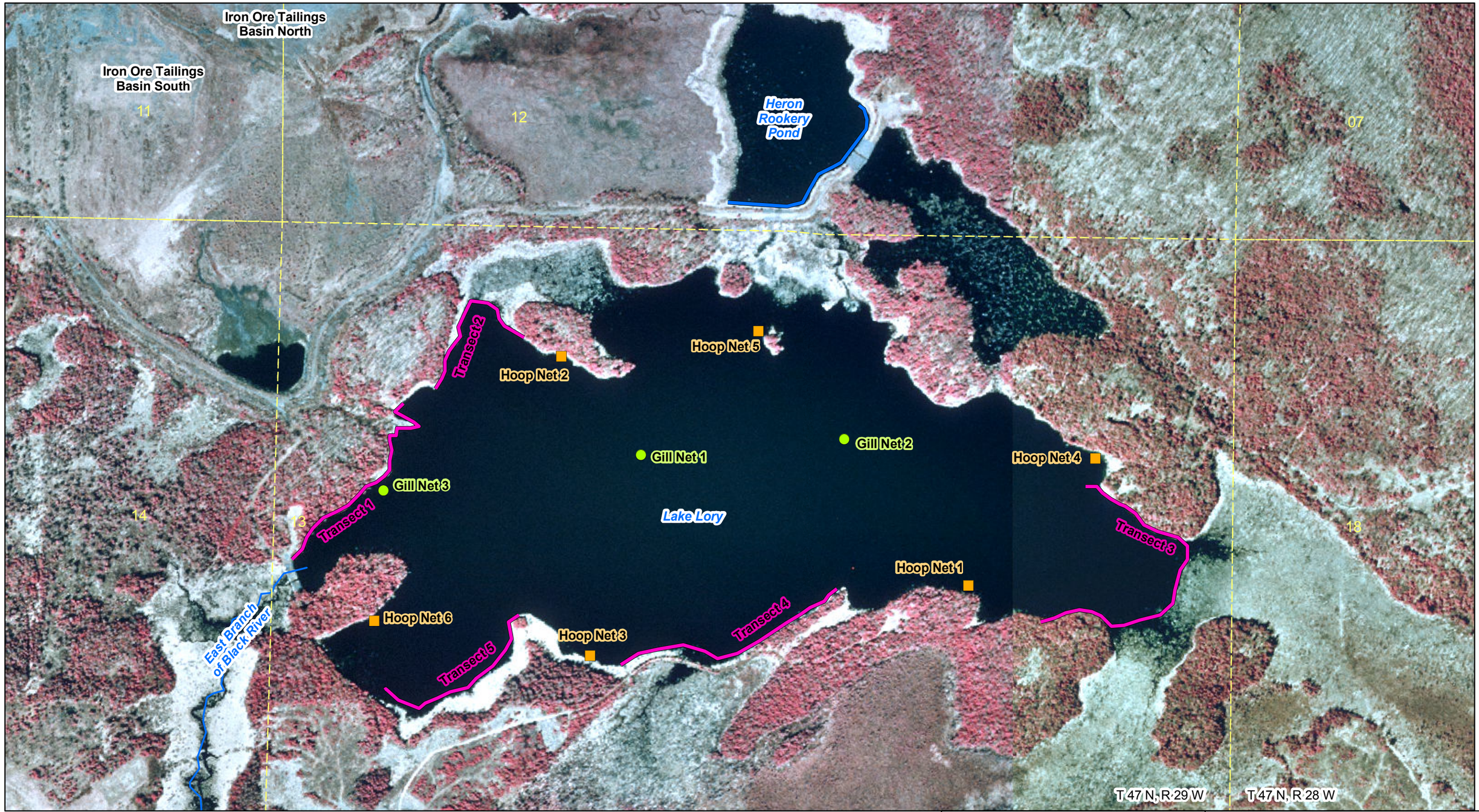

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- PLSS Sections
- Hoop Net Locations
- Gill Net Locations
- Backpack Shocker Transect
- Boom Shocker Transect

N

Advanced Ecological Management

Foth Infrastructure & Environment, LLC

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	AKM	DATE:	APR. '08
APPROVED BY:	SVD1	DATE:	APR. '08
APPROVED BY:		DATE:	

Kennecott
Eagle Minerals

FIGURE 1-4
HUMBOLDT MILL PROJECT
LAKE LORY AND HERON ROOKERY POND
AQUATIC SURVEY LOCATIONS

Scale: 0 250 500 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

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EXHIBIT B

REPORT TABLES

Table 3-1. Stream Station Location Description.

Station Number	Stream Name	Latitude/Longitude NAD 1983	Township/Range/Section	Location Description
1	Unnamed Tributary of the Black River	N 46.47222 W 87.90249	Humboldt Twp. T47N, R29W, Sec 14	Upstream extent approximately 30 feet downstream of road crossing
2	Unnamed Tributary of the Black River	N 46.47284 W 87.88657	Humboldt Twp. T47N, R29W, Sec 13	Upstream extent approximately 80 feet downstream of Lake Lory outlet
3	Middle Branch of the Escanaba River	N 46.49899 W 87.886086	Humboldt Twp. T47N, R29W, Sec 1	Upstream extent approximately 85 feet downstream of Wolf Road Crossing
4	Middle Branch of the Escanaba River	N 46.49777 W 87.87474	Humboldt Twp. T47N, R29W, Sec 1	Downstream extent approximately 2683 feet upstream of Highway 41

Table 5-1. Stream Fish Collection Data – Stations 1-4.

Scientific Name	Common name	Station 1	Station 2	Station 3	Station 4
Ictalurus melas	Black bullhead			6	3
Rhinichthys atratulus	Blacknose dace		4	1	
Notropis heterolepis	Blacknose shiner		3		
Lepomis macrochirus	Bluegill		1		
Pimephales notatus	Bluntnose minnow		1	1	
Culaea inconstans	Brook stickleback	1	6		
Lota lota	Burbot				1
Umbra limi	Central mudminnow	17	7	2	
Notropis cornuta	Common shiner			2	2
Semotilus atromaculatus	Creek chub	14	10		
Notropis atherinoides	Emerald shiner	2		1	
Pimephales promelas	Fathead minnow		2		
Phoxinus neogaeus	Finescale dace	10	2		
Notemigonus crysoleucas	Golden shiner			1	
Nocomis biguttatus	Hornyhead chub			5	2
Cottus Bairdii	Mottled sculpin			6	2
Esox lucius	Northern pike			1	
Phoxinus eos	Northern redbelly dace	14	4		
Lepomis gibbosus	Pumpkinseed sunfish			20	
Etheostoma caeruleum	Rainbow darter		1		
Noturus gyrinus	Tadpole madtom				1
Catostomus commersoni	White sucker			1	
Perca flavescens	Yellow perch	5	2	2	
	Total Captured	**63**	**43**	**49**	**11**

Table 5-2. Stream Macroinvertebrate Collection Data – Stations 1-4.

TAXA	Station 1	Station 2	Station 3	Station 4
Oligochaeta				1
Hydracina (aquatic mites)		1		
Hirudinea (leeches)	3		2	
Amphipoda (scuds)	3	6	7	11
Decapoda (crayfish)			6	8
Isopoda (sowbugs)			2	11
Ephemeroptera (mayflies)				3
Baetiscidae			2	
Baetidae			4	2
Caenidae	2			
Ephemerellidae		98	2	
Ephemeridae			20	48
Heptageniidae			16	3
Leptophlebiidae		2		1
Siphlonuridae			1	
Odonata (dragonflies)				
Aeshnidae	1	3	5	4
Cordulegastridae			1	
Corduliidae	15	1		
Gomphidae				2
Libellulidae	2			
Calopterygidae	3	1	12	5
Coenagrionidae		11		
Plecoptera (stoneflies)				
Chloroperlidae			1	2
Perlidae				28
Pteronarcyidae				1
Hemiptera (true bugs)				
Corixidae	1	2	4	2
Gelastocoridae				
Gerridae	1	1	1	2
Megaloptera				
Sialidae (alder flies)	1	1	5	1
Trichoptera (caddisflies)				
Hydropsychidae				8
Limnephilidae	1	24	25	5
Molannidae				1
Polycentropodidae	9		2	3
Coleoptera (beetles)				
Dytiscidae (total)		3		3
Gyrinidae (adults)			1	
Gyrinidae (larvae)				3
Haliplidae (adults)	1			
Hydrophilidae (total)	1			

Table 5-2 (Continued). Stream Macroinvertebrate Collection Data – Stations 1-4.

TAXA	Station 1	Station 2	Station 3	Station 4
Diptera (flies)				
Ceratopogonidae		1		1
Chironomidae	9	4	37	21
Simuliidae	1		42	66
Tabanidae		1		
Tipulidae			6	2
MOLLUSCA				
Pelecypoda			1	
Lymnaeidae		1		
Planorbidae	2	1	2	
Sphaeriidae (clams)	40	17		
TOTAL INDIVIDUALS	**96**	**179**	**207**	**248**

Table 5-3. Stream Macroinvertebrate Scores and Community Ratings – Station 1-4.

	Station 1		Station 2		Station 3		Station 4	
METRIC	**Value**	**Score**	**Value**	**Score**	**Value**	**Score**	**Value**	**Score**
TOTAL NUMBER OF TAXA	18	1	19	0	25	0	27	0
NUMBER OF MAYFLY TAXA	1	0	2	0	6	1	4	0
NUMBER OF CADDISFLY TAXA	2	0	1	-1	2	-1	4	0
NUMBER OF STONEFLY TAXA	0	-1	0	-1	1	0	3	1
PERCENT MAYFLY COMP.	2.08	-1	55.87	1	21.74	1	21.77	1
PERCENT CADDISFLY COMP.	10.42	0	13.41	0	13.04	0	6.85	0
PERCENT CONTR. DOM. TAXON	41.67	-1	54.75	-1	20.29	0	26.61	0
PERCENT ISOPOD, SNAIL, LEECH	5.21	0	1.12	1	2.90	1	4.44	0
PERCENT SURF. AIR BREATHERS	4.17	1	3.35	1	2.90	1	2.82	1
TOTAL SCORE		**-1**		**0**		**3**		**3**
COMMUNITY RATING	**Acceptable**		**Acceptable**		**Acceptable**		**Acceptable**	

Table 5-4. Stream Habitat Scores and Ratings – Station 1-4.

Habitat Metric	Station 1 glide/pool	Station 2 glide/pool	Station 3 glide/pool	Station 4 glide/pool
Substrate and Instream Cover				
Epifaunal Substrate/Avail. Cover	13	15	14	16
Pool Substrate Characterization	10	12	16	16
Pool Variability	10	9	13	10
Sediment Deposition	18	18	19	19
Channel Morphology				
Maintained Flow Volume	8	8	9	9
Flashiness	8	10	8	8
Channel Alteration	17	18	18	15
Channel Sinuosity	17	13	14	9
Riparian and Bank Structure				
Bank Stability (L)	9	10	10	9
Bank Stability (R)	9	10	10	9
Vegetative Protection (L)	10	10	10	10
Vegetative Protection (R)	10	10	10	10
Riparian Veg. Zone Width (L)	10	10	9	10
Riparian Veg. Zone Width (L)	10	10	9	9
Total Score	**159**	**163**	**169**	**159**
Habitat Rating	**Excellent**	**Excellent**	**Excellent**	**Excellent**

Table 5-5. Stream Station Dimensions

		Width (ft)		Depth (ft)	
Station	**Length**	**Average***	**Stdev****	**Average ***	**Stdev****
1	100	4.1 (3)	0.3	1.0 (3)	0.6
2	150	7.6 (3)	3.9	0.3 (3)	0.1
3	300	37.5 (3)	5.8	1.5 (3)	0.4
4	300	29.1 (3)	7.0	0.8 (3)	0.3

*** sample size is indicated within ()**
**** standard deviation**

Table 5-6. Water Quality Parameters – Stations 1-4 and surface water bodies.

Station Number	Date	Time	Temp °C	pH	Conductivity µS/cm	Dissolved Oxygen mg O_2/L	Discharge gpm
1	6/5/2007	14:38	16.6	6.2	210	4.0	148
2	6/4/2007	13:07	18.8	5.8	84	6.2	n/a
3	6/7/2007	11:05	14.0	6.5	115	7.4	6,616
4	6/7/2007	8:49	13.3	6.7	120	7.4	8,639
Humboldt Tailings Disposal Facility (HTDF)	6/5/2007	20:20	17.7	7.8	564	7.3	-
Lake Lory (Surface water)	6/5/2007	14:10	18.5	6.7	94	6.6	-
Heron Rookery Pond	6/4/2007	18:05	20.5	7.3	117	8.3	-

Table 5-7. Humboldt Tailings Disposal Facility (HTDF) Fish Collection Data.

		Number of Taxa by Sample Gear			
Scientific Name	**Common Name**	**Hoop Nets**	**Gill Nets**	**Boom Shocker**	**Total**
Notropis cornuta	Common shiner			125	125
Semotilus atromaculatus	Creek chub			6	6
Pimephales promelas	Fathead minnow			55	55
Esox Lucius	Northern pike		7	1	8
Phoxinus eos	Northern redbelly dace			1	1
Catostomus commersonii	White sucker			107	107
Total Collected by Gear		**0**	**7**	**295**	
Total Number of Fish Collected					**302**

Table 5-8. Humboldt Tailings Disposal Facility Fish Size.

	Length (inches)				Weight (pounds)			
Common Name	**min**	**max**	**average**	**stdev****	**min**	**max**	**average**	**stdev**
Creek chub	4.0	5.9	5.0 (2)	1.4	0.028	0.075	0.05	0.03
Northern pike	26.5	30.4	28.9 (8)	1.3	4.961	6.395	5.69	0.54
White sucker	1.61	7.4	4.4 (106)	0.8	0.002	0.190	0.04	0.02

*** sample size is indicated within ()**
**** standard deviation**
Smaller minnow species were not measured and are not included in this table.

Table 5-9. Lake Lory Fish Collection Data.

		Number of Taxa by Sample Gear			
Scientific Name	**Common Name**	**Hoop Nets**	**Gill Nets**	**Boom Shocker**	**Total**
Pomoxis nigromaculatus	black crappie	6		12	18
Lepomis macrochirus	bluegill	6	1	13	20
Micropterus salmoides	largemouth bass	3	3	43	49
Lepomis gibbosus	pumpkinseed	3		8	11
Micropterus dolomieu	smallmouth bass			6	6
Catostomus commersonii	white sucker	26	3		29
Perca flavescens	yellow perch	2	1	16	19
Total Collected by Gear		**46**	**8**	**98**	
Total Number of Fish Collected					**152**

Table 5-10. Lake Lory Fish Size.

	Length (inches)				Weight (pounds)			
Common Name	**min**	**max**	**average**	**stdev****	**min**	**max**	**average**	**stdev**
black crappie	7.48	10.98	8.96 (18)	0.77	0.25	0.70	0.44	0.10
bluegill	2.80	8.94	6.26 (20)	1.95	0.02	0.64	0.28	0.20
largemouth bass	3.19	14.09	8.52 (49)	3.09	0.02	1.32	0.39	0.38
pumpkinseed	3.19	7.40	5.38 (11)	1.13	0.04	0.42	0.16	0.11
smallmouth bass	5.35	12.64	9.51 (6)	2.63	0.07	0.94	0.50	0.32
white sucker	14.84	20.08	17.65 (29)	1.31	1.32	2.87	2.18	0.41
yellow perch	2.99	9.65	6.42 (19)	1.95	0.01	0.39	0.16	0.11

*** sample size is indicated within ()**
**** standard deviation**

Table 5-11. Lake Lory Macroinvertebrates.

Order	Family	Genus	Species	Taxa Count
Diptera	Chironomidae			6
Mesogastropoda	Hydrobiidae			2
Odonata	Aeshnidae	*Basiaeschna*	*janata*	1
Odonata	Coenagrionidae	*Enallagma*		2
Ephemeroptera	Ephemerellidae	*Eurylophella*		6
Odonata	Gomphidae			1
Odonata	Gomphidae	*Hagenius*	*brevistylus*	1
Odonata	Coenagrionidae	*Ischnura*		24
Coleoptera	Haliplidae	*Peltodytes*		1
Veneroida	Sphaeriidae			1
			Total	**45**

Table 5-12. Electro-fishing Survey Data of Fish Collected from Heron Rookery Pond.

Scientific Name	Common Name	Number Captured
Ameiurus nebulosus	Brown bullhead	1
Umbra limi	Central mudminnow	2
Pimephales promelas	Fathead minnow	24
Phoxinus eos	Northern redbelly dace	1
	Total Number Captured	**28**

EXHIBIT C

PHOTOGRAPHS

Photograph C-1. Station 1 – Upstream Extent. View looking south, downstream.

Photograph C-2. Station 1 – Downstream Extent. View looking west, upstream.

Photograph C-3. Station 2 – Upstream Extent. View looking west, downstream.

Photograph C-4. Station 2 – Downstream Extent. View looking east, upstream.

Photograph C-5. Station 3 – Upstream Extent. View to east, downstream.

Photograph C-6. Station 3 – Downstream Extent. View to west, upstream.

Photograph C-7. Station 4 – Upstream Extent. View to southeast, downstream.

Photograph C-8. Station 4 – Downstream Extent. View to northeast, upstream.

Photograph C-9. Humboldt Tailings Disposal Facility – View to the north.

Photograph C-10. Humboldt Tailings Disposal Facility – View to the south.

Photograph C-11. Lake Lory – View to the north.

Photograph C-12. Lake Lory – View to the west.

Photograph C-13. Heron Rookery Pond North of Lake Lory. View to the north.

A-2
Aquatic Survey Report – 2008

Humboldt Mill Aquatic Survey Report 2008

August 28, 2008

Prepared for:
Foth Infrastructure & Environment, LLC
2737 South Ridge Road
Green Bay, WI 54304

Prepared by:
ADVANCED ECOLOGICAL MANAGEMENT
2692 165th Avenue
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ADVANCED ECOLOGICAL MANAGEMENT

Table of Contents

1.0 EXECUTIVE SUMMARY 1
2.0 INTRODUCTION 2
3.0 STUDY SITE 2
4.0 METHODS 6
4.1 Fish Collection 6
4.2 Macroinvertebrates 9
4.3 Stream Habitat Evaluation 9
5.0 RESULTS AND DISCUSSION 11
5.1 Streams 11
5.1.1 Station 1 11
5.1.2 Station 2 12
5.1.3 Station 3 12
5.1.4 Station 4 13
5.1.5 Station 5 13
5.2 HTDF, Lake Lory, Heron Rookery Pond, and Wetland Complex EE 14
5.2.1 HTDF 14
5.2.2 Lake Lory 16
5.2.3 Heron Rookery Pond 17
5.2.4 Wetland Complex EE 18
REPORT FIGURES 21
Figure 1-1. Location of Humboldt Mill, Marquette County, Michigan. 22
Figure 1-2. Stream Sample Locations, Station 1-5. 23
Figure 1-3. HTDF and Wetland Complex EE Aquatic Survey Locations. 24
Figure 1-4. Lake Lory and Heron Rookery Pond Aquatic Survey Locations. 25
REPORT TABLES 26
Table 3-1. Stream Station Location Description. 27
Table 5-2. Stream Macroinvertebrate Collection Data – Stations 1-5. 29
Table 5-2 (Continued). Stream Macroinvertebrate Collection Data – Stations 1-5. 30
Table 5-3. Stream Macroinvertebrate Scores and Community Ratings – Stations 1-5. 31
Table 5-4. Stream Habitat Scores and Ratings – Stations 1-5. 32
Table 5-5. Stream Station Dimensions 33
Table 5-6. Water Quality Parameters – Stations 1-5 and Surface Water Bodies. 34
Table 5-7. Humboldt Tailings Disposal Facility Fish Collection Data. 35
Table 5-8. Humboldt Tailings Disposal Facility Fish Size. 36
Table 5-9. Humboldt Tailings Disposal Facility Macroinvertebrates. 37
Table 5-10. Lake Lory Fish Collection Data. 38
Table 5-11. Lake Lory Fish Size. 39
Table 5-12. Lake Lory Macroinvertebrates 40
Table 5-13. Electroshocking Survey Data of Fish Collected from Heron Rookery Pond. 41
Table 5-14. Electroshocking Survey Data of Fish Collected from Wetland Complex EE. 42
Table 5-15. Wetland Complex EE Macroinvertebrates. 43
PHOTOGRAPHS 44
Photograph C-1. Station 1 – Upstream Extent. View looking south, downstream. 45
Photograph C-2. Station 1 – Downstream Extent. View looking west, upstream. 45
Photograph C-3. Station 2 – Upstream Extent. View looking west, downstream. 46
Photograph C-4. Station 2 – Downstream Extent. View looking east, upstream. 46
Photograph C-5. Station 3 – Upstream Extent. View to east, downstream. 47
Photograph C-6. Station 3 – Downstream Extent. View to west, upstream. 47
Photograph C-7. Station 4 – Upstream Extent. View to southeast, downstream. 48

Photograph C-8. Station 4 – Downstream Extent. View to northeast, upstream. 48
Photograph C-9. Station 5 – Upstream Extent. View to north, downstream. 49
Photograph C-10. Station 5 – Downstream Extent. View to south, upstream. 49
Photograph C-11. Humboldt Tailings Disposal Facility – View to the northeast. 50
Photograph C-12. Humboldt Tailings Disposal Facility – View to the southwest. 50
Photograph C-13. Lake Lory – View to the east. 51
Photograph C-14. Lake Lory – View to the southeast. 51
Photograph C-15. Heron Rookery Pond North of Lake Lory. View to the northeast. 52
Photograph C-16. Heron Rookery Pond North of Lake Lory. View to the north. 52
Photograph C-17. Wetland Complex EE North of HTDF. View to north. 53
Photograph C-18. Wetland Complex EE North of HTDF. View to west. 53

List of Abbreviations, Acronyms, and Symbols

AEM	Advanced Ecological Management LLC
CPUE	Catch-per-unit-effort
°C	Degrees Celcius
t	Duration of time
ft	Feet
gpm	Gallons per minute
GLEAS	Great Lakes and Environmental Assessment Section
HTDF	Humboldt Tailings Disposal Facility
KEMC	Kennecott Eagle Minerals Company
MDEQ	Michigan Department of Environmental Quality
µS/cm	Microsiemens per centimeter
mg O_2/L	Milligrams of oxygen per liter of water
ml	Milliliters
max	Maximum
min	Minimum
N	North
n.m.	Not measured
N	Number of fish caught
pH	Measure of acidity or alkalinity of a solution
P-51	Procedure Number 51
R	Range
n	Sample size
Sec	Section
s	Standard deviation
T	Township
W	West

1.0 EXECUTIVE SUMMARY

Advanced Ecological Management, LLC (AEM) conducted an environmental baseline aquatics survey in June and early July 2008 at the Humboldt Mill site for Kennecott Eagle Minerals Company (KEMC) under contract to Foth Infrastructure & Environment, LLC. The Humboldt Mill site is located in the Upper Peninsula of Michigan, Marquette County as shown on Figure 1-1. KEMC may conduct commercial activities at the site in the future. An aquatics survey at five stream stations included fish, macroinvertebrate, and habitat community ratings according to the metrics outlined in the Great Lakes and Environmental Assessment Section (GLEAS) Procedure Number 51 (P-51), a survey protocol for wadable streams and rivers. Additional aquatics surveys at the Humboldt Tailings Disposal Facility (HTDF), Lake Lory, a heron rookery pond located north of Lake Lory, and a wetland complex located northeast of the HTDF were also conducted. Sampling survey locations are shown on Figures 1-2, 1-3, and 1-4, respectively.

A summary of the fish, macroinvertebrate, and habitat ratings for the five stream stations are displayed in the table below. All five stations were rated as "poor" fish communities and "acceptable" macroinvertebrate communities. Stream habitat was considered "excellent" in all stations except Station 5, where habitat was rated as "Good".

	Station 1	**Station 2**	**Station 3**	**Station 4**	**Station 5**
Fish Community	Poor	Poor	Poor	Poor	Poor
Macroinvertebrate Community	Acceptable	Acceptable	Acceptable	Acceptable	Acceptable
Stream Habitat	Excellent	Excellent	Excellent	Excellent	Good

No threatened or endangered species of fish or macroinvertebrates were observed within the five stream sample stations (Michigan Natural Features Inventory, 2008).

The fish community in the HTDF was predominately comprised of shiners, suckers, minnows, and pike. In Lake Lory, the fish community was predominately comprised of warm water species such as perch, bluegill, largemouth bass, and white suckers. The fish community in the heron rookery pond was predominately minnows, which provide a food supply for nesting blue herons. In Wetland Complex EE, the fish community was comprised of central mudminnows and smaller-bodied bluegill (less than two inches in length). No threatened or endangered fish species were observed in HTDF, Lake Lory, the Heron Rookery Pond or Wetland Complex EE (Michigan Natural Features Inventory, 2008).

2.0 INTRODUCTION

KEMC is investigating the Humboldt Mill in anticipation of using the mill to process nickel and copper ore. This aquatics survey was conducted by AEM in June and July 2008 to provide a description of the aquatic communities in the waters surrounding the Humboldt Mill. Previous aquatic surveys of the area were conducted by AEM in 2006 and 2007 (AEM, April 2007a; AEM October 2007b; AEM October 2007c; AEM, April 2008). The objectives of this survey were to provide a general characterization of aquatic communities and record any threatened or endangered aquatic species encountered. This site-specific survey as well as background information, provides data meeting the requirements of R 425.202 (2) (y) of Michigan's Natural Resources and Environmental Protection Act 451 of 1994 as amended Part 632. This report is based on evaluations of fish, macroinvertebrates, and aquatic habitat that were surveyed during 2008.

3.0 STUDY SITE

The Humboldt Mill property is a former iron-ore mine and ore processing facility located southeast of Champion, Michigan. The mill property and study area are located in Sections 1, 2, 10, 11, 12, 13, and 14 of Humboldt Township (Township 47 North, Range 29 West), in the vicinity of Highway 41 and east of County Road 95, Marquette County, Michigan (Figure 1-1).

The aquatic investigations conducted by AEM included surveys of the HTDF, Lake Lory, a man-made pond located north of Lake Lory that functions as a heron rookery (herein referred to as the Heron Rookery Pond), a pond located in the southern extent of a wetland complex located just northeast of HTDF (herein referred to as Wetland Complex EE), the Middle Branch Escanaba River located north of the mill property, a tributary to the Middle Branch Escanaba River, and two streams in the vicinity of the mill, which are tributaries to the Black River. Stream sample stations and other water body survey locations are illustrated in Figures 1-2, 1-3, and 1-4. An additional water body appears in Figure 1-3 on the northeast side of Lake Lory between the Heron Rookery Pond and Lake Lory. This is a wetland that generally has water present throughout the year and is hydraulically connected to Lake Lory.

Altogether, the sample stations included five stream locations, one lake, two man-made bodies of water (HTDF and Heron Rookery Pond), and one wetland. These sample stations were chosen

based on their proximity to the processing facility, their ability to provide representative habitat and biological diversity information, and their potential to be impacted by the project.
The following is a description of individual sampling stations:

Station 1: Station 1 is located on the West Branch of the Black River that flows south from a former iron-ore tailings basin (Figure 1-2). The upper end of Station 1 is located approximately 30 feet downstream from an unnamed east-west road that connects to County Road 601, and the stations continue downstream (south) 100 feet. The station location was selected downstream of the road crossing to minimize the influence of beaver impoundments that are located upstream of the road crossing. Station 1 is a low-gradient reach of the Black River.

The substrate was predominantly comprised of organic matter, silt, and woody debris. The predominant riparian vegetation consisted of tussock sedge (*Carex stricta*). Woody shrubs such as sweet gale (*Myrica gale*), speckled alder (*Alnus rugosa*), and sandbar willow (*Salix exigua*) were also observed along the stream bank within the station (Photographs C-1 and C-2).

Station 2: The upstream extent of Station 2 is located approximately 80 feet downstream of the outlet of Lake Lory (Figure 1-2). Station 2 is approximately 150 feet long and flows in a southwest direction at this location.

The substrate was predominantly comprised of organic matter, silt, and woody debris. Much of the woody debris within Station 2 presumably occurred from beaver activity and displayed evidence of gnawing, or chewed markings. Similar to Station 1, the predominant riparian vegetation consisted of tussock sedge. Woody shrubs such as sweet gale and speckled alder were also observed along the stream bank within the station (Photographs C-3 and C-4). Burreed (*Sparganium* sp.), spatterdock (*Nuphar* sp.), and rushes (*Juncus* sp.) were observed within the stream channel.

Station 3: Station 3 is located on the Middle Branch Escanaba River northeast of the Humboldt Mill. The upstream extent of the station is located approximately 85 feet downstream (east) of the Wolf Lake Road crossing (Figure 1-2). Station 3 is approximately 300 feet long and the stream flows in a southeast direction at this location.

The substrate was predominantly comprised of gravel, silt, sand, and organic matter. The predominant riparian vegetation within Station 3 consisted of tussock sedge and speckled alder (Photographs C-5 and C-6). Submerged pondweed (*Potamogeton* sp.) was abundant throughout the stream channel.

Station 4: Station 4 is located on the Middle Branch Escanaba River northeast of the Humboldt Mill. The downstream extent of the station is located approximately 2,680 feet upstream (north) of Highway 41 (Figure 1-2). Station 4 is approximately 300 feet long and the stream flows east at this location.

The substrate and riparian vegetation of Station 4 was similar to Station 3. However, an abandoned railroad grade comprises the south streambank along the entire length of the station. The streambank along the railroad grade was vegetated (Photographs C-7 and C-8), and one culvert connects a wetland located south of the river channel to the river near the upstream extent of the station.

Station 5: Station 5 is located along the right-of-way of Wolf Road, (Marquette County Road FX) approximately 1,200 feet south of the Middle Branch Escanaba River. The upstream extent of the station is located approximately 20 feet downstream of an abandoned railroad grade. Station 5 is approximately 180 feet in length and flows northeast to the downstream extent, approximately 15 ft upstream of Wolf Road (Figure 1-2). Station 5 drains an adjacent wetland to the west, which is connected to Wetland EE and nearby HTDF.

The substrate of the stream was predominantly comprised of sand, silt, and organic matter (Photographs C-9 and C-10). The streambanks were well vegetated with speckled alder overhanging the stream channel, and the predominant herbaceous component was reed canarygrass (*Phalaris arundinacea*).

HTDF: The HTDF is a water-filled pit directly north of the existing mill facility. The HTDF is approximately 3,400 feet long, 950 feet wide, and is located approximately 0.5 miles south of Highway 28 and 0.7 miles east of Highway 95 (Figure 1-3). The bathymetry of the water body is characterized by steep slopes. Shallow littoral areas of approximately 15 feet deep or less are predominantly limited to the northern and southern extents of the HTDF. Exposed bedrock

characterizes most of the shoreline (Photographs C-11 and C-12). Aquatic vegetation is scarce throughout the HTDF and is confined to shallow areas located in the north and south extents.

Lake Lory: Lake Lory is approximately 128 acres in size and is located approximately 1.3 miles south of Highway 41 and approximately 1.9 miles east of County Road 95 (Figures 1-2 and 1-3). Lake Lory drains into the East Branch of the Black River (Figure 1-4) along its southwestern boundary where an earthen berm controls the hydrology of the lake. Ponds located along the northern boundary of the lake drain into the lake and historically functioned as a tailings basin for the iron-ore mine. Photographs C-13 and C-14 display views of the lake.

Heron Rookery Pond: The man-made water body containing the blue heron nesting habitat (rookery) is located north of Lake Lory and is approximately 15 acres in size (Figure 1-4). The Heron Rookery Pond, approximately ¾ miles southeast of the processing facility, was formerly used as a tailings basin for iron-ore processing. The hydrology of the pond is controlled by an earthen berm and a culvert that are located along the southern boundary. Flooded timbers, located throughout the pond, provide nesting habitat for the great blue herons (*Ardea Herodias*; Photographs C-15 and C-16).

Wetland Complex EE: The pond located within Wetland Complex EE is located approximately 167 feet northeast of HTDF (Figure 1-3). The hydrology of the wetland complex is influenced by the presence of Highway 41 and an abandoned railroad grade, both of which bisect the wetland from east to west and direct water movement through numerous culverts. Water generally moves through the wetland complex in a northerly direction from the vicinity of the HTDF towards Highway 41 and to the Middle Branch Escanaba River. Vegetation in the wetland complex is predominantly comprised of emergent and scrub-shrub wetland vegetation, including cattails (*Typha* sp.) and speckled alder (Photographs C-17 and C-18).

Table 3-1 provides a summary of the location information for the five stream sample stations identified above. Depiction of the sampling locations for the HTDF, Lake Lory, Heron Rookery Pond, and Wetland Complex EE appear on Figures 1-3 and 1-4.

4.0 METHODS

To characterize the quality of the streams within the vicinity of the mill, flowing and wadable water bodies were sampled according to the Michigan Department of Environmental Quality's (MDEQ) Surface Water Quality Division, Great Lakes and Environmental Assessment Section (GLEAS), *Procedure #51 Survey Protocols for Wadable Rivers* (MDEQ, 2002). The GLEAS Procedure 51 (P-51) is a rapid bioassessment protocol that is used to evaluate stream quality based on fish, macroinvertebrates, and stream habitat characteristics.

Surface waters were sampled to characterize the fish communities and to provide a general description of the surface-water aquatic habitat. The HTDF, Lake Lory, Heron Rookery Pond, and Wetland Complex EE (Figures 1-3 and 1-4) were sampled using a variety of aquatic sampling methods, including the use of electroshocking gear, nets, and a sediment grabbing device to collect macroinvertebrates from unwadable water bodies.

4.1 Fish Collection

A backpack electroshocker was used in narrow (approximately ≤15 feet) or difficult-to-access stations (e.g., areas with abundant woody debris). A barge-mounted electroshocker was used to sample Stations 3 and 4, which were deep and wide enough to permit the passage of the barge unit. On all stations, one pass was conducted in an upstream direction and the duration of electroshocking charge time was recorded for each pass. Stunned fish were placed in a live well for identification and enumeration. Following collection and fish identification, enumerated fish were released within each station.

Stream fish data were analyzed according to P-51 metrics to produce a "fish score" that was used to rate the fish community as poor, neutral (acceptable), or excellent quality. There are ten metrics used to evaluate the fish community diversity and they are listed in the P-51 methodology (Creel et al., 1998). The score for each metric can range from –1 to +1 and are described as follows:

- -1 indicates the community is performing outside of (minus) two standard deviations from the average conditions found at excellent sites;

- 0 indicates the community is performing between the average condition and (minus) two standard deviations from the average condition found at excellent sites, and;
- +1 indicates the community is performing better than the average condition found at excellent sites.

The summation of the fish scores can range from –10 to +10 using these metrics. Stations that score from +5 to +10 are considered excellent. Stations that score from –5 to –10 or have less than 50 fish are considered poor, while stations that score from –5 to +5 (including zero) are considered acceptable in fish community structure (Creel et al., 1998).

Lake, pond, and wetland sites were not evaluated for fish using the P-51 procedure because the approach is designed for wadable streams (MDEQ, 2002). Since fish collection gear is not equally selective among sizes and species of fish, a combination of sampling gear, including a boom shocker, a backpack shocker, experimental gill nets, and hoop nets were used to capture fish within the HTDF, Lake Lory, Heron Rookery Pond, and Wetland Complex EE. Gear and sample locations within the HTDF and Lake Lory were selected to provide a broad sampling coverage of aquatic habitat and to minimize the bias created by gear selectivity and avoidance by fish.

A boat-mounted shocking unit and generator (boom shocker) were used to collect fish in shallow water, near-shore areas of the HTDF and Lake Lory (Figures 1-3 and 1-4). Pulsed direct current was used during the survey to minimize trauma to the fish. Electroshocking duration was automatically recorded as the total seconds of electricity that was discharged from the boom shocker in each transect. Boom shocking was conducted at night, which is more effective than shocking during daylight hours (Smith-Root, 2004).

Multiple panel monofilament gill nets of varying mesh size were fished in several locations throughout the HTDF and Lake Lory (Figures 1-3 and 1-4). Each gill net consisted of five, 6- by 25-foot panels ranging from 1.5- to 6-inch stretch mesh. The gill nets were set overnight and were fished for approximately 12 hours.

Hoop nets were placed throughout the HTDF and Lake Lory (Figures 1-3 and 1-4). Hoop nets were constructed of 2-inch stretch mesh and the hoop diameter measured four feet with a 50-foot

long center lead, and two 6- by 25-foot wing leads. Hoop nets were fished overnight for approximately 12 hours.

The Heron Rookery Pond located to the north of Lake Lory functions as nesting habitat for great blue herons, which were nesting at the time of aquatic sampling. Aquatic sampling was conducted along the south shoreline of the water body using a backpack electroshocker to minimize disturbance to these nesting birds.

Wetland Complex EE was sampled in a wadable pond located approximately 450 feet south of Highway 41, and approximately 1,500 feet west of the intersection between Highway 41 and Wolf Road (Figure 1-3). Sampling was conducted with a backpack electroshocker along the south and west shoreline on the edges of dense vegetation.

Catch-per-unit-effort (CPUE) is used as an index of fish abundance. Fish sampling efforts were standardized to units consistent with the Michigan Department of Natural Resources sampling protocol (Schneider et al., 2000). CPUE for the following gear was estimated as follows:

$$\text{CPUE} = \frac{N}{t}$$

Where,

N = number of fish caught

t = sample duration in hours (boom shocker)

t = sample duration in net nights (experimental gill net)

t = sample duration in net nights (hoop net).

As part of the enumeration process, the species, length, weight, and number of fish captured were recorded. One representative of each species that was not identifiable in the field was placed in a voucher jar containing 10% formalin for later identification. Each voucher jar was labeled according to the sample location and date. Fish were identified to species using various taxonomic references (Bailey et al., 2003; Coon, 1997; Pflieger, 1997; Page and Burr, 1991; Becker, 1983; Eddy and Underhill, 1978). The Marquette County Element List (Michigan

Natural Features Inventory, 2008) was reviewed to determine if any threatened, endangered, or special concern aquatic species occurred within the vicinity of the project.

4.2 Macroinvertebrates

Macroinvertebrate sampling was conducted within all stream stations. Upon completion of fish sampling, aquatic macroinvertebrates, including mussels and decapods (crayfish), were collected within each station using D-framed kick-nets (Merritt et al., 1996). Stations were sampled for 45 minutes using two kick-nets (total sample time = 1.5 hours) and samples were collected in all habitat types within each station to characterize the macroinvertebrate community. Collected specimens were stored in 500 ml plastic wide-mouth jars containing 70% ethanol, and were identified using various taxonomic references (Bright, 2008; Merritt et al., 2008; Cummings and Mayer, 1992; Peckarsky et al., 1990; Pennak, 1990).

The wadable stream macroinvertebrate data were analyzed according to nine metrics identified in the P-51 methodology. The sum of the macroinvertebrate scores can range from –9 to +9; and like the fish community, are graded as excellent, acceptable (slightly impaired), or poor according to the summation of the metric scores.

Aquatic macroinvertebrate sampling was conducted along the shorelines of the HTDF, Lake Lory, and Wetland Complex EE using a D-frame kick-net, and a PONAR sediment-grabbing device was used in the HTDF and Lake Lory to collect macroinvertebrates within the water basin (Figures 1-3 and 1-4).

4.3 Stream Habitat Evaluation

Riparian and instream habitats were qualitatively described for each station. A description of stream morphology included run/riffle/pool/shallow pool configurations, substrate, substrate embeddedness, instream cover, vegetation, flow stability, and bank stability. Stream habitat was rated as excellent, good, marginal, or poor based on P-51 scores interpreted from 10 habitat metrics. Habitat was rated according to the following P-51 habitat scores (MDEQ, 2002):

Habitat Characterization	Total Point Score
1. Excellent	> 154
2. Good	105 – 154
3. Marginal	56 – 104
4. Poor	< 56

Wetted stream width was measured at the downstream extent, upstream extent, and middle of each sample station to describe the physical dimensions of each stream sample station at the time of the survey. The average depth of the sample station was determined from stream depth measured at 20 percent of the channel width, 80 percent of the channel width, and 50 percent of the channel width of the downstream extent, upstream extent, and middle of the station. Stream flow was measured using a Marsh McBirney FLO-MATE 2000™.

Photographs were taken at each station to illustrate the conditions during the sampling period. Water temperature, pH, conductivity, and dissolved oxygen were measured as part of the stream habitat evaluation. These water quality parameters were measured using a Yellow Springs Instrument Model YSI 556 water quality meter.

5.0 RESULTS AND DISCUSSION

The aquatic sampling of the Humboldt Mill vicinity was conducted from June 9, 2008 through July 10, 2008. Stations 1 and 2 were sampled on June 9, 2008 and Station 5 was sampled on June 11, 2008. Sampling of the HTDF, Lake Lory, Heron Rookery Pond, and Wetland Complex EE were conducted from June 9, 2008 through June, 11 2008. Due to high water at the time of the June sampling event, stations on the Middle Branch Escanaba River (Stations 3 and 4) were sampled on July 10, 2008.

5.1 Streams

All streams sampled within the project vicinity are located in a region that is classified as a Northern Lakes and Forests ecoregion (Creel et al., 1998). Therefore, all P-51 scoring was based on metrics that relied on typical data from this ecoregion.

5.1.1 Station 1

A total of 46 fish were observed in Station 1. The dominant species included northern pearl dace (*Margariscus nachtriebi*), creek chub (*Semotilus atromaculatus*), yellow perch (*Percina flavescans),* and emerald shiner (*Notropis atherinoides*; Table 5-1). The CPUE estimate was 8.6 fish/minute of backpack electroshocking for the reach. Because fewer than 50 fish were collected from Station 1, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 1.

A total of 95 macroinvertebrates were collected from Station 1, where Sphaeriidae (fingernail clams) and Dipterans (true flies) were most abundant followed by Trichopterans (caddisflies) and Amphipoda (scuds) (Table 5-2). The macroinvertebrate community was rated as "acceptable" (Table 5-3), and no threatened, endangered, or special macroinvertebrates were observed.

Station 1 was classified as a glide/pool habitat based on use of the P-51 protocol. The habitat was rated as "excellent" based on the total habitat metric score according to the P-51 protocol (Table 5-4).

The average width of Station 1 was 7.2 feet (standard deviation; s = 1.2; sample size; n = 3) and the average depth was 1.5 feet (s = 0.8 feet; n = 9; Table 5-5). The discharge within Station 1

was 158 gallons per minute on June 9, 2008. Water temperature within Station 1 was the warmest observed temperature (22.5°C) among the sample stations (Table 5-6).

5.1.2 Station 2

A total of 41 fish were observed with an estimated CPUE of 5.7 fish/minute of backpack electroshocking in Station 2. Fathead minnows (*Pimephales promelas*) and dace were the most abundant fish within this station (Table 5-1). Because fewer than 50 fish were collected from Station 2, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 2.

A total of 180 macroinvertebrates were collected from Station 2, where Ephemeropterans (mayflies) were most abundant followed by Zygoptera (damselflies) and caddisflies (Table 5-2). The total macroinvertebrate community was rated as "acceptable" (Table 5-3), and no threatened, endangered, or special concern macroinvertebrates were observed.

Station 2 was classified as a glide/pool habitat and was rated as "excellent" according to the P-51 total habitat metric score (Table 5-4). The average width of Station 2 was 10.4 feet (s = 3.8; n = 3) and the average depth was 0.8 feet (s = 0.4 feet; n = 9; Table 5-5).

The discharge within Station 2 was 31 gallons per minute on June 9, 2008. Dissolved oxygen (4.2 mg O_2/L), conductivity (48 µS/cm), and pH (5.8) were the lowest among the sample stations (Table 5-6).

5.1.3 Station 3

Station 3 was sampled using a barge-mounted electroshocker where a total of 10 fish representing 6 taxa were observed. Mottled sculpin (*Cottus bairdii*) were the most frequently observed fish (Table 5-1) and the CPUE estimate for Station 3 was 0.7 fish/minute of barge electroshocking.

The Middle Branch Escanaba River is classified as a coldwater stream by the State of Michigan (Michigan Surface Water Information Management System, 2008). Because fewer than 50 fish and no salmonids were collected from Station 3, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 3.

A total of 197 macroinvertebrates were collected from Station 3. Mayflies, dipterans, and Decapoda (crayfish) were the most frequently observed organisms (Table 5-2). The macroinvertebrate community was rated as "acceptable" (Table 5-3), and no threatened, endangered, or special concern macroinvertebrate species were observed.

Station 3 was evaluated as a glide/pool habitat and was rated as "excellent" based on the P-51 total habitat metric score (Table 5-4). The average width of Station 3 was 36.6 feet (s = 7.5 feet; n = 3) and the average depth was 1.2 feet (s = 0.4 feet; n = 9; Table 5-5). Discharge within Station 3 was 8,953 gallons per minute on July 10, 2008 (Table 5-6).

5.1.4 Station 4

Station 4 was sampled using a barge-mounted electroshocker where a total of 13 fish representing 7 taxa were observed. Mottled sculpin and tadpole madtom (*Noturus gyrinus*) were the most frequently collected species (Table 5-1) and the CPUE estimate for Station 4 was 1.0 fish/minute of barge electroshocking. Because fewer than 50 fish and no salmonids were collected from Station 4, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 4.

A total of 170 macroinvertebrates were collected from Station 4. Mayflies, true flies, and dragonflies were the most frequently observed organisms (Table 5-2). The macroinvertebrate community was rated as "acceptable" (Table 5-3) and no threatened, endangered, or special concern macroinvertebrate species were observed.

Station 4 was evaluated as a glide/pool habitat and was rated as "excellent" based on the P-51 total habitat metric score (Table 5-4). The average width of Station 4 was 31.0 feet (s = 5.8 feet; n = 3) and the average depth was 1.1 feet (s = 0.5 feet; n = 9; Table 5-5). The discharge within Station 4 was 10,344 gallons per minute on July 10, 2008 (Table 5-6). Dissolved oxygen was 8.7 mg O_2/L (Table 5-6), and was the highest among the 2008 sample stations.

5.1.5 Station 5

Station 5 was sampled using a backpack electroshocker where a total of 4 fish representing 2 taxa were observed. Three central mudminnows and one bluegill were captured within Station 5 with a CPUE estimate of 0.5 fish/minute of backpack electroshocking. Because fewer than 50 fish and

no salmonids were collected from Station 5, the fish community was rated as "poor". No threatened, endangered, or special concern fish species were observed in Station 5.

A total of 131 macroinvertebrates were collected from Station 2, where fingernail clams and true flies were most abundant followed by beetles, caddisflies and Isopoda (sowbugs) (Table 5-2). The macroinvertebrate community was rated as "acceptable" (Table 5-3) and no threatened, endangered, or special concern macroinvertebrate species were observed.

Station 5 was evaluated as a glide/pool habitat and was rated as "good" based on the P-51 total habitat metric score (Table 5-4). Station 5 was 5.0 feet wide and average depth was 0.9 feet (s = 0.4 feet; n = 9; Table 5-5). The discharge within Station 5 was 1,480 gallons per minute on June 13, 2008 (Table 5-6). Temperature (15.2°C) was the lowest, and pH (5.8) and conductivity (154 µS/cm) were the highest among stream sample stations (Table 5-6).

5.2 HTDF, Lake Lory, Heron Rookery Pond, and Wetland Complex EE

5.2.1 HTDF

Two hoop nets were fished in nearshore areas and four gill nets were fished throughout the lake for approximately 17 hours each (Figure 1-3). Gill and hoop nets were fished from June 10, 2008 through June 11, 2008. Nets were set between 17:00 and 20:00 and were checked the next day for fish between 12:00 and 14:00.

Boom shocking was conducted along four transects that were situated parallel to the shoreline (Figure 1-3). Transect lengths ranged from a minimum of 480 feet to a maximum of 1,303 feet.

A total of 324 fish were collected from the HTDF including seven different taxa (Table 5-7). The fish community within the HTDF was predominantly comprised of minnow species and small white suckers (*Catostomus commersonii*), with the presence of large piscivorous northern pike (*Esox lucius*) that likely forage on minnow species and white suckers.

Most of the fish were collected using the boom shocker (Table 5-7). The average total CPUE for the boom shocker was 21.2 fish/hour and varied among transects.

Common shiners (*Luxilus cornutus*) and white suckers were the most frequently collected fish, and were typically collected from rock piles and from cracks in bedrock along the shoreline. Gill nets did not capture any fish, and three northern pike were the only fish captured within the hoop nets. No threatened, endangered, or special concern fish species were observed in the HTDF.

The average length of northern pike was 30.3 inches (s = 0.9 inches; n = 5), and the average weight of northern pike was 6.5 pounds (s = 0.5 pounds; n = 5; Table 5-8). Common shiners averaged 2.9 inches in length (s = 0.7 inches; n = 225) and 0.7 ounces in weight (s = 0.3 ounces; n = 3). White suckers were small in size and ranged from 2.0 to 7.0 inches in length. The average length of the white suckers was 4.1 inches (s = 0.9 inches; n = 63) and the average weight was 0.4 ounces (s = 0.3 ounces; n = 52). The lack of habitat diversity, such as a well developed littoral component of submerged and emergent vegetation and woody debris may account for the lack of diversity of fish sizes and species.

Aquatic macroinvertebrate sampling was conducted on June 10, 2008 within the HTDF where a total of 46 macroinvertebrates were collected (Table 5-9). Basommatophora (snails) and Chironomidae (midge larvae) were the most frequently collected macroinvertebrate within the HTDF. No threatened, endangered, or special concern macroinvertebrate species were observed in the HTDF.

The bedrock-dominated habitat in the littoral area of the HTDF and lack of habitat diversity, including few aquatic macrophytes, do not provide suitable conditions for the development of an abundant and diverse aquatic macroinvertebrate community within the HTDF. Low primary productivity, which is often associated with a bedrock-dominated aquatic system, may also contribute to low abundance and diversity by limiting the food supply available to macroinvertebrates.

Water temperature, pH, dissolved oxygen, and conductivity were measured on the surface of HTDF near the western shoreline on June 10, 2008. The conductivity of the HTDF was the highest among all station (486 µS/cm). Dissolved oxygen on the surface was 8.3 mg O_2/L and pH was 7.9 (Table 5-6).

5.2.2 Lake Lory

Six hoop nets were fished in nearshore areas throughout Lake Lory for approximately 14 hours for each net (Figure 1-4). Sampling took place from June 8, 2008 through June 10, 2008. Hoop nets were typically set late in the day at approximately 22:00 and were checked the next day for fish at approximately 12:00.

Gill nets were fished in three locations throughout the lake for approximately 12 hours of soak time for each net (Figure 1-4). Two gill nets were placed in the lake on June 8, 2008 at approximately 11:00 and were removed from the lake on June 9, 2008 at approximately 10:00 the next day. A third gill net was placed in the lake on June 9, 2008 at approximately 13:00 and was removed from the lake on June 10, 2008 at approximately 14:00.

Boom shocking was conducted along five transects that were situated parallel to the shoreline (Figure 1-4). Transect lengths ranged from a minimum of 257 feet to a maximum of 483 feet.

A total of 282 fish were collected from Lake Lory including eight different taxa (Table 5-10). Yellow perch (P*ercina flavescans*) were the most frequently observed species, followed by bluegills (*Lepomis macrochirus*) and largemouth bass (*Micropterus salmoides*) among all sample gear. No threatened, endangered, or special concern fish species were observed in Lake Lory.

Most of the fish were collected using a boom shocker (Table 5-10). The average total CPUE for the boom shocker was 404 fish/hour and varied among transects.

The total CPUE for hoop nets varied by net location, and ranged from a minimum of 1 fish per net night in hoop nets 1 and 4, to a maximum of 18 fish per net night in hoop net 5. The hoop nets were the most effective means for capturing white suckers. The total number of fish captured in gill nets ranged from zero fish in gill nets 1 and 2, to one fish in gill net 3.

The average length of yellow perch was 5.1 inches (s = 1.5 inches; n = 78), and the average weight of yellow perch was 0.1 pounds (s = 0.1 pounds; n = 77; Table 5-11). Black crappie ranged in size from 7.5 to 11.7 inches and varied the least in length (s = 1.1 inches; n = 13) among fish sampled in Lake Lory.

Many fish collected in Lake Lory appeared in good condition. However, black spot, which is caused by a parasite (larval trematode) that burrows into the skin of the fish, was observed in several of the bluegills, black crappie, largemouth bass, smallmouth bass, and yellow perch.

Aquatic macroinvertebrate sampling was conducted on June 9, 2008 within Lake Lory where a total of 81 macroinvertebrates were collected (Table 5-12). True flies, dragonflies, and snails were the most abundant macroinvertebrates within Lake Lory. No threatened, endangered, or special concern macroinvertebrate species were observed in Lake Lory.

Floating, submerged, and emergent aquatic vegetation were observed in patches along the shoreline of Lake Lory. Burreed (*Sparganium* sp.), floating pondweed (*Potamogeton natans*), bigleaf pondweed (*Potamogeton amplifolius*), rushes, and water-starwort (*Callitriche* sp.) were the predominant species of aquatic vegetation that were observed along the shoreline (Photographs C-11 and C-12). Large woody debris in the form of downed trees and submerged standing timber contributed to the aquatic habitat of Lake Lory.

Water temperature, pH, dissolved oxygen, and conductivity were measured on the surface of Lake Lory near the western shoreline on June 9, 2008. The surface water temperature (18.2 °C) was slightly cooler than the water temperature that was measured in Station 2 at the outlet of Lake Lory on June 9, 2008 (Table 5-6). The conductivity of Lake Lory was low (48 µS/cm) and was consistent with Station 2. Dissolved oxygen in Lake Lory was much higher than in Station 2, the outlet of Lake Lory.

5.2.3 Heron Rookery Pond

The Heron Rookery Pond was sampled for fish using a backpack shocker. A total of 58 fish were collected from the pond including three different taxa (Table 5-13). The most abundant species were fathead minnows, followed by finescale dace (*Phoxinus neogaeus*) and black bullhead (*Ameiurus melas*). Minnows and dace likely serve as an important food source for the nesting blue herons. No threatened, endangered, or special concern fish species were observed in the pond.

In addition to the standing timber, aquatic vegetation was abundant along the south shoreline and appeared to be abundant throughout the pond. Common elodea (*Elodea canadensis*) was the

predominant submerged aquatic vegetation. Cattails were abundant along the southwest shoreline, and spadderdock and arrowhead (*Saggitaria* sp.) were also observed along the shoreline.

The warmest water temperature observed among surface water bodies was recorded in the pond at 22.4 °C (Table 5-6). Conductivity was low (62 µS/cm), and pH was 7.3.

5.2.4 Wetland Complex EE

Wetland Complex EE was sampled for fish using a backpack shocker. A total of 24 fish were collected from the wetland including two different taxa (Table 5-14). Central mudminnows (*Umbra limi*) were the predominant species, with one bluegill also being captured in the wetland.

Aquatic macroinvertebrate sampling was conducted on June 11, 2008, where a total of 74 macroinvertebrates were collected (Table 5-15). Dragonflies, mayflies, and beetles were the most frequently collected macroinvertebrate within Wetland Complex EE. No threatened, endangered, or special concern macroinvertebrate species were observed in Wetland Complex EE.

The highest observed pH value of this survey was recorded in the wetland at 8.3 (Table 5-6). Water temperature was 15.4 °C and conductivity was high (427 µS/cm) relative to other sample stations.

6.0 REFERENCES

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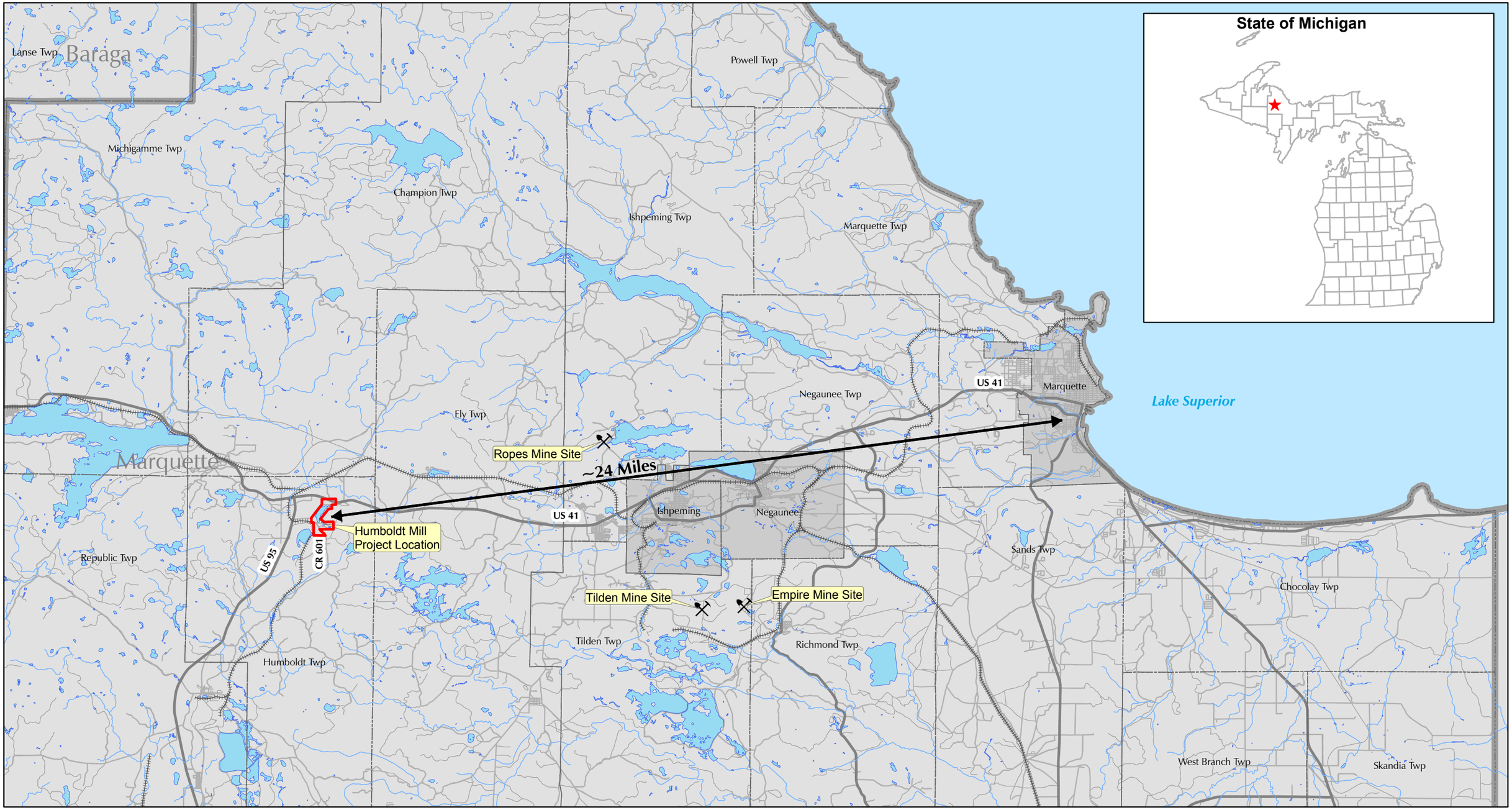
EXHIBIT A

REPORT FIGURES



NOTES

1. Horizontal datum based on NAD 83/94.
   Horizontal coordinates based on UTM Zone 16.
2. All base information downloaded from Michigan Center of Geographic Information (http://www.michigan.gov/cgi).
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Counties
- Minor Civil Divisions
- Lakes and Rivers
- KEMC Project Location
- Highways
- Major Roads
- Minor Roads
- Railroads

N

ADVANCED ECOLOGICAL MANAGEMENT

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CHECKED BY: KKB			DATE: AUG. '08
APPROVED BY:			DATE:
APPROVED BY:			DATE:

Kennecott
Eagle Minerals

FIGURE 1-1
HUMBOLDT MILL PROJECT
PROJECT LOCATION

Scale: 0 1.5 3 Miles

Date: AUGUST, 2008

Prepared by: BJW1

Project No: 06W003

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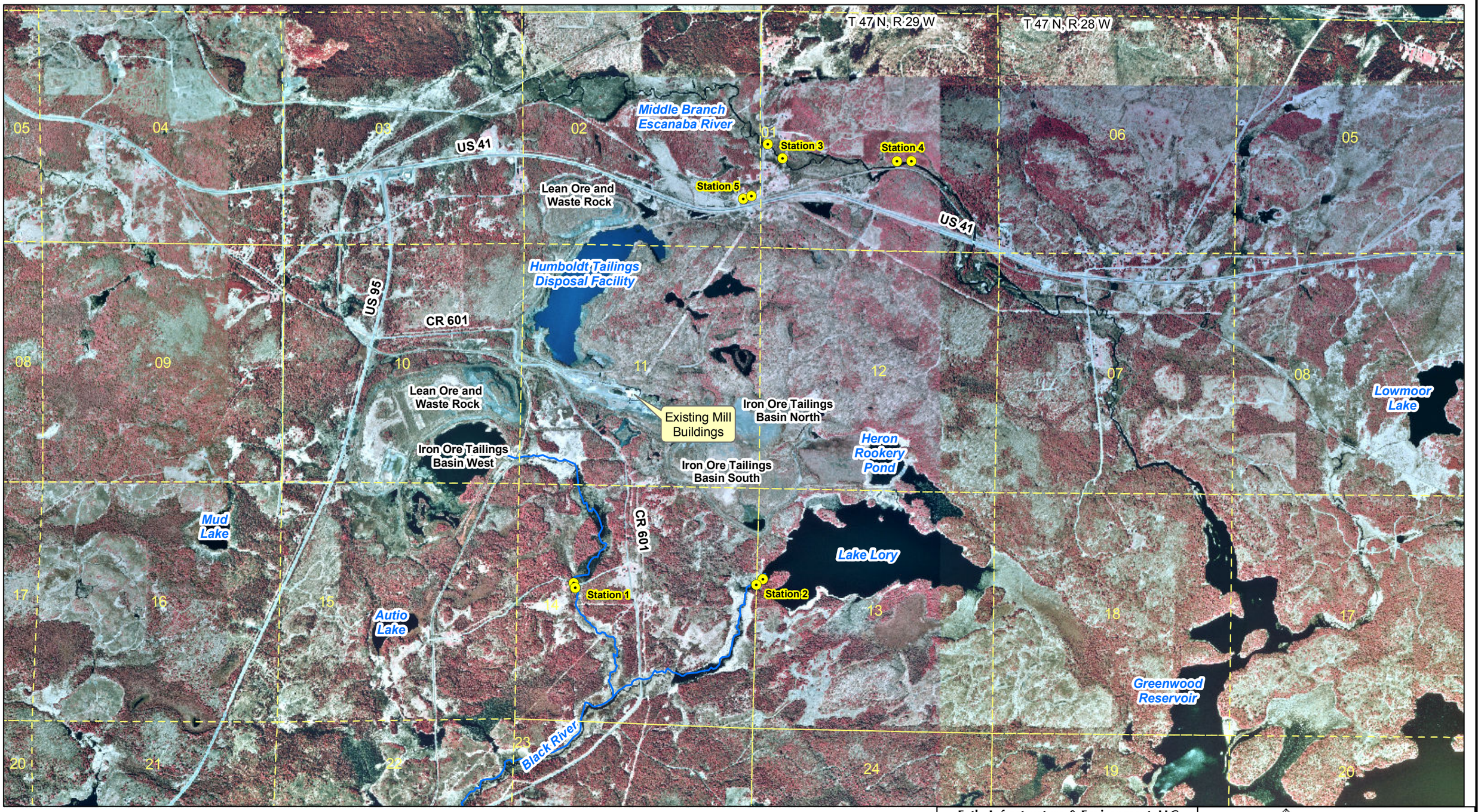

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

Sample Location Extents (upstream and downstream)

PLSS Sections

N

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY: KKB	DATE: AUG. '08
APPROVED BY:	DATE:
APPROVED BY:	DATE:

Kennecott
Eagle Minerals

FIGURE 1-2
HUMBOLDT MILL PROJECT
STREAM SAMPLE LOCATIONS

Scale: 0 1,000 2,000 Feet

Date: AUGUST, 2008

Prepared by: BJW1

Project No: 06W003

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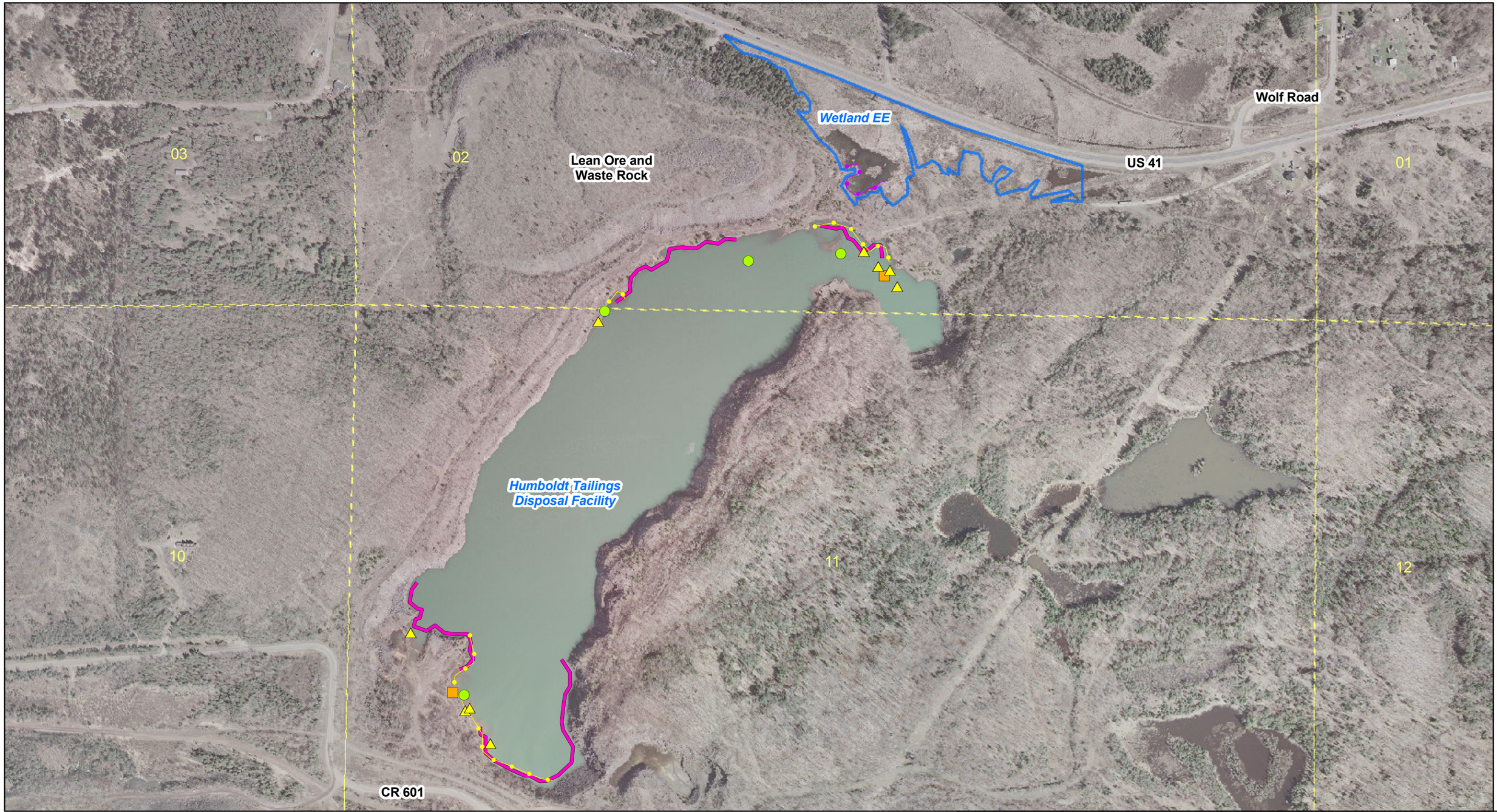

NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Ponar Macro
- Hoop Net Locations
- Gill Net Locations
- Pit Bug Transect
- Wetland Complex EE Backpack Transect
- Boom Shocker Transect
- Wetland Complex EE Boundary
- PLSS Sections

N

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REVISED	DATE	BY	DESCRIPTION

CHECKED BY: KKB	DATE: AUG. '08
APPROVED BY:	DATE:
APPROVED BY:	DATE:

Kennecott
Eagle Minerals

FIGURE 1-3
HUMBOLDT MILL PROJECT
HUMBOLDT TAILINGS DISPOSAL FACILITY
AQUATIC SURVEY LOCATIONS

Scale: 0 250 500 Feet

Date: AUGUST, 2008

Prepared by: BJW1

Project No: 06W003

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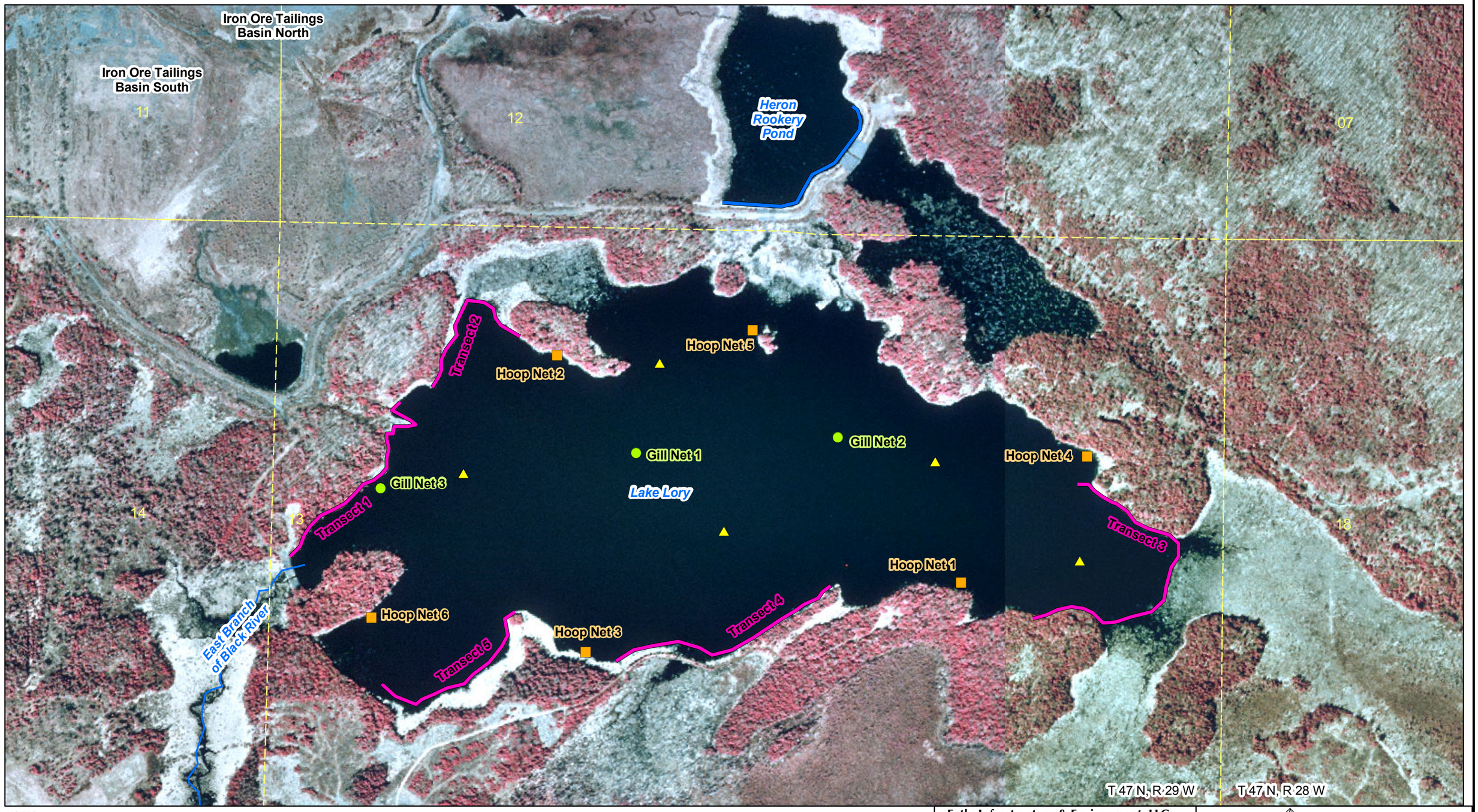

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Ponar Macro
- Hoop Net Locations
- Gill Net Locations
- Backpack Shocker Transect
- Boom Shocker Transect
- PLSS Sections

N

Advanced Ecological Management

Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION

CHECKED BY: KKB	DATE: AUG. '08
APPROVED BY:	DATE:
APPROVED BY:	DATE:

Kennecott Eagle Minerals

FIGURE 1-4
HUMBOLDT MILL PROJECT
LAKE LORY AND HERON ROOKERY POND
AQUATIC SURVEY LOCATIONS

Scale: 0 250 500 Feet

Date: AUGUST, 2008

Prepared by: BJW1

Project No: 06W003

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EXHIBIT B

REPORT TABLES

Table 3-1. Stream Station Location Description.

Station Number	Stream Name	Latitude/Longitude NAD 1983	Township/Range/Section	Location Description
1	Unnamed Tributary of the Black River	N 46.47222 W 87.90249	Humboldt Twp. T47N, R29W, Sec 14	Upstream extent approximately 30 feet downstream of road crossing
2	Unnamed Tributary of the Black River	N 46.47284 W 87.88657	Humboldt Twp. T47N, R29W, Sec 13	Upstream extent approximately 80 feet downstream of Lake Lory outlet
3	Middle Branch Escanaba River	N 46.49899 W 87.88609	Humboldt Twp. T47N, R29W, Sec 1	Upstream extent approximately 85 feet downstream of Wolf Road Crossing
4	Middle Branch Escanaba River	N 46.49777 W 87.87474	Humboldt Twp. T47N, R29W, Sec 1	Downstream extent approximately 2,683 feet upstream of Highway 41
5	Unnamed Tributary of the Middle Branch Escanaba River	N 46.49569 W 87.88276	Humboldt Twp. T47N, R29W, Sec 1	Extends between FX road and Highway 41

NAD 1983 = North American Datum of 1983
N = North
W = West
T = Township
R = Range
Sec = Section

Prepared by: DWM
Checked by: RDW

Table 5-1. Stream Fish Collection Data – Stations 1-5.

		Station				
Scientific Name	**Common name**	**1**	**2**	**3**	**4**	**5**
Ameiurus melas	Black bullhead			1	1	
Rhinichthys obtusus	Blacknose dace	2	3		2	
Notropis heterolepis	Blacknose shiner	1	1			
Lepomis macrochirus	Bluegill					1
Cualea inconstans	Brook stickleback		1			
Umbra limi	Central mudminnow	1	4			3
Notropis cornutus	Common shiner		2		1	
Semolitus atromaculatus	Creek chub	6	6			
Notropis atherinoides	Emerald shiner	5		1		
Pimephales promelas	Fathead minnow	3	8			
Phoxinus neogaeus	Finescale dace	2	6			
Cottus bairdii	Mottled sculpin			5	4	
Esox lucius	Northern pike			1	1	
Phoxinus eos	Northern redbelly dace	2	5			
Margariscus nachtriebi	Northern pearl dace	17	1			
Etheostoma caeruleum	Rainbow darter		3			
Noturus gyrinus	Tadpole madtom				3	
Catostomus commersonii	White sucker	1		1		
Percina flavescans	Yellow perch	6	1	1	1	
	Total Captured	**46**	**41**	**10**	**13**	**4**

Prepared by: DWM
Checked by: RDW

Table 5-2. Stream Macroinvertebrate Collection Data – Stations 1-5.

TAXA	Station 1	Station 2	Station 3	Station 4	Station 5
ANNELIDA (segmented worms)					
Hirudinea (leeches)	2				6
Oligochaeta (worms)					1
ARTHROPODA					
Crustacea					
Amphipoda (scuds)	9	1	5	4	4
Decapoda (crayfish)			17	8	
Isopoda (sowbugs)			2	2	9
Insecta					
Ephemeroptera (mayflies)	1	1		1	4
Baetidae			13	2	
Caenidae	6				
Ephemerellidae		106	2	3	
Ephemeridae			61	94	
Heptageniidae			15	7	
Leptophlebiidae					1
Odonata					
Anisoptera (dragonflies)					
Aeshnidae	3	2	5	3	
Cordulegastridae			2	3	
Corduliidae	1	2	2	1	
Gomphidae			1	2	
Zygoptera (damselflies)					
Calopterygidae	1		16	5	
Coenagrionidae	2	34			
Plecoptera (stoneflies)					
Perlidae			3	4	
Pteronarcyidae				1	
Hemiptera (true bugs)					
Corixidae				1	1
Gerridae		1	1	1	
Notonectidae		2			
Megaloptera					
Sialidae (alder flies)			2	1	
Trichoptera (caddisflies)					
Hydropsychidae				1	
Limnephilidae	9	15	3	5	11
Coleoptera (beetles)					
Dytiscidae (total)		1	3		7
Gyrinidae (adults)		1	1	3	
Haliplidae (adults)	1		2		3
Hydrophilidae (total)				1	1
Diptera (flies)					
Ceratopogonidae	2				
Chironomidae	21	5	27	13	25
Dixidae		1			

Table 5-2 (Continued). Stream Macroinvertebrate Collection Data – Stations 1-5.

TAXA	Station 1	Station 2	Station 3	Station 4	Station 5
Ptychopteridae		1			
Simuliidae	1		10	2	6
Tabanidae	1				
Tipulidae			4	1	1
MOLLUSCA					
Gastropoda (snails)					
Lymnaeidae					3
Physidae	1	1			
Planorbidae	1	2			
Pelecypoda (bivalves)					
Pisidiidae	6	2			39
Sphaeriidae (clams)	27	2		1	9
TOTAL INDIVIDUALS	**95**	**180**	**197**	**170**	**131**

Prepared by: DWM
Checked by: RDW

Table 5-3. Stream Macroinvertebrate Scores and Community Ratings – Stations 1-5.

	Station 1		Station 2		Station 3		Station 4		Station 5	
METRIC	**Value**	**Score**	**Value**	**Score**	**Value**	**Score**	**Value**	**Score**	**Value**	**Score**
TOTAL NUMBER OF TAXA	18	0	18	1	22	1	26	1	17	1
NUMBER OF MAYFLY TAXA	1	-1	1	-1	4	1	4	1	1	0
NUMBER OF CADDISFLY TAXA	1	-1	1	-1	1	-1	2	-1	1	-1
NUMBER OF STONEFLY TAXA	0	-1	0	-1	1	1	2	1	0	-1
PERCENT MAYFLY COMP.	6.32	0	58.89	1	46.19	1	62.35	1	0.76	-1
PERCENT CADDISFLY COMP.	9.47	0	8.33	0	1.52	0	3.53	0	8.40	0
PERCENT CONTR. DOM. TAXON	28.42	-1	58.89	-1	30.96	-1	55.29	-1	29.77	-1
PERCENT ISOPOD, SNAIL, LEECH	4.21	0	1.67	1	1.02	1	1.18	1	13.74	-1
PERCENT SURF. AIR BREATHERS	1.05	1	3.33	1	3.55	1	3.53	1	9.16	0
TOTAL SCORE		**-3**		**0**		**4**		**4**		**-4**
COMMUNITY RATING	ACCEPTABLE		ACCEPTABLE		ACCEPTABLE		ACCEPTABLE		ACCEPTABLE	

Prepared by: DWM
Checked by: RDW

Table 5-4. Stream Habitat Scores and Ratings – Stations 1-5.

HABITAT METRIC	Station 1 glide/pool	Station 2 glide/pool	Station 3 glide/pool	Station 4 glide/pool	Station 5 glide/pool
Substrate and Instream Cover					
Epifaunal Substrate/Avail. Cover	12	15	15	17	12
Pool Substrate Characterization	10	12	15	15	14
Pool Variability	10	9	12	10	5
Sediment Deposition	18	18	17	17	12
Channel Morphology					
Maintained Flow Volume	8	7	8	8	7
Flashiness	8	10	7	7	5
Channel Alteration	17	18	16	15	9
Channel Sinuosity	17	13	12	11	5
Riparian and Bank Structure					
Bank Stability (L)	9	10	9	9	9
Bank Stability (R)	9	10	9	9	9
Vegetative Protection (L)	10	10	10	10	9
Vegetative Protection (R)	10	10	10	10	9
Riparian Veg. Zone Width (L)	10	10	10	10	8
Riparian Veg. Zone Width (R)	10	10	9	9	9
Total Score	**158**	**162**	**159**	**157**	**122**
Habitat Rating	**Excellent**	**Excellent**	**Excellent**	**Excellent**	**Good**

L = Left bank facing downstream
R = Right bank facing downstream

Prepared by: DWM
Checked by: RDW

Table 5-5. Stream Station Dimensions

		Width (ft)		Depth (ft)	
Station	**Length**	**Average***	***s***	**Average ***	***s***
1	100	7.2 (3)	1.2	1.5 (9)	0.8
2	150	10.4 (3)	3.8	0.8 (9)	0.4
3	300	36.6 (3)	7.5	1.2 (9)	0.4
4	300	31.0 (3)	5.8	1.1 (9)	0.5
5	180	5.0 (1)	n/a	0.9 (9)	0.4

***sample size is indicated within ()**
***s* = standard deviation**
ft = feet

Prepared by: DWM
Checked by: RDW

Table 5-6. Water Quality Parameters – Stations 1-5 and Surface Water Bodies.

Station	Date	Time	Temperature °C	pH	Conductivity µS/cm	Dissolved Oxygen mg O_2/L	Discharge gpm
1	6/9/2008	15:54	22.5	6.0	70	4.3	158
2	6/9/2008	10:48	19.2	5.8	48	4.2	31
3	7/10/2008	13:52	16.8	6.2	54	8.5	8,953
4	7/10/2008	13:43	16.8	6.5	57	8.7	10,344
5	6/13/2008	10:46	15.2	6.9	154	5.0	1,480
Humboldt Tailings Disposal Facility (HTDF)	6/10/2008	20:08	17.0	7.9	486	8.3	
Lake Lory (Surface water)	6/9/2008	16:31	18.2	7.1	48	7.8	
Heron Rookery Pond	6/9/2008	18:04	22.4	7.3	62	n.m.	
Wetland Complex EE	6/11/2008	18:38	15.4	8.3	427	n.m.	

°C = degrees Celsius
µS/cm = microsiemens per centimeter
mg O2/L = milligrams of oxygen per liter of water
gpm = gallons per minute
n.m. = not measured
HTDF = Humboldt Tailings Disposal Facility

Prepared by: DWM
Checked by: RDW

Table 5-7. Humboldt Tailings Disposal Facility Fish Collection Data.

		Number of Taxa by Sample Gear			
Scientific Name	**Common Name**	**Hoop Nets**	**Gill Nets**	**Boom Shocker**	**Total**
Cualea inconstans	Brook stickleback			1	1
Notropis cornutus	Common shiner			225	225
Semotilus atromaculatus	Creek chub			3	3
Pimephales promelas	Fathead minnow			26	26
Esox lucius	Northern pike	3		2	5
Phoxinus eos	Northern redbelly dace			1	1
Catostomus commersonii	White sucker			63	63
Total Collected by Gear		**3**	**0**	**321**	
Total Number of Fish Collected					**324**

Prepared by: DWM
Checked by: RDW

Table 5-8. Humboldt Tailings Disposal Facility Fish Size.

	Length (inches)				Weight (ounces)			
Common Name	**min**	**max**	**average***	***s***	**min**	**max**	**average**	***s***
Brook stickleback	1.5	1.5	1.5 (1)	0.0				
Creek chub	3.8	5.4	4.8 (3)	0.9	0.004	0.3	0.2 (5)	0.1
Common shiner	1.4	4.6	2.9 (225)	0.7	0.3	0.9	0.7 (3)	0.3
Fathead minnow	3.3	4.6	3.8 (26)	0.3	0.1	0.5	0.3 (16)	0.1
Northern pike	29.4	31.5	30.3 (5)	0.9	5.95╫	7.06╫	6.53╫ (5)	0.46╫
Northern redbelly dace	2.3	2.3	2.3 (1)	0.0				
White sucker	2.0	7.0	4.1 (63)	0.9	0.1	1.9	0.4 (52)	0.3

*** sample size is indicated within ()**
***s* = standard deviation**
╫ Northern pike weights are reported in pounds
min = minimum
max = maximum

Prepared by: DWM
Checked by: RDW

Table 5-9. Humboldt Tailings Disposal Facility Macroinvertebrates.

Order	Family	Genus	Species	Taxa Count
Amphipoda	Gammaridae	*Gammaraus*		1
Amphipoda	Hyalellidae	*Hyalella*		3
Basommatophora	Planorbidae	*Helisoma*		17
Diptera	Chironomidae	*Cryptotendipes*		1
Diptera	Chironomidae	*Lipinella*		6
Diptera	Chironomidae	*Stictochironomus*		3
Diptera	Chironomidae	*Tribelos*		1
Diptera	Chironomidae			5
Ephemeroptera	Caenidae	*Caenis*		1
Ephemeroptera	Ephemerellidae	*Eurylophella*		1
Odonata	Aeshnidae	*Aeshna*	*umbrosa*	1
Odonata	Corduliidae	*Somatochlora*		1
Trichoptera	Limnephilidae	*Anabolia*		3
Trichoptera	Limnephilidae	*Platycentropus*		1
Veneroida	Pisidiidae	*Pisidium*		1
			Total	**46**

Prepared by: DWM
Checked by: RDW

Table 5-10. Lake Lory Fish Collection Data.

		Number of Taxa by Sample Gear			
Scientific Name	**Common Name**	**Hoop Nets**	**Gill Nets**	**Boom Shocker**	**Total**
Pomoxis nigromaculatus	Black crappie	2		11	13
Lepomis macrochirus	Bluegill	9		66	75
Pimephales promelas	Fathead minnow			2	2
Micropterus salmoides	Largemouth bass	2		48	50
Lepomis gibbosus	Pumpkinseed sunfish			18	18
Micropterus dolomieui	Smallmouth bass	1		15	16
Catostomus commersonii	White sucker	29	1		30
Percina flavescens	Yellow perch	1	8	69	78
Total Collected by Gear		**44**	**9**	**229**	
Total Number of Fish Collected					**282**

Prepared by: DWM
Checked by: RDW

Table 5-11. Lake Lory Fish Size.

	Length (inches)				Weight (pounds)			
Common Name	**min**	**max**	**average***	***s***	**min**	**max**	**average***	***s***
Black crappie	7.5	11.7	9.5 (13)	1.1	0.21	0.5	0.4 (13)	0.1
Bluegill	2.0	12.3	4.9 (75)	2.1	0.003	0.6	0.1 (75)	0.2
Fathead minnow								
Largemouth bass	5.9	19.9	11.1 (49)	3.2	0.08	5.1	0.8 (49)	1.0
Pumpkinseed sunfish	2.1	8.0	5.9 (18)	1.9	0.01	0.5	0.2 (18)	0.2
Smallmouth bass	6.1	13.3	9.9 (16)	2.0	0.09	0.9	0.5 (16)	0.2
White sucker	14.0	19.9	16.9 (30)	1.2	1.76	3.3	2.3 (29)	0.4
Yellow perch	2.5	8.9	5.1 (78)	1.5	0.01	0.3	0.1 (77)	0.1

Two small fathead minnows were also captured in Lake Lory, but were not measured.
*** sample size is indicated within ()**
***s* = standard deviation**
min = minimum
max = maximum

Prepared by: DWM
Checked by: RDW

Table 5-12. Lake Lory Macroinvertebrates.

Order	Family	Genus	Taxa Count
Basommatophora	Planorbidae	*Gyraulus*	1
Coleoptera	Gyrinidae	*Dineutus*	2
Coleoptera	Haliplidae	*Peltodytes*	1
Diptera	Chaoboridae	*Chaoborus*	4
Diptera	Chironomidae	*Chironomus*	16
Diptera	Chironomidae	*Procladius*	3
Diptera	Chironomidae		4
Ephemeroptera	Ephemerellidae	*Eurylophella*	7
Mesogastropoda	Hydrobiidae	*Amnicola*	14
Odonata	Aeshnidae	*Aeshna*	1
Odonata	Coenagrionidae	*Enallagma*	6
Odonata	Coenagrionidae	*Signatum*	13
Odonata	Corduliidae	*Epitheca*	1
Odonata	Gomphidae	*Ophiogomphus*	2
		Total	**81**

Prepared by: DWM
Checked by: RDW

Table 5-13. Electroshocking Survey Data of Fish Collected from Heron Rookery Pond.

Scientific Name	Common Name	Number Captured
Ameiurus nebulosus	Black bullhead	5
Pimephales promelas	Fathead minnow	47
Phoxinus neogaeus	Finescale dace	6
	Total Number Captured	**58**

Prepared by: DWM
Checked by: RDW

Table 5-14. Electroshocking Survey Data of Fish Collected from Wetland Complex EE.

Scientific Name	Common Name	Number Captured
Lepomis macrochirus	Bluegill	1
Umbra limi	Central mudminnow	23
	Total Number Captured	**24**

Prepared by: DWM
Checked by: RDW

Table 5-15. Wetland Complex EE Macroinvertebrates.

Order	Family	Genus	Species	Taxa Count
Amphipoda	Hyalellidae	*Hyalella*		5
Basommatophora	Planorbidae	*Gyraulus*		1
Coleoptera	Gyrinidae	*Gyrinus*		2
Coleoptera	Haliplidae	*Peltodytes*		2
Coleoptera	Hydrophilidae	*Tropisternus*		3
Ephemeroptera	Baetidae	*Pseudocentroptiloides*		2
Ephemeroptera	Caenidae	*Caenis*		13
Hemiptera	Belostomatidae	*Belestoma*		3
Hemiptera	Corixidae			2
Hemiptera	Gerridae	*Gerris*		1
Odonata	Coenagrionidae	*Enallagma*		26
Odonata	Corduliidae	*Epitheca*	*spinigera*	1
Odonata	Libellulidae	*Leucorrhina*		8
Odonata	Libellulidae	*Pantala*		1
Sphaeridae	Sphaerium			1
Trichoptera	Limnephilidae			1
Trichoptera	Phryganeidae			1
Trichoptera	Polycentropodidae	*Neureclipsis*		1
			Total	**74**

Prepared by: DWM
Checked by: RDW

EXHIBIT C

PHOTOGRAPHS

Photograph C-1. Station 1 – Upstream Extent. View looking south, downstream.

Photograph C-2. Station 1 – Downstream Extent. View looking west, upstream.

Photograph C-3. Station 2 – Upstream Extent. View looking west, downstream.

Photograph C-4. Station 2 – Downstream Extent. View looking east, upstream.

Photograph C-5. Station 3 – Upstream Extent. View to east, downstream.

Photograph C-6. Station 3 – Downstream Extent. View to west, upstream.

Photograph C-7. Station 4 – Upstream Extent. View to southeast, downstream.

Photograph C-8. Station 4 – Downstream Extent. View to northeast, upstream.

Photograph C-9. Station 5 – Upstream Extent. View to north, downstream.

Photograph C-10. Station 5 – Downstream Extent. View to south, upstream.

Photograph C-11. Humboldt Tailings Disposal Facility – View to the northeast.

Photograph C-12. Humboldt Tailings Disposal Facility – View to the southwest.

Photograph C-13. Lake Lory – View to the east.

Photograph C-14. Lake Lory – View to the southeast.

Photograph C-15. Heron Rookery Pond North of Lake Lory. View to the northeast.

Photograph C-16. Heron Rookery Pond North of Lake Lory. View to the north.

Photograph C-17. Wetland Complex EE North of HTDF. View to north.

Photograph C-18. Wetland Complex EE North of HTDF. View to west.

A-3
Fish Tissue Analysis – 2008

ADVANCED ECOLOGICAL MANAGEMENT

Memo

Date: 8/29/2008

To: Kris Baran, Foth Infrastructure and Environment

From: Doug Workman

RE: Humboldt Project – Lake Lory and HTDF summary of 2008 fish metals data

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Dear Kris;

The following is a summary of data on the metal content in fish collected from Lake Lory and the Humboldt Tailings Disposal Facility (HTDF) in June 2008. Fish were collected by Advanced Ecological Management, LLC fisheries personnel from Lake Lory and the HTDF by means of a boat-mounted electroshocker. Consistent with the 2007 metals analyses, ten fish of a species that was abundant in each waterbody were analyzed for a variety of metals (Tables 1 and 2). The laboratory data are attached in Table 3 and include all metals that were analyzed. The fish were tested whole at Pace Analytical Services, Inc., Green Bay, Wisconsin (Batch numbers 404992 and 404975). The laboratory analytical results are included in Attachment 1 and the metals data are summarized below by waterbody.

Lake Lory (Table 1)

Ten bluegill (*Lepomis macrochirus*) were collected from Lake Lory on June 9, 2008. Bluegill ranged in length from 150 mm to 217 mm (average length; $\bar{x}$ = 183.6 mm; standard deviation; *s* = 20.9 mm) and ranged in weight from 72 g to 242.1 g ($\bar{x}$ = 148.7 g; *s* = 54 g). Copper concentrations ranged from 0.35 mg/kg to 0.62 mg/kg ($\bar{x}$ = 0.44 mg/kg; *s* = 0.09 mg/kg) and nickel concentrations ranged from 0.06 to 0.09 ($\bar{x}$ = 0.08 mg/kg; *s* = 0.01 mg/kg). Mercury levels ranged from 0.06 mg/kg to 0.11 mg/kg ($\bar{x}$ = 0.08 mg/kg; *s* = 0.01 mg/kg) and arsenic concentrations ranged from 0.03 mg/kg to 0.06 mg/kg ($\bar{x}$ = 0.04 mg/kg; *s* = 0.01 mg/kg). See Table 1 for additional data on metals content observed in bluegill collected from Lake Lory.

HDTF (Table 2)

Ten white suckers (*Catostomus commersonii*) were collected from the HDTF on June 10, 2008. White suckers ranged in length from 125 mm to 192 mm ($\bar{x}$ = 147.5 mm; *s* = 22 mm) and ranged in weight from 16.2 g to 67.8 g ($\bar{x}$ = 31.4 g; *s* = 17.2 g). Copper concentrations ranged from 0.72 mg/kg to 4.4 mg/kg ($\bar{x}$ = 2.01 mg/kg; *s* = 1.1 mg/kg) and nickel concentrations ranged from 0.19 mg/kg to 3.7 mg/kg ($\bar{x}$ = 1.3 mg/kg; *s* = 1.1 mg/kg). Mercury levels ranged from 0.005 to 0.013 mg/kg ($\bar{x}$ = 0.009 mg/kg; s = 0.003) and arsenic levels ranged from 0.05 and 2.0 mg/kg ($\bar{x}$ = 0.41 mg/kg; s = 0.62 mg/kg). See Table 2 for additional data on metals content observed in white suckers collected from the HTDF.

Table 1. Lake Lory Fish Sampled June, 2008 – Bluegills (*Lepomis macrochirus*).

			Sample Number													
Parameter	**CAS No.**	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Min**	**Max**	**Avg.**	***s***
Length	-	mm	185	215	169	185	217	150	176	195	168	176	150	217	183.6	20.9
Weight	-	g	136.6	216.2	161.7	141.3	242.1	72	111.7	189.7	95.2	120.8	72	242.1	148.7	54
Aluminum	7429-90-5	mg/kg	0.87	1.8	0.87	11.7	0.87	0.87	0.87	0.87	0.87	0.87	0.87	11.7	2.046	3.405
Antimony	7440-36-0	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.2E-9
Arsenic	7440-38-2	mg/kg	0.04	0.03	0.04	0.063	0.03	0.06	0.03	0.05	0.05	0.04	0.025	0.063	0.044	0.013
Barium	7440-39-3	mg/kg	0.44	0.53	0.59	0.74	0.46	0.85	0.53	0.45	0.75	0.65	0.44	0.85	0.599	0.143
Beryllium	7440-41-7	mg/kg	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	2.2E-10
Boron	7440-42-8	mg/kg	0.089	0.12	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.12	0.092	0.01
Cadmium	7440-43-9	mg/kg	0.009	0.0068	0.0072	0.06	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.0068	0.06	0.0124	0.017
Chromium	7440-47-3	mg/kg	0.082	0.071	0.1	0.2	0.09	0.093	0.07	0.11	0.085	0.096	0.07	0.2	0.1	0.037
Cobalt	7440-48-4	mg/kg	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.2E-09
Copper	7440-50-8	mg/kg	0.46	0.36	0.62	0.49	0.35	0.4	0.4	0.4	0.4	0.56	0.35	0.62	0.444	0.088
Iron	7439-89-6	mg/kg	19.6	19.5	22.4	58.2	22	43.8	16.5	28.8	24.5	22.7	16.5	58.2	27.8	13.101
Manganese	7439-96-5	mg/kg	4.2	6.3	13.2	9	8.2	11.7	7	8.1	8.4	11	4.2	13.2	8.71	2.671
Mercury	7439-97-6	mg/kg	0.074	0.1	0.068	0.068	0.11	0.058	0.065	0.096	0.075	0.069	0.058	0.11	0.078	0.017
Molybdenum	7439-98-7	mg/kg	0.055	0.07	0.12	0.068	0.055	0.12	0.085	0.065	0.062	0.075	0.055	0.12	0.078	0.024
Nickel	7440-02-0	mg/kg	0.075	0.074	0.075	0.092	0.063	0.079	0.076	0.071	0.067	0.083	0.063	0.092	0.076	0.008
Selenium	7782-49-2	mg/kg	0.48	0.47	0.57	0.58	0.53	0.56	0.49	0.51	0.48	0.52	0.47	0.58	0.519	0.04
Silver	7440-22-4	mg/kg	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	6.2E-10
Strontium	7440-24-6	mg/kg	8.4	14.6	10.3	9.4	11.1	19.3	12.5	13	19.6	13.1	8.4	19.6	13.13	3.814
Zinc	7440-66-6	mg/kg	16.1	17.7	19	16.7	15.3	25.2	18.5	19.5	20.8	21.5	15.3	25.2	19.03	2.934
Percent Solids		% wet	75.6	74.2	76.1	74.4	74.7	75.3	74.9	75.5	76.6	76.1	74.2	76.6	75.34	0.79

CAS No. = chemical abstract service number
mm = millimeters
g = grams
mg/kg = milligrams per kilograms
Min = minimum
Max = maximum
Avg.= average
s = standard deviation

Table 2. HTDF Fish Sampled June, 2008 – White suckers (*Catostomus commersonii*).

			Sample Number													
Parameter	**CAS No.**	**Units**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**Min**	**Max**	**Avg.**	***s***
Length		mm	155	134	177	142	138	152	125	131	129	192	125	192	147.5	22
Weight		g	38.2	21	54.4	24.3	21.7	31.9	16.2	20.5	18.4	67.8	16.2	67.8	31.4	17.2
Aluminum	7429-90-5	mg/kg	0.87	54.6	0.96	4.6	30.9	0.87	39.7	8.1	17.5	2.4	0.87	54.6	16.05	19.3
Antimony	7440-36-0	mg/kg	0.05	0.47	0.05	0.05	0.52	0.05	0.25	0.052	0.12	0.05	0.05	0.52	0.1662	0.185
Arsenic	7440-38-2	mg/kg	0.045	2	0.11	0.14	0.94	0.11	0.36	0.082	0.18	0.12	0.045	2	0.4087	0.618
Barium	7440-39-3	mg/kg	0.16	0.93	0.34	0.51	1.5	0.52	1.2	0.94	1.7	0.49	0.16	1.7	0.829	0.513
Beryllium	7440-41-7	mg/kg	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	2.2E-10
Boron	7440-42-8	mg/kg	0.089	0.16	0.12	0.09	0.15	0.13	0.16	0.11	0.16	0.089	0.089	0.16	0.1258	0.031
Cadmium	7440-43-9	mg/kg	0.0084	0.019	0.0067	0.016	0.0067	0.0068	0.013	0.06	0.075	0.0067	0.0067	0.075	0.02183	0.025
Chromium	7440-47-3	mg/kg	0.072	0.49	0.075	0.14	0.25	0.07	0.21	0.096	0.15	0.067	0.067	0.49	0.162	0.132
Cobalt	7440-48-4	mg/kg	0.05	0.29	0.067	0.052	0.23	0.12	0.34	0.11	0.22	0.081	0.05	0.34	0.156	0.106
Copper	7440-50-8	mg/kg	0.72	4.4	1	1.6	2.2	2	3	1.8	2.4	0.98	0.72	4.4	2.01	1.1
Iron	7439-89-6	mg/kg	12.1	1150	37.4	150	3930	31.6	298	69	109	25.6	12.1	3930	581.27	1225.6
Manganese	7439-96-5	mg/kg	5.5	31.3	21.4	19.8	28.7	27.2	63.5	17.4	55.5	22.8	5.5	63.5	29.31	17.537
Mercury	7439-97-6	mg/kg	0.0094	0.0049	0.011	0.0073	0.013	0.013	0.0091	0.01	0.012	0.0045	0.0045	0.013	0.00942	0.003
Molybdenum	7439-98-7	mg/kg	0.024	0.18	0.061	0.068	0.72	0.095	0.16	0.11	0.11	0.069	0.024	0.72	0.1597	0.202
Nickel	7440-02-0	mg/kg	0.19	2.3	0.55	0.28	1.1	1.4	3.7	0.89	2.1	0.45	0.19	3.7	1.296	1.114
Selenium	7782-49-2	mg/kg	0.43	0.59	0.66	0.64	0.62	0.7	0.62	0.52	0.63	0.59	0.43	0.7	0.6	0.076
Silver	7440-22-4	mg/kg	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	6.2E-10
Strontium	7440-24-6	mg/kg	2.5	8.1	11.5	7.2	10.5	11.6	12.4	7.6	9.7	9.9	2.5	12.4	9.1	2.91
Zinc	7440-66-6	mg/kg	9.9	25.3	21.6	26.3	24.2	33.2	41.1	26.3	34.3	16.9	9.9	41.1	25.91	8.91
Percent Solids		% wet	77	78.3	77.2	80.5	78.2	79	77.8	78.9	79.4	77.7	77	80.5	78.4	1.07

CAS No. = chemical abstract service number
mm = millimeters
g = grams
mg/kg = milligrams per kilograms
Min = minimum
Max = maximum
Avg. = average
s = standard deviation

Table 3. Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL*	EQL**	Units***	Collection Date	Analysis Date
404992001	4 HTDF	Iron	150	3.4	25.0	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Antimony	0.050	0.05	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Arsenic	0.14	0.02	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Barium	0.51	0.037	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Beryllium	0.012	0.012	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Boron	0.090	0.089	0.50	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Cadmium	0.016	0.0068	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Chromium	0.14	0.04	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Aluminum	4.6	0.87	25.0	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Copper	1.6	0.069	0.50	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Molybdenum	0.068	0.017	1.0	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Manganese	19.8	0.13	0.50	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Mercury	0.0073	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992001	4 HTDF	Nickel	0.28	0.026	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Selenium	0.64	0.063	0.20	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Strontium	7.2	0.032	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Zinc	26.3	0.89	2.0	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Cobalt	0.052	0.05	0.10	mg/kg	06/10/08	08/14/08
404992001	4 HTDF	Percent Moisture	80.5	0.1	0.10	%	06/10/08	06/19/08
404992002	2 HTDF	Strontium	8.1	0.032	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Selenium	0.59	0.063	0.20	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Percent Moisture	78.3	0.1	0.10	%	06/10/08	06/19/08
404992002	2 HTDF	Aluminum	54.6	0.87	25.0	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Antimony	0.47	0.05	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Barium	0.93	0.037	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Zinc	25.3	0.89	2.0	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Cadmium	0.019	0.0068	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Arsenic	2.0	0.02	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Chromium	0.49	0.04	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Cobalt	0.29	0.05	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Copper	4.4	0.069	0.50	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Iron	1150	3.4	25.0	mg/kg	06/10/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404992002	2 HTDF	Manganese	31.3	0.13	0.50	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Mercury	0.0049	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992002	2 HTDF	Molybdenum	0.18	0.017	1.0	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Nickel	2.3	0.026	0.10	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Boron	0.16	0.089	0.50	mg/kg	06/10/08	08/14/08
404992002	2 HTDF	Beryllium	0.012	0.012	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Selenium	0.43	0.063	0.20	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Nickel	0.19	0.026	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Percent Moisture	77.0	0.1	0.10	%	06/10/08	06/19/08
404992003	1 HTDF	Copper	0.72	0.069	0.50	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Strontium	2.5	0.031	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Zinc	9.9	0.88	2.0	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Molybdenum	0.024	0.017	1.0	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Mercury	0.0094	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992003	1 HTDF	Manganese	5.5	0.13	0.50	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Antimony	0.050	0.05	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Beryllium	0.012	0.012	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Barium	0.16	0.037	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Arsenic	0.045	0.02	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Cadmium	0.0084	0.0068	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Chromium	0.072	0.04	0.10	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Boron	0.089	0.089	0.50	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Iron	12.1	3.4	24.9	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Aluminum	0.87	0.87	24.9	mg/kg	06/10/08	08/14/08
404992003	1 HTDF	Cobalt	0.050	0.05	0.10	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Nickel	0.55	0.026	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Percent Moisture	77.2	0.1	0.10	%	06/10/08	06/19/08
404992004	3 HTDF	Iron	37.4	3.4	24.8	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Mercury	0.011	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992004	3 HTDF	Manganese	21.4	0.13	0.50	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Strontium	11.5	0.031	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Zinc	21.6	0.88	2.0	mg/kg	06/10/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404992004	3 HTDF	Molybdenum	0.061	0.017	0.99	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Copper	1.0	0.069	0.50	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Antimony	0.050	0.05	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Arsenic	0.11	0.02	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Barium	0.34	0.037	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Beryllium	0.012	0.012	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Boron	0.12	0.088	0.50	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Cadmium	0.0067	0.0067	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Chromium	0.075	0.04	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Cobalt	0.067	0.05	0.099	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Selenium	0.66	0.062	0.20	mg/kg	06/10/08	08/14/08
404992004	3 HTDF	Aluminum	0.96	0.87	24.8	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Manganese	28.7	0.13	0.50	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Mercury	0.013	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992005	5 HTDF	Molybdenum	0.72	0.017	0.99	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Nickel	1.1	0.026	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Percent Moisture	78.2	0.1	0.10	%	06/10/08	06/19/08
404992005	5 HTDF	Selenium	0.62	0.062	0.20	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Iron	3930	3.4	24.8	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Strontium	10.5	0.031	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Barium	1.5	0.037	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Copper	2.2	0.069	0.50	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Cobalt	0.23	0.05	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Chromium	0.25	0.04	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Cadmium	0.0067	0.0067	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Beryllium	0.012	0.012	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Arsenic	0.94	0.02	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Antimony	0.52	0.05	0.099	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Aluminum	30.9	0.87	24.8	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Zinc	24.2	0.88	2.0	mg/kg	06/10/08	08/14/08
404992005	5 HTDF	Boron	0.15	0.088	0.50	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Nickel	1.4	0.026	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Aluminum	0.87	0.87	25.0	mg/kg	06/10/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404992006	6 HTDF	Zinc	33.2	0.89	2.0	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Strontium	11.6	0.032	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Percent Moisture	79.0	0.1	0.10	%	06/10/08	06/19/08
404992006	6 HTDF	Molybdenum	0.095	0.017	1.0	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Mercury	0.013	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992006	6 HTDF	Manganese	27.2	0.13	0.50	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Iron	31.6	3.4	25.0	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Arsenic	0.11	0.02	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Selenium	0.70	0.063	0.20	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Antimony	0.050	0.05	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Copper	2.0	0.069	0.50	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Barium	0.52	0.037	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Beryllium	0.012	0.012	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Boron	0.13	0.089	0.50	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Cadmium	0.0068	0.0068	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Chromium	0.070	0.04	0.10	mg/kg	06/10/08	08/14/08
404992006	6 HTDF	Cobalt	0.12	0.05	0.10	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Iron	298	3.4	24.9	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Cadmium	0.013	0.0068	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Selenium	0.62	0.063	0.20	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Percent Moisture	77.8	0.1	0.10	%	06/10/08	06/19/08
404992007	7 HTDF	Nickel	3.7	0.026	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Molybdenum	0.16	0.017	0.99	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Mercury	0.0091	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992007	7 HTDF	Manganese	63.5	0.13	0.50	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Strontium	12.4	0.031	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Chromium	0.21	0.04	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Aluminum	39.7	0.87	24.9	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Antimony	0.25	0.05	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Arsenic	0.36	0.02	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Barium	1.2	0.037	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Beryllium	0.012	0.012	0.099	mg/kg	06/10/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404992007	7 HTDF	Boron	0.16	0.089	0.50	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Cobalt	0.34	0.05	0.099	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Zinc	41.1	0.88	2.0	mg/kg	06/10/08	08/14/08
404992007	7 HTDF	Copper	3.0	0.069	0.50	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Iron	69.0	3.4	24.9	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Zinc	26.3	0.88	2.0	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Manganese	17.4	0.13	0.50	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Mercury	0.010	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992008	8 HTDF	Molybdenum	0.11	0.017	1.0	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Nickel	0.89	0.026	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Percent Moisture	78.9	0.1	0.10	%	06/10/08	06/19/08
404992008	8 HTDF	Selenium	0.52	0.063	0.20	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Copper	1.8	0.069	0.50	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Cobalt	0.11	0.05	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Strontium	7.6	0.031	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Chromium	0.096	0.04	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Cadmium	0.060	0.0068	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Boron	0.11	0.089	0.50	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Barium	0.94	0.037	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Arsenic	0.082	0.02	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Aluminum	8.1	0.87	24.9	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Beryllium	0.012	0.012	0.10	mg/kg	06/10/08	08/14/08
404992008	8 HTDF	Antimony	0.052	0.05	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Percent Moisture	79.4	0.1	0.10	%	06/10/08	06/19/08
404992009	9 HTDF	Chromium	0.15	0.04	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Copper	2.4	0.069	0.50	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Iron	109	3.4	24.9	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Manganese	55.5	0.13	0.50	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Mercury	0.012	0.0024	0.010	mg/kg	06/10/08	06/19/08
404992009	9 HTDF	Boron	0.16	0.089	0.50	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Nickel	2.1	0.026	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Cadmium	0.075	0.0068	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Selenium	0.63	0.063	0.20	mg/kg	06/10/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404992009	9 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Strontium	9.7	0.031	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Zinc	34.3	0.88	2.0	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Molybdenum	0.11	0.017	1.0	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Barium	1.7	0.037	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Arsenic	0.18	0.02	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Antimony	0.12	0.05	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Aluminum	17.5	0.87	24.9	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Cobalt	0.22	0.05	0.10	mg/kg	06/10/08	08/14/08
404992009	9 HTDF	Beryllium	0.012	0.012	0.10	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Cadmium	0.0067	0.0067	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Antimony	0.050	0.05	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Arsenic	0.12	0.02	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Barium	0.49	0.037	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Aluminum	2.4	0.87	24.8	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Boron	0.089	0.088	0.50	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Silver	0.025	0.025	0.050	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Chromium	0.067	0.04	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Cobalt	0.081	0.05	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Beryllium	0.012	0.012	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Copper	0.98	0.069	0.50	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Strontium	9.9	0.031	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Selenium	0.59	0.062	0.20	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Percent Moisture	77.7	0.1	0.10	%	06/10/08	06/19/08
404992010	10 HTDF	Nickel	0.45	0.026	0.099	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Molybdenum	0.069	0.017	0.99	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Mercury	0.0045	0.0023	0.0099	mg/kg	06/10/08	06/19/08
404992010	10 HTDF	Manganese	22.8	0.13	0.50	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Iron	25.6	3.4	24.8	mg/kg	06/10/08	08/14/08
404992010	10 HTDF	Zinc	16.9	0.88	2.0	mg/kg	06/10/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Nickel	0.075	0.026	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Aluminum	0.87	0.87	24.9	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Zinc	16.1	0.88	2.0	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Strontium	8.4	0.031	0.10	mg/kg	06/09/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404975001	#1 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Percent Moisture	75.6	0.1	0.10	%	06/09/08	06/19/08
404975001	#1 BLUEGILL L. LORY	Molybdenum	0.055	0.017	1.0	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Mercury	0.074	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975001	#1 BLUEGILL L. LORY	Manganese	4.2	0.13	0.50	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Iron	19.6	3.4	24.9	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Arsenic	0.040	0.02	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Selenium	0.48	0.063	0.20	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Copper	0.46	0.069	0.50	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Barium	0.44	0.037	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Cadmium	0.0090	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Chromium	0.082	0.04	0.10	mg/kg	06/09/08	08/14/08
404975001	#1 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Manganese	6.3	0.13	0.50	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Strontium	14.6	0.032	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Selenium	0.47	0.063	0.20	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Percent Moisture	74.2	0.1	0.10	%	06/09/08	06/19/08
404975002	#2 BLUEGILL L. LORY	Nickel	0.074	0.026	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Molybdenum	0.070	0.017	1.0	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Mercury	0.10	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975002	#2 BLUEGILL L. LORY	Zinc	17.7	0.89	2.0	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Aluminum	1.8	0.87	25.0	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Iron	19.5	3.4	25.0	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Arsenic	0.032	0.02	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Barium	0.53	0.037	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Boron	0.12	0.089	0.50	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Chromium	0.071	0.04	0.10	mg/kg	06/09/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404975002	#2 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975002	#2 BLUEGILL L. LORY	Copper	0.36	0.069	0.50	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Copper	0.62	0.069	0.50	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Iron	22.4	3.4	25.0	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Strontium	10.3	0.032	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Selenium	0.57	0.063	0.20	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Percent Moisture	76.1	0.1	0.10	%	06/09/08	06/19/08
404975003	#3 BLUEGILL L. LORY	Nickel	0.075	0.026	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Molybdenum	0.12	0.017	1.0	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Mercury	0.068	0.0023	0.0099	mg/kg	06/09/08	06/19/08
404975003	#3 BLUEGILL L. LORY	Zinc	19.0	0.89	2.0	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Arsenic	0.040	0.02	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Manganese	13.2	0.13	0.50	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Barium	0.59	0.037	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Cadmium	0.0072	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Chromium	0.10	0.04	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975003	#3 BLUEGILL L. LORY	Aluminum	0.87	0.87	25.0	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Nickel	0.092	0.026	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Iron	58.2	3.4	24.9	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Strontium	9.4	0.031	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Percent Moisture	74.4	0.1	0.10	%	06/09/08	06/19/08
404975004	#4 BLUEGILL L. LORY	Molybdenum	0.068	0.017	0.99	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Mercury	0.068	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975004	#4 BLUEGILL L. LORY	Manganese	9.0	0.13	0.50	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Zinc	16.7	0.88	2.0	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Antimony	0.050	0.05	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Selenium	0.58	0.063	0.20	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Copper	0.49	0.069	0.50	mg/kg	06/09/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404975004	#4 BLUEGILL L. LORY	Aluminum	11.7	0.87	24.9	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Arsenic	0.063	0.02	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Barium	0.74	0.037	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Cadmium	0.060	0.0068	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Chromium	0.20	0.04	0.099	mg/kg	06/09/08	08/14/08
404975004	#4 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.099	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Strontium	11.1	0.031	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Barium	0.46	0.037	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Iron	22.0	3.4	24.9	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Selenium	0.53	0.063	0.20	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Percent Moisture	74.7	0.1	0.10	%	06/09/08	06/19/08
404975005	#5 BLUEGILL L. LORY	Nickel	0.063	0.026	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Molybdenum	0.055	0.017	1.0	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Mercury	0.11	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975005	#5 BLUEGILL L. LORY	Manganese	8.2	0.13	0.50	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Copper	0.35	0.069	0.50	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Chromium	0.090	0.04	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Arsenic	0.025	0.02	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Aluminum	0.87	0.87	24.9	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Zinc	15.3	0.88	2.0	mg/kg	06/09/08	08/14/08
404975005	#5 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Nickel	0.079	0.026	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Aluminum	0.87	0.87	24.9	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Zinc	25.2	0.88	2.0	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Strontium	19.3	0.031	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Percent Moisture	75.3	0.1	0.10	%	06/09/08	06/19/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404975006	#6 BLUEGILL L. LORY	Molybdenum	0.12	0.017	1.0	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Mercury	0.058	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975006	#6 BLUEGILL L. LORY	Manganese	11.7	0.13	0.50	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Iron	43.8	3.4	24.9	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Arsenic	0.063	0.02	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Selenium	0.56	0.063	0.20	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Copper	0.40	0.069	0.50	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Barium	0.85	0.037	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Chromium	0.093	0.04	0.10	mg/kg	06/09/08	08/14/08
404975006	#6 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Manganese	7.0	0.13	0.50	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Strontium	12.5	0.032	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Selenium	0.49	0.063	0.20	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Percent Moisture	74.9	0.1	0.10	%	06/09/08	06/19/08
404975007	#7 BLUEGILL L. LORY	Nickel	0.076	0.026	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Molybdenum	0.085	0.017	1.0	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Mercury	0.065	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975007	#7 BLUEGILL L. LORY	Zinc	18.5	0.89	2.0	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Copper	0.40	0.069	0.50	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Chromium	0.070	0.04	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Aluminum	0.87	0.87	25.0	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Barium	0.53	0.037	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Arsenic	0.033	0.02	0.10	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Iron	16.5	3.4	25.0	mg/kg	06/09/08	08/14/08
404975007	#7 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.10	mg/kg	06/09/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404975008	#8 BLUEGILL L. LORY	Mercury	0.096	0.0023	0.0099	mg/kg	06/09/08	06/19/08
404975008	#8 BLUEGILL L. LORY	Molybdenum	0.065	0.017	1.0	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Nickel	0.071	0.026	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Percent Moisture	75.5	0.1	0.10	%	06/09/08	06/19/08
404975008	#8 BLUEGILL L. LORY	Selenium	0.51	0.063	0.20	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Zinc	19.5	0.88	2.0	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Copper	0.40	0.069	0.50	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Iron	28.8	3.4	24.9	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Strontium	13.0	0.031	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Manganese	8.1	0.13	0.50	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Aluminum	0.87	0.87	24.9	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Arsenic	0.052	0.02	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Barium	0.45	0.037	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Chromium	0.11	0.04	0.10	mg/kg	06/09/08	08/14/08
404975008	#8 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Nickel	0.067	0.026	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Iron	24.5	3.4	25.0	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Strontium	19.6	0.032	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Percent Moisture	76.6	0.1	0.10	%	06/09/08	06/19/08
404975009	#9 BLUEGILL L. LORY	Molybdenum	0.062	0.017	1.0	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Mercury	0.075	0.0024	0.010	mg/kg	06/09/08	06/19/08
404975009	#9 BLUEGILL L. LORY	Manganese	8.4	0.13	0.50	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Zinc	20.8	0.89	2.0	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Antimony	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Selenium	0.48	0.063	0.20	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Copper	0.40	0.069	0.50	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Aluminum	0.87	0.87	25.0	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Arsenic	0.048	0.02	0.10	mg/kg	06/09/08	08/14/08

Table 3 (continued). Humboldt Fish Metal Analyses 2008 Laboratory Data.

Lab Sample Number	Field ID	Parameter	Result	MDL	EQL	Units	Collection Date	Analysis Date
404975009	#9 BLUEGILL L. LORY	Barium	0.75	0.037	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Chromium	0.085	0.04	0.10	mg/kg	06/09/08	08/14/08
404975009	#9 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.10	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Strontium	13.1	0.031	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Barium	0.65	0.037	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Iron	22.7	3.4	24.9	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Selenium	0.52	0.063	0.20	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Percent Moisture	76.1	0.1	0.10	%	06/09/08	06/19/08
404975010	#10 BLUEGILL L. LORY	Nickel	0.083	0.026	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Molybdenum	0.075	0.017	0.99	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Mercury	0.069	0.0023	0.0099	mg/kg	06/09/08	06/19/08
404975010	#10 BLUEGILL L. LORY	Manganese	11.0	0.13	0.50	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Silver	0.025	0.025	0.050	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Copper	0.56	0.069	0.50	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Cobalt	0.050	0.05	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Chromium	0.096	0.04	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Cadmium	0.0068	0.0068	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Beryllium	0.012	0.012	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Arsenic	0.044	0.02	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Antimony	0.050	0.05	0.099	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Aluminum	0.87	0.87	24.9	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Zinc	21.5	0.88	2.0	mg/kg	06/09/08	08/14/08
404975010	#10 BLUEGILL L. LORY	Boron	0.089	0.089	0.50	mg/kg	06/09/08	08/14/08

*MDL = Minimum detection limit
**EQL = Estimated quantification limit
***mg/kg = Milligrams per kilogram

Attachment 1

Analytical Laboratory Reports
Batch Numbers 404992 and 404975

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

August 18, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on June 12, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Alee Her for
Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Green Bay Certification IDs

Louisiana Certification #: 04168
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Dakota Certification #: R-150
New York Certification #: 11888
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87948

Green Bay Volatiles Certification IDs

Louisiana Certification #: 04169
Kentucky Certification #: 83
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Dakota Certification #: R-200
New York Certification #: 11887
Illinois Certification #: 200051
Florida (NELAP) Certification #: E87951

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SAMPLE SUMMARY

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Lab ID	Sample ID	Matrix	Date Collected	Date Received
404992001	**4 HTDF**	Tissue	06/10/08 08:20	06/12/08 10:05
404992002	**2 HTDF**	Tissue	06/10/08 08:20	06/12/08 10:05
404992003	**1 HTDF**	Tissue	06/10/08 08:28	06/12/08 10:05
404992004	**3 HTDF**	Tissue	06/10/08 08:55	06/12/08 10:05
404992005	**5 HTDF**	Tissue	06/10/08 08:55	06/12/08 10:05
404992006	**6 HTDF**	Tissue	06/10/08 09:37	06/12/08 10:05
404992007	**7 HTDF**	Tissue	06/10/08 09:37	06/12/08 10:05
404992008	**8 HTDF**	Tissue	06/10/08 10:22	06/12/08 10:05
404992009	**9 HTDF**	Tissue	06/10/08 10:41	06/12/08 10:05
404992010	**10 HTDF**	Tissue	06/10/08 11:17	06/12/08 10:05

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SAMPLE ANALYTE COUNT

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
404992001	**4 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992002	**2 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992003	**1 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992004	**3 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992005	**5 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992006	**6 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992007	**7 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992008	**8 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992009	**9 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404992010	**10 HTDF**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G

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PROJECT NARRATIVE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 18, 2008

General Information:
10 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Method: **EPA 7471**
Description: 7471 Mercury, Tissue
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 18, 2008

General Information:
10 samples were analyzed for EPA 7471. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7471 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Method: **ASTM D2974-87**
Description: Percent Moisture Reportable
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 18, 2008

General Information:
10 samples were analyzed for ASTM D2974-87. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 4 HTDF **Lab ID: 404992001** Collected: 06/10/08 08:20 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**4.6J**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 21:16	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:16	7440-36-0	
Arsenic	**0.14**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 21:16	7440-38-2	
Barium	**0.51**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 21:16	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 21:16	7440-41-7	
Boron	**0.090J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 21:16	7440-42-8	
Cadmium	**0.016J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 21:16	7440-43-9	
Chromium	**0.14**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 21:16	7440-47-3	B
Cobalt	**0.052J**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:16	7440-48-4	
Copper	**1.6**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:16	7440-50-8	
Iron	**150**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 21:16	7439-89-6	
Manganese	**19.8**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:16	7439-96-5	
Molybdenum	**0.068J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 21:16	7439-98-7	
Nickel	**0.28**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 21:16	7440-02-0	B
Selenium	**0.64**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 21:16	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:16	7440-22-4	
Strontium	**7.2**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 21:16	7440-24-6	
Zinc	**26.3**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 21:16	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.0073J**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:37	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**80.5**	%	0.10	0.10	1		06/19/08 09:56		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 2 HTDF **Lab ID: 404992002** Collected: 06/10/08 08:20 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**54.6**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 21:22	7429-90-5	
Antimony	**0.47**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:22	7440-36-0	
Arsenic	**2.0**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 21:22	7440-38-2	
Barium	**0.93**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 21:22	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 21:22	7440-41-7	
Boron	**0.16J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 21:22	7440-42-8	
Cadmium	**0.019J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 21:22	7440-43-9	
Chromium	**0.49**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 21:22	7440-47-3	B
Cobalt	**0.29**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:22	7440-48-4	
Copper	**4.4**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:22	7440-50-8	
Iron	**1150**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 21:22	7439-89-6	
Manganese	**31.3**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:22	7439-96-5	
Molybdenum	**0.18J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 21:22	7439-98-7	
Nickel	**2.3**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 21:22	7440-02-0	
Selenium	**0.59**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 21:22	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:22	7440-22-4	
Strontium	**8.1**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 21:22	7440-24-6	
Zinc	**25.3**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 21:22	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.0049J**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:38	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**78.3**	%	0.10	0.10	1		06/19/08 09:56		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 1 HTDF **Lab ID: 404992003** Collected: 06/10/08 08:28 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 21:28	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:28	7440-36-0	
Arsenic	**0.045J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 21:28	7440-38-2	
Barium	**0.16**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 21:28	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 21:28	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 21:28	7440-42-8	
Cadmium	**0.0084J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 21:28	7440-43-9	
Chromium	**0.072J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 21:28	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:28	7440-48-4	
Copper	**0.72**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:28	7440-50-8	
Iron	**12.1J**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 21:28	7439-89-6	
Manganese	**5.5**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:28	7439-96-5	
Molybdenum	**0.024J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 21:28	7439-98-7	
Nickel	**0.19**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 21:28	7440-02-0	B
Selenium	**0.43**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 21:28	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:28	7440-22-4	
Strontium	**2.5**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 21:28	7440-24-6	
Zinc	**9.9**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 21:28	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.0094J**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:40	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**77.0**	%	0.10	0.10	1		06/19/08 09:56		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 3 HTDF **Lab ID: 404992004** Collected: 06/10/08 08:55 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**0.96J**	mg/kg	24.8	0.87	1	08/12/08 13:05	08/14/08 21:34	7429-90-5	
Antimony	**<0.050**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:34	7440-36-0	
Arsenic	**0.11**	mg/kg	0.099	0.020	1	08/12/08 13:05	08/14/08 21:34	7440-38-2	
Barium	**0.34**	mg/kg	0.099	0.037	1	08/12/08 13:05	08/14/08 21:34	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.099	0.012	1	08/12/08 13:05	08/14/08 21:34	7440-41-7	
Boron	**0.12J**	mg/kg	0.50	0.088	1	08/12/08 13:05	08/14/08 21:34	7440-42-8	
Cadmium	**<0.0067**	mg/kg	0.099	0.0067	1	08/12/08 13:05	08/14/08 21:34	7440-43-9	
Chromium	**0.075J**	mg/kg	0.099	0.040	1	08/12/08 13:05	08/14/08 21:34	7440-47-3	B
Cobalt	**0.067J**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:34	7440-48-4	
Copper	**1.0**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:34	7440-50-8	
Iron	**37.4**	mg/kg	24.8	3.4	1	08/12/08 13:05	08/14/08 21:34	7439-89-6	
Manganese	**21.4**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:34	7439-96-5	
Molybdenum	**0.061J**	mg/kg	0.99	0.017	1	08/12/08 13:05	08/14/08 21:34	7439-98-7	
Nickel	**0.55**	mg/kg	0.099	0.026	1	08/12/08 13:05	08/14/08 21:34	7440-02-0	B
Selenium	**0.66**	mg/kg	0.20	0.062	1	08/12/08 13:05	08/14/08 21:34	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:34	7440-22-4	
Strontium	**11.5**	mg/kg	0.099	0.031	1	08/12/08 13:05	08/14/08 21:34	7440-24-6	
Zinc	**21.6**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 21:34	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.011**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:41	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**77.2**	%	0.10	0.10	1		06/19/08 09:56		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 5 HTDF **Lab ID: 404992005** Collected: 06/10/08 08:55 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**30.9**	mg/kg	24.8	0.87	1	08/12/08 13:05	08/14/08 21:41	7429-90-5	
Antimony	**0.52**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:41	7440-36-0	
Arsenic	**0.94**	mg/kg	0.099	0.020	1	08/12/08 13:05	08/14/08 21:41	7440-38-2	
Barium	**1.5**	mg/kg	0.099	0.037	1	08/12/08 13:05	08/14/08 21:41	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.099	0.012	1	08/12/08 13:05	08/14/08 21:41	7440-41-7	
Boron	**0.15J**	mg/kg	0.50	0.088	1	08/12/08 13:05	08/14/08 21:41	7440-42-8	
Cadmium	**<0.0067**	mg/kg	0.099	0.0067	1	08/12/08 13:05	08/14/08 21:41	7440-43-9	
Chromium	**0.25**	mg/kg	0.099	0.040	1	08/12/08 13:05	08/14/08 21:41	7440-47-3	B
Cobalt	**0.23**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:41	7440-48-4	
Copper	**2.2**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:41	7440-50-8	
Iron	**3930**	mg/kg	24.8	3.4	1	08/12/08 13:05	08/14/08 21:41	7439-89-6	
Manganese	**28.7**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:41	7439-96-5	
Molybdenum	**0.72J**	mg/kg	0.99	0.017	1	08/12/08 13:05	08/14/08 21:41	7439-98-7	
Nickel	**1.1**	mg/kg	0.099	0.026	1	08/12/08 13:05	08/14/08 21:41	7440-02-0	
Selenium	**0.62**	mg/kg	0.20	0.062	1	08/12/08 13:05	08/14/08 21:41	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:41	7440-22-4	
Strontium	**10.5**	mg/kg	0.099	0.031	1	08/12/08 13:05	08/14/08 21:41	7440-24-6	
Zinc	**24.2**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 21:41	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.013**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:45	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**78.2**	%	0.10	0.10	1		06/19/08 09:57		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 6 HTDF **Lab ID: 404992006** Collected: 06/10/08 09:37 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 21:47	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:47	7440-36-0	
Arsenic	**0.11**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 21:47	7440-38-2	
Barium	**0.52**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 21:47	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 21:47	7440-41-7	
Boron	**0.13J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 21:47	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 21:47	7440-43-9	
Chromium	**0.070J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 21:47	7440-47-3	B
Cobalt	**0.12**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 21:47	7440-48-4	
Copper	**2.0**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:47	7440-50-8	
Iron	**31.6**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 21:47	7439-89-6	
Manganese	**27.2**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:47	7439-96-5	
Molybdenum	**0.095J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 21:47	7439-98-7	
Nickel	**1.4**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 21:47	7440-02-0	
Selenium	**0.70**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 21:47	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:47	7440-22-4	
Strontium	**11.6**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 21:47	7440-24-6	
Zinc	**33.2**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 21:47	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.013**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:46	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**79.0**	%	0.10	0.10	1		06/19/08 09:57		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 7 HTDF **Lab ID: 404992007** Collected: 06/10/08 09:37 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**39.7**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 21:54	7429-90-5	
Antimony	**0.25**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:54	7440-36-0	
Arsenic	**0.36**	mg/kg	0.099	0.020	1	08/12/08 13:05	08/14/08 21:54	7440-38-2	
Barium	**1.2**	mg/kg	0.099	0.037	1	08/12/08 13:05	08/14/08 21:54	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.099	0.012	1	08/12/08 13:05	08/14/08 21:54	7440-41-7	
Boron	**0.16J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 21:54	7440-42-8	
Cadmium	**0.013J**	mg/kg	0.099	0.0068	1	08/12/08 13:05	08/14/08 21:54	7440-43-9	
Chromium	**0.21**	mg/kg	0.099	0.040	1	08/12/08 13:05	08/14/08 21:54	7440-47-3	B
Cobalt	**0.34**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:54	7440-48-4	
Copper	**3.0**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:54	7440-50-8	
Iron	**298**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 21:54	7439-89-6	
Manganese	**63.5**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:54	7439-96-5	
Molybdenum	**0.16J**	mg/kg	0.99	0.017	1	08/12/08 13:05	08/14/08 21:54	7439-98-7	
Nickel	**3.7**	mg/kg	0.099	0.026	1	08/12/08 13:05	08/14/08 21:54	7440-02-0	
Selenium	**0.62**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 21:54	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:54	7440-22-4	
Strontium	**12.4**	mg/kg	0.099	0.031	1	08/12/08 13:05	08/14/08 21:54	7440-24-6	
Zinc	**41.1**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 21:54	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.0091J**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:48	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**77.8**	%	0.10	0.10	1		06/19/08 09:57		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 8 HTDF **Lab ID: 404992008** Collected: 06/10/08 10:22 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**8.1J**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 22:00	7429-90-5	
Antimony	**0.052J**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 22:00	7440-36-0	
Arsenic	**0.082J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 22:00	7440-38-2	
Barium	**0.94**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 22:00	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 22:00	7440-41-7	
Boron	**0.11J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 22:00	7440-42-8	
Cadmium	**0.060J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 22:00	7440-43-9	
Chromium	**0.096J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 22:00	7440-47-3	B
Cobalt	**0.11**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 22:00	7440-48-4	
Copper	**1.8**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 22:00	7440-50-8	
Iron	**69.0**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 22:00	7439-89-6	
Manganese	**17.4**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 22:00	7439-96-5	
Molybdenum	**0.11J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 22:00	7439-98-7	
Nickel	**0.89**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 22:00	7440-02-0	
Selenium	**0.52**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 22:00	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 22:00	7440-22-4	
Strontium	**7.6**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 22:00	7440-24-6	
Zinc	**26.3**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 22:00	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.010**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:49	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**78.9**	%	0.10	0.10	1		06/19/08 09:57		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 9 HTDF **Lab ID: 404992009** Collected: 06/10/08 10:41 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**17.5J**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 22:19	7429-90-5	
Antimony	**0.12**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 22:19	7440-36-0	
Arsenic	**0.18**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 22:19	7440-38-2	
Barium	**1.7**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 22:19	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 22:19	7440-41-7	
Boron	**0.16J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 22:19	7440-42-8	
Cadmium	**0.075J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 22:19	7440-43-9	
Chromium	**0.15**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 22:19	7440-47-3	B
Cobalt	**0.22**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 22:19	7440-48-4	
Copper	**2.4**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 22:19	7440-50-8	
Iron	**109**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 22:19	7439-89-6	
Manganese	**55.5**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 22:19	7439-96-5	
Molybdenum	**0.11J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 22:19	7439-98-7	
Nickel	**2.1**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 22:19	7440-02-0	
Selenium	**0.63**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 22:19	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 22:19	7440-22-4	
Strontium	**9.7**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 22:19	7440-24-6	
Zinc	**34.3**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 22:19	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.012**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:50	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**79.4**	%	0.10	0.10	1		06/19/08 09:57		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Sample: 10 HTDF **Lab ID: 404992010** Collected: 06/10/08 11:17 Received: 06/12/08 10:05 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**2.4J**	mg/kg	24.8	0.87	1	08/12/08 13:05	08/14/08 22:25	7429-90-5	
Antimony	**<0.050**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 22:25	7440-36-0	
Arsenic	**0.12**	mg/kg	0.099	0.020	1	08/12/08 13:05	08/14/08 22:25	7440-38-2	
Barium	**0.49**	mg/kg	0.099	0.037	1	08/12/08 13:05	08/14/08 22:25	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.099	0.012	1	08/12/08 13:05	08/14/08 22:25	7440-41-7	
Boron	**0.089J**	mg/kg	0.50	0.088	1	08/12/08 13:05	08/14/08 22:25	7440-42-8	
Cadmium	**<0.0067**	mg/kg	0.099	0.0067	1	08/12/08 13:05	08/14/08 22:25	7440-43-9	
Chromium	**0.067J**	mg/kg	0.099	0.040	1	08/12/08 13:05	08/14/08 22:25	7440-47-3	B
Cobalt	**0.081J**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 22:25	7440-48-4	
Copper	**0.98**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 22:25	7440-50-8	
Iron	**25.6**	mg/kg	24.8	3.4	1	08/12/08 13:05	08/14/08 22:25	7439-89-6	
Manganese	**22.8**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 22:25	7439-96-5	
Molybdenum	**0.069J**	mg/kg	0.99	0.017	1	08/12/08 13:05	08/14/08 22:25	7439-98-7	
Nickel	**0.45**	mg/kg	0.099	0.026	1	08/12/08 13:05	08/14/08 22:25	7440-02-0	B
Selenium	**0.59**	mg/kg	0.20	0.062	1	08/12/08 13:05	08/14/08 22:25	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 22:25	7440-22-4	
Strontium	**9.9**	mg/kg	0.099	0.031	1	08/12/08 13:05	08/14/08 22:25	7440-24-6	
Zinc	**16.9**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 22:25	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.0045J**	mg/kg	0.0099	0.0023	1	06/19/08 10:45	06/19/08 14:52	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**77.7**	%	0.10	0.10	1		06/19/08 09:58		

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

QC Batch: OEXT/1777 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight Reporting Only
Associated Lab Samples: 404992001, 404992002, 404992003, 404992004, 404992005, 404992006, 404992007, 404992008, 404992009, 404992010

SAMPLE DUPLICATE: 41869

Parameter	Units	404975001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	75.6	74.8	1	10	

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

QC Batch: MERP/1137 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 404992001, 404992002, 404992003, 404992004, 404992005, 404992006, 404992007, 404992008, 404992009, 404992010

METHOD BLANK: 42078
Associated Lab Samples: 404992001, 404992002, 404992003, 404992004, 404992005, 404992006, 404992007, 404992008, 404992009, 404992010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	mg/kg	<0.0024	0.010	

LABORATORY CONTROL SAMPLE: 42079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.25	0.21	84	75-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42080 42081

Parameter	Units	404975001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.074	.25	.25	0.28	0.28	81	83	70-110	2	10	

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

QC Batch: MPRP/1633 Analysis Method: EPA 6020
QC Batch Method: EPA 3050B Analysis Description: 6020 MET TISSUE
Associated Lab Samples: 404992001, 404992002, 404992003, 404992004, 404992005, 404992006, 404992007, 404992008, 404992009, 404992010

METHOD BLANK: 65004
Associated Lab Samples: 404992001, 404992002, 404992003, 404992004, 404992005, 404992006, 404992007, 404992008, 404992009, 404992010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	mg/kg	<0.87	25.0	
Antimony	mg/kg	<0.050	0.10	
Arsenic	mg/kg	<0.020	0.10	
Barium	mg/kg	<0.037	0.10	
Beryllium	mg/kg	<0.012	0.10	
Boron	mg/kg	<0.089	0.50	
Cadmium	mg/kg	<0.0068	0.10	
Chromium	mg/kg	0.067J	0.10	
Cobalt	mg/kg	<0.050	0.10	
Copper	mg/kg	0.069J	0.50	
Iron	mg/kg	<3.4	25.0	
Manganese	mg/kg	<0.13	0.50	
Molybdenum	mg/kg	<0.017	1.0	
Nickel	mg/kg	0.042J	0.10	
Selenium	mg/kg	<0.063	0.20	
Silver	mg/kg	<0.025	0.050	
Strontium	mg/kg	<0.032	0.10	
Zinc	mg/kg	<0.89	2.0	

LABORATORY CONTROL SAMPLE: 65005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	920	92	75-125	
Antimony	mg/kg	20	19.1	96	75-125	
Arsenic	mg/kg	20	19.5	98	75-125	
Barium	mg/kg	20	18.2	91	75-125	
Beryllium	mg/kg	20	17.3	86	75-125	
Boron	mg/kg	20	17.0	85	75-125	
Cadmium	mg/kg	20	19.0	95	75-125	
Chromium	mg/kg	20	18.5	93	75-125	
Cobalt	mg/kg	20	18.1	91	75-125	
Copper	mg/kg	20	18.8	94	75-125	
Iron	mg/kg	1000	954	95	75-125	
Manganese	mg/kg	20	18.5	92	75-125	
Molybdenum	mg/kg	20	18.4	92	75-125	
Nickel	mg/kg	20	18.7	94	75-125	
Selenium	mg/kg	20	20.1	101	75-125	
Silver	mg/kg	10	8.6	86	75-125	
Strontium	mg/kg	20	18.9	94	75-125	
Zinc	mg/kg	20	19.7	98	75-125	

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65006 65007

Parameter	Units	404975001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	mg/kg	<0.87	996	998	902	885	91	89	75-125	2	20	
Antimony	mg/kg	<0.050	19.9	20	19.0	18.9	95	95	75-125	.4	20	
Arsenic	mg/kg	0.040J	19.9	20	19.7	19.3	99	96	75-125	2	20	
Barium	mg/kg	0.44	19.9	20	19.3	18.9	95	93	75-125	2	20	
Beryllium	mg/kg	<0.012	19.9	20	16.7	16.5	84	83	75-125	2	20	
Boron	mg/kg	<0.089	19.9	20	16.8	16.6	84	83	75-125	1	20	
Cadmium	mg/kg	0.0090J	19.9	20	18.9	18.8	95	94	75-125	.2	20	
Chromium	mg/kg	0.082J	19.9	20	18.9	18.5	94	92	75-125	2	20	
Cobalt	mg/kg	<0.050	19.9	20	18.1	17.8	91	89	75-125	1	20	
Copper	mg/kg	0.46J	19.9	20	18.6	18.5	91	90	75-125	.8	20	
Iron	mg/kg	19.6J	996	998	975	953	96	94	75-125	2	20	
Manganese	mg/kg	4.2	19.9	20	24.8	23.2	103	95	75-125	7	20	
Molybdenum	mg/kg	0.055J	19.9	20	18.7	18.5	94	92	75-125	1	20	
Nickel	mg/kg	0.075J	19.9	20	18.6	18.3	93	91	75-125	2	20	
Selenium	mg/kg	0.48	19.9	20	20.6	20.3	101	99	75-125	2	20	
Silver	mg/kg	<0.025	10	10	8.5	8.4	85	84	75-125	1	20	
Strontium	mg/kg	8.4	19.9	20	32.3	29.2	120	104	75-125	10	20	
Zinc	mg/kg	16.1	19.9	20	35.9	35.1	99	95	75-125	2	20	

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QUALIFIERS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404992

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404992001	**4 HTDF**	ASTM D2974-87	OEXT/1777		
404992002	**2 HTDF**	ASTM D2974-87	OEXT/1777		
404992003	**1 HTDF**	ASTM D2974-87	OEXT/1777		
404992004	**3 HTDF**	ASTM D2974-87	OEXT/1777		
404992005	**5 HTDF**	ASTM D2974-87	OEXT/1777		
404992006	**6 HTDF**	ASTM D2974-87	OEXT/1777		
404992007	**7 HTDF**	ASTM D2974-87	OEXT/1777		
404992008	**8 HTDF**	ASTM D2974-87	OEXT/1777		
404992009	**9 HTDF**	ASTM D2974-87	OEXT/1777		
404992010	**10 HTDF**	ASTM D2974-87	OEXT/1777		
404992001	**4 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992002	**2 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992003	**1 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992004	**3 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992005	**5 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992006	**6 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992007	**7 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992008	**8 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992009	**9 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992010	**10 HTDF**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404992001	**4 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992002	**2 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992003	**1 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992004	**3 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992005	**5 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992006	**6 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992007	**7 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992008	**8 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992009	**9 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404992010	**10 HTDF**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129

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UPPER MIDWEST REGION
MN: 612-607-1700 **WI:** 920-469-2436

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CHAIN OF CUSTODY

COC No. 012053

(Please Print Clearly)

Company Name:	FOTH INFRASTRUCTURE
Branch/Location:	Green Bay
Project Contact:	Andrea Martin
Phone:	920 496 6854
Project Number:	
Project Name:	Kennecott Humboldt
Project State:	MI
Sampled By (Print):	Doug Workman
Sampled By (Sign):	Doug Wk
PO #:	Regulatory Program:

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

***Preservation Codes**
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	4 HTDF	6-10	8:20pm	B				L=142	1-plastic Ziplock	
002	2 HTDF	6-10	8:20pm	B				L=134		
003	1 HTDF	6-10	8:25pm					L=155		
004	3 HTDF	6-10	8:55pm					L=177		
005	5 HTDF	6-10	9:55pm					L=138		
006	6 HTDF	6-10	9:37pm					L=152		
007	7 HTDF	6-10	9:37pm					L=125		
008	8 HTDF	6-10	10:22pm					L=131		
009	9 HTDF	6-10	10:41pm					L=129		
010	10 HTDF	6-10	11:17pm					L=142		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
RWK	6-11-08 10:47		
UPS	6/12/08 1005	M. Felch	6/12/08 10:05

PACE Project No. 404992

Receipt Temp = 2 °C

Sample Receipt pH OK / Adjusted NA

Cooler Custody Seal Present / Not Present (Not Present circled)
Intact / Not Intact

Version 6.0 06/14/06

ORIGINAL

Sample Condition Upon Receipt

Pace Analytical

Client Name: _____ Project # 404992

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

Thermometer Used JB **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 20C **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C **Comments:** NB

Date and Initials of person examining contents: 6/12/08 MK

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☐Yes ☐No ☑N/A	9.
-Pace Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☐Yes ☐No ☑N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: B		
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☑No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: DH **Date:** 6/12/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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August 18, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on June 11, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Tod Noltemeyer

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Green Bay Certification IDs

Louisiana Certification #: 04168
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Dakota Certification #: R-150
New York Certification #: 11888
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87948

Green Bay Volatiles Certification IDs

Louisiana Certification #: 04169
Kentucky Certification #: 83
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Dakota Certification #: R-200
New York Certification #: 11887
Illinois Certification #: 200051
Florida (NELAP) Certification #: E87951

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SAMPLE SUMMARY

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Lab ID	Sample ID	Matrix	Date Collected	Date Received
404975001	**#1 BLUEGILL L. LORY**	Tissue	06/09/08 15:05	06/11/08 10:10
404975002	**#2 BLUEGILL L. LORY**	Tissue	06/09/08 20:05	06/11/08 10:10
404975003	**#3 BLUEGILL L. LORY**	Tissue	06/09/08 20:32	06/11/08 10:10
404975004	**#4 BLUEGILL L. LORY**	Tissue	06/09/08 21:12	06/11/08 10:10
404975005	**#5 BLUEGILL L. LORY**	Tissue	06/09/08 21:12	06/11/08 10:10
404975006	**#6 BLUEGILL L. LORY**	Tissue	06/09/08 21:33	06/11/08 10:10
404975007	**#7 BLUEGILL L. LORY**	Tissue	06/09/08 22:44	06/11/08 10:10
404975008	**#8 BLUEGILL L. LORY**	Tissue	06/09/08 22:44	06/11/08 10:10
404975009	**#9 BLUEGILL L. LORY**	Tissue	06/09/08 23:10	06/11/08 10:10
404975010	**#10 BLUEGILL L. LORY**	Tissue	06/09/08 23:52	06/11/08 10:10

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SAMPLE ANALYTE COUNT

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
404975001	**#1 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975002	**#2 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975003	**#3 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975004	**#4 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975005	**#5 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975006	**#6 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975007	**#7 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975008	**#8 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975009	**#9 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G
404975010	**#10 BLUEGILL L. LORY**	ASTM D2974-87	JAL	1	PASI-G
		EPA 6020	MES	18	PASI-G
		EPA 7471	LMS	1	PASI-G

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PROJECT NARRATIVE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 18, 2008

General Information:
10 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Method: **EPA 7471**
Description: 7471 Mercury, Tissue
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 18, 2008

General Information:
10 samples were analyzed for EPA 7471. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7471 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Method: **ASTM D2974-87**
Description: Percent Moisture Reportable
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 18, 2008

General Information:
10 samples were analyzed for ASTM D2974-87. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #1 BLUEGILL L. LORY **Lab ID: 404975001** Collected: 06/09/08 15:05 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 19:15	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 19:15	7440-36-0	
Arsenic	**0.040J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 19:15	7440-38-2	
Barium	**0.44**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 19:15	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 19:15	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 19:15	7440-42-8	
Cadmium	**0.0090J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 19:15	7440-43-9	
Chromium	**0.082J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 19:15	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 19:15	7440-48-4	
Copper	**0.46J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 19:15	7440-50-8	
Iron	**19.6J**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 19:15	7439-89-6	
Manganese	**4.2**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 19:15	7439-96-5	
Molybdenum	**0.055J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 19:15	7439-98-7	
Nickel	**0.075J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 19:15	7440-02-0	B
Selenium	**0.48**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 19:15	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 19:15	7440-22-4	
Strontium	**8.4**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 19:15	7440-24-6	
Zinc	**16.1**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 19:15	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.074**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:16	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**75.6**	%	0.10	0.10	1		06/19/08 09:53		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #2 BLUEGILL L. LORY **Lab ID: 404975002** Collected: 06/09/08 20:05 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**1.8J**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 20:00	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:00	7440-36-0	
Arsenic	**0.032J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:00	7440-38-2	
Barium	**0.53**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:00	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:00	7440-41-7	
Boron	**0.12J**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:00	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:00	7440-43-9	
Chromium	**0.071J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:00	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:00	7440-48-4	
Copper	**0.36J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:00	7440-50-8	
Iron	**19.5J**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 20:00	7439-89-6	
Manganese	**6.3**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:00	7439-96-5	
Molybdenum	**0.070J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:00	7439-98-7	
Nickel	**0.074J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:00	7440-02-0	B
Selenium	**0.47**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:00	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:00	7440-22-4	
Strontium	**14.6**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 20:00	7440-24-6	
Zinc	**17.7**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 20:00	7440-66-6	SD
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.10**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:22	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**74.2**	%	0.10	0.10	1		06/19/08 09:54		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #3 BLUEGILL L. LORY **Lab ID: 404975003** Collected: 06/09/08 20:32 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 20:12	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:12	7440-36-0	
Arsenic	**0.040J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:12	7440-38-2	
Barium	**0.59**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:12	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:12	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:12	7440-42-8	
Cadmium	**0.0072J**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:12	7440-43-9	
Chromium	**0.10**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:12	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:12	7440-48-4	
Copper	**0.62**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:12	7440-50-8	
Iron	**22.4J**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 20:12	7439-89-6	
Manganese	**13.2**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:12	7439-96-5	
Molybdenum	**0.12J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:12	7439-98-7	
Nickel	**0.075J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:12	7440-02-0	B
Selenium	**0.57**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:12	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:12	7440-22-4	
Strontium	**10.3**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 20:12	7440-24-6	
Zinc	**19.0**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 20:12	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.068**	mg/kg	0.0099	0.0023	1	06/19/08 10:45	06/19/08 14:24	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**76.1**	%	0.10	0.10	1		06/19/08 09:54		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #4 BLUEGILL L. LORY **Lab ID: 404975004** Collected: 06/09/08 21:12 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**11.7J**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 20:19	7429-90-5	
Antimony	**<0.050**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 20:19	7440-36-0	
Arsenic	**0.063J**	mg/kg	0.099	0.020	1	08/12/08 13:05	08/14/08 20:19	7440-38-2	
Barium	**0.74**	mg/kg	0.099	0.037	1	08/12/08 13:05	08/14/08 20:19	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.099	0.012	1	08/12/08 13:05	08/14/08 20:19	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:19	7440-42-8	
Cadmium	**0.060J**	mg/kg	0.099	0.0068	1	08/12/08 13:05	08/14/08 20:19	7440-43-9	
Chromium	**0.20**	mg/kg	0.099	0.040	1	08/12/08 13:05	08/14/08 20:19	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 20:19	7440-48-4	
Copper	**0.49J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:19	7440-50-8	
Iron	**58.2**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 20:19	7439-89-6	
Manganese	**9.0**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:19	7439-96-5	
Molybdenum	**0.068J**	mg/kg	0.99	0.017	1	08/12/08 13:05	08/14/08 20:19	7439-98-7	
Nickel	**0.092J**	mg/kg	0.099	0.026	1	08/12/08 13:05	08/14/08 20:19	7440-02-0	B
Selenium	**0.58**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:19	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:19	7440-22-4	
Strontium	**9.4**	mg/kg	0.099	0.031	1	08/12/08 13:05	08/14/08 20:19	7440-24-6	
Zinc	**16.7**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 20:19	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.068**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:25	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**74.4**	%	0.10	0.10	1		06/19/08 09:54		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #5 BLUEGILL L. LORY **Lab ID: 404975005** Collected: 06/09/08 21:12 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 20:25	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:25	7440-36-0	
Arsenic	**0.025J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:25	7440-38-2	
Barium	**0.46**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:25	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:25	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:25	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:25	7440-43-9	
Chromium	**0.090J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:25	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:25	7440-48-4	
Copper	**0.35J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:25	7440-50-8	
Iron	**22.0J**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 20:25	7439-89-6	
Manganese	**8.2**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:25	7439-96-5	
Molybdenum	**0.055J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:25	7439-98-7	
Nickel	**0.063J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:25	7440-02-0	B
Selenium	**0.53**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:25	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:25	7440-22-4	
Strontium	**11.1**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 20:25	7440-24-6	
Zinc	**15.3**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 20:25	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.11**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:29	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**74.7**	%	0.10	0.10	1		06/19/08 09:54		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #6 BLUEGILL L. LORY **Lab ID: 404975006** Collected: 06/09/08 21:33 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 20:31	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:31	7440-36-0	
Arsenic	**0.063J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:31	7440-38-2	
Barium	**0.85**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:31	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:31	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:31	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:31	7440-43-9	
Chromium	**0.093J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:31	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:31	7440-48-4	
Copper	**0.40J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:31	7440-50-8	
Iron	**43.8**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 20:31	7439-89-6	
Manganese	**11.7**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:31	7439-96-5	
Molybdenum	**0.12J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:31	7439-98-7	
Nickel	**0.079J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:31	7440-02-0	B
Selenium	**0.56**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:31	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:31	7440-22-4	
Strontium	**19.3**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 20:31	7440-24-6	
Zinc	**25.2**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 20:31	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.058**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:30	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**75.3**	%	0.10	0.10	1		06/19/08 09:54		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #7 BLUEGILL L. LORY **Lab ID: 404975007** Collected: 06/09/08 22:44 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 20:38	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:38	7440-36-0	
Arsenic	**0.033J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:38	7440-38-2	
Barium	**0.53**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:38	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:38	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:38	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:38	7440-43-9	
Chromium	**0.070J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:38	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:38	7440-48-4	
Copper	**0.40J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:38	7440-50-8	
Iron	**16.5J**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 20:38	7439-89-6	
Manganese	**7.0**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:38	7439-96-5	
Molybdenum	**0.085J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:38	7439-98-7	
Nickel	**0.076J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:38	7440-02-0	B
Selenium	**0.49**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:38	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:38	7440-22-4	
Strontium	**12.5**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 20:38	7440-24-6	
Zinc	**18.5**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 20:38	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.065**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:32	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**74.9**	%	0.10	0.10	1		06/19/08 09:55		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #8 BLUEGILL L. LORY **Lab ID: 404975008** Collected: 06/09/08 22:44 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 20:44	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:44	7440-36-0	
Arsenic	**0.052J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:44	7440-38-2	
Barium	**0.45**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:44	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:44	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:44	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:44	7440-43-9	
Chromium	**0.11**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:44	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:44	7440-48-4	
Copper	**0.40J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:44	7440-50-8	
Iron	**28.8**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 20:44	7439-89-6	
Manganese	**8.1**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:44	7439-96-5	
Molybdenum	**0.065J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:44	7439-98-7	
Nickel	**0.071J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:44	7440-02-0	B
Selenium	**0.51**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:44	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:44	7440-22-4	
Strontium	**13.0**	mg/kg	0.10	0.031	1	08/12/08 13:05	08/14/08 20:44	7440-24-6	
Zinc	**19.5**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 20:44	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.096**	mg/kg	0.0099	0.0023	1	06/19/08 10:45	06/19/08 14:33	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**75.5**	%	0.10	0.10	1		06/19/08 09:55		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #9 BLUEGILL L. LORY **Lab ID: 404975009** Collected: 06/09/08 23:10 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	25.0	0.87	1	08/12/08 13:05	08/14/08 20:50	7429-90-5	
Antimony	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:50	7440-36-0	
Arsenic	**0.048J**	mg/kg	0.10	0.020	1	08/12/08 13:05	08/14/08 20:50	7440-38-2	
Barium	**0.75**	mg/kg	0.10	0.037	1	08/12/08 13:05	08/14/08 20:50	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.10	0.012	1	08/12/08 13:05	08/14/08 20:50	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 20:50	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.10	0.0068	1	08/12/08 13:05	08/14/08 20:50	7440-43-9	
Chromium	**0.085J**	mg/kg	0.10	0.040	1	08/12/08 13:05	08/14/08 20:50	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.10	0.050	1	08/12/08 13:05	08/14/08 20:50	7440-48-4	
Copper	**0.40J**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 20:50	7440-50-8	
Iron	**24.5J**	mg/kg	25.0	3.4	1	08/12/08 13:05	08/14/08 20:50	7439-89-6	
Manganese	**8.4**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 20:50	7439-96-5	
Molybdenum	**0.062J**	mg/kg	1.0	0.017	1	08/12/08 13:05	08/14/08 20:50	7439-98-7	
Nickel	**0.067J**	mg/kg	0.10	0.026	1	08/12/08 13:05	08/14/08 20:50	7440-02-0	B
Selenium	**0.48**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 20:50	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 20:50	7440-22-4	
Strontium	**19.6**	mg/kg	0.10	0.032	1	08/12/08 13:05	08/14/08 20:50	7440-24-6	
Zinc	**20.8**	mg/kg	2.0	0.89	1	08/12/08 13:05	08/14/08 20:50	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.075**	mg/kg	0.010	0.0024	1	06/19/08 10:45	06/19/08 14:34	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**76.6**	%	0.10	0.10	1		06/19/08 09:55		

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ANALYTICAL RESULTS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Sample: #10 BLUEGILL L. LORY **Lab ID: 404975010** Collected: 06/09/08 23:52 Received: 06/11/08 10:10 Matrix: Tissue

Results reported on a "wet-weight" basis

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3050B								
Aluminum	**<0.87**	mg/kg	24.9	0.87	1	08/12/08 13:05	08/14/08 21:09	7429-90-5	
Antimony	**<0.050**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:09	7440-36-0	
Arsenic	**0.044J**	mg/kg	0.099	0.020	1	08/12/08 13:05	08/14/08 21:09	7440-38-2	
Barium	**0.65**	mg/kg	0.099	0.037	1	08/12/08 13:05	08/14/08 21:09	7440-39-3	
Beryllium	**<0.012**	mg/kg	0.099	0.012	1	08/12/08 13:05	08/14/08 21:09	7440-41-7	
Boron	**<0.089**	mg/kg	0.50	0.089	1	08/12/08 13:05	08/14/08 21:09	7440-42-8	
Cadmium	**<0.0068**	mg/kg	0.099	0.0068	1	08/12/08 13:05	08/14/08 21:09	7440-43-9	
Chromium	**0.096J**	mg/kg	0.099	0.040	1	08/12/08 13:05	08/14/08 21:09	7440-47-3	B
Cobalt	**<0.050**	mg/kg	0.099	0.050	1	08/12/08 13:05	08/14/08 21:09	7440-48-4	
Copper	**0.56**	mg/kg	0.50	0.069	1	08/12/08 13:05	08/14/08 21:09	7440-50-8	
Iron	**22.7J**	mg/kg	24.9	3.4	1	08/12/08 13:05	08/14/08 21:09	7439-89-6	
Manganese	**11.0**	mg/kg	0.50	0.13	1	08/12/08 13:05	08/14/08 21:09	7439-96-5	
Molybdenum	**0.075J**	mg/kg	0.99	0.017	1	08/12/08 13:05	08/14/08 21:09	7439-98-7	
Nickel	**0.083J**	mg/kg	0.099	0.026	1	08/12/08 13:05	08/14/08 21:09	7440-02-0	B
Selenium	**0.52**	mg/kg	0.20	0.063	1	08/12/08 13:05	08/14/08 21:09	7782-49-2	
Silver	**<0.025**	mg/kg	0.050	0.025	1	08/12/08 13:05	08/14/08 21:09	7440-22-4	
Strontium	**13.1**	mg/kg	0.099	0.031	1	08/12/08 13:05	08/14/08 21:09	7440-24-6	
Zinc	**21.5**	mg/kg	2.0	0.88	1	08/12/08 13:05	08/14/08 21:09	7440-66-6	
7471 Mercury, Tissue	Analytical Method: EPA 7471 Preparation Method: EPA 7471								
Mercury	**0.069**	mg/kg	0.0099	0.0023	1	06/19/08 10:45	06/19/08 14:36	7439-97-6	
Percent Moisture Reportable	Analytical Method: ASTM D2974-87								
Percent Moisture	**76.1**	%	0.10	0.10	1		06/19/08 09:55		

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

QC Batch: OEXT/1777 | Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 | Analysis Description: Dry Weight Reporting Only
Associated Lab Samples: 404975001, 404975002, 404975003, 404975004, 404975005, 404975006, 404975007, 404975008, 404975009, 404975010

SAMPLE DUPLICATE: 41869

Parameter	Units	404975001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	75.6	74.8	1	10	

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

QC Batch: MERP/1137 Analysis Method: EPA 7471
QC Batch Method: EPA 7471 Analysis Description: 7471 Mercury
Associated Lab Samples: 404975001, 404975002, 404975003, 404975004, 404975005, 404975006, 404975007, 404975008, 404975009, 404975010

METHOD BLANK: 42078
Associated Lab Samples: 404975001, 404975002, 404975003, 404975004, 404975005, 404975006, 404975007, 404975008, 404975009, 404975010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	mg/kg	<0.0024	0.010	

LABORATORY CONTROL SAMPLE: 42079

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/kg	.25	0.21	84	75-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 42080 42081

Parameter	Units	404975001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/kg	0.074	.25	.25	0.28	0.28	81	83	70-110	2	10	

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

QC Batch: MPRP/1633 | Analysis Method: EPA 6020
QC Batch Method: EPA 3050B | Analysis Description: 6020 MET TISSUE
Associated Lab Samples: 404975001, 404975002, 404975003, 404975004, 404975005, 404975006, 404975007, 404975008, 404975009, 404975010

METHOD BLANK: 65004
Associated Lab Samples: 404975001, 404975002, 404975003, 404975004, 404975005, 404975006, 404975007, 404975008, 404975009, 404975010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	mg/kg	<0.87	25.0	
Antimony	mg/kg	<0.050	0.10	
Arsenic	mg/kg	<0.020	0.10	
Barium	mg/kg	<0.037	0.10	
Beryllium	mg/kg	<0.012	0.10	
Boron	mg/kg	<0.089	0.50	
Cadmium	mg/kg	<0.0068	0.10	
Chromium	mg/kg	0.067J	0.10	
Cobalt	mg/kg	<0.050	0.10	
Copper	mg/kg	0.069J	0.50	
Iron	mg/kg	<3.4	25.0	
Manganese	mg/kg	<0.13	0.50	
Molybdenum	mg/kg	<0.017	1.0	
Nickel	mg/kg	0.042J	0.10	
Selenium	mg/kg	<0.063	0.20	
Silver	mg/kg	<0.025	0.050	
Strontium	mg/kg	<0.032	0.10	
Zinc	mg/kg	<0.89	2.0	

LABORATORY CONTROL SAMPLE: 65005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	mg/kg	1000	920	92	75-125	
Antimony	mg/kg	20	19.1	96	75-125	
Arsenic	mg/kg	20	19.5	98	75-125	
Barium	mg/kg	20	18.2	91	75-125	
Beryllium	mg/kg	20	17.3	86	75-125	
Boron	mg/kg	20	17.0	85	75-125	
Cadmium	mg/kg	20	19.0	95	75-125	
Chromium	mg/kg	20	18.5	93	75-125	
Cobalt	mg/kg	20	18.1	91	75-125	
Copper	mg/kg	20	18.8	94	75-125	
Iron	mg/kg	1000	954	95	75-125	
Manganese	mg/kg	20	18.5	92	75-125	
Molybdenum	mg/kg	20	18.4	92	75-125	
Nickel	mg/kg	20	18.7	94	75-125	
Selenium	mg/kg	20	20.1	101	75-125	
Silver	mg/kg	10	8.6	86	75-125	
Strontium	mg/kg	20	18.9	94	75-125	
Zinc	mg/kg	20	19.7	98	75-125	

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QUALITY CONTROL DATA

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65006 65007

Parameter	Units	404975001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	mg/kg	<0.87	996	998	902	885	91	89	75-125	2	20	
Antimony	mg/kg	<0.050	19.9	20	19.0	18.9	95	95	75-125	.4	20	
Arsenic	mg/kg	0.040J	19.9	20	19.7	19.3	99	96	75-125	2	20	
Barium	mg/kg	0.44	19.9	20	19.3	18.9	95	93	75-125	2	20	
Beryllium	mg/kg	<0.012	19.9	20	16.7	16.5	84	83	75-125	2	20	
Boron	mg/kg	<0.089	19.9	20	16.8	16.6	84	83	75-125	1	20	
Cadmium	mg/kg	0.0090J	19.9	20	18.9	18.8	95	94	75-125	.2	20	
Chromium	mg/kg	0.082J	19.9	20	18.9	18.5	94	92	75-125	2	20	
Cobalt	mg/kg	<0.050	19.9	20	18.1	17.8	91	89	75-125	1	20	
Copper	mg/kg	0.46J	19.9	20	18.6	18.5	91	90	75-125	.8	20	
Iron	mg/kg	19.6J	996	998	975	953	96	94	75-125	2	20	
Manganese	mg/kg	4.2	19.9	20	24.8	23.2	103	95	75-125	7	20	
Molybdenum	mg/kg	0.055J	19.9	20	18.7	18.5	94	92	75-125	1	20	
Nickel	mg/kg	0.075J	19.9	20	18.6	18.3	93	91	75-125	2	20	
Selenium	mg/kg	0.48	19.9	20	20.6	20.3	101	99	75-125	2	20	
Silver	mg/kg	<0.025	10	10	8.5	8.4	85	84	75-125	1	20	
Strontium	mg/kg	8.4	19.9	20	32.3	29.2	120	104	75-125	10	20	
Zinc	mg/kg	16.1	19.9	20	35.9	35.1	99	95	75-125	2	20	

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QUALIFIERS

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
SD	The serial dilution and the original analysis did not agree within ±10%. The concentration is estimated due to a suspected chemical or physical interference.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: KENNECOTT HUMBOLDT
Pace Project No.: 404975

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404975001	**#1 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975002	**#2 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975003	**#3 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975004	**#4 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975005	**#5 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975006	**#6 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975007	**#7 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975008	**#8 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975009	**#9 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975010	**#10 BLUEGILL L. LORY**	ASTM D2974-87	OEXT/1777		
404975001	**#1 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975002	**#2 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975003	**#3 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975004	**#4 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975005	**#5 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975006	**#6 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975007	**#7 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975008	**#8 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975009	**#9 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975010	**#10 BLUEGILL L. LORY**	EPA 7471	MERP/1137	EPA 7471	MERC/1135
404975001	**#1 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975002	**#2 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975003	**#3 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975004	**#4 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975005	**#5 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975006	**#6 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975007	**#7 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975008	**#8 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975009	**#9 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129
404975010	**#10 BLUEGILL L. LORY**	EPA 3050B	MPRP/1633	EPA 6020	ICPM/1129

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Page 1 of

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CHAIN OF CUSTODY

COC No. 012052

(Please Print Clearly)	
Company Name:	Foth Infrastructure
Branch/Location:	Green Bay
Project Contact:	Andrea Martin
Phone:	920 496 6854
Project Number:	
Project Name:	Kennecott Humboldt
Project State:	MI
Sampled By (Print):	Doug Workman
Sampled By (Sign):	Doug W
PO #:	Regulatory Program:

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

FILTERED? (YES/NO) — Y/N
PRESERVATION (CODE)* — Pick Letter

Analyses Requested

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	#1 Bluegill L. Lory	6/9/08	15 05		L=185	1-poly bagged fish	
002	#2 Bluegill L. Lory	6/9	20 35		L=215		
003	#3 Bluegill L. Lory	6/9	20 32		L=169		
004	#4 Bluegill L. Lory	6/9	21 12		L=185 w=141.3		
005	#5 Bluegill L. Lory	6/9	21 12		L=217		
006	#6 Bluegill L. Lory	6/9	21 33		L=150		
007	#7 Bluegill L. Lory	6/9	22 44		L=172		
008	#8 Bluegill L. Lory	6/9	22 44		L=195		
009	#9 Bluegill L. Lory	6/9	23 11		L=168		
010	#10 Bluegill L. Lory	6/9	23 52		L=176		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
RDWZ	7/10/08 12:00		
UPS	6-11-08 1010	C. Jo Pace	6-11-08 1012

Sample Condition Upon Receipt

Pace Analytical

Client Name: Foth Infrastructure Project # 404975

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other poly bags

Thermometer Used JTB **Type of Ice:** (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 3.0 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 6-11-08 cg

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☐Yes	☑No	☐N/A	2. No Analysis request on COC.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☐Yes	☑No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: B				
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No		Initial when completed: ____ Lot # of added preservative: ____
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☑No	☐N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): _____				

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: COC relinquished with date 7-10/08. cg 6-11-08

Project Manager Review: AH **Date:** 6/12/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Appendix B

Terrestrial Biology Reports

B-1

Terrestrial Biology Report – 2007

BIOLOGICAL SURVEY SUPPLEMENT:
PLANT COMMUNITIES, WILDLIFE, AND WETLAND EVALUATION

Kennecott Eagle Minerals Company
Humboldt Mill
Marquette County, Michigan

Prepared for:

Foth Infrastructure & Environmental

Prepared by:

King & MacGregor Environmental, Inc.
2520 Woodmeadow SE
Grand Rapids, Michigan 49546
www.king-macgregor.com

May 1, 2008

TABLE OF CONTENTS

1.0 INTRODUCTION ..... Page 1
- 1.1 Study Area ..... Page 1
- 1.2 Survey Purpose ..... Page 1

2.0 THREATENED AND ENDANGERED PLANT SPECIES - Detailed Study Area ..... Page 1
- 2.1 Methods ..... Page 1
- 2.2 Results ..... Page 1
- 2.3 Discussion ..... Page 1

3.0 WILDLIFE ..... Page 2
- 3.1 Birds - Overall Study Area ..... Page 2
  - 3.1.1 Methods ..... Page 2
  - 3.1.2 Results ..... Page 2
  - 3.1.3 Discussion ..... Page 3
- 3.2 Mammals ..... Page 3
  - 3.2.1 Small Mammals- Overall Study Area ..... Page 3
    - 3.2.1.1 Methods ..... Page 3
    - 3.2.1.2 Results ..... Page 4
    - 3.2.1.3 Discussion ..... Page 4
  - 3.2.2 Large Mammals - Overall Study Area ..... Page 4
    - 3.2.2.1 Methods ..... Page 4
    - 3.2.2.2 Results ..... Page 4
    - 3.2.2.3 Discussion ..... Page 4
- 3.3 Frogs and Toads- Overall Study Area ..... Page 4
  - 3.3.1 Methods ..... Page 4
  - 3.3.2 Results ..... Page 5
  - 3.3.3 Discussion ..... Page 5
- 3.4 Threatened and Endangered Wildlife Species - Overall Study Area ..... Page 5
  - 3.4.1 Methods ..... Page 5
  - 3.4.2 Results ..... Page 5
  - 3.4.3 Discussion ..... Page 6

4.0 WETLAND EVALUATION ..... Page 6
- 4.1 Wetland Boundary Delineation - Detailed Study Area ..... Page 6
  - 4.1.1 Methods ..... Page 6
  - 4.1.2 Results ..... Page 6
  - 4.1.3 Discussion ..... Page 7
- 4.2 Wetland Boundary Delineation - Wetland EE ..... Page 7
  - 4.2.1 Methods ..... Page 7
  - 4.2.2 Results ..... Page 7
  - 4.2.3 Discussion ..... Page 8
- 4.3 Preliminary Wetland Evaluation - Black River Wetland ..... Page 8
  - 4.3.1 Methods ..... Page 8
  - 4.3.2 Results ..... Page 8
  - 4.3.3 Discussion ..... Page 8

5.0 CONCLUSION ..... Page 9

REFERENCES AND LITERATURE CITED

FIGURES

Figure 1-1	Project Location
Figure 1-2	Study Area and Sample Location Map
Figure 4-1	Wetland Boundary Flagging in the Detailed Study Area
Figure 4-2	Survey Locations for 2006 & 2007 Wetland Surveys
Figure 4-3	Marquette County Soils for Study Area (SSURGO)
Figure 4-4	Wetland EE Wetland Boundary
Figure 4-5	Wetland EE & Adjacent Land to the North NWI Identified Wetlands
Figure 4-6	Preliminary Wetland Evaluation of Black River Wetland
Figure 4-7	Wetland Evaluation of Black River Wetland

TABLES

Table 3-1	June 2007 Bird Sampling Point Data – Humboldt Mill Site
Table 3-2	June 2007 Bird Species Summary – Humboldt Mill Site
Table 3-3	September 2007 Bird Sampling Point Data – Humboldt Mill Site
Table 3-4	September 2007 Bird Species Summary – Humboldt Mill Site
Table 3-5a	Small Mammal Survey: May 18, 2007 – Humboldt Mill Site
Table 3-5b	Small Mammal Survey: May 19, 2007 – Humboldt Mill Site
Table 3-5c	Small Mammal Survey: May 20, 2007 – Humboldt Mill Site
Table 3-6a	Frog and Toad Survey: May 17, 2007 – Humboldt Mill Site
Table 3-6b	Frog and Toad Survey: May 18, 2007 – Humboldt Mill Site
Table 3-6c	Frog and Toad Survey: June 7, 2007
Table 4-1	Plant Species List for Wetland EE and Black River Wetland

PHOTOGRAPHS

Photos 1 and 2	Sampling Point 1 Photos – Bird and Small Mammals
Photos 3 and 4	Sampling Point 2 Photos– Bird and Small Mammals
Photos 5 and 6	Sampling Point 3 Photos– Bird and Small Mammals
Photos 7 and 8	Sampling Point 4 Photos– Bird and Small Mammals
Photos 9 and 10	Sampling Point 5 Photos– Bird and Small Mammals
Photos 11 and 12	Sampling Point 6 Photos– Bird and Small Mammals
Photos 13 and 14	Sampling Point 7 Photos– Bird and Small Mammals
Photos 15 and 16	Sampling Point 8 Photos– Bird and Small Mammals
Photos 17 and 18	Sampling Point 9 Photos– Bird and Small Mammals
Photos 19 and 20	Sampling Point 10 Photos– Bird and Small Mammals
Photos 21 and 22	Sampling Point 11 Photos– Bird and Small Mammals
Photos 23 and 24	Wetland Location Photos - Wetland EE
Photos 25 and 26	Wetland Location Photos - Black River Wetland

APPENDIX

MDEQ Wetland Identification Report (07-52-0001-WA)

LIST OF ACRONYMS

KME:	King & MacGregor Environmental, Inc.
Foth I&E:	Foth Infrastructure & Environment, LLC
MDEQ:	Michigan Department of Environmental Quality
HTDF:	Humboldt Tailings Disposal Facility
KEMC:	Kennecott Eagle Minerals Company
MNFI:	Michigan Natural Features Inventory
MDNR:	Michigan Department of Natural Resources
SSURGO:	Soil Survey Geographic
USDA:	United States Department of Agriculture
MDNR:	Michigan Department of Natural Resources
MIRIS:	Michigan Resource Information System
GPS:	Global Positioning System

1.0 INTRODUCTION

King and MacGregor Environmental Inc. (KME) was contracted by Foth Infrastructure & Environment, LLC (Foth I&E) to conduct baseline biological investigations within the Humboldt Mill Site in Marquette County, Michigan (Figure 1-1). This report describes the results of the 2007 surveys of birds, mammals, frogs and toads, threatened and endangered species, wetland communities and the results of the Michigan Department of Environmental Quality (MDEQ) confirmation of the 2006 wetland delineation conducted within the detailed study area. This report is intended as a supplement the assessments conducted in 2006 as reported in the *Biological Survey: Plant Communities, Wildlife, and Wetland Evaluation*, dated April 5, 2007, prepared by KME (2006 Biological Survey Report).

1.1 Study Area

The study area for this investigation includes the Humboldt Tailings Disposal Facility (HTDF) and processing facility known as the Humboldt Mill Site and surrounding undeveloped areas. The study area is located west of Ishpeming, in the southeast corner of the intersection of U.S. 41 and Highway 95 and occupies all or portions of Sections 1, 2, 3, 10, 11, 12, 13, 14 and 15, T47N, R29W, Humboldt Township, Marquette County, Michigan. The study area of the 2007 biological survey is unchanged from the 2006 biological survey (Figure 1-2). A study area of 3,169 acres containing a detailed study area of 186 acres surrounding the mill is shown on Figure 1-2. Additional study of two wetlands outside the detailed study area but within the overall study area was performed.

1.2 Survey Purpose

Documentation of this baseline ecological information will assist with Kennecott Eagle Minerals Company (KEMC) planning activities.

2.0 THREATENED AND ENDANGERED PLANT SPECIES – Detailed Study Area

2.1 Methods

The Michigan Natural Features Inventory (MNFI) maintains the database of all known threatened and endangered plant species in Michigan. A query was made of the MNFI to identify any known threatened or endangered plant species within the detailed study area to determine if any additional occurrences of threatened or endangered species were documented since 2006.

2.2 Results

The MNFI database query did not identify any additional known threatened or endangered plant species occurrences within the detailed study area.

2.3 Discussion

Threatened and endangered plants typically occur in rare plant habitats. All of the plant communities identified within the study area are typical of this region. No unusual plant communities that may harbor rare plants were identified. Historical mining and logging activities within the study area also limit the likelihood of rare plant habitats being present on site.

3.0 WILDLIFE

3.1 Birds – Overall Study Area

3.1.1 Methods

The methodologies developed and described in the 2006 Biological Survey Report were employed during the 2007 bird surveys. Diurnal survey methods included using a series of point count surveys, which are a commonly accepted method for identifying birds in a region (Howe, et al., 1997; Sauer, et al., 2005). Eleven sampling points were established in 2006 within differing habitat types in order to maximize documentation of bird species present. Sampling locations appear in Figure 1-2. Photographs and general habitat descriptions of each sampling point were documented (Photos 1-22).

A breeding bird survey was conducted June 7-8, 2007. A fall bird migration survey was conducted September 12 and 14, 2007. The survey protocol included ten-minute, unlimited radius counts at each of the eleven survey points, recording all birds seen or heard, consistent with *The Atlas of Breeding Birds of Michigan* protocol. The same eleven sampling points were used in the June and September surveys. All eleven points were surveyed on two consecutive days for the breeding season and fall migration surveys. The surveys were generally conducted in reverse order on the second day of sampling in order to stagger the time of day each point was surveyed. Most sampling was conducted from early morning to early afternoon. All bird species encountered in the study area while traveling from survey point to survey point, or during other on-site activities, were recorded on data sheets as incidental species. Bird presence data was recorded on data sheets. Weather conditions and habitat types were recorded for all observations. Point surveys were not conducted during times of strong wind or heavy rain.

In addition to the eleven point bird surveys, KME also conducted an assessment of an existing great blue heron (*Ardea herodias*) nesting colony that had previously been identified within the study area (Heron Rookery Pond) (Figure 1-2). The assessment was conducted on May 17, June 8, and September 14, 2007.

KME also assessed a bald eagle (*Haliaeetus leucocephalus*) nesting site in relative proximity to the heron nesting colony (Figure 1-2). That assessment was conducted on May 17, June 8, and September 14, 2007.

3.1.2 Results

A total of 1,741 birds representing 74 species were identified on site during the June and September, 2007 surveys. The June breeding bird survey identified 206 birds representing 56 species (Table 3-1 & Table 3-2). The September migration survey identified 1,535 birds representing 35 species (Table 3-3 & Table 3-4). Some of the most commonly identified species during the bird surveys included the Canada Goose (*Branta canadenis*), American robin (*Turdus migratorius*), blue jay (*Cyanocitta cristata*), American crow (*Corvus brachyrhynchos*), rock pigeon (*Columba livia*), and black-capped chickadee (*Poecile atricapillus*).

The great blue heron nesting colony was found to be active during both the May and June assessments. The nesting colony was inactive during September. During the May assessment, 29 nests were identified in the heron nesting colony. Eighteen of the 29 nests were active with adult great blue herons present, presumably on eggs. Five of the 29 nests were occupied by double-crested cormorant (*Phalacrocorax auritus*). Five of the nests were inactive. During the June assessment, 30 nests were identified in the heron nesting colony. Twelve of the 30 nests appeared to be active with adult great blue herons present. Five of the nests were occupied by double-crested cormorant. Thirteen of the nests were inactive.

The bald eagle nest was active during both the May and June assessments. Two adult bald eagles and one eaglet were observed in, or in close proximity to, the nest on May 17, 2007. Single adult bald eagles were also observed at sampling points 9 and 11 on June 7 and 8, 2007.

3.1.3 Discussion

The bird species identified within the study area during the June breeding survey and September migration survey are consistent with the bird species one would expect in the habitats present on site. Several flocks of Canada geese were observed during the September survey which accounts for an increase in the bird numbers observed from the June survey.

The existing nesting colony of great blue herons appears to be healthy based on the activities observed. The presence of double-crested cormorants within the heron colony is evidence of the recent expansion of Michigan's population of double-crested cormorants. Double-crested cormorants have been documented as competing with other colonial water birds for nesting locations (Wires et al., 2001).

3.2 Mammals

3.2.1 Small Mammals – Overall Study Area

3.2.1.1 Methods

The methodologies developed and described in the 2006 Biological Survey Report were employed during the 2007 small mammal survey. The same 11 sampling points established in 2006 were used for the small mammal studies (Figure 1-2). Photographs and general habitat descriptions of each sampling point were documented (Photos 1-22).

A combination of two small snap traps, one large snap trap, and one Sherman live trap were used at each sampling location. The array of four traps was deployed typically within one to two meters of each sampling point. Traps were placed in locations, such as against fallen trees, to enhance the likelihood of capturing small mammals and to hide the traps from curious birds or other non-target species. Bait for the traps consisted of peanut butter and oatmeal on the three snap traps and wheat crackers in the Sherman traps. Sampling was conducted on three consecutive days: May 18-20, 2007 at all sampling points.

3.2.1.2 Results

Fourteen small mammals representing four species were identified during the May 18 - 20, 2007 trapping period (Table 3-5a, b, c). These four species included: deer mouse (*Peromyscus maniculatus*), white-footed mouse (*Peromyscus leucopus*), Eastern chipmunk (*Tamias striatus*), and the least chipmunk (*Tamias minimus*). The most commonly encountered small mammal was the deer mouse. Red squirrel (*Tamiasciurus hudsonicus*) was not represented in the small mammal sampling, however these squirrels were commonly observed within the study area.

No threatened or endangered small mammals were encountered during the sampling period.

3.2.1.3 Discussion

The small mammals encountered are typical of those expected in the habitats present within the study area. Small mammals were distributed throughout mature wooded habitats, shrub and open habitats, and wetland habitats.

3.2.2 Large Mammals – Overall Study Area

3.2.2.1 Methods

The methodologies developed and described in the 2006 Biological Survey Report were employed during the 2007 mammal survey. All evidence of large mammal presence was noted during the small mammal surveys and also during the course of conducting other biological surveys in the study. Documentation of direct observation or indirect evidence such as scat, tracks, feeding areas, or similar evidence was performed.

3.2.2.2 Results

Two large mammal species were directly observed in the study area: white tail deer (*Odocoileus virginianus*) and raccoon (*Procyon lotor*). Indirect evidence was observed for the following species: cottontail rabbit (*Sylvilagus floridanus*), beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), coyote (*Canis latrans),* mink (*Mustela vison*), and skunk (*Mephitis mephitis*). In the previous survey (KME, 2007), indirect evidence of gray wolf has been observed. Further discussion appears in Section 3.4.

3.2.2.3 Discussion

The large mammals identified on site are consistent with the species expected in the vegetative habitats present. Other relatively common large mammal species possibly present within the study area, but not detected during our surveys, include wood chuck (*Marmonta monax*), porcupine (*Erethizon dorsatum*), bobcat (*Lynx rufus*), black bear (*Ursus americanus*), and river otter (*Lutra canadensis*).

3.3 Frogs and Toads – Overall Study Area

3.3.1 Methods

The methodologies developed and described in the 2006 Biological Survey Report were employed during the 2007 Frog and Toad survey. The survey for frogs and toads was conducted according to the survey protocol developed by the MDNR Wildlife Division (MDNR, 2002). Survey methodology consists of listening to frog and toad breeding calls in established survey locations for ten-minute periods. Survey protocol requires that

surveys be conducted on evenings with calm air or mild winds and air temperatures greater than 45 degrees Fahrenheit in the early spring (April 1 through May 5), greater than 55 degrees Fahrenheit in the late spring (May 6 through June 10), and greater than 65 degrees Fahrenheit in the summer (June 11 through July 10). Temperatures were taken using thermometers located in vehicles parked near the sampling points. Weather observations and temperatures were recorded on data sheets at each sampling point.

The same five survey points selected in 2006 were used (Figure 1-2). These five survey points are generally representative of the aquatic habitats in the study area that are likely to harbor frog and toad populations. The frog and toad survey was conducted on May 17 and 18, 2007, and June 7, 2007.

3.3.2 Results

A total of five species of frogs and one species of toad were heard during the survey periods (Table 3-6a, b, c). Species recorded included northern spring peepers (*Pseudacris crucifer*), eastern gray tree frogs (*Hyla versicolor*), green frogs (*Rana clamitans*), western chorus frogs (*Pseudacris triseriata*), northern leopard frogs (*Rana pipiens*), and eastern american toad (*Bufo americanus*). The weather conditions were near or within the range suggested by the MDNR protocol, calling activity included Call Index Values of 1, 2, and 3. It should be noted that during the May 17, 2007 survey the temperature fell below optimal suggested temperature, therefore an additional survey was conducted on June 7, 2007.

3.3.3 Discussion

All five sites surveyed exhibited use by frogs and four of the sites exhibited use by toads for breeding. The most abundant recorded frog species was the northern spring peeper.

3.4 Threatened and Endangered Wildlife Species – Overall Study Area

3.4.1 Methods

The methodologies developed and described in the 2006 Biological Survey Report were employed during the 2007 Threatened and Endangered Species Wildlife evaluation. The MNFI database was queried to determine if additional species had been added since the 2006 query. In accordance with MDNR (2001b) guidelines, KME surveyed the site for any MNFI listed wildlife species or their habitats during the appropriate season. KME also noted other protected species observed during field investigations but not previously identified by the MNFI. KME assessed the use of the existing bald eagle nest through visual observation during the spring season.

3.4.2 Results

No additional known occurrences of threatened or endangered species have been added to the MNFI database since the 2006 query. The MNFI database query resulted in identification of the existing bald eagle nest near Lake Lory. No other threatened or endangered wildlife species, including birds, mammals, and frogs and toads, were identified in the MNFI query. Indirect evidence of the gray wolf was documented in the 2006 survey (KME, 2007), however, no evidence of gray wolf was found during the 2007 survey. As documented in the 2006 Biological Survey Report, gray wolves have been removed from protection under the Federal Endangered Species Act, however, remain listed as a threatened species by the State of Michigan.

The 2007 bird surveys resulted in the identification of two state threatened bird species. These included the bald eagle (noted on the MNFI database) and the common loon (*Gavia immer*).

The bald eagle nest near Lake Lory was observed during the 2007 breeding season. Adult bald eagles and an eaglet were observed during the 2007 bird surveys. All of the bald eagle observations were made in the proximity of the bald eagle nest and Lake Lory.

Common loons were observed during both the June and September bird surveys.

3.4.3 Discussion

It is likely that two of the three adult bald eagles observed were the parents of the eaglet observed in the nest. No other eagle nest locations were identified during the surveys.

The presence of loons during both surveys indicates that this area is at least a favored loafing and feeding area for loons with some potential nesting habitat present.

4.0 WETLAND EVALUATION

4.1 Wetland Boundary Delineation – Detailed Study Area

4.1.1 Methods

A wetland delineation was conducted within the 186-acre detailed wetland study area in 2006 and is described in the 2006 Biological Survey Report. On July 18, 2007, the MDEQ was requested to confirm the accuracy of the 2006 wetland delineation and to render a finding regarding the MDEQ jurisdiction over the identified wetlands pursuant to the Michigan Natural Resources and Environmental Protection Act, P.A. 451 of 1994, Part 303, Wetland Protection (Part 303). The area of investigation used by the MDEQ is somewhat smaller than the 186-acre detailed study area; however, all of the wetlands identified during the 2006 wetland delineation were evaluated by the MDEQ.

4.1.2 Results

On November 20, 2007, the MDEQ issued a Wetland Identification Report, MDEQ File No. 07-52-0001-WA (see Appendix) that identified 21 individual wetlands within the MDEQ area of investigation (Figure 4-1). These wetlands comprise approximately 15.49 acres total. The MDEQ determined that Wetlands A, B, D, E/F, G, H, J, K, L, M, N, O, P, Q, R, CC/T/U, AA, and BB are regulated under Part 303 and that Wetlands I, S, and V are not regulated under Part 303.

The MDEQ evaluated areas C, W, X, Y, Z, and DD identified in the 2006 wetland determination and determined that these man-made features did not meet the definition of wetland under provision of Part 303 due to a lack of sufficient hydrology and/or the lack of a predominance of wetland vegetation.

4.1.3 Discussion

The November 20, 2007 wetland determination and regulatory finding takes precedence over the previously conducted 2006 wetland determination. Authorization must be obtained under provisions of Part 303 prior to conducting most filling, dredging, draining activities, and/or maintaining a use within the MDEQ identified regulated wetlands.

4.2 Wetland Boundary Delineation – Wetland EE

4.2.1 Methods

A wetland delineation was conducted within the area directly north of the HTDF (Figure 4-2) in accordance with the MDEQ Wetland Identification Manual: A Technical Manual for Identifying Wetlands in Michigan (MDEQ, 2001).

KME reviewed in-office materials including the SSURGO database for Marquette County, Michigan (USDA, 2005) (Figure 4-3), National Wetland Inventory mapping, MDNR MIRIS Current Use Inventory, and MDNR 1998 aerial photography to identify potential wetlands within the detailed wetland study area.

KME conducted a wetland delineation on July 7, 2007. At each area of potential wetland, an evaluation was conducted to determine if wetland vegetation, visual evidence of wetland hydrology and hydric soils were present. Based on this evaluation, an upland/wetland boundary was identified. The wetland boundary was delineated by placing numbered pink flagging at intervals along the identified boundary. Each numbered flag was located utilizing mapping-grade global positioning system (GPS) (Figure 4-4). Photographs were taken within the wetland (Photos 23 and 24).

4.2.2 Results

One area of wetland north of the HTDF within the project boundary was located during the July 7, 2007 evaluation and was designated Wetland EE (Figure 4-4). Wetland EE is an emergent/scrub-shrub wetland approximately 11.8 acres in size. The boundaries of this wetland were identified using flagging labeled EE1 through EE100 (Figure 4-4). The upland/wetland boundaries were located utilizing mapping-grade GPS.

The vegetation identified in Wetland EE includes blue-joint (*Calamagrostis canadensis*), aquatic sedge (*Carex aquatilis*), strict sedge (*Carex stricta*), European swamp thistle (*Cirsium palustre*), bunchberry (*Cornus canadensis*), woodland horsetail (*Equisetum sylvaticum*), soft rush (*Juncus effusus*), American water-horehound (*Lycopus americanus*), petioled willow (*Salix petiolaris*), balsam willow (*Salix pyrifolia*), wool-grass (*Scirpus cyperinus*), white meadow-sweet (*Spraea alba*), and broad-leaved cattail (*Typha latifolia*) (Table 4-1).

The soils in Wetland EE are described in the SSURGO database as Histosols and Aquents – ponded, a very poorly drained soil type, and Kinross muck, a poorly drained soil type (Figure 4-3). The standing water present over the entire wetland during the on-site evaluation indicate that soil conditions are consistent with this description. Based on a review of in-office materials, it appears that this wetland complex is hydrologically connected to the Middle Branch of the Escanaba River through surface water drainage (Figure 4-5).

4.2.3 Discussion

Wetland EE is part of a wetland complex extending outside the area of investigation. This wetland complex is bisected by U.S. Highway 41 (Figure 4-5). It appears that Wetland EE is regulated under provisions the Michigan Natural Resources and Environmental Protection Act, P.A. 451 of 1994, Part 303 due to apparent hydrologic connection to stream.

4.3 Preliminary Wetland Evaluation – Black River Wetland

4.3.1 Methods

The Black River Wetland is an emergent/scrub-shrub wetland complex located west of the existing mill buildings and contiguous to the Black River within the western portion of the overall area of investigation (Figure 4-2). The purpose of this evaluation was to determine the general character and determine an approximate upland wetland boundary (Figure 4-6). The wetland boundary was not flagged. This preliminary wetland evaluation was conducted in accordance with the MDEQ Wetland Identification Manual: A Technical Manual for Identifying Wetlands in Michigan (MDEQ, 2001), and the procedures and general practices used by the MDEQ when conducting a preliminary wetland evaluation. Photographs were taken within the wetland (Photos 25 and 26).

4.3.2 Results

On June 7, 2007, KME biologists conducted a preliminary wetland evaluation of the Black River Wetland. The vegetation identified in the Black River Wetland includes speckled alder (*Alnus incana* spp. *rugosa*), blue-joint (*Calamagrostis canadensis*), aquatic sedge (*Carex aquatilis*), red-osier dogwood (*Cornus stolonifera*), sweet gale (*Myrica gale*), reed canary grass (*Phalaris arundinacea*), and willow (*Salix* sp.). See Table 4-1 for a complete list of plant species observed in this wetland.

The vegetation identified in the upland portions (Figure 4-7) of this area includes balsam fir (*Abies balsamea*), wild sarsaparilla (*Aralia nudicaulis*), alpine enchanter's nightshade (*Circaea alpina*), intermediate fern (*Dryopteris intermedia*), oak fern (*Gymnocarpium dryopteris*), northern wood-sorrel (*Oxalis acetosella*), and dwarf raspberry (*Rubus pubescens*).

The soils in the Black River Wetland are described in the SSURGO database as Histosols and Aquents – ponded, and Carbondale and Tawas soils, both very poorly drained soil types (Figure 4-3). On site observations were consistent with these soil descriptions.

4.3.3 Discussion

The Black River Wetland complex comprises a portion of the headwaters of the West Branch of the Black River. There is some historical evidence of mining activities within the wetland such as an old railroad grade passing through the north and west portions of the wetland (Figure 4-6). The Black River Wetland plant community is typical of wetlands found throughout the Escanaba River watershed.

5.0 CONCLUSION

KME conducted environmental surveys in 2007 for KEMC to supplement baseline environmental information gathered during 2006 within the Humboldt Mill study area in Marquette County, Michigan.

Surveys for birds, small mammals, large mammals, and frogs and toads were conducted within the study area established in 2006. A total of 74 bird species were identified on site, including two state threatened species the bald eagle and common loon. A total of five small mammal species and two large mammal species were directly identified on site. Five species of frogs and one species of toad were identified on site. All of the bird, mammal, and frog species identified are typical of those species associated with the vegetative communities on site.

The wetland determination conducted in 2006 within the detailed study area was confirmed with modifications by the MDEQ. A wetland determination was conducted north of the HTDF. One wetland was identified, Wetland EE. This emergent/scrub-shrub wetland appears to be regulated by the MDEQ. A preliminary wetland evaluation was conducted within an area west of the Humboldt Mill Site and is referred to as the Black River Wetland Area.

Two State threatened species were identified during the 2007 assessments, bald eagle and common loon. Observations of a great blue heron nesting colony and bald eagle nest were conducted.

REFERENCES AND LITERATURE CITED

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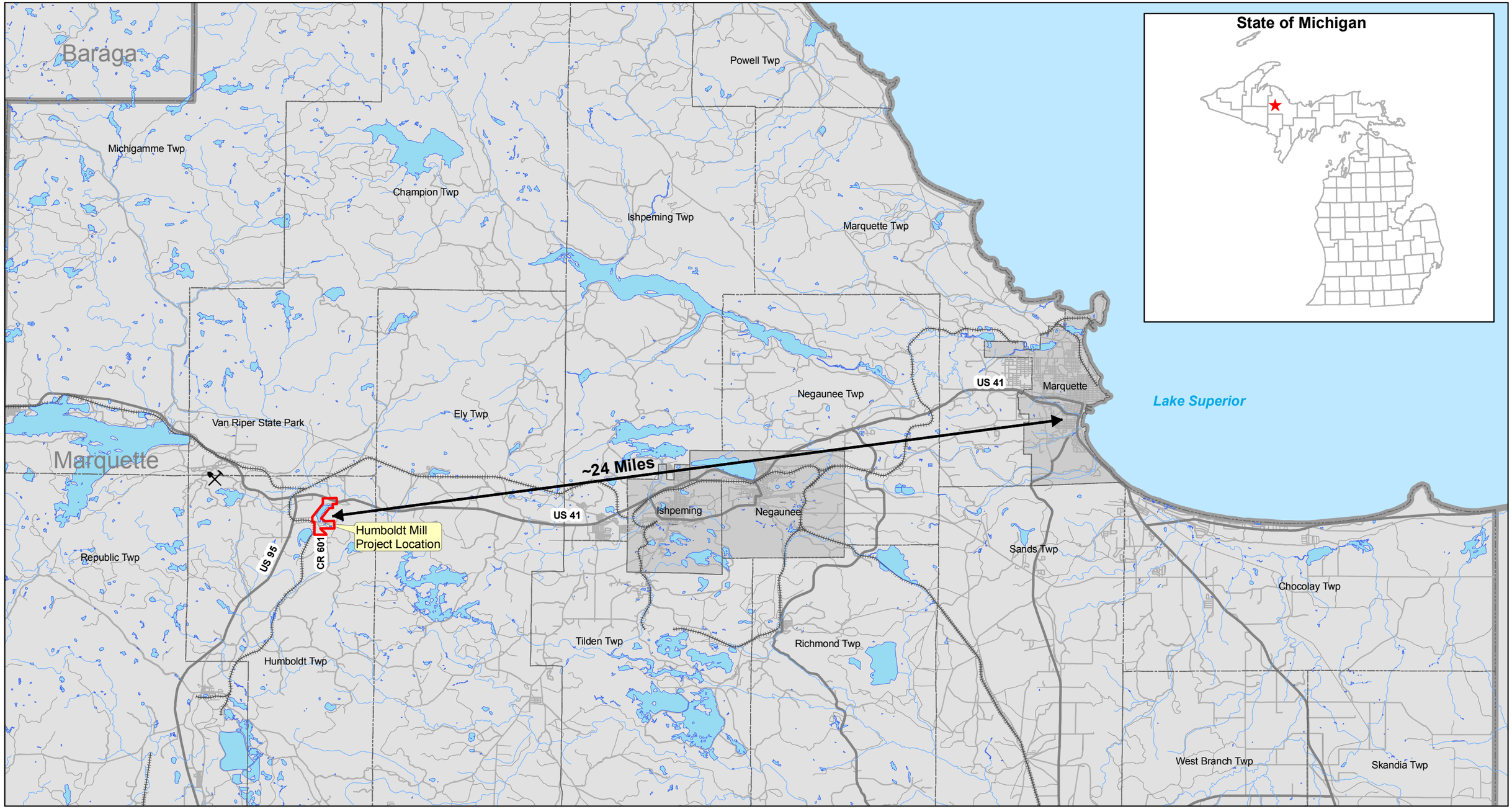
FIGURES



NOTES

1. Horizontal datum based on NAD 83/94.
   Horizontal coordinates based on UTM Zone 16.
2. All base information downloaded from Michigan Center of Geographic Information (http://www.michigan.gov/cgi).
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Counties
- Minor Civil Divisions
- Lakes and Rivers
- KEMC Project Location
- Highways
- Major Roads
- Minor Roads
- Railroads

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FIGURE 1-1
HUMBOLDT MILL PROJECT
PROJECT LOCATION

Scale: 0 1.5 3 Miles

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

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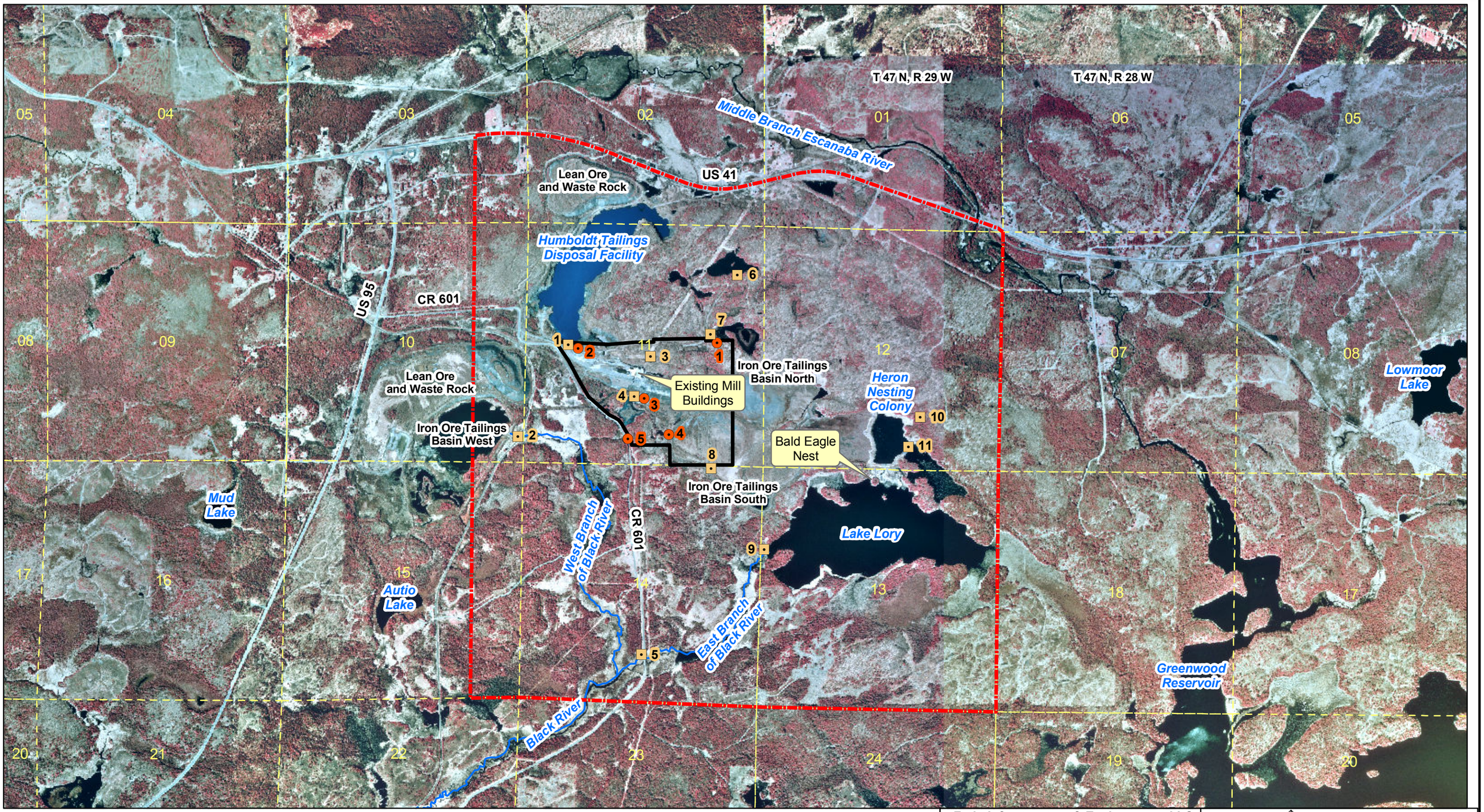

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Overall Study Area for 2006 and 2007 Biological Surveys
- Detailed Wetland Study Area for 2006 and 2007 Biological Surveys
- PLSS Sections
- Spring frog and toad sample locations
- Avian and small mammal sample locations

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APPROVED BY:	SVD1	DATE: APR. '08	
APPROVED BY:		DATE:	

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FIGURE 1-2
HUMBOLDT MILL PROJECT
STUDY AREA
AND SAMPLE LOCATION MAP

Scale: 0 1,000 2,000 Feet

Date: APRIL, 2008

Prepared by: DAT

Project No: 06W003

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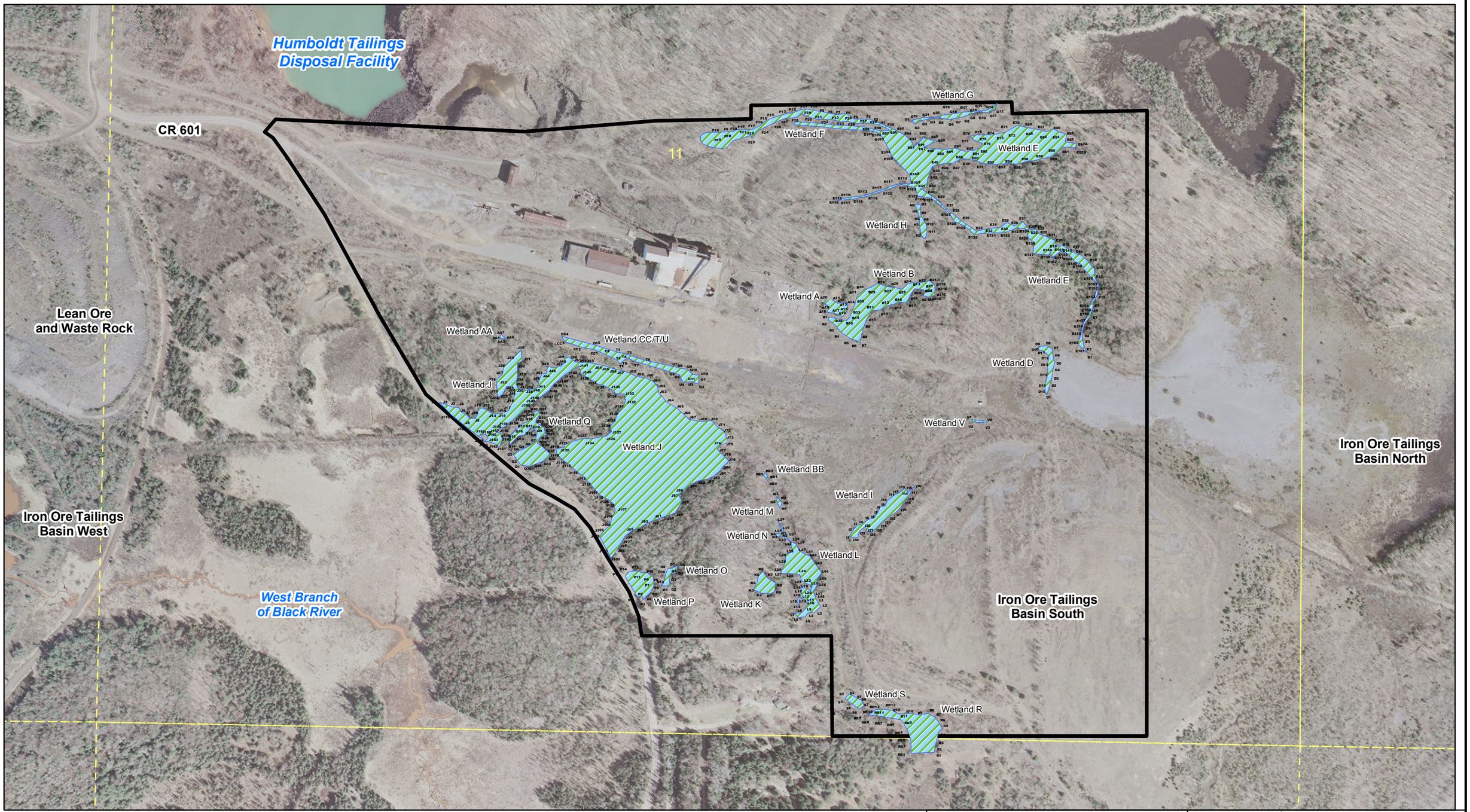

NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/96. Horizontal coordinates based on Michigan State Plane North.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.
4. Level 3 Wetland Boundary GPS data supplied by King & MacGregor Environmental, Inc. via email on 09/25/2007.

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LEGEND

- Overall Study Area for 2006 and 2007 Biological Surveys
- Detailed Wetland Study Area for 2006 and 2007 Biological Surveys
- PLSS Sections
- R7 Wetland Boundary Flagging
- Wetlands
- Detailed Wetland Study Area

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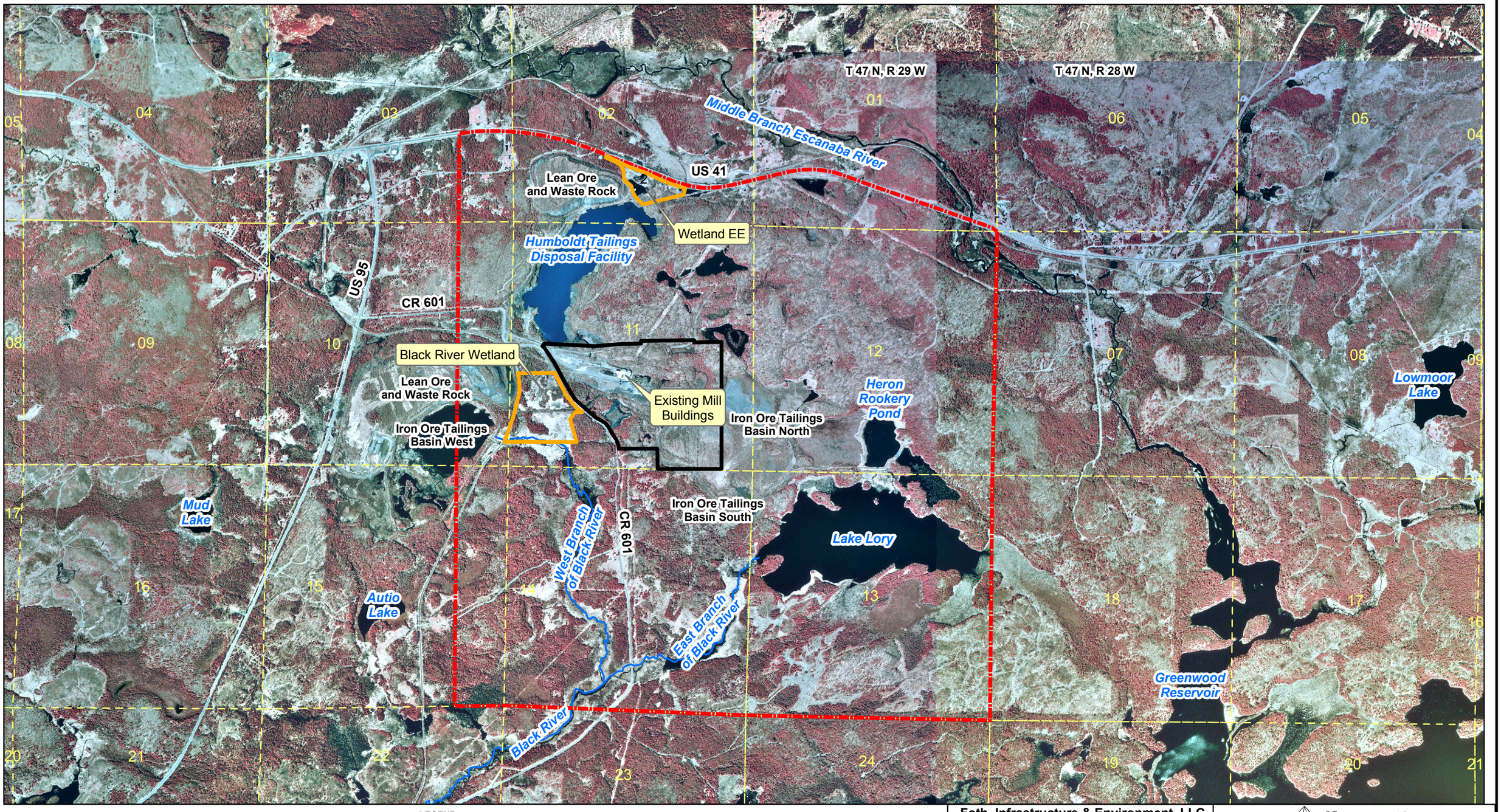
FIGURE 4-1
HUMBOLDT MILL PROJECT
WETLAND BOUNDARY FLAGGING
IN THE DETAILED STUDY AREA

Scale: 0 200 400 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003



NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- 2007 Wetland Survey Locations
- Overall Study Area for 2006 and 2007 Biological Surveys
- Detailed Wetland Study Area for 2006 and 2007 Biological Survey
- PLSS Sections

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FIGURE 4-2
HUMBOLDT MILL PROJECT
SURVEY LOCATIONS FOR 2006 & 2007
WETLAND SURVEYS

Scale: 0 1,000 2,000 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

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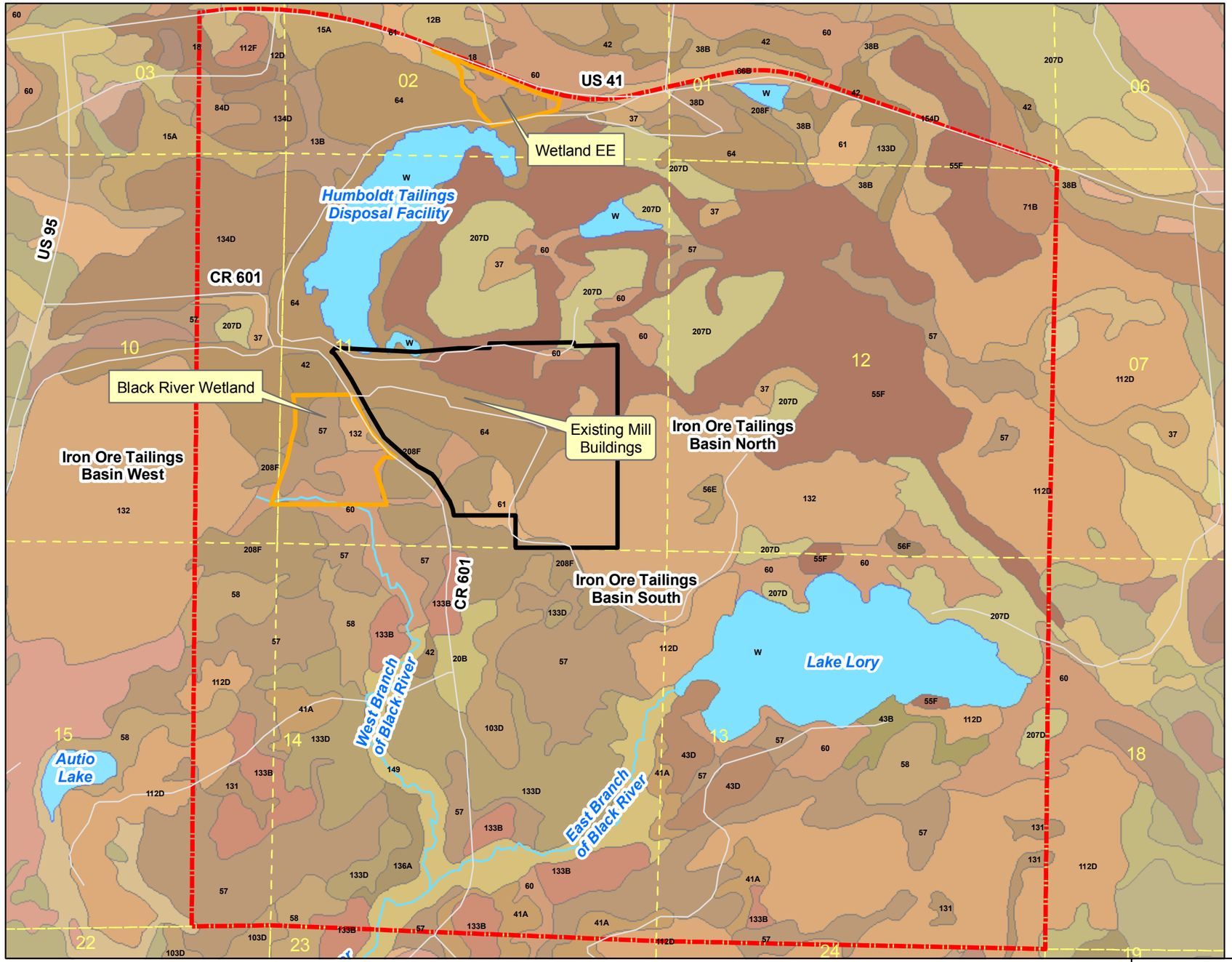

SSURGO Soils

- 57 - Carbondale and Tawas soils
- 41A - Channing fine sandy loam - 0 to 3 percent slopes
- 15A - Croswell sand - 0 to 3 percent slopes
- 207D - Dishno-Michigamme-Rock outcrop complex - 6 to 25 percent slopes - very bouldery
- 149 - Evart-Cathro complex
- 71B - Evart-Pelkie-Sturgeon complex - 0 to 4 percent slopes
- 58 - Greenwood and Dawson soils
- 60 - Histosols and Aquents - ponded
- 13B - Kalkaska sand - 0 to 6 percent slopes
- 43B - Karlin sandy loam - 1 to 6 percent slopes
- 43D - Karlin sandy loam - 6 to 18 percent slopes
- 134D - Keewaydin cobbly fine sandy loam - 6 to 18 percent slopes - bouldery
- 133B - Keewaydin-Dishno complex - 1 to 6 percent slopes - rocky - bouldery
- 133D - Keewaydin-Dishno complex - 6 to 18 percent slopes - rocky - bouldery
- 208F - Keewaydin-Michigamme cobbly fine sandy loams - 18 to 45 percent slopes - rocky - very bouldery
- 112F - Keewaydin-Michigamme-Rock outcrop complex - 25 to 60 percent slopes - very bouldery
- 112D - Keewaydin-Michigamme-Rock outcrop complex - 6 to 25 percent slopes - very bouldery
- 18 - Kinross muck
- 55F - Michigamme-Rock outcrop complex - 25 to 70 percent slopes - very bouldery
- 42 - Minocqua muck
- 136A - Minocqua-Channing complex - 0 to 3 percent slopes
- 38B - Pence fine sandy loam - 0 to 6 percent slopes
- 38D - Pence fine sandy loam - 6 to 18 percent slopes
- 56E - Peshekee-Rock outcrop complex - 18 to 35 percent slopes - very bouldery
- 56F - Peshekee-Rock outcrop complex - 35 to 70 percent slopes - very bouldery
- 61 - Pits - borrow
- 64 - Pits and Dumps - mine
- 20B - Rousseau-Ocqueoc fine sands - 0 to 6 percent slopes
- 12B - Rubicon sand - 0 to 6 percent slopes
- 12D - Rubicon sand - 6 to 18 percent slopes
- 84D - Rubicon-Ishpeming-Rock outcrop complex - 6 to 25 percent slopes
- 103D - Rubicon-Ocqueoc-Rock outcrop complex - 6 to 25 percent slopes
- 154D - Rubicon-Sayner complex - 6 to 18 percent slopes - rocky
- 132 - Slickens
- 66B - Udipsamments-Urban land complex - nearly level and gently sloping
- W - Water
- 37 - Witbeck very stony muck - extremely bouldery
- 131 - Witbeck-Cathro complex - very bouldery

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

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LEGEND

- Detailed Wetland Study Area for 2006 and 2007 Biological Surveys
- Soils Study Area
- Section Number
- Roads
- Lakes and Rivers
- 2007 Wetland Survey Locations

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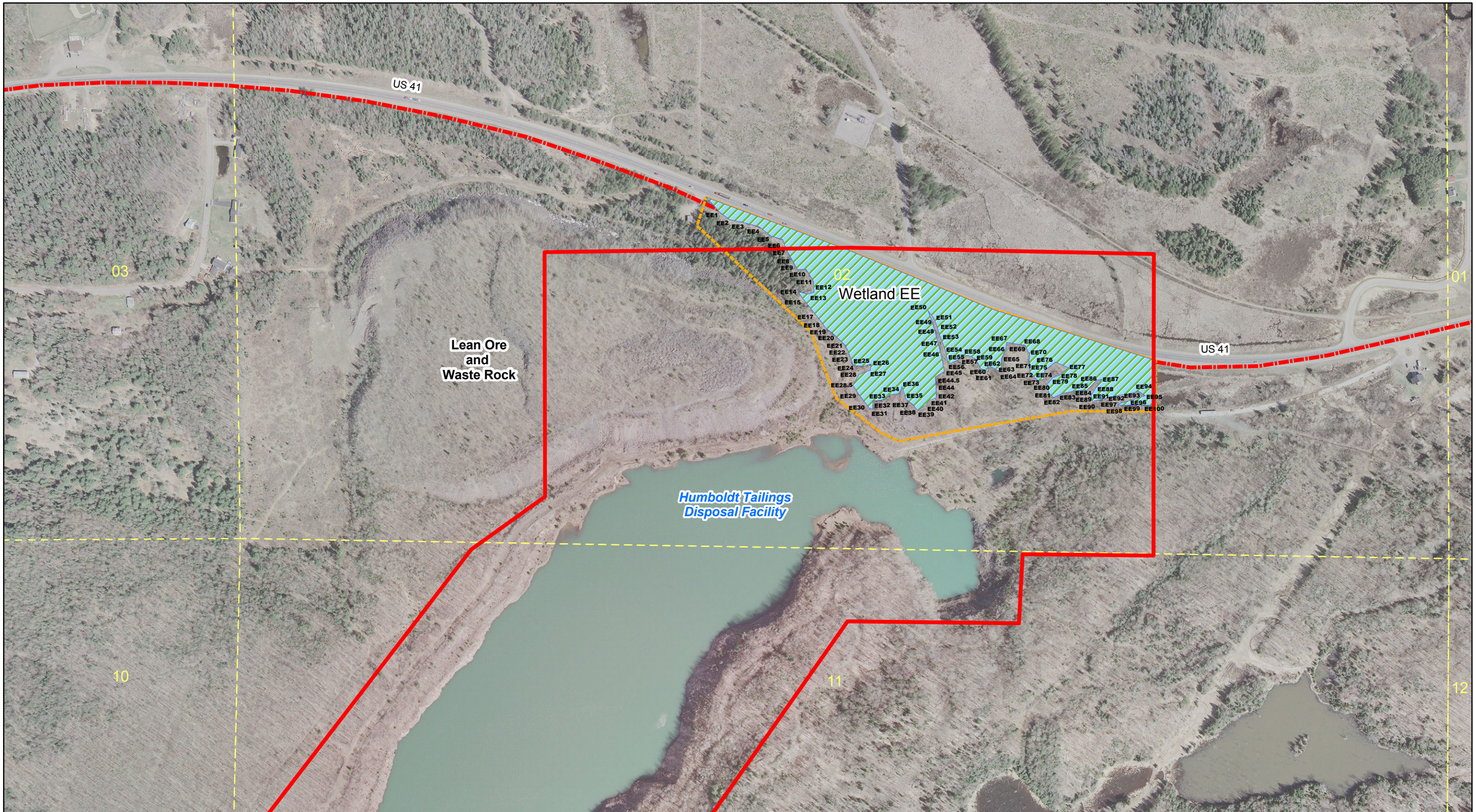
FIGURE 4-3
HUMBOLDT MILL PROJECT
MARQUETTE COUNTY SOILS FOR STUDY AREA

Scale: 0 750 1,500 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003



NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/96. Horizontal coordinates based on Michigan State Plane North.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.
4. Revised Wetland Boundary GPS data supplied by King & MacGregor Environmental, Inc. via email on 09/25/2007.

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LEGEND

- Overall Study Area for 2006 and 2007 Biological Survey
- PLSS Sections
- EE7 Wetland Boundary Flagging
- Wetland EE - approximately 11.8 acres
- Wetland Study Area
- KEMC Project Location

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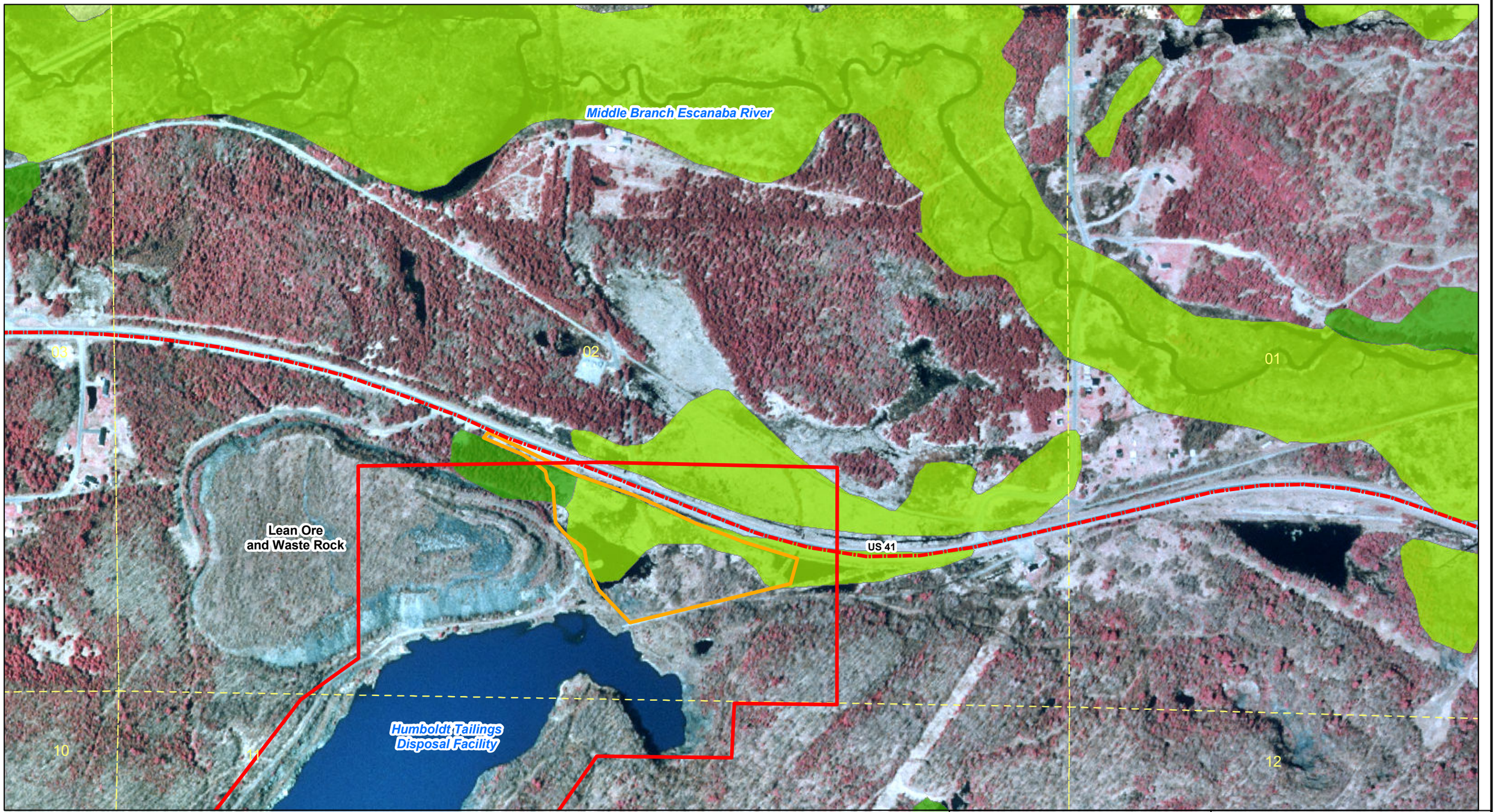
FIGURE 4-4
HUMBOLDT MILL PROJECT
WETLAND EE BOUNDARY

Scale: 0 200 400 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003



NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- 2007 Wetland Survey Location of Wetland EE
- Overall Study Area Boundary for 2006 and 2007 Biological Surveys
- KEMC Project Location
- PLSS Sections

Marquette County NWI

- Emergent
- Scrub-Shrub
- Forested

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FIGURE 4-5
HUMBOLDT MILL PROJECT
WETLAND EE & ADJACENT LAND TO THE NORTH
NWI IDENTIFIED WETLANDS

Scale: 0 250 500 Feet	Date: APRIL 2008
Prepared by: DAT	Project No: 06W003

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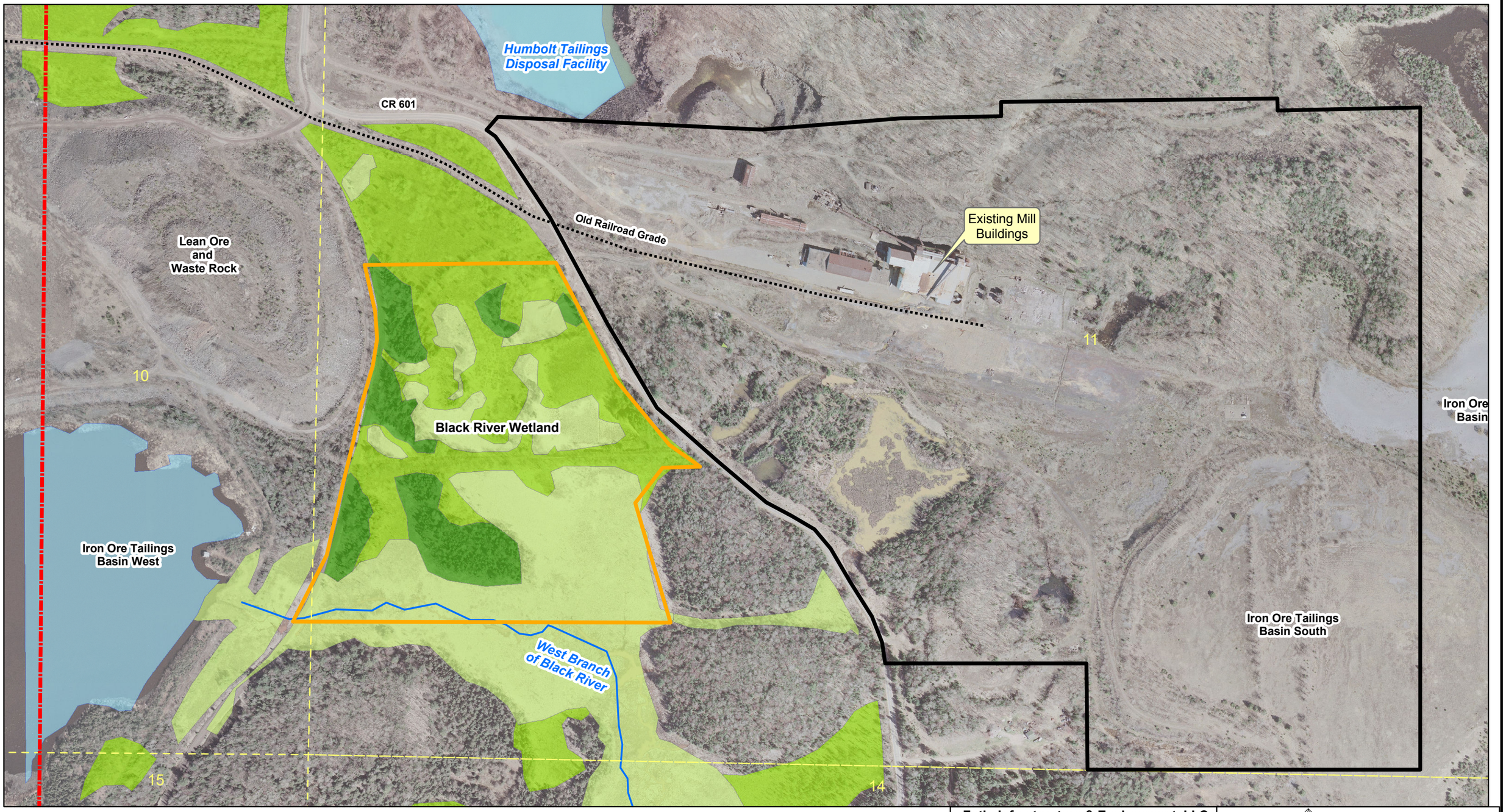

NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.
4. Wetland boundary adjusted for presence of rail bed

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LEGEND

- Black River Wetland
- Overall Study Area for 2006 and 2007 Biological Surveys
- Detailed Wetland Study Area, Wetlands in this area not shown
- PLSS Sections
- Old Railroad Grade

Marquette County NWI

- Emergent
- Scrub-Shrub
- Forested
- Open Water/Unknown Bottom

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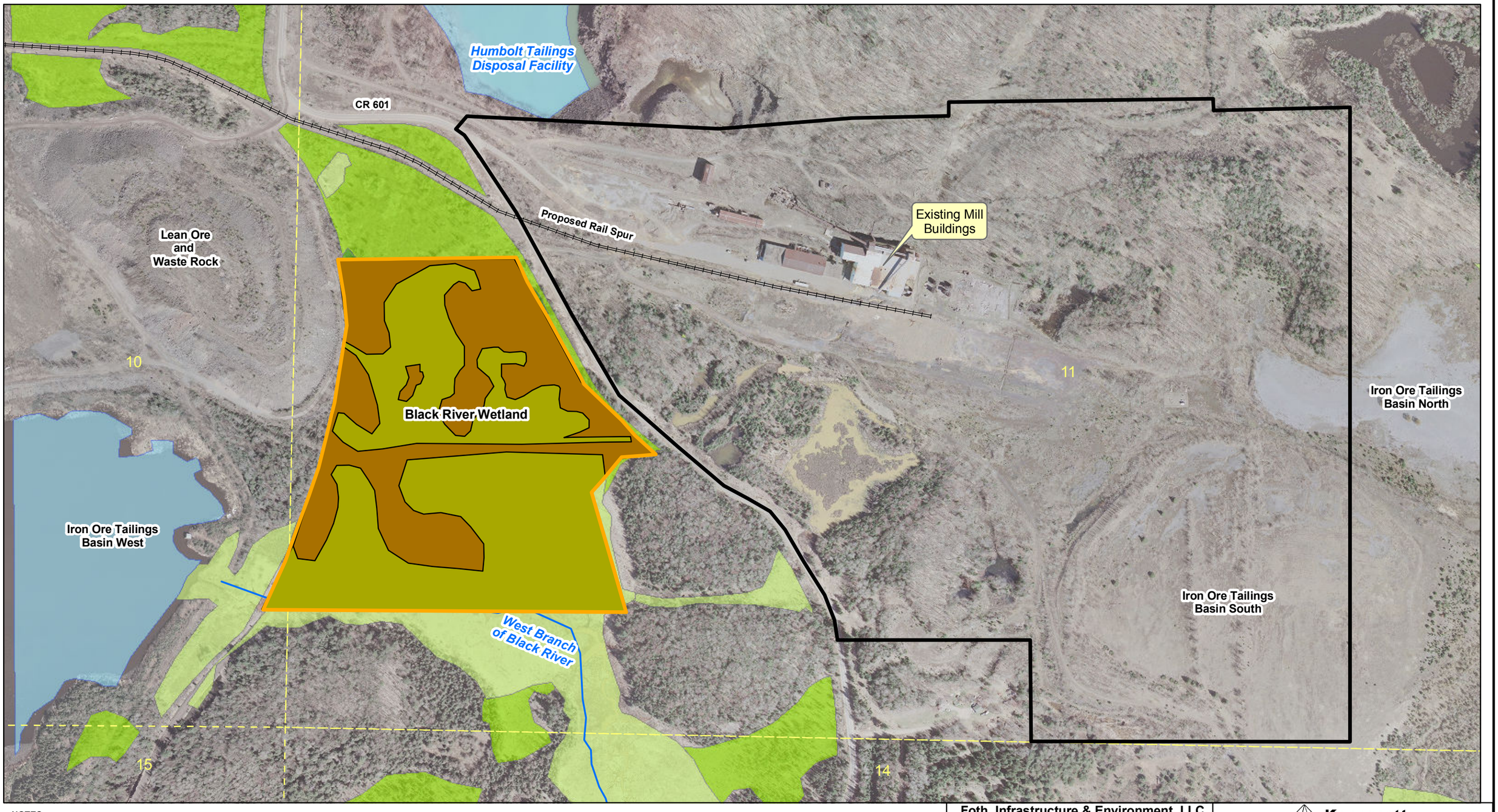
FIGURE 4-6
HUMBOLDT MILL PROJECT
PRELIMINARY WETLAND EVALUATION
OF BLACK RIVER WETLAND

Scale: 0 200 400 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003



NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.
4. Wetland boundary adjusted for presence of rail bed

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LEGEND

- Black River Wetland
- Detailed Wetland Study Area, Wetlands in this area not shown
- PLSS Sections
- Proposed Renovation of LS&I Railroad Spur

Marquette County NWI

- Emergent
- Scrub-Shrub
- Forested
- Open Water/Unknown Bottom

KME June/July 2007 Survey

- Approximate Upland Areas
- Approximate Wetland Areas

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Eagle Minerals

FIGURE 4-7
HUMBOLDT MILL PROJECT
WETLAND EVALUATION
OF BLACK RIVER WETLAND

Scale: 0 200 400 Feet

Date: APRIL 2008

Prepared by: DAT

Project No: 06W003

TABLES

Table 3-1: June 2007 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection
1	06/07/07	American robin	*Turdus migratorius*	2	Visual/Auditory
1	06/07/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
1	06/07/07	Canada goose	*Branta canadensis*	10	Visual/Flyover
1	06/07/07	tree swallow	*Tachycineta bicolor*	1	Visual
1	06/07/07	herring gull	*Larus argentus*	1	Visual
1	06/07/07	indigo bunting	*Passerina cyanea*	1	Auditory
1	06/08/07	American goldfinch	*Carduelis tristis*	1	Visual/Auditory
1	06/08/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
1	06/08/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
1	06/08/07	field sparrow	*Spizella pusilla*	1	Auditory
2	06/07/07	white-throated sparrow	*Zonotrichia albicollis*	1	Visual
2	06/07/07	downy woodpecker	*Picoides pubescens*	1	Visual/Auditory
2	06/07/07	black-throated green warbler	*Dendroica virens*	1	Auditory
2	06/07/07	common grackle	*Quiscalus quiscula*	2	Flyover
2	06/07/07	green heron	*Butorides virescens*	1	Auditory/Flyover
2	06/07/07	alder flycatcher	*Empidonax alnorum*	1	Auditory
2	06/07/07	black-and-white warbler	*Mniotilta varia*	1	Auditory
2	06/07/07	American goldfinch	*Carduelis tristis*	1	Visual/Auditory
2	06/07/07	hermit thrush	*Catharus guttatus*	1	Auditory
2	06/07/07	chipping sparrow	*Spizella passerina*	1	Auditory
2	06/08/07	common loon	*Gavia immer*	1	Auditory
2	06/08/07	white-throated sparrow	*Zonotrichia albicollis*	2	Auditory
2	06/08/07	hermit thrush	*Catharus guttatus*	1	Auditory
2	06/08/07	alder flycatcher	*Empidonax alnorum*	1	Auditory
2	06/08/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
2	06/08/07	song sparrow	*Melospiza melodia*	1	Auditory
2	06/08/07	common yellowthroat	*Geothlypis trichas*	1	Auditory
2	06/08/07	golden-winged warbler	*Vermivora chrysoptera*	1	Auditory
2	06/08/07	veery	*Catharus fuscescens*	1	Auditory
2	06/08/07	black-throated green warbler	*Dendroica virens*	1	Auditory
3	06/07/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
3	06/08/07	indigo bunting	*Passerina cyanea*	1	Auditory
3	06/08/07	American redstart	*Setophaga ruticilla*	1	Auditory
3	06/08/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
3	06/08/07	tufted titmouse	*Baeolophus bicolor*	1	Auditory
4	06/07/07	brown-headed cowbird	*Molothrus ater*	1	Visual
4	06/07/07	mourning dove	*Zenaida macroura*	1	Auditory
4	06/07/07	common yellowthroat	*Geothlypis trichas*	1	Auditory
4	06/07/07	rock pigeon	*Columba livia*	4	Visual
4	06/07/07	barn swallow	*Hirundo rustica*	2	Visual
4	06/07/07	tree swallow	*Tachycineta bicolor*	4	Visual
4	06/07/07	common grackle	*Quiscalus quiscula*	1	Auditory
4	06/07/07	chipping sparrow	*Spizella passerina*	1	Auditory
4	06/07/07	sandhill crane	*Grus canadensis*	1	Auditory
4	06/07/07	red-winged blackbird	*Agelaius phoeniceus*	1	Auditory
4	06/07/07	herring gull	*Larus argentus*	1	Flyover
4	06/07/07	European starling	*Sturnus vulgaris*	3	Flyover
4	06/08/07	American goldfinch	*Carduelis tristis*	1	Auditory
4	06/08/07	rock pigeon	*Columba livia*	1	Visual
4	06/08/07	red-winged blackbird	*Agelaius phoeniceus*	1	Auditory
4	06/08/07	common yellowthroat	*Geothlypis trichas*	1	Auditory
4	06/08/07	warbling vireo	*Vireo gilvus*	1	Auditory
4	06/08/07	chipping sparrow	*Spizella passerina*	1	Auditory
4	06/08/07	pileated woodpecker	*Dryocopus pileatus*	1	Auditory

Table 3-1 con't: June 2007 Bird Sampling Point Data - Humboldt Mill Site					
Sampling Point	**Date**	**Common Name**	**Scientific Name**	**Number of Occurences**	**Type of Detection**
4	06/08/07	common grackle	*Quiscalus quiscula*	1	Visual/Auditory
4	06/08/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
4	06/08/07	American robin	*Turdus migratorius*	1	Auditory
4	06/08/07	mourning dove	*Zenaida macroura*	3	Visual
4	06/08/07	song sparrow	*Melospiza melodia*	1	Auditory
4	06/08/07	green heron	*Butorides virescens*	1	Auditory
4	06/08/07	northern flicker	*Colaptes auratus*	1	Auditory
4	06/08/07	great blue heron	*Ardea herodias*	1	Visual
5	06/07/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
5	06/07/07	chestnut-sided warbler	*Dendroica pensylvanica*	1	Auditory
5	06/07/07	common yellowthroat	*Geothlypis trichas*	2	Auditory
5	06/07/07	turkey vulture	*Cathartes aura*	1	Flyover
5	06/07/07	northern flicker	*Colaptes auratus*	1	Visual
5	06/07/07	yellow warbler	*Dendroica petechia*	1	Auditory
5	06/07/07	cedar waxwing	*Bombycilla cedrorum*	6	Visual
5	06/07/07	alder flycatcher	*Empidonax alnorum*	1	Auditory
5	06/08/07	alder flycatcher	*Empidonax alnorum*	1	Auditory
5	06/08/07	common yellowthroat	*Geothlypis trichas*	2	Auditory
5	06/08/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
5	06/08/07	chipping sparrow	*Spizella passerina*	1	Auditory
6	06/07/07	American redstart	*Setophaga ruticilla*	1	Auditory
6	06/07/07	eastern wood-pewee	*Contopus virens*	1	Auditory
6	06/07/07	white-throated sparrow	*Zonotrichia albicollis*	1	Auditory
6	06/08/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
6	06/08/07	American robin	*Turdus migratorius*	1	Visual
6	06/08/07	black-throated green warbler	*Dendroica virens*	1	Auditory
6	06/08/07	red-breasted nuthatch	*Sitta canadensis*	1	Auditory
6	06/08/07	song sparrow	*Melospiza melodia*	1	Auditory
6	06/08/07	golden-winged warbler	*Vermivora chrysoptera*	1	Auditory
7	06/07/07	turkey vulture	*Cathartes aura*	1	Visual/Flyover
7	06/07/07	black-and-white warbler	*Mniotilta varia*	1	Auditory
7	06/07/07	chestnut-sided warbler	*Dendroica pensylvanica*	1	Visual/Auditory
7	06/07/07	American goldfinch	*Carduelis tristis*	1	Flyover
7	06/07/07	great crested flycatcher	*Myiarchus crinitus*	1	Auditory
7	06/08/07	chestnut-sided warbler	*Dendroica pensylvanica*	1	Auditory
7	06/08/07	chipping sparrow	*Spizella passerina*	2	Auditory
7	06/08/07	ovenbird	*Seiurus aurocapilla*	1	Auditory
7	06/08/07	American robin	*Turdus migratorius*	1	Auditory
7	06/08/07	hooded merganser	*Lophodytes cucullatus*	1	Visual
8	06/07/07	blue-headed vireo	*Vireo solitarus*	1	Auditory
8	06/07/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
8	06/07/07	white-throated sparrow	*Zonotrichia albicollis*	1	Auditory
8	06/07/07	chipping sparrow	*Spizella passerina*	1	Visual/Auditory
8	06/07/07	American goldfinch	*Carduelis tristis*	1	Auditory
8	06/08/07	common loon	*Gavia immer*	1	Visual/Auditory/Flyover
8	06/08/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
8	06/08/07	field sparrow	*Spizella pusilla*	1	Auditory
8	06/08/07	ovenbird	*Seiurus aurocapilla*	1	Auditory
8	06/08/07	northern flicker	*Colaptes auratus*	1	Auditory
8	06/08/07	American goldfinch	*Carduelis tristis*	1	Auditory
9	06/07/07	American goldfinch	*Carduelis tristis*	1	Visual/Auditory
9	06/07/07	song sparrow	*Melospiza melodia*	1	Auditory
9	06/07/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
9	06/07/07	common yellowthroat	*Geothlypis trichas*	1	Auditory

Table 3-1 con't: June 2007 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection
9	06/07/07	Nashville warbler	*Vermivora ruficapilla*	1	Auditory
9	06/07/07	bald eagle	*Haliaeetus leucocephalus*	1	Visual
9	06/08/07	white-throated sparrow	*Zonotrichia albicollis*	1	Auditory
9	06/08/07	song sparrow	*Melospiza melodia*	1	Auditory
9	06/08/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
9	06/08/07	American crow	*Corvus brachyrhynchos*	1	Auditory
9	06/08/07	eastern kingbird	*Tyrannus tyrannus*	1	Auditory
9	06/08/07	common yellowthroat	*Geothlypis trichas*	1	Auditory
9	06/08/07	black-and-white warbler	*Mniotilta varia*	1	Auditory
9	06/08/07	ruby-throated hummingbird	*Archilochus colubris*	1	Visual
9	06/08/07	bald eagle	*Haliaeetus leucocephalus*	1	Visual
9	06/08/07	common loon	*Gavia immer*	1	Visual
10	06/07/07	ovenbird	*Seiurus aurocapilla*	1	Auditory
10	06/07/07	great crested flycatcher	*Myiarchus crinitus*	1	Auditory
10	06/07/07	song sparrow	*Melospiza melodia*	1	Auditory
10	06/07/07	northern parula	*Parula americana*	1	Auditory
10	06/08/07	ovenbird	*Seiurus aurocapilla*	1	Auditory
10	06/08/07	blue jay	*Cyanocitta cristata*	1	Auditory
10	06/08/07	red-eyed vireo	*Vireo olivaceus*	1	Auditory
10	06/08/07	black-and-white warbler	*Mniotilta varia*	1	Auditory
11	06/07/07	bald eagle	*Haliaeetus leucocephalus*	1	Visual
11	06/07/07	alder flycatcher	*Empidonax alnorum*	1	Auditory
11	06/07/07	double-crested cormorant	*Phalacrocorax auritus*	1	Visual
11	06/07/07	tree swallow	*Tachycineta bicolor*	1	Visual
11	06/07/07	rose-breasted grosbeak	*Pheucticus ludovicianus*	1	Auditory
11	06/07/07	black-and-white warbler	*Mniotilta varia*	1	Auditory
11	06/07/07	great crested flycatcher	*Myiarchus crinitus*	1	Auditory
11	06/07/07	red-winged blackbird	*Agelaius phoeniceus*	1	Visual/Auditory
11	06/07/07	turkey vulture	*Cathartes aura*	3	Visual
11	06/07/07	common grackle	*Quiscalus quiscula*	1	Visual
11	06/08/07	double-crested cormorant	*Phalacrocorax auritas*	5	Visual
11	06/08/07	rose-breasted grosbeak	*Pheucticus ludovicianus*	1	Auditory
11	06/08/07	tree swallow	*Tachycineta bicolor*	13	Visual/Flyover
11	06/08/07	pileated woodpecker	*Dryocopus pileatus*	1	Visual
11	06/08/07	common grackle	*Quiscalus quiscula*	1	Visual
11	06/08/07	red-winged blackbird	*Agelaius phoeniceus*	1	Visual
11	06/08/07	bald eagle	*Haliaeetus leucocephalus*	1	Visual
11	06/08/07	American robin	*Turdus migratorius*	1	Flyover
11	06/08/07	great blue heron	*Ardea herodias*	1	Visual
11	06/08/07	brown-headed cowbird	*Molothrus ater*	2	Auditory
11	06/08/07	American goldfinch	*Carduelis tristis*	1	Auditory
11	06/08/07	eastern kingbird	*Tyrannus tyrannus*	1	Visual
11	06/08/07	northern flicker	*Colaptes auratus*	1	Auditory
***	06/07/07	belted kingfisher	*Ceryle alcyon*	1	Visual
***	06/08/07	pileated woodpecker	*Dryocopus pileatus*	1	Visual
***	06/08/07	Wilson's snipe	*Gallinago delicata*	1	Auditory
***	06/08/07	barn swallow	*Hirundo rustica*	1	Auditory
***	06/08/07	gray catbird	*Dumetella carolinensis*	1	Auditory
			Total Number of Bird Occurrences	**206**	

*** = Species identified in the Study Area, but not associates with sampling locations

Table 3-2: June 2007 Bird Species Summary - Humboldt Mill Site

Species Count	Common Name	Total # of Birds Observed
1	alder flycatcher	5
2	American crow	1
3	American goldfinch	8
4	American redstart	2
5	American robin	6
6	bald eagle	4
7	barn swallow	3
8	belted kingfisher	1
9	black-and-white warbler	5
10	black-throated green warbler	3
11	blue jay	1
12	blue-headed vireo	1
13	brown-headed cowbird	3
14	Canada goose	10
15	cedar waxwing	6
16	chestnut-sided warbler	3
17	chipping sparrow	7
18	common grackle	6
19	common loon	3
20	common yellowthroat	9
21	double-crested cormorant	6
22	downy woodpecker	3
23	eastern wood-pewee	1
24	European starling	3
25	field sparrow	2
26	golden-winged warbler	2
27	gray catbird	1
28	great blue heron	2
29	great crested flycatcher	3
30	green heron	2
31	hermit thrush	2
32	herring gull	2
33	hooded merganser	1
34	indigo bunting	2
35	mourning dove	4
36	Nashville warbler	7
37	northern flicker	4
38	northern parula	1
39	ovenbird	4
40	pileated woodpecker	3
41	red-breasted nuthatch	1
42	red-eyed vireo	9
43	red-winged blackbird	4
44	rock pigeon	5
45	rose-breasted grosbeak	2
46	ruby-throated hummingbird	1
47	sandhill crane	1
48	song sparrow	6
49	tree swallow	19
50	tufted titmouse	1
51	turkey vulture	5
52	veery	1
53	warbling vireo	1
54	white-throated sparrow	6
55	Wilson's snipe	1
56	yellow warbler	1

KEY:

	Observed only 1-3 total birds

Table 3-3: September 2007 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	*Scientific Name*	Number of Occurences	Type of Detection
1	09/12/07	blue jay	*Cyanocitta cristata*	5	Visual
1	09/12/07	rock pigeon	*Columba livia*	2	Visual / Flyover
1	09/12/07	northern flicker	*Colaptes auratus*	1	Visual
1	09/14/07	great blue heron	*Ardea herodias*	1	Visual
1	09/14/07	turkey vulture	*Cathartes aura*	2	Visual
1	09/14/07	red-tailed hawk	*Buteo jamaicensis*	1	Visual
1	09/14/07	Canada goose	*Branta canadensis*	5	Visual
1	09/14/07	pine siskin	*Carduelis pinus*	1	Visual
1	09/14/07	common loon	*Gavia immer*	1	Visual
1	09/14/07	dark-eyed junco	*Junco hyemalis*	2	Visual
2	09/12/07	pileated woodpecker	*Dryocopus pileatus*	1	Visual
2	09/12/07	Canada goose	*Branta canadensis*	72	Visual
2	09/12/07	American crow	*Corvus brachyrhynchos*	1	Auditory
2	09/12/07	turkey vulture	*Cathartes aura*	1	Visual
2	09/12/07	blue jay	*Cyanocitta cristata*	1	Visual
2	09/12/07	black-capped chickadee	*Poecile atricapillus*	1	Auditory
2	09/14/07	white-breasted nuthatch	*Sitta carolinensis*	1	Auditory
2	09/14/07	blue jay	*Cyanocitta cristata*	2	Visual
3	09/12/07	Canada goose	*Branta canadensis*	200	Visual/Auditory/Flyover
3	09/12/07	American crow	*Corvus brachyrhynchos*	1	Visual
3	09/12/07	blue jay	*Cyanocitta cristata*	1	Auditory
3	09/12/07	common raven	*Corvus corax*	1	Visual
3	09/12/07	black-capped chickadee	*Poecile atricapillus*	1	Auditory
3	09/14/07	American crow	*Corvus brachyrhynchos*	1	Auditory
3	09/14/07	blue jay	*Cyanocitta cristata*	1	Auditory
4	09/12/07	Canada goose	*Branta canadensis*	5	Visual
4	09/12/07	common raven	*Corvus corax*	1	Auditory
4	09/12/07	northern flicker	*Colaptes auratus*	3	Auditory
4	09/12/07	rock pigeon	*Columba livia*	15	Visual
4	09/12/07	black-capped chickadee	*Poecile atricapillus*	1	Auditory
4	09/14/07	blue jay	*Cyanocitta cristata*	1	Visual
4	09/14/07	Canada goose	*Branta canadensis*	70	Visual
4	09/14/07	ring-billed gull	*Larus delawarensis*	1	Visual
4	09/14/07	northern flicker	*Colaptes auratus*	1	Visual
4	09/14/07	rock pigeon	*Columba livia*	20	Visual
5	09/12/07	American crow	*Corvus brachyrhynchos*	2	Auditory
5	09/12/07	Canada goose	*Branta canadensis*	46	Auditory
5	09/12/07	black-capped chickadee	*Poecile atricapillus*	1	Auditory
5	09/12/07	northern flicker	*Colaptes auratus*	4	Visual
5	09/12/07	blue jay	*Cyanocitta cristata*	2	Visual
5	09/12/07	American robin	*Turdus migratorius*	2	Auditory
5	09/12/07	cedar waxwing	*Bombycilla cedrorum*	3	Visual
5	09/14/07	hairy woodpecker	*Picoides villosus*	1	Visual
5	09/14/07	black-capped chickadee	*Poecile atricapillus*	1	Visual
6	09/12/07	Canada goose	*Branta canadensis*	100	Visual
6	09/12/07	turkey vulture	*Cathartes aura*	1	Visual
6	09/14/07	wood duck	*Aix sponsa*	1	Auditory
6	09/14/07	blue jay	*Cyanocitta cristata*	1	Visual
6	09/14/07	white-breasted nuthatch	*Sitta carolinensis*	1	Auditory
7	09/12/07	black-capped chickadee	*Poecile atricapillus*	1	Auditory
7	09/12/07	blue jay	*Cyanocitta cristata*	1	Auditory
7	09/12/07	white-breasted nuthatch	*Sitta carolinensis*	1	Auditory
7	09/12/07	Canada goose	*Branta canadensis*	100	Auditory

Table 3-3 con't: September 2007 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	*Scientific Name*	Number of Occurences	Type of Detection
7	09/12/07	American crow	*Corvus brachyrhynchos*	1	Auditory
7	09/14/07	pileated woodpecker	*Dryocopus pileatus*	1	Auditory
7	09/14/07	swamp sparrow	*Melospiza georgiana*	1	Visual/Auditory
7	09/14/07	blue jay	*Cyanocitta cristata*	1	Auditory
7	09/14/07	Canada goose	*Branta canadensis*	25	Auditory
8	09/12/07	Canada goose	*Branta canadensis*	187	Visual/Auditory
8	09/12/07	blue jay	*Cyanocitta cristata*	2	Visual
8	09/12/07	northern flicker	*Colaptes auratus*	2	Visual
8	09/12/07	American crow	*Corvus brachyrhynchos*	3	Visual
8	09/12/07	American robin	*Turdus migratorius*	2	Auditory
8	09/14/07	Canada goose	*Branta canadensis*	84	Visual/Auditory
8	09/14/07	yellow-shafted flicker	*Colaptes auratus*	1	Visual
8	09/14/07	blue jay	*Cyanocitta cristata*	1	Visual
8	09/14/07	American robin	*Turdus migratorius*	1	Visual
9	09/12/07	American robin	*Turdus migratorius*	2	Auditory
9	09/12/07	black-capped chickadee	*Poecile atricapillus*	4	Visual/Auditory
9	09/12/07	American crow	*Corvus brachyrhynchos*	1	Auditory
9	09/12/07	sharp-shinned hawk	*Accipiter striatus*	1	Visual
9	09/12/07	Canada goose	*Branta canadensis*	50	Auditory
9	09/12/07	blue jay	*Cyanocitta cristata*	2	Auditory
9	09/12/07	herring gull	*Larus argentatus*	1	Visual
9	09/12/07	common yellowthroat	*Geothlypis trichas*	1	Auditory
9	09/12/07	pileated woodpecker	*Dryocopus pileatus*	1	Auditory
9	09/14/07	blue jay	*Cyanocitta cristata*	2	Auditory
9	09/14/07	Nashville warbler	*Vermivora ruficapilla*	1	Visual
10	09/12/07	Canada goose	*Branta canadensis*	100	Flyover
10	09/12/07	northern flicker	*Colaptes auratus*	1	Auditory
10	09/12/07	black-capped chickadee	*Poecile atricapillus*	1	Auditory
10	09/12/07	blue jay	*Cyanocitta cristata*	2	Visual
10	09/12/07	white-breasted nuthatch	*Sitta carolinensis*	1	Auditory
10	09/14/07	blue jay	*Cyanocitta cristata*	5	Auditory
11	09/12/07	blue jay	*Cyanocitta cristata*	3	Visual/Auditory
11	09/12/07	northern flicker	*Colaptes auratus*	1	Auditory
11	09/12/07	black-capped chickadee	*Poecile atricapillus*	4	Visual
11	09/12/07	American crow	*Corvus brachyrhynchos*	2	Auditory
11	09/12/07	Canada goose	*Branta canadensis*	33	Flyover
11	09/12/07	red-bellied woodpecker	*Melanerpes carolinus*	1	Auditory
11	09/12/07	belted kingfisher	*Ceryle alcyon*	1	Auditory
11	09/12/07	downy woodpecker	*Picoides pubescens*	1	Auditory
11	09/12/07	wood duck	*Aix sponsa*	2	Visual
11	09/14/07	blue jay	*Cyanocitta cristata*	2	Visual
11	09/14/07	wood duck	*Aix sponsa*	1	Visual
***	09/12/07	northern flicker	*Colaptes auratus*	1	Visual
***	09/12/07	Canada goose	*Branta canadensis*	100	Visual
***	09/12/07	mallard	*Anas platyrhynchos*	5	Visual
***	09/12/07	gadwall	*Anas strepera*	6	Visual
***	09/12/07	dark-eyed junco	*Junco hyemalis*	1	Visual
***	09/12/07	blue jay	*Cyanocitta cristata*	1	Visual
***	09/12/07	pied-billed grebe	*Podilymbus podiceps*	2	Visual
***	09/12/07	pileated woodpecker	*Dryocopus pileatus*	1	Auditory
***	09/12/07	red-tailed hawk	*Buteo jamaicensis*	1	Visual/Auditory
***	09/12/07	common yellowthroat	*Geothlypis trichas*	1	Visual
***	09/12/07	swamp sparrow	*Melospiza georgiana*	1	Visual

Table 3-3 con't: September 2007 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	*Scientific Name*	Number of Occurences	Type of Detection
***	09/12/07	Canada goose	*Branta canadensis*	130	Visual
***	09/12/07	pied-billed grebe	*Podilymbus podiceps*	11	Visual
***	09/12/07	green-winged teal	*Anas crecca*	8	Visual
***	09/12/07	wood duck	*Aix sponsa*	2	Visual
***	09/12/07	ruffed grouse	*Bonasa umbellus*	1	Visual
***	09/12/07	white-throated sparrow	*Zonotrichia albicollis*	1	Visual
***	09/12/07	American robin	*Turdus migratorius*	11	Visual
***	09/12/07	northern flicker	*Colaptes auratus*	1	Visual
***	09/12/07	Nashville warbler	*Vermivora ruficapilla*	1	Visual
***	09/14/07	blue jay	*Cyanocitta cristata*	1	Visual
***	09/14/07	mallard	*Anas platyrhynchos*	4	Visual
***	09/14/07	green-winged teal	*Anas crecca*	10	Visual
***	09/14/07	wood duck	*Aix sponsa*	1	Visual
			Total Number of Bird Occurrences	**1535**	

*** = Species identified in the Study Area, but not associated with sampling locations

Table 3-4: September 2007 Bird Species Summary

Species Count	Common Name	Total # of Birds Observed
1	American crow	12
2	American robin	18
3	belted kingfisher	1
4	black-capped chickadee	15
5	blue jay	37
6	Canada goose	1307
7	cedar waxwing	3
8	common loon	1
9	common raven	2
10	common yellowthroat	2
11	dark-eyed junco	3
12	downy woodpecker	1
13	gadwall	6
14	great blue heron	1
15	green-winged teal	18
16	hairy woodpecker	1
17	herring gull	1
18	mallard	9
19	Nashville warbler	2
20	northern flicker	15
21	pied-billed grebe	13
22	pileated woodpecker	4
23	pine siskin	1
24	red-bellied woodpecker	1
25	red-tailed hawk	2
26	ring-billed gull	1
27	rock pigeon	37
28	ruffed grouse	1
29	sharp-shinned hawk	1
30	swamp sparrow	2
31	turkey vulture	4
32	white-breasted nuthatch	4
33	white-throated sparrow	1
34	wood duck	7
35	yellow-shafted flicker	1

KEY:

	Observed only 1-3 total birds

TABLE 3-5a: SMALL MAMMAL SURVEY SAMPLING POINT DATA

Kennecott Eagle Minerals Company - Humboldt Mill Site

May 18, 2007 - Day 1

Sampling Point	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***
1	O		deer mouse	*Peromyscus maniculatus*	O		deer mouse	*Peromyscus maniculatus*
2	O		O - bait gone		O		O	
3	X		O		O		O	
4	O		O		O		O	
5	O - bait gone		*		O		O	
6	X		O		O		X	
7	O		O		O		O	
8	O		O		O		O	
9	O - bait gone		O		least chipmunk	*Eutamias minimus*	least chipmunk	*Eutamias minimus*
10	O		O		O		O	
11	O		O		eastern chipmunk	*Tamias striatus*	eastern chipmunk	*Tamias striatus*

O=Trap unsnapped
X=Trap snapped
* song sparrow trapped

TABLE 3-5b: SMALL MAMMAL SURVEY SAMPLING POINT DATA

Kennecott Eagle Minerals Company - Humboldt Mill Site

May 19, 2007 - Day 2

Sampling Point	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***
1	deer mouse	*Peromyscus maniculatus*	O		O		deer mouse	*Peromyscus maniculatus*
2	O - bait gone		O - bait gone		O		O	
3	O - bait gone		O		O		O	
4	O		O		X		O	
5	O - bait gone		O		O		O	
6	O		O		O		O	
7	O - bait gone		O - bait gone		O		O	
8	O		O		O		O	
9	X		O		O		white-footed mouse	*Peromyscus leucopus*
10	O - bait gone		X		X		deer mouse	*Peromyscus maniculatus*
11	O		O		eastern chipmunk	*Tamias striatus*	eastern chipmunk	*Tamias striatus*

* O=Trap unsnapped
X=Trap snapped

TABLE 3-5c: SMALL MAMMAL SURVEY SAMPLING POINT DATA

Kennecott Eagle Minerals Company - Humboldt Mill Site

May 20, 2007 - Day 3

Sampling Point	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***
1	O		O		O		deer mouse	*Peromyscus maniculatus*
2	O		O		O		O	
3	O		O		O		O	
4	O		O		O		O	
5	O		O		O		X	
6	O		O		O		O	
7	O		O		O		O	
8	O		O		O		O	
9	O - bait gone		O		X		deer mouse	*Peromyscus maniculatus*
10	O		O		O		O	
11	O		O		O		O	

* O=Trap unsnapped
X=Trap snapped

TABLE 3-6a: FROG & TOAD SURVEY SAMPLING POINT DATA

Kennecott Eagle Minerals Company - Humboldt Mill Site

May 17, 2007 - Day 1

Sampling Point	Call Index Value *	Species		Start Time	Temp
		Common Name	***Scientific Name***		
	3	northern spring peeper	*Pseudacris crucifer*		
	1	western chorus frog	*Pseudacris triseriata*		
1	1	northern leopard frog	*Rana pipiens*	9:30 PM	55° F
	3	northern spring peeper	*Pseudacris crucifer*		
2	1	eastern american toad	*Bufo americanus*	10:05 PM	48° F
	3	northern spring peeper	*Pseudacris crucifer*		
	2	eastern american toad	*Bufo americanus*		
3	1	northern leopard frog	*Rana pipiens*	10:27 PM	49° F
	2	northern spring peeper	*Pseudacris crucifer*		
	1	western chorus frog	*Pseudacris triseriata*		
4	1	eastern american toad	*Bufo americanus*	10:40 PM	51° F
	3	northern spring peeper	*Pseudacris crucifer*		
5	1	western chorus frog	*Pseudacris triseriata*	11:04 PM	50° F

* 1=Individuals can be counted and there is space between calls
2=Individuals can be counted but there is some overlapping of calls
3=Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

TABLE 3-6b: FROG & TOAD SURVEY SAMPLING POINT DATA

Kennecott Eagle Minerals Company - Humboldt Mill Site

May 18, 2007 - Day 2

Sampling Point	Call Index Value *	Species		Start Time	Temp
		Common Name	***Scientific Name***		
	3	northern spring peeper	*Pseudacris crucifer*		
	1	western chorus frog	*Pseudacris triseriata*		
1	1	northern leopard frog	*Rana pipiens*	8:35 PM	73° F
2	N/A	N/A		9:05 PM	67° F
	3	northern spring peeper	*Pseudacris crucifer*		
	2	gray tree frog	*Hyla versicolor*		
	1	western chorus frog	*Pseudacris triseriata*		
3	1	green frog	*Rana clamitans*	9:30 PM	63° F
	3	northern spring peeper	*Pseudacris crucifer*		
4	2	gray tree frog	*Hyla versicolor*	9:47 PM	63° F
	3	northern spring peeper	*Pseudacris crucifer*		
	2	gray tree frog	*Hyla versicolor*		
	1	eastern american toad	*Bufo americanus*		
5	1	western chorus frog	*Pseudacris triseriata*	10:14 PM	67° F

* 1=Individuals can be counted and there is space between calls
2=Individuals can be counted but there is some overlapping of calls
3=Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

TABLE 3-6c: FROG & TOAD SURVEY SAMPLING POINT DATA

Kennecott Eagle Minerals Company - Humboldt Mill Site

June 7, 2007 - Day 3

Sampling Point	Call Index Value *	Species		Start Time	Temp
		Common Name	***Scientific Name***		
	3	northern spring peeper	*Pseudacris crucifer*		
	2	western chorus frog	*Pseudacris triseriata*		
1	2	eastern american toad	*Bufo americanus*	9:35 PM	71° F
	3	northern spring peeper	*Pseudacris crucifer*		
	2	eastern american toad	*Bufo americanus*		
2	1	northern leopard frog	*Rana pipiens*	10:10 PM	67° F
	2	northern spring peeper	*Pseudacris crucifer*		
	1	gray tree frog	*Hyla versicolor*		
3	2	eastern american toad	*Bufo americanus*	10:30 PM	68° F
	1	eastern american toad	*Bufo americanus*		
	3	gray tree frog	*Hyla versicolor*		
4	2	northern spring peeper	*Pseudacris crucifer*	10:45 PM	68° F
	3	northern spring peeper	*Pseudacris crucifer*		
5	2	western chorus frog	*Pseudacris triseriata*	10:14 PM	68° F

* 1=Individuals can be counted and there is space between calls

2=Individuals can be counted but there is some overlapping of calls

3=Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

TABLE 4-1: PLANT SPECIES LIST FOR WETLAND EE AND BLACK RIVER WETLAND AT HUMBOLDT MILL SITE

June 7, 2007

SITE	SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	RELATIVE ABUNDANCE	GROWTH HABIT	COEFF. OF CONSERV.
Wetland EE (along US-41). Emergent interior of cattails with scrub-shrub border of willow. Scattered dead conifers. Overburden pile on south side.	Anemone quinquefolia	Wood Anemone	Yes	FAC	0	Uncommon	Herb	5
	Aster puniceus (incl. A. firmus)	Swamp Aster	Yes	OBL	-5	Uncommon	Herb	5
	Betula papyrifera	Paper Birch	Yes	FACU+	2	Uncommon	Tree	2
	Calamagrostis canadensis	Blue-joint	Yes	OBL	-5	Common	Herb	3
	Carex aquatilis	Aquatic Sedge	Yes	OBL	-5	Locally Common	Herb	7
	Carex canescens	Hoary Sedge	Yes	OBL	-5	Uncommon	Herb	8
	Carex stipata	Stipitate Sedge	Yes	[OBL]	-5	Uncommon	Herb	1
	Carex stricta	Strict Sedge	Yes	OBL	-5	Locally Common	Herb	4
	Cirsium palustre	European Swamp Thistle	No	[FACW+]	-4	Common	Herb	0
	Cornus canadensis	Bunchberry; Dwarf Cornel	Yes	FAC	0	Local	Herb	6
	Cornus stolonifera	Red-osier Dogwood	Yes	FACW	-3	Uncommon	Shrub	2
	Equisetum sylvaticum	Woodland Horsetail	Yes	FACW	-3	Local	Herb	5
	Fragaria virginiana	Wild Strawberry	Yes	FAC-	1	Uncommon	Herb	2
	Iris versicolor	Varicolored Iris	Yes	OBL	-5	Uncommon	Herb	5
	Juncus effusus	Soft Rush	Yes	OBL	-5	Occasional	Herb	3
	Ledum groenlandicum	Labrador-Tea	Yes	OBL	-5	Uncommon	Shrub	8

TABLE 4-1 con't: PLANT SPECIES LIST FOR WETLAND EE AND BLACK RIVER WETLAND AT HUMBOLDT MILL SITE

June 7, 2007

SITE	SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	RELATIVE ABUNDANCE	GROWTH HABIT	COEFF. OF CONSERV.
Wetland EE (along US-41). Emergent interior of cattails with scrub-shrub border of willow. Scattered dead conifers. Overburden pile on south side.	Lycopus americanus	American Water-horehound	Yes	OBL	-5	Local	Herb	2
	Mentha arvensis	Field Mint	Yes	FACW	-3	Uncommon	Herb	3
	Picea mariana	Black Spruce	Yes	FACW	-3	Uncommon	Tree	6
	Pinus banksiana	Jack Pine	Yes	FACU	3	Uncommon	Tree	5
	Populus balsamifera	Balsam Poplar	Yes	FACW	-3	Uncommon	Tree	2
	Populus tremuloides	Quaking Aspen	Yes	FAC	0	Uncommon	Tree	1
	Pyrola elliptica	Elliptic Wintergreen	Yes	[UPL]	5	Uncommon	Herb	6
	Ribes glandulosum	Skunk Currant	Yes	FACW	-3	Uncommon	Shrub	5
	Rubus strigosus (R. idaeus ssp. strigosus)	Wild Red Raspberry	Yes	FACW-	-2	Uncommon	Herb	2
	Rumex orbiculatus	Great Water Dock	Yes	OBL	-5	Uncommon	Herb	9
	Salix bebbiana	Bebb Willow	Yes	FACW+	-4	Uncommon	Shrub	1
	Salix petiolaris	Petioled Willow	Yes	FACW+	-4	Common	Shrub	1
	Salix pyrifolia	Balsam Willow	Yes	FACW+	-4	Frequent	Shrub	8
	Scirpus cyperinus	Wool-grass	Yes	OBL	-5	Occasional	Herb	5
	Solidago altissima	Tall Goldenrod	Yes	FACU	3	Uncommon	Herb	1
	Solidago gigantea	Giant Goldenrod	Yes	FACW	-3	Uncommon	Herb	3
	Spartina pectinata	Prairie Cordgrass	Yes	FACW+	-4	Uncommon	Herb	5
	Spiraea alba	White Meadow-sweet	Yes	FACW+	-4	Occasional	Shrub	4

TABLE 4-1 con't: PLANT SPECIES LIST FOR WETLAND EE AND BLACK RIVER WETLAND AT HUMBOLDT MILL SITE

June 7, 2007

SITE	SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	RELATIVE ABUNDANCE	GROWTH HABIT	COEFF. OF CONSERV.
Wetland EE (along US-41). Emergent interior of cattails with scrub-shrub border of willow. Scattered dead conifers. Overburden pile on south side.	Tanacetum vulgare	Common Tansy	No	[UPL]	5	Uncommon	Herb	0
	Taraxacum officinale	Common Dandelion	No	FACU	3	Uncommon	Herb	0
	Typha latifolia	Broad-leaved Cattail	Yes	OBL	-5	Abundant	Herb	1
	Count: 37			**Average:**	**-2.43**		**Average:**	**3.7**
Scrub-shrub portions of Black River Wetland (east of overburden hill and former RR).	Alnus incana ssp. rugosa	Speckled Alder	Yes	OBL	-5	Abundant	Shrub	5
	Myrica gale	Sweet Gale	Yes	OBL	-5	Very Common	Shrub	6
	Onoclea sensibilis	Sensitive Fern	Yes	FACW	-3	Uncommon	Herb	2
	Picea mariana	Black Spruce	Yes	FACW	-3	Uncommon	Tree	6
	Salix bebbiana	Bebb Willow	Yes	FACW+	-4	Occasional	Shrub	1
	Salix sp.	Willow	No	[FACW]	-3	Very Common	Shrub	3
	Spiraea alba	White Meadow-sweet	Yes	FACW+	-4	Occasional	Shrub	4
	Count: 7			**Average:**	**-3.86**		**Average:**	**3.9**
Emergent portions of Black River Wetland (east of overburden hill and former RR).	Calamagrostis canadensis	Blue-joint	Yes	OBL	-5	Locally Common	Herb	3
	Carex aquatilis	Aquatic Sedge	Yes	OBL	-5	Common	Herb	7

TABLE 4-1 con't: PLANT SPECIES LIST FOR WETLAND EE AND BLACK RIVER WETLAND AT HUMBOLDT MILL SITE

June 7, 2007

SITE	SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	RELATIVE ABUNDANCE	GROWTH HABIT	COEFF. OF CONSERV.
Emergent portions of Black River Wetland (east of overburden hill and former RR).	Cirsium palustre	European Swamp Thistle	No	[FACW+]	-4	Uncommon	Herb	0
	Cornus stolonifera	Red-osier Dogwood	Yes	FACW	-3	Locally Common	Shrub	2
	Phalaris arundinacea	Reed Canary Grass	No	FACW+	-4	Locally Common	Herb	0
	Picea mariana	Black Spruce	Yes	FACW	-3	Uncommon	Tree	6
	Rubus strigosus (R. idaeus ssp. strigosus)	Wild Red Raspberry	Yes	FACW-	-2	Occasional	Herb	2
	Rumex orbiculatus	Great Water Dock	Yes	OBL	-5	Uncommon	Herb	9
	Sagittaria latifolia	Broad-leaved Arrowhead	Yes	OBL	-5	Local	Herb	1
	Sparganium eurycarpum	Broad-fruit Bur-reed	Yes	OBL	-5	Local	Herb	5
	Spiraea alba	White Meadow-sweet	Yes	FACW+	-4	Occasional	Shrub	4
	Typha latifolia	Broad-leaved Cattail	Yes	OBL	-5	Locally Common	Herb	1
	Count: 12			**Average:**	**-4.17**		**Average:**	**3.3**
Forested areas on higher ground interspersed throughout Black River Wetland	Abies balsamea	Balsam Fir	Yes	FACW	-3	Common	Tree	3
	Aralia nudicaulis	Wild Sarsaparilla	Yes	FACU	3	Occasional	Herb	5
	Arctium minus	Bur-dock	No	[UPL]	5	Uncommon	Herb	0
	Betula papyrifera	Paper Birch	Yes	FACU+	2	Uncommon	Tree	2
	Carex intumescens	Tumid Sedge	Yes	FACW+	-4	Uncommon	Herb	3

TABLE 4-1 con't: PLANT SPECIES LIST FOR WETLAND EE AND BLACK RIVER WETLAND AT HUMBOLDT MILL SITE

June 7, 2007

SITE	SCIENTIFIC NAME	ENGLISH NAME	NATIVE?	WETL. IND. CODE	WETL. IND. NO.	RELATIVE ABUNDANCE	GROWTH HABIT	COEFF. OF CONSERV.
Forested areas on higher ground interspersed throughout Black River Wetland	Circaea alpina	Alpine Enchanter's-nights	Yes	FACW	-3	Local	Herb	4
	Cirsium palustre	European Swamp Thistle	No	[FACW+]	-4	Uncommon	Herb	0
	Dryopteris intermedia	Intermediate Fern	Yes	FAC	0	Occasional	Herb	5
	Gymnocarpium dryopteris	Oak Fern	Yes	FAC	0	Very Common	Herb	5
	Oxalis acetosella	Northern Wood-sorrel	Yes	[FACU]	3	Local	Herb	7
	Prunella vulgaris	Self-Heal	No	FAC	0	Uncommon	Herb	0
	Prunus virginiana	Choke Cherry	Yes	FAC-	1	Uncommon	Shrub	2
	Rubus pubescens	Dwarf Raspberry	Yes	FACW+	-4	Occasional	Herb	4
	Rubus strigosus (R. idaeus ssp. strigosus)	Wild Red Raspberry	Yes	FACW-	-2	Uncommon	Herb	2
	Trientalis borealis	Starflower	Yes	FAC+	-1	Uncommon	Herb	5
	Trillium cernuum	Nodding Trillium	Yes	FAC	0	Uncommon	Herb	5
	Count: 16			**Average:**	**-0.44**		**Average:**	**3.3**

Table Abbreviations:

WETL. IND. CODE – Wetland Indicator Code

WETL. IND. NO. – Wetland Indicator Number

COEFF. OF CONSERV. – Coefficient of Conservatism

Table 4-1 Notes:

1. Wetland Indicator Codes
Wetland indicator codes are three-letter codes that indicate a plant's tolerance of wetland conditions. Each plant that occurs in Michigan has been assigned by a panel of botanists one of five wetland indicator codes. The Michigan Department of Natural Resources published these codes in 2001 as *Floristic Quality Assessment with Wetland Categories and Examples of Computer Applications for the State of Michigan* (Herman et al., 2001). The five codes are OBL (obligate wetland) species, FACW (facultative wetland) species, FAC (facultative) species, FACU (facultative upland) species, and UPL (upland) species. By definition, OBL species occur in wetlands 99% of the time; FACW species occur in wetlands greater than 66% of the time; FAC species occur in wetlands 50% of the time; FACU species occur in wetlands less than 33% of the time; UPL species occur in wetlands less than 1% of the time. The plus and minus signs that accompany some of the codes indicate a greater (+) or lesser (-) affinity for wetlands.

2. Wetland Indicator Numbers
To quantitatively determine the degree to which the vegetation is dominated by wetland species, each wetland indicator code has been assigned a wetness coefficient: UPL = 5, FACU- = 4, FACU = 3, FACU+ = 2, FAC- = 1, FAC = 0, FAC+ = -1, FACW- = -2, FACW = -3, FACW+ = -4, OBL = -5. The average of these numbers serves as an index for evaluating the "wetness" of the vegetation at a site. When the average is greater than zero, the vegetation consists predominantly of non-wetland species (ranging from FAC- to UPL), whereas a negative average indicates a prevalence of wetland species (ranging from FAC+ to OBL).

3. Growth Habit
The growth habit of a species refers to whether it is a tree, a shrub, or an herbaceous plant.

4. Coefficient of Conservatism
Coefficients of conservatism are numbers ranging from zero to ten which have been assigned to Michigan plant species by a panel of botanists. These numbers are intended to represent the "conservatism" of the species, which is defined as "an estimated probability that a plant is likely to occur in a landscape relatively unaltered from what is believed to be pre-European settlement condition" (Herman, et al., 2001). In this system, non-native species and weedy native species are assigned zeroes, while species known to be highly intolerant of habitat alteration are assigned tens. The process of assigning numbers involved considerable subjectivity, so the system lacks scientific rigor. Nevertheless, it is useful since species with high numbers are indicative of high quality natural habitats. A high number is also an indication that a species may be uncommon or even rare.

PHOTOGRAPHS

Photos 1 and 2: Bird and Small Mammal Sampling Point Photos – Sampling Point 1

North View

South View

Sampling Point 1. An open area disturbed from historical mining. Generally consists of a field bordering immature white spruce and quaking aspen stands. Also near the edge of a water-filled mining pit with steep rocky faces. Common herbaceous plants include late goldenrod and grasses.

Photos 3 and 4: Bird and Small Mammal Sampling Point Photos – Sampling Point 2

North View

South View

Sampling Point 2. An abandoned railroad grade with hummock sedge emergent wetlands on both sides. The emergent wetlands contain patches of scrub-shrub/forested wetland dominated by tag alder. Common herbaceous species include sedges and reed canary grass.

Photos 5 and 6: Bird and Small Mammal Sampling Point Photos – Sampling Point 3

North View

South View

Sampling Point 3. Existing power line with maintained right-of-way dominated by bracken fern and scrub hazelnut. Both sides of the right-of-way are dominated by quaking and big tooth aspen, white birch, and sugar maple in varying topography. Site is elevated above the Humboldt mining buildings with an open view to the south.

Photos 7 and 8: Bird and Small Mammal Sampling Point Photos – Sampling Point 4

North View

South View

Sampling Point 4. Edge of an existing trail with a generally open view of mixed emergent and scrub-shrub wetlands dominated by cattail, tag alder and scattered conifers, with scrub aspen growth to the north.

Photos 9 and 10: Bird and Small Mammal Sampling Point Photos – Sampling Point 5

North View

South View

Sampling Point 5. Paved road crossing of extensive open hummock sedge- dominated emergent wetland with a stream corridor and a fringe of black spruce and tag alder scrub wetland. There is an open view in all directions. Mixed hardwood and conifer uplands are adjacent.

Photos 11 and 12: Bird and Small Mammal Sampling Point Photos – Sampling Point 6

North View

South View

Sampling Point 6. Edge of emergent wetland with a beaver impoundment and open water areas surrounded by black spruce and tag alder. Adjacent surrounding upland habitat is comprised of dense, mature closed-canopy white spruce, hemlock, sugar maple, and white birch on steep terrain. View is open over the wetland.

Photos 13 and 14: Bird and Small Mammal Sampling Point Photos – Sampling Point 7

North View

South View

Sampling Point 7. Edge of a saturated emergent wetland comprised of sedges and rushes, with patches of open water area and dead standing timber. The surrounding upland habitat bordering the wetland is comprised of dense, mature, closed-canopy white spruce, hemlock, sugar maple, and white birch on rolling terrain. The view over the wetland is open.

Photos 15 and 16: Bird and Small Mammal Sampling Point Photos – Sampling Point 8

North View

South View

Sampling Point 8. Edge of an extensive historic tailings basin. Some portions are dominated by herbaceous upland species such as tall goldenrod and orange hawkweed. Other portions are covered by scrub willow, quaking aspen, and emergent wetland plants. Adjacent upland habitats are dominated by a mix of scattered white spruce, balsam fir and big tooth aspen.

Photos 17 and 18: Bird and Small Mammal Sampling Point Photos – Sampling Point 9

North View

South View

Sampling Point 9. Outlet of Lake Lory. There is a view of an emergent/scrub-shrub/forested wetland riparian zone along the outlet stream, where a beaver dam is present. Common wetland species include black spruce, balsam fir, and tag alder. Adjacent upland habitat is comprised of mixed spruce, sugar maple and big tooth aspen.

Photos 19 and 20: Bird and Small Mammal Sampling Point Photos – Sampling Point 10

North View

South View

Sampling Point 10. Remote upland habitat of mixed deciduous and coniferous forest. Common tree species include red maple, sugar maple, and red oak, with a ground cover of thimbleberry and bracken fern. Terrain is rolling, with rocky ridges, a dense canopy, and evidence of historic logging.

Photos 21 and 22: Bird and Small Mammal Sampling Point Photos – Sampling Point 11

North View

South View

Sampling Point 11. Causeway between Lake Lory and open water body. Dead standing timber and submergent wetlands are present north of causeway. The heron nesting colony and eagle nest are visible from this location. South of the causeway is forested and scrub shrub wetland. Common plant species include balsam fir and tag alder.

Photos 23 and 24: Wetland Photos – Wetland EE

View East from U.S. 41

View East From Interior

Photos 25 and 26: Wetland Photos – Black River Wetland

View South From Interior

View East From Abandoned Railroad Grade

APPENDIX

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
UPPER PENINSULA DISTRICT OFFICE

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

November 20, 2007

Mr. Matt MacGregor
King & MacGregor Environmental, Inc.
2520 Woodmeadow Drive SE
Grand Rapids, Michigan 49546

Dear Mr. MacGregor:

SUBJECT: Wetland Identification Report
Wetland Identification File Number: 07-52-0001-WA

The Department of Environmental Quality (DEQ) conducted a Level 3 Wetland Identification Review on 192 acres of property (Property Tax Identification Number 52-06-211-001-20) located in Town 47N, Range 29W, Section 11, Humboldt Township, Marquette County on August 22 and September 12, 2007. The wetland review was conducted in accordance with Part 303, Wetland Protection of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); and Rule 4 (1), Wetland Identification and Assessment (R 281.924) of the Administrative Rules for Part 303. This is a report of our findings in response to your Wetland Identification Application.

The DEQ staff walked the flagged boundaries with the consultant as requested in your wetland identification application. Based on our on-site investigation, which included review of plant communities, hydrologic indicators and soils, and an in-office review of other pertinent information, the DEQ accepts the boundaries as modified on September 12, 2007. Enclosed is a site map of the identified area that was provided by your consultant and annotated by the DEQ. It will be noted that the modified map shows a reduced assessment area, these reductions are accepted by the DEQ. It is also noted there is a non-wetland ditch running westerly, just south of the old mine buildings, which empties into a wetland area via a culvert under highway 601 which is not shown on this wetland map. This map identifies both regulated and unregulated wetland and non-wetland (upland) areas within the identification area.

For those areas identified as regulated wetland on the site map, specifically wetlands A, B, D, E/F, G, H, J, K, L, M, N, O, P, Q, R, CC/T/U, AA, and BB, please be advised that any of the following activities require a permit under Part 303:

a) Deposit or permit the placing of fill material in a regulated wetland.
b) Dredge, remove, or permit the removal of soil or minerals from regulated wetland.
c) Construct, operate, or maintain any use or development in a regulated wetland.
d) Drain surface water from a regulated wetland.

For those areas identified as non-wetland (upland) and non-regulated wetland, specifically wetlands I, S and V on the site map, the DEQ lacks jurisdiction under Part 303 for activities occurring in those areas. The non-regulated wetland(s) is (are) not regulated since they are not contiguous to the Great Lakes, an inland lake or pond, or a river or stream.

You may request the DEQ reassess the subject review area, or any portion of the review area, should you disagree with the findings, within 60 days of the date of this report. A written request to reassess the Wetland Identification Review area must be accompanied by supporting evidence with regard to wetland vegetation, soils or hydrology different from, or in addition to, the information relied upon by DEQ staff in preparing this report. The request should be submitted to:

Wetland Identification Program
Land and Water Management Division
Department of Environmental Quality
P.O. Box 30458
Lansing, Michigan 48909-7756

Please be aware that this identification report does not constitute a determination of the presence of wetland that may be regulated under local ordinances or federal law. The U.S. Army Corps of Engineers (USACE) retains regulatory authority over certain wetlands pursuant to Section 404 of the Clean Water Act (CWA), and specifically those wetlands associated with traditionally navigable waters of the state. Navigable waters are generally the Great Lakes, their connecting waters, and river systems and lakes connected to these waters. In other areas of the state, the DEQ is responsible for identification of wetland boundaries for purposes of compliance with the CWA under an agreement with the U.S. Environmental Protection Agency. Your assessment area does not appear to be within those areas also regulated by the USACE. However, should you desire more information, please contact the USACE at 313-226-2218.

This Wetland Identification Report is limited to findings pursuant to Part 303 and does not constitute a determination of jurisdiction under other DEQ administered programs. Any land use activities undertaken on the assessed parcel may be subject to regulation pursuant to the NREPA under the following programs:

Part 91, Soil Erosion and Sedimentation Control
Part 301, Inland Lakes and Streams

The findings contained in this report are binding on the DEQ until November 20, 2010, a period of three years from the date of this Wetland Identification Report unless a

reassessment is conducted. Please contact me if you have any questions regarding this report.

Sincerely,

Mark Feldhauser
District Supervisor
Land and Water Management Division
906-346-8525

ams
Enclosure

cc: Ms. Wendy Veltman, DEQ
Mr. Thomas Quigley, Minerals Processing Corp.
Mr. Peter O'Dovero, O'Dovero Properties
Marquette County CEA
Marquette County Health Department
Humboldt Township Clerk

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
Land and Water Management Division

November 6, 2007

King & MacGregor Environmental, Inc.
2520 Woodmeadow Drive SE
Grand Rapids, MI 49546

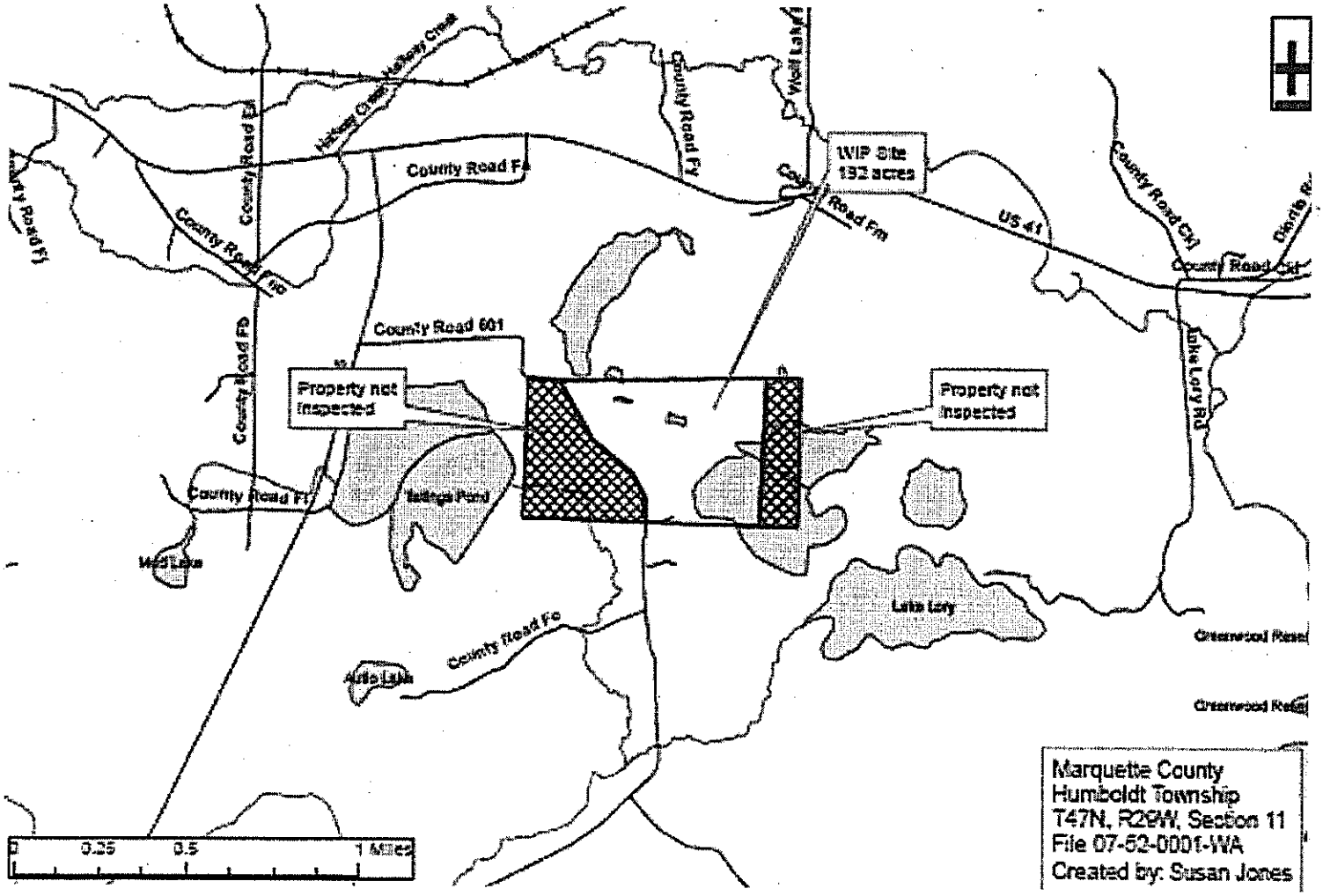
King & MacGregor Environmental, Inc. Photo Album

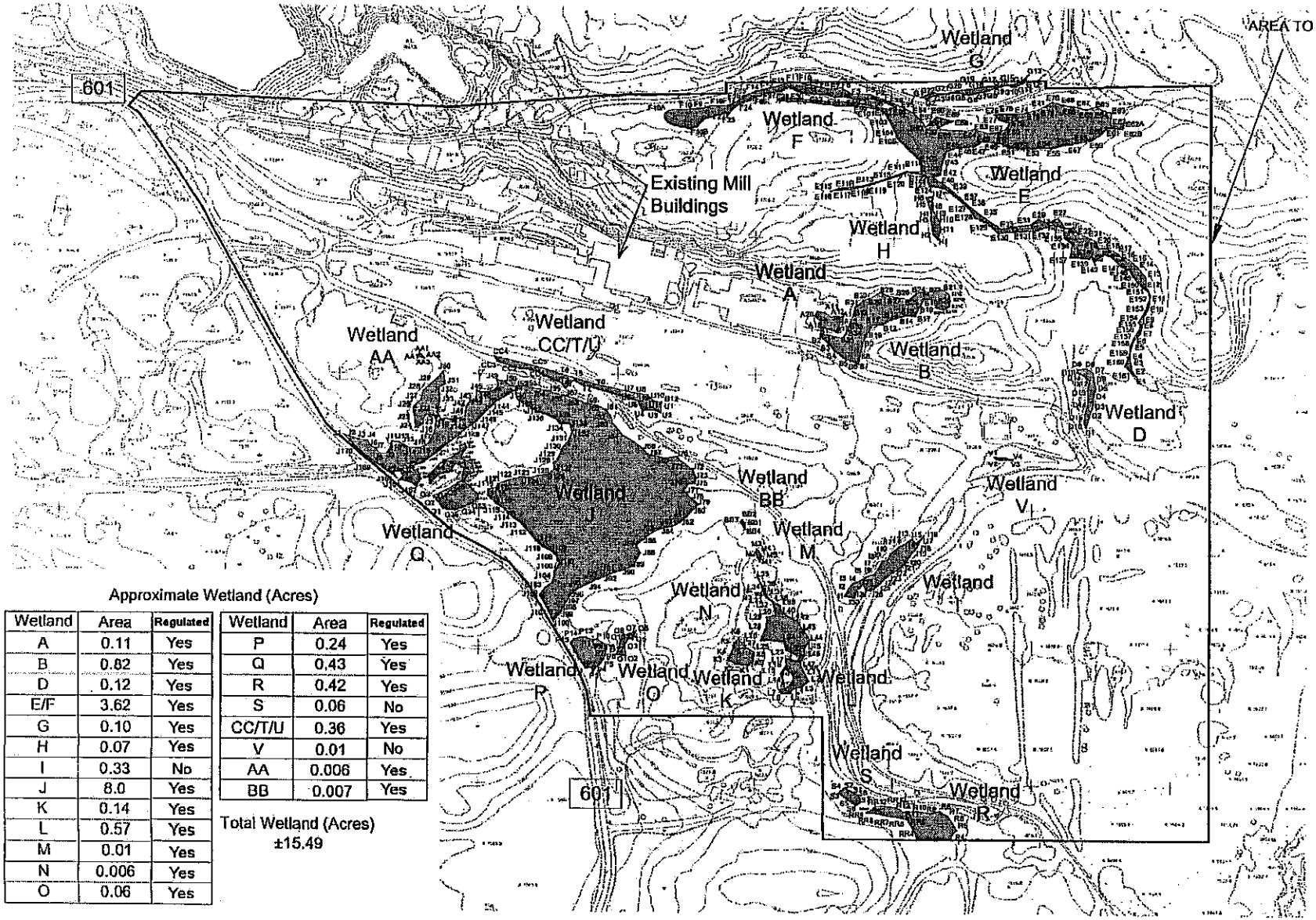
SUBJECT: Wetland Identification Report
Wetland Identification File Number 07-52-0001-WA

The Department of Environmental Quality (DEQ) captured images on property (property tax identification number 52-06-211-001-20) located in Town 47N, Range 29W, Section 11, Humboldt Township, Marquette County on September 12, 2007.

Photo Album

Photo's taken by: Brian Anderson





Approximate Wetland (Acres)

Wetland	Area	Regulated
A	0.11	Yes
B	0.82	Yes
D	0.12	Yes
E/F	3.62	Yes
G	0.10	Yes
H	0.07	Yes
I	0.33	No
J	8.0	Yes
K	0.14	Yes
L	0.57	Yes
M	0.01	Yes
N	0.006	Yes
O	0.06	Yes

Wetland	Area	Regulated
P	0.24	Yes
Q	0.43	Yes
R	0.42	Yes
S	0.06	No
CC/T/U	0.36	Yes
V	0.01	No
AA	0.006	Yes
BB	0.007	Yes

Total Wetland (Acres)
±15.49

This drawing showing those areas containing wetland and not containing wetland is an approximation of the boundaries flagged on-site.

This drawing does not authorize or permit activities requiring a permit in accordance with Part 303 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

0 80' 160' 320'
Scale

King & MacGregor Environmental, Inc.

N
NORTH

Wetland Determination For:
Humboldt Mill Site
Humboldt Township
Marquette County, Michigan

DATE	DESCRIPTION
7/11/07	WIP App
8/28/07	Revised - WIP App

PROJECT NUMBER
06259

SHEET NAME
WIP PLAN

SHEET NUMBER
FIG-1

B-2

Terrestrial Biology Reports - 2008

Biological Survey Supplement 2008

BIOLOGICAL SURVEY SUPPLEMENT 2008:

PLANT COMMUNITIES AND WILDLIFE EVALUATION

Kennecott Eagle Minerals Company
Humboldt Mill
Marquette County, Michigan

Prepared for:

Foth Infrastructure & Environmental, LLC

Prepared by:

King & MacGregor Environmental, Inc.
2520 Woodmeadow SE
Grand Rapids, Michigan 49546
www.king-macgregor.com

August 27, 2008

TABLE OF CONTENTS

1.0 INTRODUCTION ..... Page 1
- 1.1 Study Area ..... Page 1
- 1.2 Survey Purpose ..... Page 1

2.0 THREATENED AND ENDANGERED PLANT SPECIES - Detailed Study Area ..... Page 1
- 2.1 Methods ..... Page 1
- 2.2 Results ..... Page 1
- 2.3 Discussion ..... Page 1

3.0 WILDLIFE ..... Page 2
- 3.1 Birds - Overall Study Area ..... Page 2
  - 3.1.1 Methods ..... Page 2
  - 3.1.2 Results ..... Page 2
  - 3.1.3 Discussion ..... Page 3
- 3.2 Mammals ..... Page 3
  - 3.2.1 Small Mammals- Overall Study Area ..... Page 3
    - 3.2.1.1 Methods ..... Page 3
    - 3.2.1.2 Results ..... Page 3
    - 3.2.1.3 Discussion ..... Page 4
  - 3.2.2 Large Mammals - Overall Study Area ..... Page 4
    - 3.2.2.1 Methods ..... Page 4
    - 3.2.2.2 Results ..... Page 4
    - 3.2.2.3 Discussion ..... Page 4
- 3.3 Frogs and Toads- Overall Study Area ..... Page 4
  - 3.3.1 Methods ..... Page 4
  - 3.3.2 Results ..... Page 5
  - 3.3.3 Discussion ..... Page 5
- 3.4 Threatened and Endangered Wildlife Species - Overall Study Area ..... Page 5
  - 3.4.1 Methods ..... Page 5
  - 3.4.2 Results ..... Page 5
  - 3.4.3 Discussion ..... Page 6

4.0 CONCLUSION ..... Page 6

REFERENCES AND LITERATURE CITED

TABLES

Table 3-1	June 2008 Bird Sampling Point Data – Humboldt Mill Site
Table 3-2	June 2008 Bird Species Summary – Humboldt Mill Site
Table 3-3a	Small Mammal Survey: July 14, 2008 – Humboldt Mill Site
Table 3-3b	Small Mammal Survey: July 15, 2008 – Humboldt Mill Site
Table 3-3c	Small Mammal Survey: July 16, 2008 – Humboldt Mill Site
Table 3-4a	Frog and Toad Survey: May 28, 2008 – Humboldt Mill Site
Table 3-4b	Frog and Toad Survey: May 29, 2008 – Humboldt Mill Site
Table 4-1	Incidental Wildlife Species 2008 Data

FIGURES

Figure 1-1	Project Location
Figure 1-2	Study Area and Sample Location Map

PHOTOGRAPHS

Photos 1 and 2	Sampling Point 1 Photos – Bird and Small Mammals
Photos 3 and 4	Sampling Point 2 Photos– Bird and Small Mammals
Photos 5 and 6	Sampling Point 3 Photos– Bird and Small Mammals
Photos 7 and 8	Sampling Point 4 Photos– Bird and Small Mammals
Photos 9 and 10	Sampling Point 5 Photos– Bird and Small Mammals
Photos 11 and 12	Sampling Point 6 Photos– Bird and Small Mammals
Photos 13 and 14	Sampling Point 7 Photos– Bird and Small Mammals
Photos 15 and 16	Sampling Point 8 Photos– Bird and Small Mammals
Photos 17 and 18	Sampling Point 9 Photos– Bird and Small Mammals
Photos 19 and 20	Sampling Point 10 Photos– Bird and Small Mammals
Photos 21 and 22	Sampling Point 11 Photos– Bird and Small Mammals

LIST OF ACRONYMS

KME:	King & MacGregor Environmental, Inc.
Foth I&E:	Foth Infrastructure & Environment, LLC
MDEQ:	Michigan Department of Environmental Quality
HTDF:	Humboldt Tailings Disposal Facility
KEMC:	Kennecott Eagle Minerals Company
MNFI:	Michigan Natural Features Inventory
MDNR:	Michigan Department of Natural Resources
SSURGO:	Soil Survey Geographic
USDA:	United States Department of Agriculture
MDNR:	Michigan Department of Natural Resources
GPS:	Global Positioning System

1.0 INTRODUCTION

King and MacGregor Environmental Inc. (KME) was contracted by Foth Infrastructure & Environment, LLC (Foth I&E) to conduct baseline biological investigations within the Humboldt Mill Site in Marquette County, Michigan (Figure 1-1). This report describes the results of the 2008 surveys for birds, mammals, frogs and toads, and threatened and endangered species. This assessment provides information for comparison to the results of surveys KME conducted in 2006 and 2007 and reported in *Biological Survey: Plant Communities, Wildlife, and Wetland Evaluation*, dated April 5, 2007, and *Biological Survey Supplement: Plant Communities, Wildlife, and Wetland Evaluation*, dated May 1, 2008.

1.1 Study Area

The study area for this investigation includes the Humboldt Tailings Disposal Facility (HTDF) and processing facility known as the Humboldt Mill Site and surrounding undeveloped areas. The study area is located west of Ishpeming, in the southeast corner of the intersection of U.S. 41 and Highway 95 and occupies all or portions of Sections 1, 2, 3, 10, 11, 12, 13, 14 and 15, T47N, R29W, Humboldt Township, Marquette County, Michigan. The study area for the 2008 biological survey is unchanged from the 2007 biological survey (Figure 1-2). A study area of 3,169 acres containing a detailed study area of 186 acres surrounding the mill is shown on Figure 1-2. Additional study of a wetland outside the detailed study area but within the overall study area was performed.

1.2 Survey Purpose

Documentation of this baseline ecological information will assist with Kennecott Eagle Minerals Company (KEMC) planning activities.

2.0 THREATENED AND ENDANGERED PLANT SPECIES – Detailed Study Area

2.1 Methods

The Michigan Natural Features Inventory (MNFI) maintains the database of all known threatened and endangered plant species in Michigan. A query was made of the MNFI to identify any known threatened or endangered plant species within the detailed study area to determine if any additional occurrences of threatened or endangered species had been documented since 2007. A meander survey was conducted on August 8, 2008 within the detailed study area to supplement the botanical studies conducted during 2006 and 2007.

2.2 Results

The query of the MNFI database, updated on July 17, 2008, identified an occurrence of Canada rice-grass (*Oryzopsis canadensis*) within Section 11 of Humboldt Township. This occurrence was documented in 1936. The August 8, 2008, meander survey did not identify any endangered or threatened plant species or potential habitat within the detailed study area.

2.3 Discussion

Canada rice grass is normally found in sandy, moist, moderately acidic jack pine clearings. It is associated with leatherleaf (*Chamaedaphne calyculata*), blueberry (*Vaccinium* spp.), hair-grass (*Deschampsia* spp.), goldthread (*Coptis trifolia*), bunchberry (*Cornus canadensis*) and poverty grass (*Danthonia spicata*). No appropriate habitat conditions were identified within the study area.

Threatened and endangered plants typically occur in rare plant habitats. All of the plant communities identified within the study area are typical of this region. No unusual plant

communities that may harbor rare plants were identified. Historical mining and logging activities within the study area also limit the likelihood of rare plant habitats being present on site.

3.0 WILDLIFE

3.1 Birds – Overall Study Area

3.1.1 Methods

The methodologies developed and described in the 2006 *Biological Survey Report* and 2007 *Biological Survey Supplement* were employed during the 2008 bird surveys. Diurnal survey methods included using a series of point count surveys, which are a commonly accepted method for identifying birds in a region (Howe, et al., 1997; Sauer, et al., 2005). Eleven sampling points were established in 2006 within differing habitat types in order to maximize documentation of bird species present. Sampling locations appear in Figure 1-2. Photographs and general habitat descriptions of each sampling point were documented (Photos 1-22).

A breeding bird survey was conducted on June 12 and 13, 2008. The survey protocol included ten-minute, unlimited radius counts at each of the eleven survey points, recording all birds seen or heard. This is consistent with *The Atlas of Breeding Birds of Michigan* (Brewer et al, 1991) protocol. All eleven points were surveyed on two consecutive days. The surveys were generally conducted in reverse order on the second day of sampling in order to stagger the time of day each point was surveyed. Most sampling was conducted from early morning to early afternoon. All bird species encountered in the study area while traveling from survey point to survey point, or during other on-site activities, were recorded on data sheets as incidental species. Bird presence data was recorded on data sheets. Weather conditions and habitat types were recorded for all observations. Point surveys were not conducted during times of strong wind or heavy rain.

The fall migration portion of the bird surveys has not yet been conducted. These surveys will be conducted in September, 2008, and results will be reported in a separate document.

In addition to the eleven point bird surveys, KME also conducted an assessment of an existing great blue heron (*Ardea herodias*) nesting colony that had previously been identified within the study area (Heron Rookery Pond) (Figure 1-2). The assessment was conducted on May 27, with additional observations noted during the bird surveys on June 12 and June 13 and during the small mammal survey on July 15, 2008.

KME also assessed a bald eagle (*Haliaeetus leucocephalus*) nesting site in relative proximity to the heron nesting colony (Figure 1-2). That assessment was also conducted on May 27, with additional observations on June 12, and July 15, 2008.

3.1.2 Results

A total of 420 birds representing 61 species were identified during the June, 2008 surveys (Table 3-1 & Table 3-2). Some of the most commonly identified species during the bird surveys included the Canada goose (*Branta canadenis*), the tree swallow (*Tachycineta bicolor*), the great blue heron (*Ardea herodias*), and the American robin (*Turdus migratorius*).

The great blue heron nesting colony was found to be active during the May, June, and July assessments. During the May assessment, 22 nests were identified within the heron nesting colony. Fifteen of the nests were occupied by herons, while four of the 22 nests were occupied

by double-crested cormorants (*Phalacrocorax auritus).* During the June 12, 2008 bird survey, eight great blue herons and eight double-crested cormorants were noted. During the bird survey on June 13, 2008, 15 great blue herons and five double-crested cormorants were observed. The nesting colony was again observed during the small mammal surveys in July. At this time, no great blue herons were observed, while sixteen double-crested cormorants, including adults and fledglings, were observed on the nests.

The bald eagle nest was inactive during the May, June, and July assessments. No bald eagles were observed on or in close proximity of the nest. However, a bald eagle was observed at Sampling Point 9 on June 12 and June 13, 2008.

3.1.3 Discussion

The bird species identified within the study area during the June breeding survey are consistent with the bird species one would expect in the habitats present on site.

The existing nesting colony of great blue herons appears to be healthy based on the activities observed. The presence of double-crested cormorants within the heron colony is evidence of the recent expansion of Michigan's population of double-crested cormorants. Double-crested cormorants have been documented as competing with other colonial water birds for nesting locations (Wires et al., 2001).

3.2 Mammals

3.2.1 Small Mammals – Overall Study Area

3.2.1.1 Methods

The methodologies developed and described in the 2006 *Biological Survey Report* and 2007 *Biological Survey Supplement* were employed during the 2008 small mammal survey. The same 11 sampling points established in 2006 were used for the small mammal studies (Figure 1-2). Photographs and general habitat descriptions of each sampling point were documented (Photos 1-22).

A combination of two small snap traps, one large snap trap, and one Sherman live trap were used at each sampling location. The array of four traps was deployed typically within one to two meters of each sampling point. Traps were placed in locations, such as against fallen trees, to enhance the likelihood of capturing small mammals and to hide the traps from curious birds or other non-target species. Bait for the traps consisted of peanut butter and oatmeal on the three snap traps and wheat crackers in the Sherman traps. Sampling was conducted on three consecutive days, July 14, 15, and 16, 2008, at all sampling points.

3.2.1.2 Results

Twenty small mammals representing three species were identified during the July 14-16, 2008 trapping period (Table 3-3a, b, c). The three species observed included the deer mouse (*Peromyscus maniculatus*), the boreal redback vole (*Clethrionomys gapperi*), and the eastern chipmunk (*Tamias striatus*). As a result of predation, one trapped mammal could only be identified to genus (*Peromyscus*). The most commonly observed small mammal was the eastern chipmunk.

No threatened or endangered small mammals were encountered during the sampling period.

3.2.1.3 Discussion

The small mammals encountered are typical of those expected in the habitats present within the study area. Small mammals were distributed throughout mature wooded habitats, shrub and open habitats, and wetland habitats.

3.2.2 Large Mammals – Overall Study Area

3.2.2.1 Methods

The methodologies developed and described in the 2006 Biological Survey Report were employed during the 2008 mammal survey. All evidence of large mammal presence was noted during the small mammal surveys and also during the course of conducting other biological surveys in the study. Direct observation or indirect evidence such as scat, tracks, feeding areas, or similar evidence was documented (Table 4-1).

3.2.2.2 Results

White-tailed deer (*Odocoileus virginianus*) and beaver (*Castor canadensis*) were directly observed within the study area. Indirect evidence of porcupines (*Erethizon dorsatum*), and coyote (*Canis latrans*) was also observed. Large canine tracks were also observed within the study area. These tracks may have been left by a grey wolf (*Canis lupus*) or a large domestic dog, which have been observed within the area. Further discussion regarding gray wolves appears in Section 3.4.

3.2.2.3 Discussion

The large mammals identified within the study area are consistent with the species expected in the vegetative habitats present. Other relatively common large mammal species possibly present within the study area but not detected during our surveys include woodchuck (*Marmonta monax*), common raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), red fox (*Vulpes vulpes*), common gray fox (*Urocyon cinereoargenteus*), black bear (*Ursus americanus*), and river otter (*Lutra canadensis*).

3.3 Frogs and Toads – Overall Study Area

3.3.1 Methods

The methodologies developed and described in the 2006 *Biological Survey Report* and 2007 *Biological Survey Supplement* were employed during the 2008 frog and toad survey. The survey for frogs and toads was conducted based on the survey protocol developed by the Michigan Department of Natural Resources (MDNR) Wildlife Division (MDNR, 2002). Survey methodology consists of listening to frog and toad breeding calls in established survey locations for ten-minute periods. Survey protocol requires that surveys be conducted on evenings with calm air or mild winds and air temperatures greater than 45 degrees Fahrenheit in the early spring (April 1 through May 5), greater than 55 degrees Fahrenheit in the late spring (May 6 through June 10), and greater than 65 degrees Fahrenheit in the summer (June 11 through July 10). Temperatures were taken using Skymate hand-held thermo-windmeters at each sampling point. Weather observations and temperatures were documented on data sheets at each sampling point.

The same five survey points selected in 2006 were used (Figure 1-2). These five survey points are generally representative of the aquatic habitats in the study area that are likely to harbor frog and toad populations. The frog and toad surveys were conducted on May 28 and 29, 2008.

3.3.2 Results

Three species of frogs and one species of toad were heard during the survey periods (Table 3-4a, b). Species documented included the northern spring peeper (*Pseudacris crucifer*), eastern gray tree frog (*Hyla versicolor*), mink frog (*Rana septentrionalis*), and American toad (*Bufo americanus*). The weather conditions were within the range suggested by the MDNR protocol. Calling activity included Call Index Values of 1, 2, and 3. In addition to frogs and toads heard during the frog and toad survey periods, green frogs (*Rana clamitans*) were heard at Bird Sampling Point 5 on July 15, 2008.

3.3.3 Discussion

All five sites surveyed exhibited use by frogs and four of the sites exhibited use by toads for breeding. The most abundant frog species documented were the northern spring peeper and the gray tree frog.

3.4 Threatened and Endangered Wildlife Species – Overall Study Area

3.4.1 Methods

The methodologies developed and described in the 2006 *Biological Survey Report* and 2007 *Biological Survey Supplement* were employed during the 2008 Threatened and Endangered Wildlife evaluation. The MNFI database, updated on July 17, 2008, was queried to determine if additional species had been added since the 2007 query. In accordance with MDNR (2001b) guidelines, KME surveyed the site for any MNFI listed wildlife species or their habitats during the appropriate season. KME also noted other protected species observed during field investigations but not previously identified by the MNFI. KME assessed the use of the existing bald eagle nest through visual observation during the spring season.

3.4.2 Results

No additional known occurrences of threatened or endangered wildlife species have been added to the MNFI database since the 2007 query. The MNFI database query resulted in identification of the existing bald eagle nest near Lake Lory. No other threatened or endangered wildlife species, including birds, mammals, and frogs and toads, were identified in the MNFI query. Potential indirect evidence of gray wolves was observed during the 2008 survey period. Although no evidence of gray wolves was found during the 2007 survey (KME, 2008), indirect evidence of this species was documented in the 2006 survey (KME, 2007). As noted in the 2006 Biological Survey Report, gray wolves have been removed from protection under the Federal Endangered Species Act. However, they remain listed as a threatened species by the State of Michigan.

The 2008 bird surveys resulted in the identification of two state-threatened bird species. These include the bald eagle (noted on the MNFI database) and the common loon (*Gavia immer*).

The bald eagle nest near Lake Lory was observed during the 2008 breeding season. No activity was observed at the bald eagle nest in 2008. However, an adult bald eagle was observed at Sampling Point 9, which is near Lake Lory, on two days during the June, 2008 survey period.

Common loons were observed during the June bird surveys.

3.4.3 Discussion

Although no activity was observed at the bald eagle nest, a bald eagle was observed on two occasions at Sampling Point 9, which is across Lake Lory from the nest. Bald eagles use this area for feeding and loafing.

The presence of loons during both surveys indicates that this area is at least a favored loafing and feeding area for loons with some potential nesting habitat present.

4.0 CONCLUSION

In 2008, KME conducted environmental surveys for KEMC to compare to baseline environmental information gathered in 2006 and supplemental surveys conducted in 2007 within the Humboldt Mill study area in Marquette County, Michigan.

Surveys for birds, small mammals, large mammals, and frogs and toads were conducted within the study area established in 2006. Sixty-one bird species were identified, including two state-threatened species, the bald eagle and the common loon. Three small mammal and two large mammal species were directly identified on site. Three species of frogs and one species of toad were identified on site. All of the bird, mammal, frog, and toad species identified are typical of those species associated with the vegetative communities in the study area.

Two state-threatened animal species, the bald eagle and the common loon, were directly identified during the 2008 assessments. Indirect evidence of a large canine was observed. This indirect evidence may indicate the presence of the state-threatened gray wolf. Observations of a great blue heron nesting colony and a bald eagle nest were conducted. No threatened or endangered plant species or potential habitats were identified during the surveys.

REFERENCES AND LITERATURE CITED

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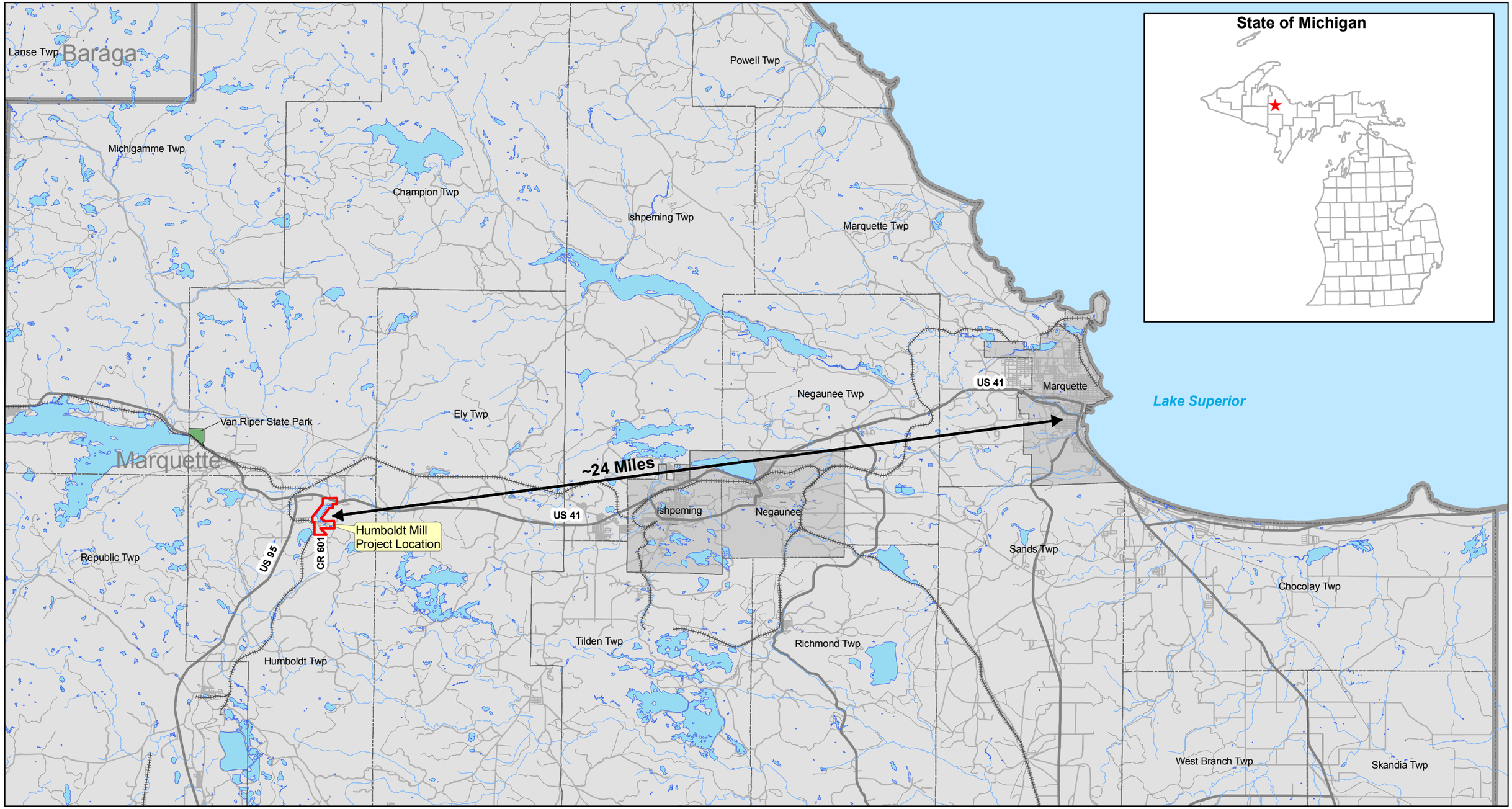
FIGURES



NOTES

1. Horizontal datum based on NAD 83/94.
   Horizontal coordinates based on UTM Zone 16.
2. All base information downloaded from Michigan Center of Geographic Information (http://www.michigan.gov/cgi).
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Counties
- Minor Civil Divisions
- Lakes and Rivers
- KEMC Project Location
- Highways
- Major Roads
- Minor Roads
- Railroads

N

King & MacGregor Environmental, Inc.

Foth
Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC			
REVISED	DATE	BY	DESCRIPTION
CHECKED BY: KKB			DATE: AUG. '08
APPROVED BY: SVD1			DATE: AUG. '08
APPROVED BY:			DATE:

Kennecott
Eagle Minerals

FIGURE 1-1
HUMBOLDT MILL PROJECT
PROJECT LOCATION

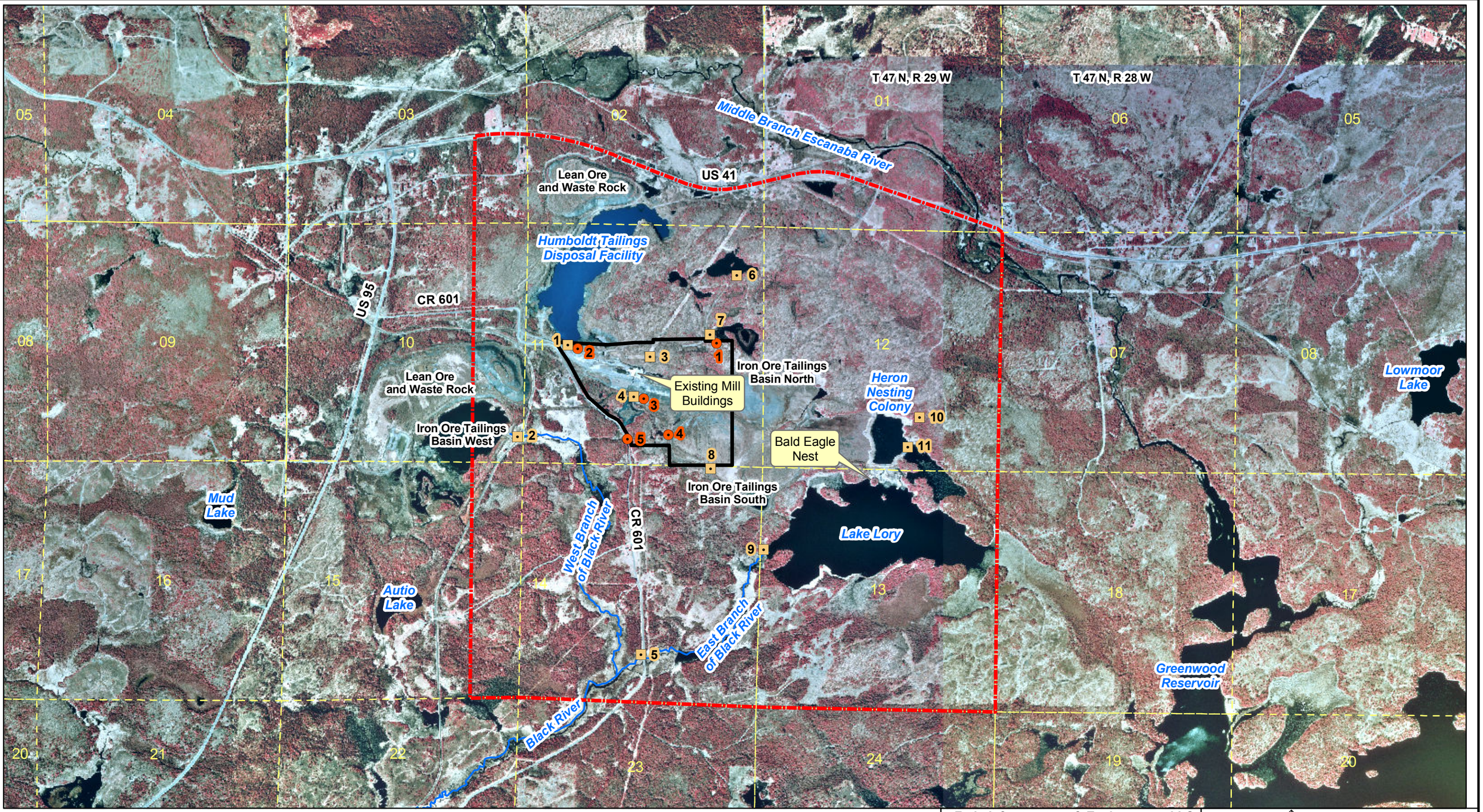
Scale: 0 1.5 3 Miles

Date: AUGUST, 2008

Prepared by: DAT

Project No: 06W003

M:\06w003\mxd\KME\2008\kmc_humboldt_ProjectLocation_11x17.mxd August 27, 2008



NOTES

1. Base Information, USGS georeferenced Digital Raster Graphics (DRG) and 1998 Digital Orthophoto Quads are from Michigan Center of Geographic Information (http://www.michigan.gov/cgi/)
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

LEGEND

- Overall Study Area for 2006 through 2008 Biological Surveys
- Detailed Wetland Study Area for 2006 and 2007 Biological Surveys
- PLSS Sections
- Spring frog and toad sample locations
- Avian and small mammal sample locations

N

King & MacGregor Environmental, Inc.

Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	KKB	DATE: AUG. '08	
APPROVED BY:	SVD1	DATE: AUG. '08	
APPROVED BY:		DATE:	

Kennecott
Eagle Minerals

FIGURE 1-2
HUMBOLDT MILL PROJECT
STUDY AREA
AND SAMPLE LOCATION MAP

Scale: 0 1,000 2,000 Feet

Date: AUGUST, 2008

Prepared by: DAT

Project No: 06W003

M:\06w003\mxd\KME\2008\kmc_humboldt_WetlandStudy_11x17.mxd August 27, 2008

TABLES

Table 3-1: June 2008 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
1	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
1	6/12/2008	belted kingfisher	*Ceryle alcyon*	1	V
1	6/12/2008	turkey vulture	*Cathartes aura*	1	V
1	6/12/2008	black-capped chickadee	*Poecile atricapillus*	2	A / V
1	6/12/2008	American robin	*Turdus migratorius*	1	A
2	6/12/2008	blue jay	*Cyanocitta cristata*	2	A
2	6/12/2008	Canada goose	*Branta canadensis*	3	A
2	6/12/2008	American robin	*Turdus migratorius*	1	A
2	6/12/2008	red-breasted nuthatch	*Sitta canadensis*	1	A
2	6/12/2008	northern flicker (yellow-shafted)	*Colaptes auratus*	1	A
2	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
2	6/12/2008	American redstart	*Setophaga ruticilla*	2	A / V
2	6/12/2008	song sparrow	*Melospiza melodia*	1	A
2	6/12/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
2	6/12/2008	common yellowthroat	*Geothlypis trichas*	1	A
2	6/12/2008	chipping sparrow	*Spizella passerina*	1	A
2	6/12/2008	hermit thrush	*Catharus guttatus*	1	A
3	6/12/2008	ovenbird	*Seiurus aurocapilla*	1	A
3	6/12/2008	black-and-white warbler	*Mniotilta varia*	1	A
3	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
4	6/12/2008	common raven	*Corvus corax*	1	A / V
4	6/12/2008	eastern kingbird	*Tyrannus tyrannus*	1	V
4	6/12/2008	cedar waxwing	*Bombycilla cedrorum*	3	A / V
4	6/12/2008	American robin	*Turdus migratorius*	2	A
4	6/12/2008	brown-headed cowbird	*Molothrus ater*	1	A / V
4	6/12/2008	red-winged blackbird	*Agelaius phoeniceus*	2	A / V
4	6/12/2008	great blue heron	*Ardea herodias*	1	V
4	6/12/2008	turkey vulture	*Cathartes aura*	1	V
4	6/12/2008	ovenbird	*Seiurus aurocapilla*	1	A
4	6/12/2008	killdeer	*Charadrius vociferus*	1	V
4	6/12/2008	tree swallow	*Tachycineta bicolor*	2	V
4	6/12/2008	song sparrow	*Melospiza melodia*	1	A
4	6/12/2008	clay-colored sparrow	*Spizella pallida*	1	A / V
5	6/12/2008	Canada goose	*Branta canadensis*	64	F
5	6/12/2008	common yellowthroat	*Geothlypis trichas*	1	A
5	6/12/2008	blue jay	*Cyanocitta cristata*	1	A
5	6/12/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
5	6/12/2008	yellow-rumped warbler	*Dendroica coronata*	1	A
5	6/12/2008	song sparrow	*Melospiza melodia*	1	A
5	6/12/2008	wood duck	*Aix sponsa*	1	F
5	6/12/2008	chestnut-sided warbler	*Dendroica pensylvanica*	1	A
5	6/12/2008	American bittern	*Botaurus lentiginosus*	1	V
6	6/12/2008	wood duck	*Aix sponsa*	1	V
6	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
6	6/12/2008	ovenbird	*Seiurus aurocapilla*	1	A
6	6/12/2008	American robin	*Turdus migratorius*	1	V
6	6/12/2008	blue jay	*Cyanocitta cristata*	1	A / V
6	6/12/2008	black-throated green warbler	*Dendroica virens*	1	A
6	6/12/2008	ruby-throated hummingbird	*Archilochus colubris*	1	V
6	6/12/2008	common grackle	*Quiscalus quiscula*	1	V
6	6/12/2008	Tennessee warbler	*Vermivora peregrina*	1	A
6	6/12/2008	black-and-white warbler	*Mniotilta varia*	1	A
6	6/12/2008	belted kingfisher	*Ceryle alcyon*	1	A / V
6	6/12/2008	song sparrow	*Melospiza melodia*	1	V

Table 3-1 continued: June 2008 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
6	6/12/2008	eastern kingbird	*Tyrannus tyrannus*	1	A / V
7	6/12/2008	ruffed grouse	*Bonasa umbellus*	1	A
7	6/12/2008	red-winged blackbird	*Agelaius phoeniceus*	1	A
7	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
7	6/12/2008	black-and-white warbler	*Mniotilta varia*	1	A
7	6/12/2008	turkey vulture	*Cathartes aura*	3	V
7	6/12/2008	brown creeper	*Certhia americana*	1	V
7	6/12/2008	yellow-throated vireo	*Vireo flavifrons*	1	A
7	6/12/2008	pileated woodpecker	*Dryocopus pileatus*	1	A
8	6/12/2008	chipping sparrow	*Spizella passerina*	2	V
8	6/12/2008	Philadelphia vireo	*Vireo philadelphicus*	1	A
8	6/12/2008	ovenbird	*Seiurus aurocapilla*	1	A
8	6/12/2008	American goldfinch	*Carduelis tristis*	1	A
8	6/12/2008	American crow	*Corvus brachyrhynchos*	1	A
9	6/12/2008	common yellowthroat	*Geothlypis trichas*	1	A
9	6/12/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
9	6/12/2008	common loon	*Gavia immer*	2	V
9	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
9	6/12/2008	American goldfinch	*Carduelis tristis*	1	V
9	6/12/2008	American crow	*Corvus brachyrhynchos*	1	A
9	6/12/2008	alder flycatcher	*Empidonax alnorum*	1	A
9	6/12/2008	American robin	*Turdus migratorius*	2	A / V
9	6/12/2008	song sparrow	*Melospiza melodia*	1	A
9	6/12/2008	bald eagle	*Haliaeetus leucocephalus*	1	V
9	6/12/2008	yellow-bellied sapsucker	*Sphyrapicus varius*	1	A
9	6/12/2008	pine warbler	*Dendroica pinus*	1	A
10	6/12/2008	northern parula	*Parula americana*	1	A
10	6/12/2008	ovenbird	*Seiurus aurocapilla*	1	A
10	6/12/2008	blue jay	*Cyanocitta cristata*	1	A
10	6/12/2008	American robin	*Turdus migratorius*	1	A
10	6/12/2008	hermit thrush	*Catharus guttatus*	1	A
10	6/12/2008	red-eyed vireo	*Vireo olivaceus*	1	A
11	6/12/2008	yellow warbler	*Dendroica petechia*	1	A
11	6/12/2008	Canada goose	*Branta canadensis*	49	F
11	6/12/2008	belted kingfisher	*Ceryle alcyon*	1	A / V
11	6/12/2008	double-crested cormorant	*Phalacrocorax auritus*	8	V
11	6/12/2008	tree swallow	*Tachycineta bicolor*	8	V
11	6/12/2008	great blue heron	*Ardea herodias*	8	V
11	6/12/2008	American robin	*Turdus migratorius*	1	A / V
11	6/12/2008	killdeer	*Charadrius vociferus*	1	A / V
11	6/12/2008	turkey vulture	*Cathartes aura*	1	V
11	6/12/2008	eastern kingbird	*Tyrannus tyrannus*	1	A / V
11	6/12/2008	common loon	*Gavia immer*	1	A
11	6/12/2008	red-winged blackbird	*Agelaius phoeniceus*	1	A
11	6/12/2008	sandhill crane	*Grus canadensis*	1	A
11	6/12/2008	great crested flycatcher	*Myiarchus crinitus*	1	A
11	6/12/2008	common grackle	*Quiscalus quiscula*	1	A / V
11	6/12/2008	warbling vireo	*Vireo gilvus*	1	A
11	6/12/2008	yellow-rumped warbler	*Dendroica coronata*	1	V
1	6/13/2008	blue jay	*Cyanocitta cristata*	1	A
1	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A
1	6/13/2008	northern flicker (yellow-shafted)	*Colaptes auratus*	1	A
1	6/13/2008	American crow	*Corvus brachyrhynchos*	1	A
1	6/13/2008	American robin	*Turdus migratorius*	1	A / V

Table 3-1 continued: June 2008 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
1	6/13/2008	song sparrow	*Melospiza melodia*	1	A
1	6/13/2008	indigo bunting	*Passerina cyanea*	1	A / V
1	6/13/2008	mourning dove	*Zenaida macroura*	1	V
1	6/13/2008	Canada goose	*Branta canadensis*	2	F
2	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
2	6/13/2008	song sparrow	*Melospiza melodia*	1	A
2	6/13/2008	swamp sparrow	*Melospiza georgiana*	2	A
2	6/13/2008	black-capped chickadee	*Poecile atricapillus*	1	A
2	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A
2	6/13/2008	white-throated sparrow	*Zonotrichia albicollis*	3	A
2	6/13/2008	alder flycatcher	*Empidonax alnorum*	1	A
3	6/13/2008	ovenbird	*Seiurus aurocapilla*	1	A
3	6/13/2008	American robin	*Turdus migratorius*	1	A
3	6/13/2008	blue jay	*Cyanocitta cristata*	1	A / V
3	6/13/2008	chestnut-sided warbler	*Dendroica pensylvanica*	1	A
3	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
4	6/13/2008	bank swallow	*Riparia riparia*	5	F
4	6/13/2008	barn swallow	*Hirundo rustica*	5	F
4	6/13/2008	tree swallow	*Tachycineta bicolor*	3	F
4	6/13/2008	American robin	*Turdus migratorius*	1	V
4	6/13/2008	song sparrow	*Melospiza melodia*	1	A
4	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A
4	6/13/2008	green heron	*Butorides virescens*	1	F
4	6/13/2008	belted kingfisher	*Ceryle alcyon*	1	V
4	6/13/2008	red-winged blackbird	*Agelaius phoeniceus*	1	A / V
4	6/13/2008	hooded merganser	*Lophodytes cucullatus*	1	F
4	6/13/2008	common grackle	*Quiscalus quiscula*	1	V
4	6/13/2008	clay-colored sparrow	*Spizella pallida*	1	A
4	6/13/2008	mourning dove	*Zenaida macroura*	1	A
4	6/13/2008	blue jay	*Cyanocitta cristata*	1	A
5	6/13/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
5	6/13/2008	swamp sparrow	*Melospiza georgiana*	3	A
5	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A
5	6/13/2008	red-winged blackbird	*Agelaius phoeniceus*	1	A
5	6/13/2008	song sparrow	*Melospiza melodia*	1	A
6	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
6	6/13/2008	hermit thrush	*Catharus guttatus*	1	A
6	6/13/2008	pileated woodpecker	*Dryocopus pileatus*	1	A
6	6/13/2008	American robin	*Turdus migratorius*	1	A
6	6/13/2008	song sparrow	*Melospiza melodia*	1	A
6	6/13/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
6	6/13/2008	common grackle	*Quiscalus quiscula*	1	V
6	6/13/2008	red-winged blackbird	*Agelaius phoeniceus*	1	A
7	6/13/2008	ovenbird	*Seiurus aurocapilla*	1	A
7	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
7	6/13/2008	northern flicker (yellow-shafted)	*Colaptes auratus*	1	A / V
7	6/13/2008	song sparrow	*Melospiza melodia*	1	A / V
7	6/13/2008	chestnut-sided warbler	*Dendroica pensylvanica*	1	A
7	6/13/2008	common raven	*Corvus corax*	1	A
7	6/13/2008	American robin	*Turdus migratorius*	1	V
7	6/13/2008	black-capped chickadee	*Poecile atricapillus*	1	A
7	6/13/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
7	6/13/2008	pileated woodpecker	*Dryocopus pileatus*	1	A
7	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A

Table 3-1 continued: June 2008 Bird Sampling Point Data - Humboldt Mill Site

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
8	6/13/2008	song sparrow	*Melospiza melodia*	1	A
8	6/13/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
8	6/13/2008	blue jay	*Cyanocitta cristata*	1	A
8	6/13/2008	northern flicker (yellow-shafted)	*Colaptes auratus*	1	A / V
8	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
8	6/13/2008	American robin	*Turdus migratorius*	1	V
9	6/13/2008	bald eagle	*Haliaeetus leucocephalus*	1	V
9	6/13/2008	black-throated green warbler	*Dendroica virens*	1	A
9	6/13/2008	double-crested cormorant	*Phalacrocorax auritus*	1	V
9	6/13/2008	black-and-white warbler	*Mniotilta varia*	1	A
9	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A
9	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
9	6/13/2008	belted kingfisher	*Ceryle alcyon*	1	A
9	6/13/2008	yellow warbler	*Dendroica petechia*	1	A
9	6/13/2008	white-throated sparrow	*Zonotrichia albicollis*	1	A
10	6/13/2008	red-breasted nuthatch	*Sitta canadensis*	1	A
10	6/13/2008	hermit thrush	*Catharus guttatus*	1	A / V
10	6/13/2008	blue jay	*Cyanocitta cristata*	1	A
10	6/13/2008	black-throated green warbler	*Dendroica virens*	1	A
10	6/13/2008	ovenbird	*Seiurus aurocapilla*	1	A
11	6/13/2008	tree swallow	*Tachycineta bicolor*	40	V
11	6/13/2008	double-crested cormorant	*Phalacrocorax auritus*	5	V
11	6/13/2008	great blue heron	*Ardea herodias*	15	A / V
11	6/13/2008	killdeer	*Charadrius vociferus*	1	V
11	6/13/2008	American robin	*Turdus migratorius*	3	V
11	6/13/2008	common grackle	*Quiscalus quiscula*	1	A
11	6/13/2008	ring-billed gull	*Larus delawarensis*	1	A
11	6/13/2008	red-winged blackbird	*Agelaius phoeniceus*	1	A
11	6/13/2008	least flycatcher	*Empidonax minimus*	2	V
11	6/13/2008	red-eyed vireo	*Vireo olivaceus*	1	A
11	6/13/2008	eastern kingbird	*Tyrannus tyrannus*	1	V
11	6/13/2008	American goldfinch	*Carduelis tristis*	1	V
11	6/13/2008	great crested flycatcher	*Myiarchus crinitus*	1	A / V
11	6/13/2008	common yellowthroat	*Geothlypis trichas*	1	A
11	6/13/2008	yellow-throated vireo	*Vireo flavifrons*	1	A
			Total Number of Bird Occurrences	**420**	

* A=Audial
F=Flyover
V=Visual

Prepared by: COB
Checked by: MJM

Table 3-2: June 2008 Bird Species Summary - Humboldt Mill Site

Species Count		Total # of Birds Observed
1	alder flycatcher	2
2	American bittern	1
3	American crow	3
4	American goldfinch	3
5	American redstart	2
6	American robin	18
7	bald eagle	2
8	bank swallow	5
9	barn swallow	5
10	belted kingfisher	5
11	black-and-white warbler	4
12	black-capped chickadee	4
13	black-throated green warbler	3
14	blue jay	10
15	brown creeper	1
16	brown-headed cowbird	1
17	Canada goose	118
18	cedar waxwing	3
19	chestnut-sided warbler	3
20	chipping sparrow	3
21	clay-colored sparrow	2
22	common grackle	5
23	common loon	3
24	common raven	2
25	common yellowthroat	10
26	double-crested cormorant	14
27	Eastern kingbird	4
28	great blue heron	24
29	great crested flycatcher	2
30	green heron	1
31	hermit thrush	4
32	hooded merganser	1
33	indigo bunting	1
34	killdeer	3
35	least flycatcher	2
36	mourning dove	2
37	Northern flicker (yellow-shafted)	4
38	Northern parula	1
39	ovenbird	8
40	Philadelphia vireo	1
41	pileated woodpecker	3
42	pine warbler	1
43	red-breasted nuthatch	2
44	red-eyed vireo	14
45	red-winged blackbird	8
46	ring-billed gull	1
47	ruby-throated hummingbird	1
48	ruffed grouse	1
49	sandhill crane	1
50	song sparrow	12
51	swamp sparrow	5
52	Tennessee warbler	1
53	tree swallow	53
54	turkey vulture	6
55	warbling vireo	1
56	white-throated sparrow	11
57	wood duck	2
58	yellow warbler	2
59	yellow-bellied sapsucker	1
60	yellow-rumped warbler	2
61	yellow-throated vireo	2
	TOTAL BIRD OCCURRENCES	**420**

KEY:

Observed only 1-3 total birds

Prepared by: COB

Checked by: MJM

TABLE 3-3a: Small Mammal Survey Sampling Point Data - Humboldt Mill Site

July 14, 2008 - Day 1

Sampling Point	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***
1	X - bait intact		O - bait gone		X - bait gone		X - bait gone	
2	deer mouse	*Peromyscus maniculatus*	O		O - bait gone		O	
3	O		X - bait intact		X - bait intact		deer mouse	*Peromyscus maniculatus*
4	X - bait intact		O		O		O	
5	O		O		O		O	
6	boreal redback vole	*Clethrionomys gapperi*	O		O		O	
7	O - bait gone		O - bait gone		O - bait gone		O	
8	deer mouse	*Peromyscus maniculatus*	deer mouse	*Peromyscus maniculatus*	O - bait gone		Eastern chipmunk	*Tamias striatus*
9	O		O		O		O	
10	O		O		X - bait gone		deer mouse	*Peromyscus maniculatus*
11	O		O		O - bait gone		X - bait gone	

* O=Trap unsnapped
X=Trap snapped

Prepared by: COB
Checked by: MJM

TABLE 3-3b: Small Mammal Survey Sampling Point Data - Humboldt Mill Site

July 15, 2008 - Day 2

Sampling Point	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***
1	O		Eastern chipmunk	*Tamias striatus*	Eastern chipmunk	*Tamias striatus*	Eastern chipmunk	*Tamias striatus*
2	O		X - bait gone		O - bait gone		X - bait gone	
3	O		O		O		O	
4	O		O		O		O	
5	O		O - bait gone		O		O	
6	X - bait intact		O		X - bait gone		O - bait gone	
7	O		O - bait gone		O - bait gone		O	
8	X - bait gone		O - bait gone		O		O	
9	X - bait gone		O		X - bait gone		X - bait intact	
10	deer mouse	*Peromyscus maniculatus*	X - bait intact		O		O	
11	X - bait gone		Eastern chipmunk	*Tamias striatus*	Eastern chipmunk	*Tamias striatus*	Eastern chipmunk	*Tamias striatus*

* O=Trap unsnapped
X=Trap snapped

Prepared by: COB
Checked by: MJM

TABLE 3-3c: Small Mammal Survey Sampling Point Data - Humboldt Mill Site

July 16, 2008 - Day 3

Sampling Point	Small Snap Trap 1		Small Snap Trap 2		Large Snap Trap		Live Trap	
	Common Name	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***	**Common Name**	***Scientific Name***
1	X - bait gone		X - bait gone		Eastern chipmunk	*Tamias striatus*	O	
2	*Peromyscus sp.* (predation)		Eastern chipmunk	*Tamias striatus*	O		O	
3	X - bait gone		X - bait intact		O		O	
4	O		O		O		O	
5	O		O - bait gone		O		O	
6	O		O		Eastern chipmunk	*Tamias striatus*	O	
7	O - bait gone		O - bait gone		O - bait gone		O - bait gone	
8	X - bait gone		O - bait gone		O - bait gone		Eastern chipmunk	*Tamias striatus*
9	X - bait gone		X - bait gone		Eastern chipmunk	*Tamias striatus*	O	
10	O		O		O		O	
11	O		O		O		O	

* O=Trap unsnapped
X=Trap snapped

Prepared by: COB
Checked by: MJM

TABLE 3-4a: Frog and Toad Survey Sampling Point Data - Humboldt Mill Site

May 28, 2008 - Day 1

Sampling Point	Call Index Value [1]	Species		Start Time	Temperature (ºF)[2]
		Common Name	*Scientific Name*		
1	3	Northern spring peeper	*Pseudacris crucifer*	10:05 PM	58.5
	1	gray tree frog	*Hyla versicolor*		
2	1	Northern spring peeper	*Pseudacris crucifer*	10:27 PM	59.5
	2	gray tree frog	*Hyla versicolor*		
3	2	Northern spring peeper	*Pseudacris crucifer*	10:55 PM	60
	3	gray tree frog	*Hyla versicolor*		
4	2	Northern spring peeper	*Pseudacris crucifer*	10:40 PM	57
	3	gray tree frog	*Hyla versicolor*		
5	2	Northern spring peeper	*Pseudacris crucifer*	11:10 PM	55.5
	1	American toad	*Bufo americanus*		
	1	gray tree frog	*Hyla versicolor*		

Footnotes

[1] 1 = Individuals can be counted and there is space between calls
2 = Individuals can be counted but there is some overlapping of calls
3 = Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

[2] ºF = Degrees Fahrenheit

Prepared by: COB
Checked by: MJM

TABLE 3-4b: Frog and Toad Survey Sampling Point Data - Humboldt Mill Site

May 29, 2008 - Day 2

Sampling Point	Call Index Value [1]	Species		Start Time	Temperature (ºF)[2]
		Common Name	*Scientific Name*		
1	3	Northern spring peeper	*Pseudacris crucifer*	10:05 PM	61
	1	gray tree frog	*Hyla versicolor*		
	1	mink frog	*Rana septentrionalis*		
2	3	gray tree frog	*Hyla versicolor*	10:20 PM	65
	1	American toad	*Bufo americanus*		
	2	Northern spring peeper	*Pseudacris crucifer*		
3	3	Northern spring peeper	*Pseudacris crucifer*	10:40 PM	64
	1	American toad	*Bufo americanus*		
	3	gray tree frog	*Hyla versicolor*		
4	1	Northern spring peeper	*Pseudacris crucifer*	10:30 PM	65
	1	gray tree frog	*Hyla versicolor*		
	1	American toad	*Bufo americanus*		
5	2	Northern spring peeper	*Pseudacris crucifer*	10:55 PM	65
	1	gray tree frog	*Hyla versicolor*		
	1	American toad	*Bufo americanus*		

Footnotes

[1] 1 = Individuals can be counted and there is space between calls
2 = Individuals can be counted but there is some overlapping of calls
3 = Full chorus; calls are continuous and overlapping. Individuals cannot be distinguished

[2] ºF = Degrees Fahrenheit

Prepared by: COB
Checked by: MJM

Table 4-1: Incidental Wildlife Species 2008 Data - Humboldt Mill Site

Date	Common Name	Scientific Name	Number of Occurrences	Location	Type of Detection*
5/28/2008	beaver	*Castor canadensis*	1	Sampling Point 4	V
6/12/2008	belted kingfisher	*Ceryle alcyon*	1	Sampling Point 2	V
6/12/2008	yellow-bellied sapsucker	*Sphyrapicus varius*	1	Sampling Point 9	A
6/12/2008	turkey vulture	*Cathartes aura*	1	Sampling Point 11	V
6/12/2008	Philadelphia vireo	*Vireo philadelphicus*	1	Sampling Point 11	A
6/12/2008	cedar waxwing	*Bombycilla cedrorum*	1	Sampling Point 11	V
6/12/2008	Canada goose	*Branta canadensis*	1 brood	Sampling Point 11	V
6/13/2008	muskrat	*Ondatra zibethicus*	1	Sampling Point 4	V
6/13/2008	painted turtle	*Chrysemys picta*	4	Sampling Points 4 and 6	V
6/13/2008	scarlet tanager	*Piranga olivacea*	1	Between Sampling Points 6 and 7	V
6/9/2008 to 6/13/2008	eastern chipmunk	*Tamias striatus*	multiple	throughout site	V
7/14/2008	indigo bunting	*Passerina cyanea*	2	southwest of Hwy 601	V
7/14/2008	indigo bunting	*Passerina cyanea*	1	Sampling Point 2	V
7/15/2008	porcupine	*Erethizon dorsatum*	1	Sampling Point 2	quills in dog's nose
7/16/2008	red-tailed hawk	*Buteo jamaicensis*	1	Sampling Point 10	V
7/15/2008	large canine (possibly gray wolf)	*Canis* sp. *(*possibly *Canis lupus)*	1	Sampling Point 6	scat/tracks
7/14/2008	large canine (possibly gray wolf)	*Canis* sp. *(*possibly *Canis lupus)*	1	Sampling Point 7	scat/tracks
7/15/2008	green frog	*Rana clamitans*	1	Sampling Point 5	A
7/15/2008	cedar waxwing	*Bombycilla cedrorum*	10	Sampling Point 6	V, A
7/15/2008	hermit thrush	*Catharus guttatus*	1	Sampling Point 10	A
7/15/2008	ovenbird	*Seiurus aurocapilla*	1	Sampling Point 10	A
7/15/2008	double-crested cormorant	*Phalacrocorax auritus*	16	Sampling Point 11	A

* A=Audial
F=Flyover
V=Visual

Prepared by: COB
Checked by: MJM

PHOTOGRAPHS

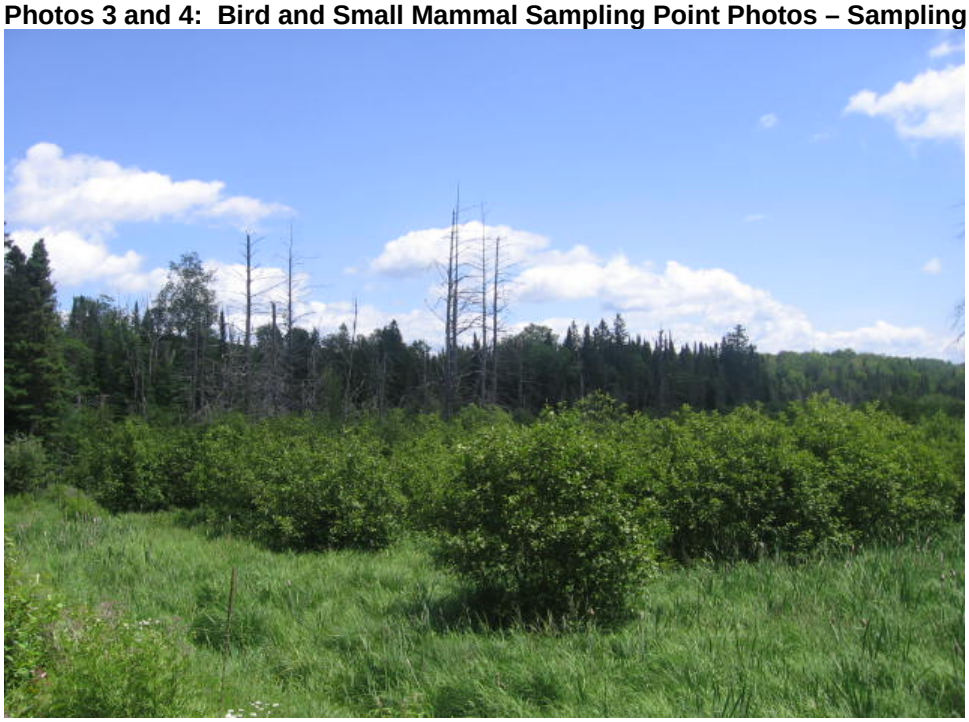
Photos 1 and 2: Bird and Small Mammal Sampling Point Photos – Sampling Point 1

North View

South View

Sampling Point 1. An open area disturbed from historical mining. Generally consists of a field bordering immature white spruce and quaking aspen stands. Also near the edge of a water-filled mining pit with steep rocky faces. Common herbaceous plants include late goldenrod and grasses.

Photos 3 and 4: Bird and Small Mammal Sampling Point Photos – Sampling Point 2



North View

South View

Sampling Point 2. An abandoned railroad grade with hummock sedge emergent wetlands on both sides. The emergent wetlands contain patches of scrub-shrub/forested wetland dominated by tag alder. Common herbaceous species include sedges and reed canary grass.

Photos 5 and 6: Bird and Small Mammal Sampling Point Photos – Sampling Point 3

North View

South View

Sampling Point 3. Existing power line with maintained right-of-way dominated by bracken fern and scrub hazelnut. Both sides of the right-of-way are dominated by quaking and big tooth aspen, white birch, and sugar maple in varying topography. Site is elevated above the Humboldt mining buildings with an open view to the south.

Photos 7 and 8: Bird and Small Mammal Sampling Point Photos – Sampling Point 4

North View

South View

Sampling Point 4. Edge of an existing trail with a generally open view of mixed emergent and scrub-shrub wetlands dominated by cattail, tag alder, and scattered conifers, with scrub aspen growth to the north.

Photos 9 and 10: Bird and Small Mammal Sampling Point Photos – Sampling Point 5

North View

South View

Sampling Point 5. Paved road crossing of extensive open hummock sedge-dominated emergent wetland with a stream corridor and a fringe of black spruce and tag alder scrub wetland. There is an open view in all directions. Mixed hardwood and conifer uplands are adjacent.

Photos 11 and 12: Bird and Small Mammal Sampling Point Photos – Sampling Point 6

North View

South View

Sampling Point 6. Edge of emergent wetland with a beaver impoundment and open water areas surrounded by black spruce and tag alder. Adjacent surrounding upland habitat is comprised of dense, mature, closed-canopy white spruce, hemlock, sugar maple, and white birch on steep terrain. View is open over the wetland.

Photos 13 and 14: Bird and Small Mammal Sampling Point Photos – Sampling Point 7

North View

South View

Sampling Point 7. Edge of a saturated emergent wetland comprised of sedges and rushes, with patches of open water and dead standing timber. The surrounding upland habitat bordering the wetland is comprised of dense, mature, closed-canopy white spruce, hemlock, sugar maple, and white birch on a rolling terrain. The view over the wetland is open.

Photos 15 and 16: Bird and Small Mammal Sampling Point Photos – Sampling Point 8

North View

South View

Sampling Point 8. Edge of an extensive historic tailings basin. Some portions are dominated by herbaceous upland species such as tall goldenrod and orange hawkweed. Other portions are covered by scrub willow, quaking aspen, and emergent wetland plants. Adjacent upland habitats are dominated by a mix of scattered white spruce, balsam fir, and big tooth aspen.

Photos 17 and 18: Bird and Small Mammal Sampling Point Photos – Sampling Point 9

North View

South View

Sampling Point 9. Outlet of Lake Lory. There is a view of an emergent/scrub-shrub/forested wetland riparian zone along the outlet stream, where a beaver dam is present. Common wetland plant species include black spruce, balsam fir, and tag alder. Adjacent upland habitat is comprised of mixed spruce, sugar maple, and big tooth aspen.

Photos 19 and 20: Bird and Small Mammal Sampling Point Photos – Sampling Point 10

North View

South View

Sampling Point 10. Remote upland habitat of mixed deciduous and coniferous forest. Common tree species include red maple, sugar maple, and red oak, with a ground cover of thimbleberry and bracken fern. Terrain is rolling, with rocky ridges, a dense canopy, and evidence of historic logging.

Photos 21 and 22: Bird and Small Mammal Sampling Point Photos – Sampling Point 11

North View

South View

Sampling Point 11. Causeway between Lake Lory and open water body. Dead standing timber and submergent wetlands are present north of the causeway. The heron nesting colony and eagle nest are visible from this location. South of the causeway is forested and scrub-shrub wetland. Common plant species include balsam fir and tag alder.

Fall Migrating Bird Survey, September 2008

King & MacGregor Environmental, Inc.
2520 Woodmeadow Drive SE
Grand Rapids, MI 49546
Phone (616)957-1231 • Fax (616) 957-2198

MEMO

Date: November 25, 2008

To: Stephen Donohue, Foth Infrastructure & Environment, LLC

Cc: Dennis Donohue, Warner, Norcross & Judd, LLP

From: Matthew MacGregor

Re: Humboldt Mill Site – Fall Migrating Bird Survey, September 2008

King & MacGregor Environmental, Inc. (KME) was contracted by Foth Infrastructure & Environment, LLC (Foth I&E) to conduct baseline environmental investigations within the Humboldt Mill Site in Marquette County, Michigan. The results of the 2008 surveys for mammals, frogs and toads, threatened and endangered species, and breeding birds were presented in *Biological Survey Supplement 2008: Plant Communities and Wildlife* Evaluation (KME, 2008). This report is an addendum to the *Biological Survey Supplement 2008* and describes the results of the 2008 migrating bird surveys KME conducted at the Humboldt Mill Site.

Methods
KME conducted migrating bird surveys at the Humboldt Mill Site on September 24 and 25, 2008. The methodologies developed and described in the *Biological Survey Report* (2007), which describes surveys done in 2006, and *Biological Survey Supplement* (2007 and 2008) were employed during the 2008 migrating bird surveys. Diurnal survey methods included using a series of point count surveys, which is a commonly accepted method for identifying birds in a region (Howe, et al., 1997; Sauer, et al., 2005). Eleven sampling points were established in 2006 in a variety of habitat types in order to maximize documentation of bird species present.

During the course of the migrating bird surveys, KME also documented wildlife that was observed at the Humboldt Mill Site at a different location than a sampling point or during a different time than a sampling period. These species were recorded as "incidental wildlife species."

Results
A total of 222 birds representing 28 species were identified during the September, 2008 surveys (Table 1 and Table 2). Some of the species most commonly identified during the surveys included red-breasted nuthatch (*Sitta canadensis*), rock pigeon (*Columba livia*), and yellow-rumped warbler (*Dendroica coronata*).

In addition, twenty-three birds representing five species were identified as incidental wildlife species (Table 3). These species included black-throated blue warbler (*Dendroica caerulescens*), ruffed grouse (*Bonasa umbellus*), American robin (*Turdus migratorius*), ring-necked duck (*Aythya collaris*), and mallard (*Anas platyrhynchos*) (Table 1, 2, and 3).

Discussion

The bird species identified within the study area during the September migration survey are consistent with the bird species one would expect in the habitats present on site. No threatened or endangered bird species were observed.

REFERENCES AND LITERATURE CITED

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Sauer, J.R., J.E. Hines, and J. Fallon, 2005. The North American Breeding Bird Survey. United States Geological Survey, Patuxent Wildlife Research Center.

Table 1: Bird Sampling Point Data

Kennecott Eagle Minerals Company - Humboldt Mill Project Site

September 2008

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
1	09/24/08	American crow	*Corvus brachyrhynchos*	1	A
1	09/24/08	blue jay	*Cyanocitta cristata*	1	A
2	09/24/08	red-breasted nuthatch	*Sitta canadensis*	2	A
2	09/24/08	blue jay	*Cyanocitta cristata*	1	A
2	09/24/08	white-throated sparrow	*Zonotrichia albicollis*	2	V / A
2	09/24/08	American goldfinch	*Carduelis tristis*	1	A
2	09/24/08	black-capped chickadee	*Poecile atricapillus*	1	A
2	09/24/08	American crow	*Corvus brachyrhynchos*	1	A
2	09/24/08	American robin	*Turdus migratorius*	1	A
3	09/24/08	common raven	*Corvus corax*	1	A
4	09/24/08	yellow-rumped warbler	*Dendroica coronata*	4	V
4	09/24/08	rock pigeon	*Columba livia*	10	V
5	09/24/08	red-breasted nuthatch	*Sitta canadensis*	1	A
5	09/24/08	American crow	*Corvus brachyrhynchos*	1	A
5	09/24/08	blue jay	*Cyanocitta cristata*	5	V / A
5	09/24/08	Canada goose	*Branta canadensis*	2	A
5	09/24/08	American goldfinch	*Carduelis tristis*	2	A
6	09/24/08	red-breasted nuthatch	*Sitta canadensis*	1	A
6	09/24/08	blue jay	*Cyanocitta cristata*	1	A
7	09/24/08	red-breasted nuthatch	*Sitta canadensis*	1	A
8	09/24/08	bald eagle	*Haliaeetus leucocephalus*	2	F
8	09/24/08	Northern flicker (yellow-shafted)	*Colaptes auratus*	1	V
9	09/24/08	wood duck	*Aix sponsa*	1	V
9	09/24/08	Northern flicker (yellow-shafted)	*Colaptes auratus*	1	A
9	09/24/08	common raven	*Corvus corax*	1	A
9	09/24/08	pileated woodpecker	*Dryocopus pileatus*	1	A
9	09/24/08	red-breasted nuthatch	*Sitta canadensis*	1	A
10	09/24/08	black-capped chickadee	*Poecile atricapillus*	3	A
10	09/24/08	red-breasted nuthatch	*Sitta canadensis*	1	A
11	09/24/08	American robin	*Turdus migratorius*	1	A
11	09/24/08	American crow	*Corvus brachyrhynchos*	1	A
11	09/24/08	red-breasted nuthatch	*Sitta canadensis*	1	A
11	09/24/08	blue jay	*Cyanocitta cristata*	2	V / A
11	09/24/08	belted kingfisher	*Ceryle alcyon*	2	V / A
11	09/24/08	Northern flicker (yellow-shafted)	*Colaptes auratus*	2	A
11	09/24/08	red-eyed vireo	*Vireo olivaceus*	1	A
11	09/24/08	wood duck	*Aix sponsa*	1	A
1	09/25/08	American robin	*Turdus migratorius*	3	A
1	09/25/08	black-capped chickadee	*Poecile atricapillus*	2	A
1	09/25/08	American crow	*Corvus brachyrhynchos*	1	A
1	09/25/08	Northern flicker (yellow-shafted)	*Colaptes auratus*	1	A
1	09/25/08	pileated woodpecker	*Dryocopus pileatus*	1	A
2	09/25/08	American crow	*Corvus brachyrhynchos*	3	A
2	09/25/08	black-capped chickadee	*Poecile atricapillus*	3	A
2	09/25/08	red-breasted nuthatch	*Sitta canadensis*	6	A
2	09/25/08	blue jay	*Cyanocitta cristata*	2	A
2	09/25/08	American robin	*Turdus migratorius*	1	A
3	09/25/08	white-breasted nuthatch	*Sitta carolinensis*	1	A
3	09/25/08	black-capped chickadee	*Poecile atricapillus*	3	A
3	09/25/08	pileated woodpecker	*Dryocopus pileatus*	2	A

Table 1 continued: Bird Sampling Point Data

Kennecott Eagle Minerals Company - Humboldt Mill Project Site

September 2008

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
3	09/25/08	American goldfinch	*Carduelis tristis*	4	A
3	09/25/08	American robin	*Turdus migratorius*	1	A
3	09/25/08	dark-eyed junco	*Junco hyemalis*	2	V / A
3	09/25/08	Northern flicker (yellow-shafted)	*Colaptes auratus*	1	A
3	09/25/08	pine siskin	*Carduelis pinus*	2	A
4	09/25/08	rock pigeon	*Columba livia*	20	V
4	09/25/08	blue jay	*Cyanocitta cristata*	1	A
4	09/25/08	red-breasted nuthatch	*Sitta canadensis*	1	A
4	09/25/08	American crow	*Corvus brachyrhynchos*	1	A
4	09/25/08	pileated woodpecker	*Dryocopus pileatus*	1	A
5	09/25/08	Northern flicker (yellow-shafted)	*Colaptes auratus*	1	A
5	09/25/08	American robin	*Turdus migratorius*	2	A
5	09/25/08	red-breasted nuthatch	*Sitta canadensis*	5	A
5	09/25/08	white-breasted nuthatch	*Sitta carolinensis*	1	A
5	09/25/08	swamp sparrow	*Melospiza georgiana*	3	V / A
6	09/25/08	red-breasted nuthatch	*Sitta canadensis*	5	A
6	09/25/08	white-breasted nuthatch	*Sitta carolinensis*	1	A
6	09/25/08	red-eyed vireo	*Vireo olivaceus*	1	A
6	09/25/08	American robin	*Turdus migratorius*	2	A
6	09/25/08	common raven	*Corvus corax*	1	V
7	09/25/08	red-breasted nuthatch	*Sitta canadensis*	6	A
7	09/25/08	American robin	*Turdus migratorius*	1	A
7	09/25/08	black-capped chickadee	*Poecile atricapillus*	2	A
7	09/25/08	red-eyed vireo	*Vireo olivaceus*	1	A
7	09/25/08	dark-eyed junco	*Junco hyemalis*	3	A
7	09/25/08	American goldfinch	*Carduelis tristis*	1	A
7	09/25/08	white-winged crossbill	*Loxia leucoptera*	1	A
8	09/25/08	red-breasted nuthatch	*Sitta canadensis*	2	A
8	09/25/08	black-capped chickadee	*Poecile atricapillus*	2	V / A
8	09/25/08	American robin	*Turdus migratorius*	2	A
8	09/25/08	yellow-rumped warbler	*Dendroica coronata*	15	V / A
8	09/25/08	hermit thrush	*Catharus guttatus*	1	V
8	09/25/08	ruby-crowned kinglet	*Regulus calendula*	1	V
8	09/25/08	blue jay	*Cyanocitta cristata*	1	V
8	09/25/08	downy woodpecker	*Picoides pubescens*	1	V
9	09/25/08	red-breasted nuthatch	*Sitta canadensis*	3	A
9	09/25/08	blue jay	*Cyanocitta cristata*	1	V
9	09/25/08	American crow	*Corvus brachyrhynchos*	1	A
9	09/25/08	ruby-crowned kinglet	*Regulus calendula*	1	V / A
9	09/25/08	pied-billed grebe	*Podilymbus podiceps*	3	V
9	09/25/08	pileated woodpecker	*Dryocopus pileatus*	1	A
9	09/25/08	American robin	*Turdus migratorius*	1	A
9	09/25/08	downy woodpecker	*Picoides pubescens*	1	V / A
9	09/25/08	black-capped chickadee	*Poecile atricapillus*	1	A
9	09/25/08	dark-eyed junco	*Junco hyemalis*	3	V / A
9	09/25/08	golden-crowned kinglet	*Regulus satrapa*	1	V
10	09/25/08	American robin	*Turdus migratorius*	1	A
10	09/25/08	red-breasted nuthatch	*Sitta canadensis*	1	A
10	09/25/08	pileated woodpecker	*Dryocopus pileatus*	1	A
10	09/25/08	black-capped chickadee	*Poecile atricapillus*	1	A

Table 1 continued: Bird Sampling Point Data

Kennecott Eagle Minerals Company - Humboldt Mill Project Site

September 2008

Sampling Point	Date	Common Name	Scientific Name	Number of Occurences	Type of Detection*
10	09/25/08	yellow-bellied sapsucker	*Sphyrapicus varius*	1	V
10	09/25/08	blue jay	*Cyanocitta cristata*	1	A
11	09/25/08	yellow-bellied sapsucker	*Sphyrapicus varius*	1	A
11	09/25/08	belted kingfisher	*Ceryle alcyon*	1	V / A
11	09/25/08	blue jay	*Cyanocitta cristata*	2	V / A
11	09/25/08	red-breasted nuthatch	*Sitta canadensis*	2	A
11	09/25/08	wood duck	*Aix sponsa*	1	A
11	09/25/08	American goldfinch	*Carduelis tristis*	1	A
11	09/25/08	pileated woodpecker	*Dryocopus pileatus*	1	A
11	09/25/08	American robin	*Turdus migratorius*	1	A
11	09/25/08	pied-billed grebe	*Podilymbus podiceps*	1	V
			Total Number of Bird Occurrences	**222**	

7	09/24/08	black throated blue warbler **	*Dendroica caerulescens*	1	A
9	09/24/08	ruffed grouse **	*Bonasa umbellus*	1	V
10	09/24/08	American robin **	*Turdus migratorius*	1	A
11	09/24/08	ring-necked duck **	*Aythya collaris*	1	V
11	09/24/08	mallard **	*Anas platyrhynchos*	6	V
6	09/25/08	ruffed grouse **	*Bonasa umbellus*	3	V
9	09/25/08	ring-necked duck **	*Aythya collaris*	1	V
9	09/25/08	mallard **	*Anas platyrhynchos*	9	A, V
			Total Incidental Birds	**23**	

* A=Audial
F=Flyover
V=Visual

** Bird observed outside of sampling period. Identified as an incidental wildlife species.

Table 2: Bird Species Summary

Kennecott Eagle Minerals Company - Humboldt Mill Site

September 2008

Species Count	Common Name	Total # of Birds Observed
1	American crow	10
2	American goldfinch	9
3	American robin	17
4	bald eagle	2
5	belted kingfisher	3
6	black-capped chickadee	18
7	blue jay	18
8	Canada goose	2
9	common raven	3
10	dark-eyed junco	8
11	downy woodpecker	2
12	golden-crowned kinglet	1
13	hermit thrush	1
14	Northern flicker (yellow-shafted)	7
15	pied-billed grebe	4
16	pileated woodpecker	8
17	pine siskin	2
18	red-breasted nuthatch	39
19	red-eyed vireo	3
20	rock pigeon	30
21	ruby-crowned kinglet	2
22	swamp sparrow	3
23	white-breasted nuthatch	3
24	white-throated sparrow	2
25	white-winged crossbill	1
26	wood duck	3
27	yellow-bellied sapsucker	2
28	yellow-rumped warbler	19

TOTAL BIRDS	**222**

black throated blue warbler **	1
ruffed grouse **	4
American robin **	1
ring-necked duck **	2
mallard **	15

TOTAL INCIDENTAL BIRDS	**23**

KEY:

Observed only 1-3 total birds

** Incidental bird - not included in total

Table 3: Incidental Wildlife Species - Humboldt Mill Site

Kennecott Eagle Minerals Company - Humboldt Mill Project Site

September 2008

Date	Common Name	Scientific Name	Number of Occurrences	Location	Type of Detection*
09/24/08	red squirrel	*Tamiasciurus hudsonicus*	1	Sampling Point 2	A
09/24/08	spring peeper	*Pseudacris crucifer*	5	Sampling Point 2	A
09/24/08	black throated blue warbler	*Dendroica caerulescens*	1	Sampling Point 7	A
09/24/08	ruffed grouse	*Bonasa umbellus*	1	Sampling Point 9	V
09/24/08	American robin	*Turdus migratorius*	1	Sampling Point 10	A
09/24/08	spring peeper	*Pseudacris crucifer*	2	Sampling Point 10	A
09/24/08	spring peeper	*Pseudacris crucifer*	5	Sampling Point 11	A
09/24/08	red squirrel	*Tamiasciurus hudsonicus*	1	Sampling Point 11	A
09/24/08	ring-necked duck	*Aythya collaris*	1	Sampling Point 11	V
09/24/08	mallard	*Anas platyrhynchos*	6	Sampling Point 11	V
09/25/08	least chipmunk	*Eutamias minimus*	1	Sampling Point 1	A
09/25/08	whitetail deer	*Odocoileus virginianus*	1	Sampling Point 1	tracks
09/25/08	red squirrel	*Tamiasciurus hudsonicus*	1	Sampling Point 2	A
09/25/08	least chipmunk	*Eutamias minimus*	2	Sampling Point 2	V
09/25/08	red squirrel	*Tamiasciurus hudsonicus*	2	Sampling Point 3	A
09/25/08	least chipmunk	*Eutamias minimus*	1	Sampling Point 5	A
09/25/08	red squirrel	*Tamiasciurus hudsonicus*	3	Sampling Point 5	A
09/25/08	red squirrel	*Tamiasciurus hudsonicus*	2	Sampling Point 6	A
09/25/08	ruffed grouse	*Bonasa umbellus*	3	Sampling Point 6	V
09/25/08	red squirrel	*Tamiasciurus hudsonicus*	2	Sampling Point 7	A
09/25/08	ring-necked duck	*Aythya collaris*	1	Sampling Point 9	V
09/25/08	mallard	*Anas platyrhynchos*	9	Sampling Point 9	A, V

* A=Audial
F=Flyover
V=Visual

B-3

HTDF Wetland Delineation

King & MacGregor Environmental, Inc.
2520 Woodmeadow Drive SE
Grand Rapids, MI 49546
Phone (616)957-1231 • Fax (616) 957-2198

Memo

Date: **October 15, 2008**

To: **Stephen Donohue, Foth Infrastructure & Environment, LLC**

Cc: **Dennis Donohue, Warner, Norcross & Judd, LLP**
Vicky Peacey, Foth Infrastructure & Environment, LLC

From: **Matthew MacGregor**

Re: **Humboldt Mill Site - WWTP Discharge Wetlands**

King & MacGregor Environmental, Inc. (KME) was contracted by Foth Infrastructure & Environment, LLC (Foth I&E) to conduct baseline biological investigations within the Humboldt Mill Site in Marquette County, Michigan. On September 18 and 22, 2008, as part of these investigations, KME conducted a wetland delineation within the area directly north of the Humboldt Tailings Disposal Facility (HTDF) and south of the previously delineated Wetland EE (Figure 1). The intent of this report is to provide a description of the character of the wetlands identified and an opinion regarding the possible jurisdiction of the Michigan Department of Environmental Quality (MDEQ) over these wetlands.

Methods
The methods used to conduct this wetland delineation were consistent with the procedures and general practices used by the MDEQ (Michigan Department of Environmental Quality) as described in *A Technical Manual for Identifying Wetlands in Michigan* (MDEQ, 2001).

The wetland delineation was conducted on September 18 and 22, 2008. Each area of potential wetland was evaluated to determine if wetland vegetation, visual evidence of wetland hydrology and hydric soils were present. Based on this evaluation, an upland/wetland boundary was identified for each wetland. The wetland boundaries were delineated by placing numbered pink flagging at intervals along the identified boundaries. Each numbered flag was located by survey. Photographs were taken of each wetland (Photos 1 through 14).

Results
Eight wetlands were identified within the area of investigation. The wetlands were identified as wetlands 1 through 8 and are described below:

<u>Wetland 1</u>
This small emergent wetland is located in the eastern portion of the area of investigation, northeast of the HTDF. This wetland appears to have developed within a previously graded

area. Plant species identified within this wetland included broad-leaved cattail (*Typha latifolia*), sensitive fern (*Onoclea sensibilis*), interrupted fern (*Osmunda claytoniana*) and red-top grass (*Agrostis stolonifera*). Standing water was present within this wetland at the time of inspection. The soil column in this wetland was disturbed, consisting mainly of large broken rock and cobble. This wetland was identified using flags labeled 1-1 through 1-4.

Wetland 2

This emergent and open water wetland is located in the eastern portion of the area of investigation, northeast of Wetland 1. This wetland appears to have developed within a previously disturbed area, consisting mainly of an open water area within a bedrock or rock rubble depression. Plant species identified within this wetland included broad-leaved cattail, interrupted fern, wool grass (*Scirpus cyperinus*) and red-top grass. The soil column in this wetland was disturbed, consisting mainly of large broken rock, cobble and bedrock. This wetland was identified using flags labeled 2-1 through 2-6.

Wetland 3

This scrub/shrub wetland is located in the eastern portion of the area of investigation, south of Wetland 2, at the base of a steep exposed rock hillside. Plant species identified within this wetland included speckled alder (*Alnus incana*), swamp aster (*Aster puniceus*), wild strawberry (*Fragaria virginiana*), woodland horsetail (*Equisetum sylvaticum*), sensitive fern, and red-top grass. The soil column in this wetland was disturbed, consisting mainly of large broken rock and cobble. This wetland was identified using flags labeled 3-1 through 3-8.

Wetland 4

This emergent and open water wetland is located in the eastern portion of the area of investigation, along the northeast edge of the HTDF. Plant species identified within this wetland included speckled alder, broad-leaved cattail, wool grass and various sedge species (*Carex sp.*). The soil column in this wetland was disturbed, consisting mainly of saturated sands and large broken rock and cobble. This wetland was identified using flags labeled 4-1 through 4-4. It should be noted that a narrow (1-2 feet) band of wetland vegetation was observed intermittently along most of the HTDF shoreline. Due to its linear configuration and close proximity to the shore, it was not flagged.

Wetland 5

This scrub/shrub wetland is located on the western portion of the area of investigation, on the north side of the HTDF. Plant species identified within this wetland included speckled alder, balsam poplar (*Populus balsamifera*), quaking aspen (*Populus tremuloides*), blue-joint grass (*Calamagrostis canadensis*), varicolored iris (*Iris versicolor*), swamp aster, strict sedge (*Carex stricta*), stipitate sedge (*Carex stipata*), woodland horsetail, sensitive fern, and red-top grass. The soil column in this wetland was disturbed, consisting mainly of saturated sand, broken rock and cobble. This wetland was identified using flags labeled 5-1 through 5-21.

Wetland 6

This scrub/shrub wetland is located in the western portion of the area of investigation, northwest of Wetland 5, at the base of a steep exposed rock hillside. Plant species identified within this wetland included speckled alder, blue-joint grass, garden tansy (*Tanacetum vulgare)* and sensitive fern. The soil column in this wetland was disturbed, consisting mainly of large broken rock and cobble. This wetland was identified using flags labeled 6-1 through 6-6.

Wetland 7

This scrub/shrub wetland is located in the western portion of the area of investigation, southwest of Wetland 6, at the base of a steep exposed rock hillside. Plant species identified within this wetland included speckled alder, blue-joint grass, garden tansy and sensitive fern. The soil column in this wetland was disturbed, consisting mainly of large broken rock and cobble. This wetland was identified using flags labeled 7-1 through 7-6.

Wetland 8

This scrub/shrub wetland is located in the western portion of the area of investigation, east of Wetland 7, at the base of a steep exposed rock hillside. Plant species identified within this wetland included speckled alder, blue-joint grass, garden tansy and sensitive fern. The soil column in this wetland was disturbed, consisting mainly of large broken rock and cobble. This wetland was identified using flags labeled 8-1 through 8-6.

Discussion

In order for the MDEQ to have regulatory authority over a wetland, the wetland must be contiguous to a lake, pond, and/or stream and/or over 5 acres in size. Due to their proximity to the HTDF, all of the wetlands identified in this investigation are likely regulated under the Michigan Natural Resources and Environmental Protection Act, P.A. 451 of 1994,(NREPA) Part 303, Wetland Protection.

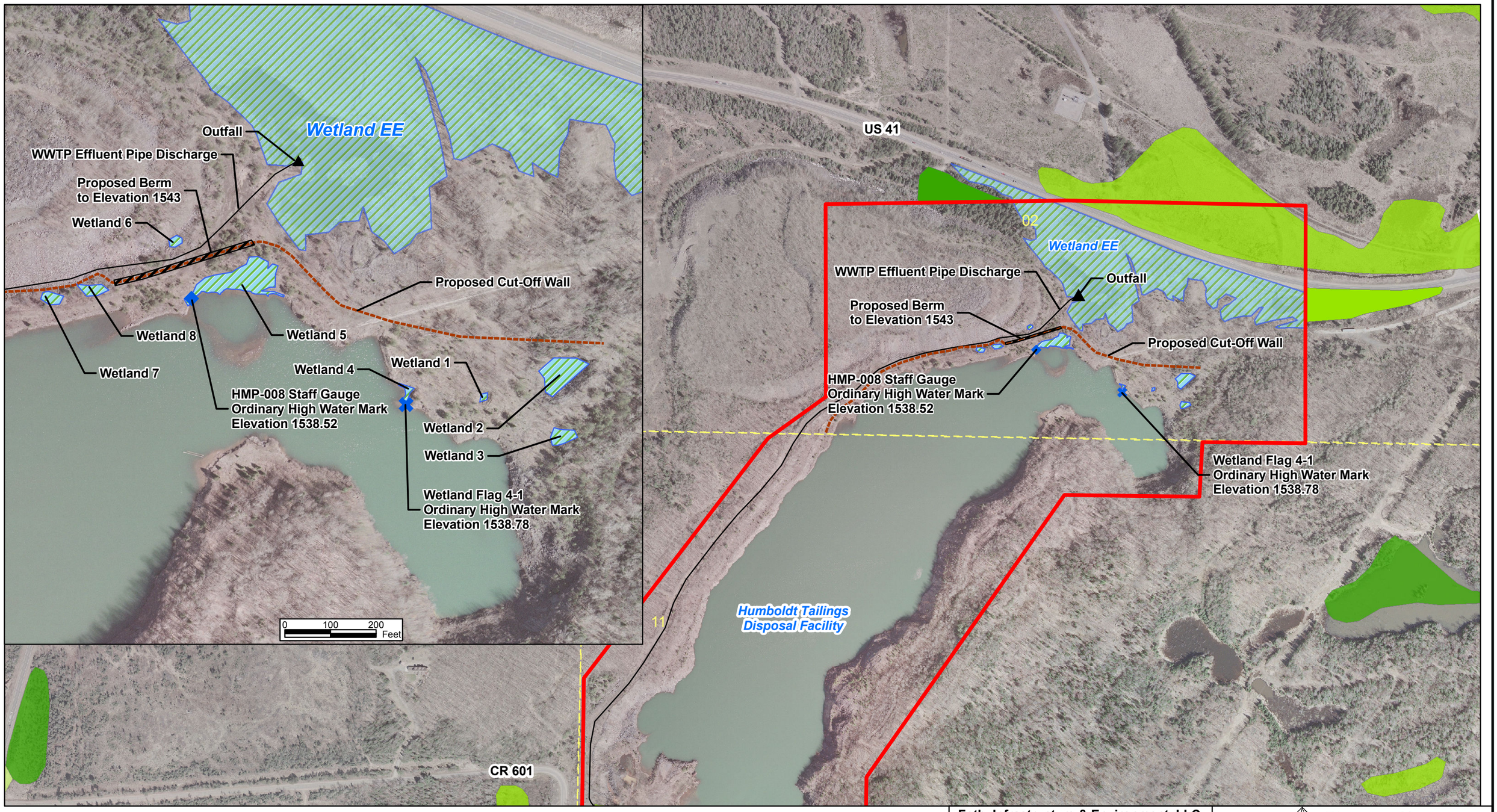
The NREPA, Part 301 defines an "Inland lake or stream" as "…a natural or artificial lake, pond, or impoundment; a river, stream, or creek…or any other body of water that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water…". Further, "Ordinary high-water mark" is defined as "… the line between upland and bottomland that persists through successive changes in water levels, below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the surface of the soil, and the vegetation...".

Based on evaluation of the shoreline of the HTDF, it appears that the Ordinary High Water Mark of this waterbody is located at Wetland Flag 4-1, or between elevation 1538.52 and 1538.78.

REFERENCES AND LITERATURE CITED

Michigan Department of Environmental Quality. 2001. MDEQ Wetland Identification Manual: A Technical Manual for Identifying Wetlands in Michigan. EQ2787.

United States Department of Agriculture. 2005. Soil Survey Geographic Database for Marquette County, Michigan. U.S. Department of Agriculture, Natural Resource Conservation Service. http://www.SoilDataMart.ncrcs.usda.gov



NOTES

1. Orthophotography supplied by Aero-Metric Engineering, Sheboygan, Wisconsin. Date of photography: April 27, 2006.
2. Horizontal datum based on NAD 83/94. Horizontal coordinates based on UTM Zone 16.
3. Site Location - Project Site within Sections 2 and 11, T47N, R29W, Humboldt Township, Marquette County, Michigan.

M:\06w003\mxd\KME\2008\kmc_humboldt_wetlandEEdischargeloc&wetlands_11x17.mxd October 13, 2008

LEGEND

- Proposed Cut-Off Wall
- WWTP Effluent Pipeline
- Proposed Berm
- KEMC Project Location
- Flagged Wetland Boundary (Area approximately 12.25 acres)
- PLSS Sections

Marquette County NWI Outside Project Boundary

- Emergent
- Scrub-Shrub
- Forested

N

Foth
Foth Infrastructure & Environment, LLC

Foth Infrastructure & Environment, LLC

REVISED	DATE	BY	DESCRIPTION

CHECKED BY:	KKB	DATE:	OCT. '08
APPROVED BY:	SVD1	DATE:	OCT. '08
APPROVED BY:		DATE:	

Kennecott
Eagle Minerals

FIGURE 1

WWTP DISCHARGE LOCATION AND FLAGGED WETLANDS

Scale: 0 250 500 Feet

Date: OCTOBER, 2008

Prepared by: BJW1

Project No: 06W003

Photo 1: Wetland 1a

Photo 2: Wetland 1b

Photo 3: Wetland 2a

Photo 4: Wetland 2b

Photo 5: Wetland 3a

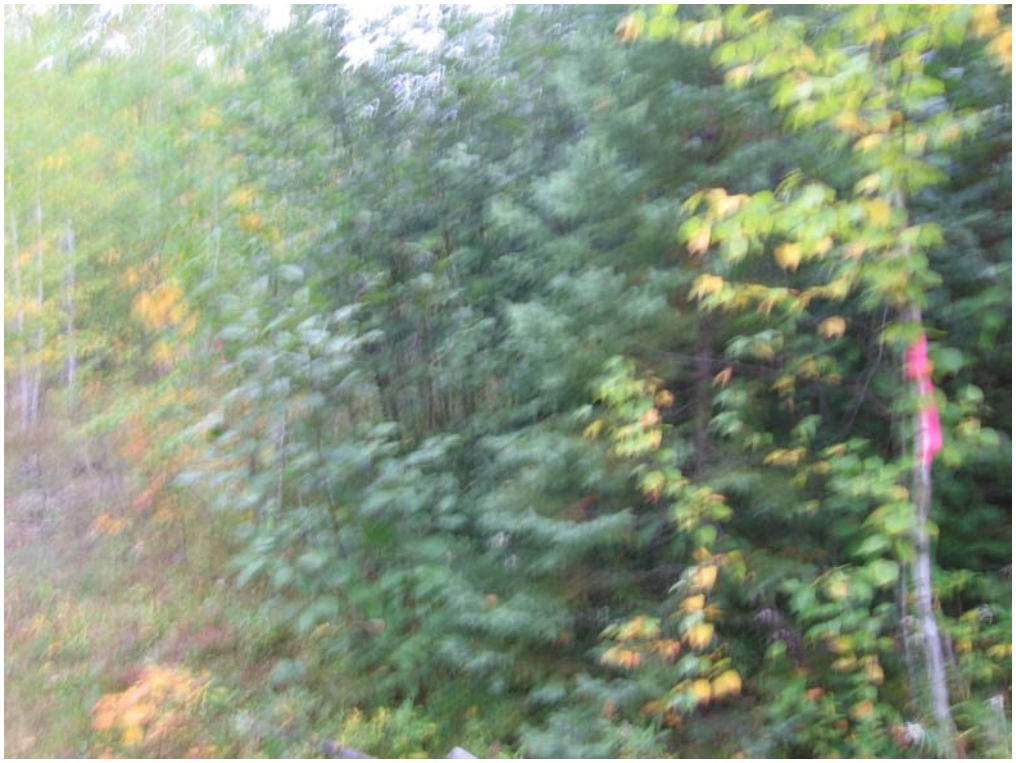


Photo 6: Wetland 3b

Photo 7: Wetland 4a

Photo 8: Wetland 4b

Photo 9: Wetland 4c

Photo 10: Wetland 5a

Photo 11: Wetland 5b

Photo 12: Wetland 6

Photo 13: Wetland 7

Photo 14: Wetland 8

Appendix C

North Jackson

Groundwater Sampling Field Reports

March 2008

NORTH
JACKSON
COMPANY

1004 Harbor Hills Drive, Suite 102 • Marquette, Michigan • 906.225.6787

April 2, 2008

Mr. Stephen V. Donohue
2737 South Ridge Road
P.O. Box 19012
Green Bay, WI 54307

Re: Humboldt Mill Site March 2008 Groundwater Monitoring Event

Dear Mr. Donohue:

Attached is the draft Humboldt Mill Site March 2008 Groundwater Monitoring Field Report.

If you have any questions, please call.

Sincerely,

Kari Paulson

North Jackson Company
Groundwater Monitoring Report

Project Name: Humboldt Mill

Contact: North Jackson Company
1004 Harbor Hills Drive, Suite 102
Marquette, Michigan 49855
Phone (906) 225-6787

Summary of Monitoring Activities

Sampling Date(s): 3/12/08, 3/13/08, 3/17/08, 3/18/08, 3/19/08, 3/20/08

Activities: Collected groundwater samples from wells HYG-1, HW-1, HW-1A, HW-2, HW-3, HW-4, HW-5, HW-5A, HW-6, HW-6A, KMW-2, KMW-3, KMW-4, KMW-5, KMW-7, KMW-9, KMW-9P, KMW-10, MW-5, MW-11, MW-12, MW-101, MW-102, MW-103, MW-601, MW-602, MW-603, MW-604, MW-605, MW-606, P-602, P-604, P-605, and PW-2.

Collected QA/QC samples, including 6 masked duplicates, 6 field (atmospheric) blanks.

Measured water levels at 42 monitoring wells on 3/11/08.

Unable to measure water levels at staff gauges or well points at HMP and HMS locations due to ice. The water level at TDP-001 was also unable to be measured due to ice and TDP-002 was dry.

Field Report Attachments

Field Analytical Data Summary	Yes
Flow Measurement	No
Water Sampling Log	35
Quality Control Summary	Yes
Chain of Custody Numbers	20080312, 20080313, 015120, 20080318, 20080319, and 20080320

Laboratory Analysis

Pace - Metals, anions, cations, BTEX (MW-5 only), general chemistry

Sampler Name(s): Andrew Maracini (AJM), Richard Eagle (RRE), Peter Sabee (PJS), and Chris Cantway (CEC)

North Jackson Company
Groundwater Quality Control Sampling Summary

Project Name: Humboldt Mill

Sample ID	Sampling Date	Description
DUP-001	3/12/08	Masked duplicate (KMW-3)
DUP-002	3/13/08	Masked duplicate (P-604)
DUP-003	3/17/08	Masked duplicate (HW-6)
DUP-004	3/18/08	Masked duplicate (HW-4)
DUP-005	3/19/08	Masked duplicate (KMW-10)
DUP-006	3/20/08	Masked duplicate (KMW-9P)
FBK-001	3/12/08	Field blank
FBK-002	3/13/08	Field blank
FBK-003	3/17/08	Field blank
FBK-004	3/18/08	Field blank
FBK-005	3/19/08	Field blank
FBK-006	3/20/08	Field blank

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU)
HYG-1	3/17/08	11	514	7.3	3.8	30	<1
HW-1	3/20/08	9.0	502	7.3	<0.005	-40	28
HW-1A	3/17/08	9.3	553	7.5	6.5	-24	<1
HW-2	3/17/08	6.2	530	7.7	0.25	-118	23
HW-3	3/18/08	7.7	167	NM	<0.05	104	145
HW-4	3/18/08	6.6	548	NM	<0.005	30	<1
HW-5	3/17/08	7.8	554	7.6	<0.005	-151	29
HW-5A	3/17/08	6.7	526	7.5	7.5	-33	29
HW-6	3/17/08	7.0	503	7.6	0.1	-140	2
HW-6A	3/17/08	8.8	523	7.5	<0.005	-167	NM
KMW-2	3/19/08	6.3	607	6.9	<0.005	-95	30
KMW-3	3/12/08	8.9	506	6.5	<0.005	-58	<1
KMW-4	3/19/08	7.9	369	NM	<0.005	-6	<1
KMW-5	3/18/08	7.4	426	6.5	<0.4	-88	43
KMW-7	3/12/08	9.8	1,342	6.0	<0.005	1	<1
KMW-9	3/12/08	8.9	539	6.2	<0.005	36	2
KMW-9P	3/20/08	8.2	1,725	NM	<0.005	-71	<1
KMW-10	3/19/08	4.8	201	NM	<0.005	-34	<1
MW-5	3/20/08	i	i	i	i	i	i
MW-11	3/12/08	9.0	2,349	6.2	1.2	-49	35
MW-12	3/12/08	8.7	309	7.1	<0.05	-88	<1

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU)
MW-101	3/18/08	7.8	391	6.8	<0.005	-108	19
MW-102	3/19/08	i	i	i	i	i	i
MW-103	3/20/08	8.0	708	NM	<0.005	-90	<1
MW-601	3/19/08	i	i	i	i	i	i
MW-602	3/13/08	8.3	203	7.3	<0.005	-144	<1
MW-603	3/19/08	8.8	152	NM	0.2	-23	5
MW-604	3/13/08	3.0	276	6.7	<0.005	-77	<1
MW-605	3/13/08	6.7	216	7.9	<0.005	-31	13
MW-606	3/19/08	7.7	195	NM	0.3	-102	17
P-602	3/13/08	8.7	156	7.8	<0.005	-214	<1
P-604	3/13/08	6.7	239	6.7	0.01	4	62
P-605	3/13/08	8.2	237	7.2	<0.005	-128	<1
PW-2	3/19/08	i	i	i	i	i	i

i Insufficient water for collection of field parameters.
NM Not measured.
* Temperature measurements were affected by low-flow methodology and may be considerably warmer or colder than actual conditions.

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
MW-5	Monitoring Well	3/11/08	1589.08	10.18	1578.90
MW-6	Monitoring Well	3/11/08	1590.68	23.26	1567.42
MW-7	Monitoring Well	3/11/08	1589.19	27.05	1562.14
MW-9	Monitoring Well	3/11/08	1614.07	26.81	1587.26
MW-11	Monitoring Well	3/12/08	1594.26	6.66	1587.60
MW-12	Monitoring Well	3/12/08	1590.26	5.68	1584.58
MW-101	Monitoring Well	3/11/08	1600.41	7.25	1593.16
MW-102	Monitoring Well	3/11/08	1596.82	8.41	1588.41
MW-103	Monitoring Well	3/11/08	1596.04	9.53	1586.51
MW-104	Monitoring Well	3/11/08	1591.53	11.05	1580.48
MW-601	Monitoring Well	3/11/08	1603.07	6.99	1596.08
MW-602	Monitoring Well	3/11/08	1621.41	19.78	1601.63
MW-603	Monitoring Well	3/11/08	1613.80	18.78	1595.02
MW-604	Monitoring Well	3/11/08	1595.56	6.99	1588.57
MW-605	Monitoring Well	3/11/08	1596.68	7.68	1589.00
MW-606	Monitoring Well	3/11/08	1615.10	14.64	1600.46
P-602	Monitoring Well	3/11/08	1621.32	19.69	1601.63
P-604	Monitoring Well	3/11/08	1595.42	7.67	1587.75
P-605	Monitoring Well	3/11/08	1596.60	7.62	1588.98
PW-1	Monitoring Well	3/11/08	1589.43	13.39	1576.04
PW-2	Monitoring Well	3/11/08	1589.59	38.18	1551.41
PW-4	Monitoring Well	3/11/08	1592.03	12.81	1579.22
KMW-1	Monitoring Well	3/11/08	1588.75	9.42	1579.33
KMW-2	Monitoring Well	3/11/08	1589.19	8.18	1581.01
KMW-3	Monitoring Well	3/11/08	1590.58	16.33	1574.25
KMW-4	Monitoring Well	3/11/08	1586.62	30.11	1556.51
KMW-5	Monitoring Well	3/11/08	1597.88	43.33	1554.55
KMW-6A	Monitoring Well	3/11/08	1598.47	43.52	1554.95
KMW-7	Monitoring Well	3/11/08	1582.50	27.07	1555.43
KMW-9	Monitoring Well	3/11/08	1581.40	26.75	1554.65
KMW-9P	Monitoring Well	3/11/08	1581.47	26.64	1554.83
KMW-10	Monitoring Well	3/11/08	1596.92	8.25	1588.67

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
HYG-1	Existing Pit Well	3/11/08	1543.43	8.22	1535.21
HW-1	Existing Pit Well	3/11/08	1541.86	6.55	1535.31
HW-1A	Existing Pit Well	3/11/08	1541.82	6.52	1535.30
HW-2	Existing Pit Well	3/11/08	1544.99	8.98	1536.01
HW-3	Existing Pit Well	3/11/08	1584.85	36.04	1548.81
HW-4	Existing Pit Well	3/11/08	1582.02	30.06	1551.96
HW-5	Existing Pit Well	3/11/08	1543.03	6.92	1536.11
HW-5A	Existing Pit Well	3/11/08	1543.30	6.99	1536.31
HW-6	Existing Pit Well	3/11/08	1537.63	4.60	1533.03
HW-6A	Existing Pit Well	3/11/08	1537.58	4.00	1533.58
HMS-001	Staff Gauge	3/11/08	1597.00	f	NM
HMS-002	Staff Gauge	3/11/08	1589.79	f	NM
HMS-003	Staff Gauge	3/11/08	1588.05	f	NM
HMS-004	Staff Gauge	3/11/08	1587.83	f	NM
HMS-005	Staff Gauge	3/11/08	1587.81	f	NM
HMS-006	Staff Gauge	3/11/08	1583.31	f	NM
HMS-007	Staff Gauge	3/11/08	1574.25	f	NM
HMP-004	Staff Gauge	3/11/08	1531.11	f	NM
HMP-005	Staff Gauge	3/11/08	1541.91	f	NM
HMP-006	Well Point	3/11/08	1752.52	f	NM
HMP-007	Staff Gauge	3/11/08	1571.17	f	NM
HMP-008	Staff Gauge	3/11/08	1535.92	f	NM
HMP-009	Staff Gauge	3/11/08	1532.64	f	NM
TDP001	Driven Point	3/11/08	1604.00	f	NM
TDP002	Driven Point	3/11/08	1610.80	d	NM

Notes: All monitoring well depths measured from top of PVC (at mark, if present).
Staff gauges were read directly.
d Dry
f Frozen

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Sunny, ~20°s F
Sample ID: HW-1

Date: 3/20/08
Sampler(s): AJM/RRE
Sampling time: 1500

Odor: None
Appearance: Light grey

Temperature (°C): 9.0
Spec. Cond. (µmhos/cm @ 25°C): 502
Conductivity µmhos): 348
pH (SU): 7.3
D.O. (ppm): <0.005
ORP (mV): -40
Turbidity (NTU): 28

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 7 ft
Water column in well: 70 ft
Volume/foot: 1.47 gal/ft
Well volume: 103 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~26

Evacuation method: Submersible pump with new tubing

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.8 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1427						6.59
1430	497	7.4	<0.005	-65	2	6.79
1435	501	7.4	<0.005	-77	6	6.81
1440	500	7.4	<0.005	-78	10	6.82
1445	499	7.4	<0.005	-62	14	6.82
1450	502	7.4	<0.005	-49	18	6.83
1455	502	7.3	<0.005	-44	22	6.83
1500	502	7.3	<0.005	-40	26	6.83

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Light wind, overcast, ~20°s F
Sample ID: HW-1A

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1420

Odor: None
Appearance: Clear to orange cast

Temperature (°C): 9.3
Spec. Cond. (µmhos/cm @ 25°C): 553
Conductivity (µmhos): 389
pH (SU): 7.5
D.O. (ppm): 6.5
ORP (mV): -24
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 7 ft
Water column in well: 25 ft
Volume/foot: 1.47 gal/ft
Well volume: 37 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~20

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1400						6.55
1405	547	7.8	5.0	-49	5	7.21
1410	550	7.6	6.0	-18	10	7.18
1415	556	7.5	6.2	-14	15	7.17
1420	553	7.5	6.5	-24	20	7.19

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, light snow, ~30°s F
Sample ID: HW-4

Date: 3/18/08
Sampler(s): CEC/RRE
Sampling time: 1308

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 6.6
Spec. Cond. (µmhos/cm @ 25°C): 548
Conductivity µmhos): 345
pH (SU): NM
D.O. (ppm): <0.005
ORP (mV): -140
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 30 ft
Water column in well: 46 ft
Volume/foot: 1.47 gal/ft
Well volume: 68 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~36

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.7 gpm. Masked duplicate (DUP-004) collected here.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1233				11	32.22
1238	549	<0.005	-139	15	32.27
1243	546	<0.005	-136	18	32.26
1248	552	<0.005	-139	22	32.26
1253	549	<0.005	-139	25	32.27
1258	549	<0.005	-132	29	32.28
1303	545	<0.005	-139	32	32.29
1308	548	<0.005	-140	36	32.28

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Breezy, overcast, ~20°s F
Sample ID: HW-5

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1305

Odor: Slight hydrogen sulfide
Appearance: Grey/black to grey/ green

Temperature (°C): 7.8
Spec. Cond. (µmhos/cm @ 25°C): 554
Conductivity µmhos): 363
pH (SU): 7.6
D.O. (ppm): <0.005
ORP (mV): -151
Turbidity (NTU): 29

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 7 ft
Water column in well: 64 ft
Volume/foot: 1.47 gal/ft
Well volume: 94 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~19

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1240						6.93
1250	555	7.7	<0.005	-157	8	7.36
1255	555	7.7	<0.005	-151	11	7.35
1300	555	7.6	<0.005	-150	15	7.38
1305	554	7.6	<0.005	-151	19	7.39

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Breezy, overcast, ~20°s F
Sample ID: HW-5A

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1225

Odor: None
Appearance: Slight orange

Temperature (°C): 6.7
Spec. Cond. (µmhos/cm @ 25°C): 526
Conductivity µmhos): 342
pH (SU): 7.5
D.O. (ppm): 7.5
ORP (mV): -33
Turbidity (NTU): 29

Description of measuring point Mark on riser

Total depth: 31 ft
Approx. Depth to water: 7 ft
Water column in well: 24 ft
Volume/foot: 1.47 gal/ft
Well volume: 35 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~27

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1158						7.01
1205	519	8.1	6.5	-70	7	7.63
1210	526	7.6	7.1	-48	12	7.59
1215	528	7.6	7.3	-42	17	7.58
1220	529	7.5	7.5	-34	22	7.57
1225	529	7.5	7.5	-33	27	7.58

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Overcast, light breeze, ~20°s F
Sample ID: HW-6

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1020

Odor: None
Appearance: Clear to slight yellow

Temperature (°C): 7.0
Spec. Cond. (µmhos/cm @ 25°C): 503
Conductivity µmhos): 322
pH (SU): 7.6
D.O. (ppm): 0.1
ORP (mV): -140
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 5 ft
Water column in well: 66 ft
Volume/foot: 1.47 gal/ft
Well volume: 98 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~9

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.25 gpm.
Masked duplicate (DUP-003) collected here.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0946						4.01
0953	492	6.4	0.1	-74	2	4.67
0956	492	6.8	0.1	-98	3	4.68
1002	493	7.3	0.1	-139	4	4.69
1008	496	7.6	0.1	-161	6	4.71
1013	501	7.7	0.1	-155	7	4.69
1016	504	7.6	0.1	-146	8	4.70
1020	503	7.6	0.1	-140	9	4.69

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Breezy, overcast, ~20°s F
Sample ID: HW-6A

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1100

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.8
Spec. Cond. (µmhos/cm @ 25°C): 523
Conductivity µmhos): 361
pH (SU): 7.5
D.O. (ppm): <0.005
ORP (mV): -167
Turbidity (NTU): NM

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 4 ft
Water column in well: 24 ft
Volume/foot: 1.47 gal/ft
Well volume: 35 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1035						4.62
1042	527	7.4	<0.005	-152	7	4.80
1050	520	7.5	<0.005	-170	15	4.86
1055	522	7.5	<0.005	-171	20	4.86
1100	523	7.5	<0.005	-167	25	4.86

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Clear, ~30°s F
Sample ID: KMW-2

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 1134

Odor: Petroleum
Appearance: Slightly cloudy

Temperature (°C): 6.3
Spec. Cond. (µmhos/cm @ 25°C): 607
Conductivity (µmhos): 380
pH (SU): 6.9
D.O. (ppm): <0.005
ORP (mV): -95
Turbidity (NTU): 30

Description of measuring point: Mark on riser

Total depth: 19 ft
Approx. Depth to water: 8 ft
Water column in well: 11 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0958						8.20
1003	390	7.1	< 1.0	-94	0.5	9.37
1008	394	7.1	< 1.0	-94	1.0	9.33
1013	407	7.1	< 1.0	-92	1.5	9.33
1018	420	7.1	< 1.0	-92	2.0	9.33
1023	431	7.1	< 1.0	-92	2.5	9.33
1028	449	7.1	< 1.0	-92	3.0	9.33
1033	462	7.1	< 0.005	-92	3.5	9.33
1038	476	7.1	< 0.005	-93	4.0	9.33
1043	491	7.0	< 0.005	-93	4.5	9.33
1048	510	7.0	< 0.005	-94	5.0	9.33
1053	523	7.0	< 0.005	-93	5.5	9.33
1058	541	7.0	< 0.005	-93	6.0	9.33
1103	548	7.0	< 0.005	-94	6.5	9.40
1108	565	7.0	< 0.005	-93	7.0	9.44
1113	584	7.0	< 0.005	-93	7.5	9.44
1124	604	6.9	< 0.005	-95	8.6	9.44
1129	607	6.9	< 0.005	-95	9.1	9.44
1134	607	6.9	< 0.005	-95	9.8	9.44

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Partly cloudy, ~30°s F
Sample ID: KMW-3

Date: 3/12/08
Sampler(s): RRE/CEC
Sampling time: 1230

Odor: Possible hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.9
Spec. Cond. (µmhos/cm @ 25°C): 506
Conductivity µmhos): 343
pH (SU): 6.5
D.O. (ppm): <0.005
ORP (mV): -58
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 16 ft
Water column in well: 16 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~9

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.25 gpm.
Masked duplicate (DUP-001) collected here.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1200						16.47
1210	501	6.5	<0.005	-54	4	16.57
1215	503	6.5	<0.005	-55	5	16.57
1220	504	6.5	<0.005	-57	7	16.57
1225	506	6.5	<0.005	-57	8	16.56
1230	506	6.5	<0.005	-58	9	16.57

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Clear, sunny, ~30°s F
Sample ID: KMW-4

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 1545

Odor: None
Appearance: Clear

Temperature (°C): 7.9
Spec. Cond. (µmhos/cm @ 25°C): 369
Conductivity µmhos): 248
pH (SU): NM
D.O. (ppm): <0.005
ORP (mV): -6
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 43 ft
Approx. Depth to water: 30 ft
Water column in well: 13 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~30

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.75 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1505					30.22
1510	382	<0.005	2	4	30.44
1515	378	<0.005	-2	8	30.44
1520	375	<0.005	-3	11	30.44
1525	373	<0.005	-4	15	30.44
1530	372	<0.005	-5	19	30.44
1535	370	<0.005	-5	23	30.44
1540	369	<0.005	-5	26	30.45
1545	369	<0.005	-6	30	30.44

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, snowing, ~30°s F
Sample ID: KMW-5

Date: 3/18/08
Sampler(s): CEC/RRE
Sampling time: 1313 & 1617

Odor: Slight hydrogen sulfide
Appearance: Cloudy

Temperature (°C): 7.4
Spec. Cond. (µmhos/cm @ 25°C): 426
Conductivity µmhos): 283
pH (SU): 6.5
D.O. (ppm): <0.4
ORP (mV): -88
Turbidity (NTU): 43

Description of measuring point Mark on riser

Total depth: 53 ft
Approx. Depth to water: 43 ft
Water column in well: 10 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~0.4

Evacuation method: Dedicated submersible pump

Date/Time	# Collected	Bottle	Preservative	Parameter	Comment
	0	40 ml glass	HCl	VOCs	
3/18/08 (1313)	1	500 ml plastic	HNO3	Metals, hardness	
3/18/08 (1313)	1	250 ml plastic	HNO3	Lithium	
3/18/08 (1313)	1	500 ml clear glass	None	LL Hg	
3/18/08 (1617)	1	250 ml plastic	None	Nitrite, nitrate	
3/18/08 (1617)	1	250 ml plastic	NaOH	Cyanide	
3/18/08 (1617)	1	250 ml plastic	H2SO4	Ammonia	
3/18/08 (1617)	1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
3/18/08 (1617)	1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.01 gpm
Able to stabilize but well ran dry before sampling. Sampled at 1313 & 1617 of same day.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1230						43.47
1252	436	6.7	<0.4	-115	0.22	45.38
1257	434	6.6	<0.4	-101	0.27	45.77
1302	429	6.5	<0.4	-96	0.32	46.00
1307	426	6.5	<0.4	-88	0.37	46.22

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: KMW-7

Date: 3/12/08
Sampler(s): RRE/CEC
Sampling time: 1426

Odor: Petroleum
Appearance: Clear

Temperature (°C): 9.8
Spec. Cond. (µmhos/cm @ 25°C): 1342
Conductivity µmhos): 951
pH (SU): 6.0
D.O. (ppm): <0.005
ORP (mV): 1
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 30 ft
Approx. Depth to water: 27 ft
Water column in well: 3 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.5 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~14

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1350						27.10
1401	1344	6.0	<0.005	-1.6	4	27.18
1406	1348	6.0	<0.005	-0.2	6	21.17
1411	1348	6.0	<0.005	-0.6	8	21.16
1416	1344	6.0	<0.005	0.8	10	21.15
1421	1344	6.0	<0.005	2.8	12	21.15
1426	1342	6.0	<0.005	1.1	14	21.14

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: KMW-9

Date: 3/12/08
Sampler(s): RRE/CEC
Sampling time: 1541

Odor: None
Appearance: Clear

Temperature (°C): 8.9
Spec. Cond. (µmhos/cm @ 25°C): 539
Conductivity µmhos): 365
pH (SU): 6.2
D.O. (ppm): <0.005
ORP (mV): 36
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 27 ft
Water column in well: 5 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.9 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1516						26.77
1521	537	6.2	<0.005	41	3	26.98
1526	542	6.2	<0.005	39	5	26.98
1531	543	6.2	<0.005	38	8	26.98
1536	540	6.2	<0.005	36	10	26.96
1541	539	6.2	<0.005	36	13	26.96

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Sunny, ~20°s F
Sample ID: KMW-9P

Date: 3/20/08
Sampler(s): AJM/RRE
Sampling time: 1239

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.2
Spec. Cond. (µmhos/cm @ 25°C): 1725
Conductivity µmhos): 1170
pH (SU): NM
D.O. (ppm): <0.005
ORP (mV): -71
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 57 ft
Approx. Depth to water: 27 ft
Water column in well: 30 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~45

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1.5 gpm. Masked duplicate (DUP-006) collected here.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1209					26.74
1214	1729	<0.005	-44	8	27.34
1219	1738	<0.005	-53	15	27.34
1224	1740	<0.005	-60	23	27.34
1229	1734	<0.005	-66	30	27.34
1234	1729	<0.005	-69	38	27.34
1239	1725	<0.005	-71	45	27.35

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Partly cloudy, breezy, ~30°s F
Sample ID: KMW-10

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 1400

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 4.8
Spec. Cond. (µmhos/cm @ 25°C): 201
Conductivity µmhos): 124
pH (SU): NM
D.O. (ppm): <0.005
ORP (mV): -34
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 8 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~33

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1.5 gpm. Masked duplicate (DUP-005) collected here.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1338					8.33
1340	203	<0.005	-57	3	8.33
1345	203	<0.005	-57	11	8.33
1350	202	<0.005	-36	18	8.33
1355	201	<0.005	-34	26	8.33
1400	201	<0.005	-34	33	8.33

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Mostly cloudy, breezy, ~30°s F
Sample ID: MW-5

Date: 3/20/08
Sampler(s): CEC/RRE
Sampling time: 1352

Odor: Petroleum
Appearance: Cloudy/tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 17 ft
Approx. Depth to water: 10 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~1

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
2	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry on 3/19/08 and sampled on 3/20/08.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Mostly cloudy, ~30°s F
Sample ID: MW-11

Date: 3/12/08
Sampler(s): RRE/CEC
Sampling time: 1430

Odor: Hydrogen sulfide
Appearance: Tan, possible petroleum film

Temperature (°C): 9.0
Spec. Cond. (µmhos/cm @ 25°C): 2349
Conductivity µmhos): 1595
pH (SU): 6.2
D.O. (ppm): 1.2
ORP (mV): -49
Turbidity (NTU): 35

Description of measuring point Mark on riser

Total depth: 12 ft
Approx. Depth to water: 7 ft
Water column in well: 5 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~1

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
3	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.02 gpm.
MS/MSD for lab collected here.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1332						6.66
1405	2308	6.1	2.1	-31	0.7	8.75
1410	2319	6.1	1.7	-36	0.8	8.61
1415	2311	6.1	1.4	-42	0.9	8.54
1420	2325	6.1	1.2	-43	1.0	8.45
1425	2330	6.2	1.2	-48	1.1	8.81
1430	2349	6.2	1.2	-49	1.2	8.53

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Partly cloudy, ~30°s F
Sample ID: MW-12

Date: 3/12/08
Sampler(s): RRE/CEC
Sampling time: 1234

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.7
Spec. Cond. (µmhos/cm @ 25°C): 309
Conductivity (µmhos): 212
pH (SU): 7.1
D.O. (ppm): <0.05
ORP (mV): -88
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 6 ft
Water column in well: 9 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~21

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1153						5.68
1209	307	7.1	0.6	-87	8	8.49
1214	308	7.1	<0.05	-104	11	8.50
1219	309	7.1	<0.05	-87	13	8.49
1224	311	7.1	<0.05	-98	16	8.49
1229	311	7.1	<0.05	-91	18	8.50
1234	309	7.1	<0.05	-88	21	8.50

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: MW-101

Date: 3/18/08
Sampler(s): RRE/CEC
Sampling time: 1605

Odor: Hydrogen sulfide & petroleum
Appearance: Cloudy

Temperature (°C): 7.8
Spec. Cond. (µmhos/cm @ 25°C): 391
Conductivity µmhos): 256
pH (SU): 6.8
D.O. (ppm): <0.005
ORP (mV): -108
Turbidity (NTU): 19

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 7 ft
Water column in well: 14 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1542						7.28
1550	387	6.9	<0.005	-98	4	7.30
1555	390	6.8	<0.005	-104	7	7.30
1600	390	6.8	<0.005	-106	9	7.30
1605	391	6.8	<0.005	-108	12	7.30

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Clear, sunny, ~20°s F
Sample ID: MW-102

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 0910 & 1430

Odor: NM
Appearance: NM

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 9 ft
Approx. Depth to water: 8 ft
Water column in well: 1 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~0.4

Evacuation method: Dedicated submersible pump

Date/Time	# Collected	Bottle	Preservative	Parameter	Comment
	0	40 ml glass	HCl	VOCs	
3/19/08 (0910)	1	500 ml plastic	HNO3	Metals, hardness	
3/19/08 (0910)	1	250 ml plastic	HNO3	Lithium	
3/19/08 (1430)	1	500 ml clear glass	None	LL Hg	
	0	250 ml plastic	None	Nitrite, nitrate	
	0	250 ml plastic	NaOH	Cyanide	
	0	250 ml plastic	H2SO4	Ammonia	
	0	250 ml plastic	None	Alk2, Cl, Fl, SO4	
	0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry and sampled for partial list at times shown above.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Clear, sunny, ~20°s F
Sample ID: MW-103

Date: 3/20/08
Sampler(s): AJM/RRE
Sampling time: 1335

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.0
Spec. Cond. (µmhos/cm @ 25°C): 708
Conductivity µmhos): 483
pH (SU): NM
D.O. (ppm): <0.005
ORP (mV): -90
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 22 ft
Approx. Depth to water: 10 ft
Water column in well: 12 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~28

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.8 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1300					9.61
1305	666	<0.005	-57	4	10.02
1310	697	<0.005	-70	8	10.02
1315	704	<0.005	-78	12	10.04
1320	706	<0.005	-83	16	10.04
1325	708	<0.005	-85	20	10.05
1330	708	<0.005	-88	24	10.05
1335	708	<0.005	-90	28	10.05

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, snowing, ~30°s F
Sample ID: MW-601

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 0910

Odor: Petroleum
Appearance: Cloudy

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 7 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~1

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry on 3/18/08 and sampled on 3/19/08.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: MW-602

Date: 3/13/08
Sampler(s): CEC/RRE
Sampling time: 1445

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.3
Spec. Cond. (µmhos/cm @ 25°C): 203
Conductivity (µmhos): 141
pH (SU): 7.3
D.O. (ppm): <0.005
ORP (mV): -144
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 20 ft
Water column in well: 1 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1420						19.80
1425	205	7.3	<0.005	-117	5	20.46
1430	205	7.3	<0.005	-129	10	20.48
1435	204	7.3	<0.005	-133	15	20.49
1440	204	7.3	<0.005	-140	20	20.49
1445	203	7.3	<0.005	-144	25	20.48

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Partly cloudy, ~20°s F
Sample ID: MW-603

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 1300

Odor: NM
Appearance: NM

Temperature (°C): 8.8
Spec. Cond. (µmhos/cm @ 25°C): 152
Conductivity µmhos): 106
pH (SU): NM
D.O. (ppm): 0.2
ORP (mV): -23
Turbidity (NTU): 5

Description of measuring point: Mark on riser

Total depth: 24 ft
Approx. Depth to water: 19 ft
Water column in well: 5 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~9

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.3 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1230					18.87
1235	150	0.2	-11	2	19.16
1240	151	0.2	-13	3	19.16
1245	152	0.2	-17	5	19.16
1250	152	0.2	-19	6	19.16
1255	152	0.2	-21	8	19.16
1300	152	0.2	-23	9	19.16

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: MW-604

Date: 3/13/08
Sampler(s): CEC/RRE
Sampling time: 1239

Odor: Hydrogen sulfide, iron
Appearance: Clear

Temperature (°C): 3.0
Spec. Cond. (µmhos/cm @ 25°C): 276
Conductivity µmhos): 160
pH (SU): 6.7
D.O. (ppm): <0.005
ORP (mV): -77
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 8 ft
Water column in well: 6 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~58

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~2 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1210						6.99
1214	283	6.8	<0.005	-76	8	7.00
1219	280	6.7	<0.005	-75	18	7.00
1224	278	6.7	<0.005	-76	28	7.00
1229	277	6.7	<0.005	-76	38	7.00
1234	276	6.7	<0.005	-77	48	7.00
1239	276	6.7	<0.005	-77	58	7.00

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: MW-605

Date: 3/13/08
Sampler(s): CEC/RRE
Sampling time: 1335

Odor: None
Appearance: Light tan

Temperature (°C): 6.7
Spec. Cond. (µmhos/cm @ 25°C): 216
Conductivity µmhos): 139
pH (SU): 7.9
D.O. (ppm): <0.005
ORP (mV): -31
Turbidity (NTU): 13

Description of measuring point Mark on PVC riser

Total depth: 14 ft
Approx. Depth to water: 8 ft
Water column in well: 6 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1310						7.74
1315	220	6.9	<0.005	-33	5	7.90
1320	218	6.9	<0.005	-32	10	7.90
1325	217	6.9	<0.005	-31	15	7.89
1330	217	6.9	<0.005	-34	20	7.92
1335	216	6.9	<0.005	-31	25	7.90

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Partly cloudy, ~20°s F
Sample ID: MW-606

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 1152

Odor: None
Appearance: Clear

Temperature (°C): 7.7
Spec. Cond. (µmhos/cm @ 25°C): 195
Conductivity µmhos): 131
pH (SU): NM
D.O. (ppm): 0.3
ORP (mV): -102
Turbidity (NTU): 17

Description of measuring point Mark on PVC riser

Total depth: 16 ft
Approx. Depth to water: 15 ft
Water column in well: 1 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~20

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1132					14.75
1137	195	0.3	-83	5	16.37
1142	195	0.3	-91	10	16.36
1147	195	0.3	-95	15	16.35
1152	195	0.3	-102	20	16.37

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: P-602

Date: 3/13/08
Sampler(s): CEC/RRE
Sampling time: 1505

Odor: Hydrogen sulfide
Appearance: Clear, with gas bubbles

Temperature (°C): 8.7
Spec. Cond. (µmhos/cm @ 25°C): 156
Conductivity µmhos): 105
pH (SU): 7.8
D.O. (ppm): <0.005
ORP (mV): -214
Turbidity (NTU): <1

Description of measuring point: Mark on riser

Total depth: 46 ft
Approx. Depth to water: 20 ft
Water column in well: 26 ft
Volume/foot: 0.16 gal/ft
Well volume: 4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1415						19.72
1420	117	7.4	<0.005	-115	3	20.55
1425	119	7.6	<0.005	-160	5	20.54
1430	127	7.7	<0.005	-179	8	20.52
1435	133	7.7	<0.005	-188	10	20.56
1440	143	7.7	<0.005	-195	13	20.60
1445	148	7.7	<0.005	-201	15	20.66
1450	152	7.8	<0.005	-206	18	20.68
1455	157	7.8	<0.005	-210	20	20.72
1500	156	7.8	<0.005	-212	23	20.63
1505	156	7.8	<0.005	-214	25	20.65

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, light snow, ~30°s F
Sample ID: P-604

Date: 3/13/08
Sampler(s): CEC/RRE
Sampling time: 1225

Odor: None
Appearance: Clear, a bit of black sediment or sand

Temperature (°C): 6.7
Spec. Cond. (µmhos/cm @ 25°C): 239
Conductivity µmhos): 158
pH (SU): 6.7
D.O. (ppm): 0.01
ORP (mV): 4
Turbidity (NTU): 62

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 8 ft
Water column in well: 20 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.
Masked duplicate (DUP-002) collected here.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1200						7.68
1205	243	6.7	0.015	1	3	7.99
1210	242	6.7	0.01	4	5	7.97
1215	241	6.7	0.01	4	8	7.97
1220	240	6.7	0.01	4	10	7.97
1225	239	6.7	0.01	4	13	7.97

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, ~30°s F
Sample ID: P-605

Date: 3/13/08
Sampler(s): CEC/RRE
Sampling time: 1332

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.2
Spec. Cond. (µmhos/cm @ 25°C): 237
Conductivity µmhos): 161
pH (SU): 7.2
D.O. (ppm): <0.005
ORP (mV): -128
Turbidity (NTU): <1

Description of measuring point Mark on PVC riser

Total depth: 35 ft
Approx. Depth to water: 8 ft
Water column in well: 27 ft
Volume/foot: 0.16 gal/ft
Well volume: 4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~22

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.8 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1305						7.64
1312	241	7.3	<0.005	-134	6	7.68
1317	239	7.3	<0.005	-132	10	7.69
1322	238	7.3	<0.005	-130	14	7.69
1327	237	7.2	<0.005	-129	18	7.68
1332	237	7.2	<0.005	-128	22	7.68

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, heavy snow, ~30°s F
Sample ID: PW-2

Date: 3/19/08
Sampler(s): RRE/CEC
Sampling time: 1500

Odor: None
Appearance: Cloudy

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 41 ft
Approx. Depth to water: 38 ft
Water column in well: 2 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~0.4

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry on 3/18/08 and sampled on 3/19/08.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Breezy, overcast, ~20°s F
Sample ID: HYG-1

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1350

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 514
Conductivity µmhos): 376
pH (SU): 7.3
D.O. (ppm): 3.8
ORP (mV): 30
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 8 ft
Water column in well: 19 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~20

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1330						8.21
1335	513	7.3	4.1	14	5	8.39
1340	514	7.3	3.9	21	10	8.40
1345	514	7.3	3.8	27	15	8.39
1350	514	7.3	3.8	30	20	8.40

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Overcast, windy, ~20°s F
Sample ID: HW-2

Date: 3/17/08
Sampler(s): PJS/AJM
Sampling time: 1515

Odor: Slight hydrogen sulfide
Appearance: Appears clear then black sediment w/ oxygen

Temperature (°C): 6.2
Spec. Cond. (µmhos/cm @ 25°C): 530
Conductivity µmhos): 339
pH (SU): 7.7
D.O. (ppm): 0.25
ORP (mV): -118
Turbidity (NTU): 23

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 9 ft
Water column in well: 23 ft
Volume/foot: 1.47 gal/ft
Well volume: 33 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~17

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1442						8.99
1450	515	8.0	0.2	-165	4	9.70
1455	521	7.9	0.2	-148	7	9.68
1500	526	7.9	0.2	-132	9	9.69
1505	528	7.7	0.25	-126	12	9.68
1510	529	7.7	0.25	-121	14	9.67
1515	530	7.7	0.25	-118	17	9.64

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill
Weather: Cloudy, light snow, ~30°s F
Sample ID: HW-3

Date: 3/18/08
Sampler(s): CEC/RRE
Sampling time: 1417

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 7.7
Spec. Cond. (µmhos/cm @ 25°C): 167
Conductivity µmhos): 112
pH (SU): NM
D.O. (ppm): <0.05
ORP (mV): 104
Turbidity (NTU): 145

Description of measuring point Mark on riser

Total depth: 45 ft
Approx. Depth to water: 36 ft
Water column in well: 9 ft
Volume/foot: 1.47 gal/ft
Well volume: 13 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~23

Evacuation method: Dedicated submersible pump

# Collected	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.9 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Stabilization Record:

Time	Spec. Cond. (mmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1352					36.13
1357	161	0.1	77	5	36.13
1402	164	<0.05	94	9	36.13
1407	166	<0.05	99	14	36.14
1412	166	<0.05	100	18	36.14
1417	167	<0.05	104	23	36.14

May 2008

NORTH
JACKSON
COMPANY

1004 Harbor Hills Drive, Suite 102 • Marquette, Michigan • 906.225.6787

June 17, 2008

Mr. Stephen V. Donohue
2737 South Ridge Road
P.O. Box 19012
Green Bay, WI 54307

Re: Humboldt Mill Site May 2008 Groundwater Quality Monitoring Event

Dear Mr. Donohue:

Attached is the draft Humboldt Mill Site May 2008 Groundwater Quality Sampling Field Report.

If you have any questions, please call.

Sincerely,

Kari Paulson

North Jackson Company
Groundwater Monitoring Report

Project Name: Humboldt Mill Site

Contact: North Jackson Company
1004 Harbor Hills Drive, Suite 102
Marquette, Michigan 49855
Phone (906) 225-6787

Summary of Monitoring Activities

Field Date(s): 5/20/08, 5/21/08, 5/22/08, 5/27/08

Activities: Collected groundwater samples from wells HYG-1, HW-1, HW-1A, HW-2, HW-3, HW-4, HW-5, HW-5A, HW-6, HW-6A, KMW-2, KMW-3, KMW-4, KMW-5, KMW-7, KMW-9, KMW-9P, KMW-10, MW-5, MW-11, MW-12, MW-101, MW-102, MW-103, MW-601, MW-602, MW-603, MW-604, MW-605, MW-606, P-602, P-604, P-605, and PW-2.

Collected QA/QC samples, including 3 masked duplicates, 3 field (atmospheric) blanks.

Measured water levels at 42 monitoring locations on 5/20/08.

Field Report Attachments

Field Analytical Data Summary	Yes
Flow Measurement	No
Water Sampling Log	34
Quality Control Summary	Yes
Chain of Custody Numbers	20080521, 20080522, 20080527

Laboratory Analysis

Pace - Metals, anions, cations, BTEX (MW-5 only), general chemistry

Sampler Name(s): Andrew Maracini (AJM), Richard Eagle (RRE), Curt Sheffield (CLS), and Chris Cantway (CEC)

North Jackson Company
Groundwater Quality Control Sampling Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Description
DUP-001	5/21/08	Masked duplicate (HW-1A)
DUP-002	5/22/08	Masked duplicate (P-604)
DUP-003	5/27/08	Masked duplicate (MW-605)
FBK-001	5/21/08	Field blank
FBK-002	5/22/08	Field blank
FBK-003	5/27/08	Field blank

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU)
HYG-1	5/21/08	6.2	531	NM	7.5	87	<1
HW-1	5/21/08	8.8	474	7.2	<0.05	-79	32
HW-1A	5/21/08	5.1	525	8.4	8.9	6	20
HW-2	5/21/08	5.8	508	7.7	0.4	-117	19
HW-3	5/21/08	8.0	133	5.6	<0.05	13	1
HW-4	5/21/08	6.8	501	7.2	<0.05	-160	2
HW-5	5/21/08	8.2	516	7.8	<0.05	-185	11
HW-5A	5/21/08	4.9	524	NM	7.4	-28	31
HW-6	5/21/08	9.1	513	NM	<0.05	-225	9
HW-6A	5/21/08	7.9	481	7.8	<0.05	-163	14
KMW-2	5/22/08	9.4	942	6.4	<0.05	-64	<1
KMW-3	5/21/08	8.2	466	6.5	<0.05	-67	<1
KMW-4	5/21/08	7.0	335	6.4	<0.05	0	<1
KMW-5	5/27/08	i	i	i	i	i	i
KMW-7	5/27/08	8.7	1,065	5.8	<0.05	-8	2
KMW-9	5/22/08	7.8	572	6.1	<0.05	26	<1
KMW-9P	5/22/08	8.3	1,731	6.2	<0.05	-63	<1
KMW-10	5/21/08	6.8	125	6.6	1	-63	2
MW-5	5/27/08	i	i	i	i	i	i
MW-11	5/21/08	7.3	2,235	6.1	<0.05	-75	6
MW-12	5/21/08	9.4	298	7.1	<0.05	-118	NM

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU)
MW-101	5/22/08	7.2	387	6.6	<0.05	-97	3
MW-102	5/27/08	i	i	i	i	i	i
MW-103	5/22/08	7.7	692	6.6	<0.05	-88	2
MW-601	5/27/08	i	i	i	i	i	i
MW-602	5/27/08	7.5	151	6.6	3.9	-34	<1
MW-603	5/21/08	8.1	131	6.4	1.4	36	<1
MW-604	5/22/08	5.8	202	6.8	<0.05	-96	15
MW-605	5/27/08	7.2	192	6.6	2.8	70	2
MW-606	5/21/08	7.2	191	7.2	<0.05	-59	<1
P-602	5/22/08	11	115	7.6	<0.05	-148	25
P-604	5/22/08	6.9	170	6.6	2	34	3
P-605	5/22/08	8.1	246	7.2	<0.05	-120	<1
PW-2	5/22/08	9.1	591	6.3	0.6	109	<1

i Insufficient water for collection of field parameters.
NM Not measured.
* Temperature measurements were affected by low-flow methodology and may be considerably warmer or colder than actual conditions.

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill Site

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
MW-5	Monitoring Well	5/20/08	1589.08	5.87	1583.21
MW-6	Monitoring Well	5/20/08	1590.68	18.88	1571.80
MW-7	Monitoring Well	5/20/08	1589.19	19.33	1569.86
MW-9	Monitoring Well	5/20/08	1614.07	22.87	1591.20
MW-11	Monitoring Well	5/20/08	1594.26	5.60	1588.66
MW-12	Monitoring Well	5/20/08	1590.26	4.14	1586.12
MW-101	Monitoring Well	5/20/08	1600.41	4.04	1596.37
MW-102	Monitoring Well	5/20/08	1596.82	5.88	1590.94
MW-103	Monitoring Well	5/20/08	1596.04	7.79	1588.25
MW-104	Monitoring Well	5/20/08	1591.53	5.94	1585.59
MW-601	Monitoring Well	5/20/08	1603.07	3.28	1599.79
MW-602	Monitoring Well	5/20/08	1621.41	14.25	1607.16
MW-603	Monitoring Well	5/20/08	1613.80	16.19	1597.61
MW-604	Monitoring Well	5/20/08	1595.56	5.92	1589.64
MW-605	Monitoring Well	5/20/08	1596.68	5.58	1591.10
MW-606	Monitoring Well	5/20/08	1615.10	11.70	1603.40
P-602	Monitoring Well	5/20/08	1621.32	14.18	1607.14
P-604	Monitoring Well	5/20/08	1595.42	6.07	1589.35
P-605	Monitoring Well	5/20/08	1596.60	5.50	1591.10
PW-1	Monitoring Well	5/20/08	1589.43	5.77	1583.66
PW-2	Monitoring Well	5/20/08	1589.59	36.89	1552.70
PW-4	Monitoring Well	5/20/08	1592.03	6.74	1585.29
KMW-1	Monitoring Well	5/20/08	1588.75	3.03	1585.72
KMW-2	Monitoring Well	5/20/08	1589.19	4.93	1584.26
KMW-3	Monitoring Well	5/20/08	1590.58	13.10	1577.48
KMW-4	Monitoring Well	5/20/08	1586.62	25.80	1560.82
KMW-5	Monitoring Well	5/20/08	1597.88	38.10	1559.78
KMW-6A	Monitoring Well	5/20/08	1598.47	40.01	1558.46
KMW-7	Monitoring Well	5/20/08	1582.50	23.26	1559.24
KMW-9	Monitoring Well	5/20/08	1581.40	23.24	1558.16
KMW-9P	Monitoring Well	5/20/08	1581.47	23.13	1558.34
KMW-10	Monitoring Well	5/20/08	1596.92	7.24	1589.68

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill Site

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
HYG-1	Existing Pit Well	5/20/08	1543.43	7.59	1535.84
HW-1	Existing Pit Well	5/20/08	1541.86	5.83	1536.03
HW-1A	Existing Pit Well	5/20/08	1541.82	5.87	1535.95
HW-2	Existing Pit Well	5/20/08	1544.99	8.56	1536.43
HW-3	Existing Pit Well	5/20/08	1584.85	34.89	1549.96
HW-4	Existing Pit Well	5/20/08	1582.02	28.49	1553.53
HW-5	Existing Pit Well	5/20/08	1543.03	6.16	1536.87
HW-5A	Existing Pit Well	5/20/08	1543.30	6.25	1537.05
HW-6	Existing Pit Well	5/20/08	1537.63	3.71	1533.92
HW-6A	Existing Pit Well	5/20/08	1537.58	3.34	1534.24
HMS-001	Staff Gauge	5/20/08	1597.92	3.4*	1600.3*
HMS-002	Staff Gauge	5/20/08	1589.79	2.77	1592.56
HMS-003	Staff Gauge	5/20/08	1588.05	3.11	1591.16
HMS-004	Staff Gauge	5/20/08	1587.83	3.13	1590.96
HMS-005	Staff Gauge	5/20/08	1587.81	1.97	1589.78
HMS-006	Staff Gauge	5/20/08	1583.31	2.38	1585.69
HMS-007	Staff Gauge	5/20/08	1574.25	**	**
HMP-004	Staff Gauge	5/20/08	1531.11	1.98	1533.09
HMP-005	Staff Gauge	5/20/08	1541.91	1.60	1543.51
HMP-006	Well Point	5/20/08	1752.52	4.14	1748.38
HMP-007	Staff Gauge	5/20/08	1571.17	1.05	1572.22
HMP-008	Staff Gauge	5/20/08	1535.92	1.43	1537.35
HMP-009	Staff Gauge	5/20/08	1532.64	1.98	1534.62
TDP001	Driven Point	5/20/08	1604.00	6.15	1597.85
TDP002	Driven Point	5/20/08	1610.80	2.05	1608.75

Notes: All monitoring well depths measured from top of PVC (at mark, if present). Staff gauges were read directly. Measuring points of staff guages are assumed to be 0 elevation.

*The water at HMS-001 was above the gauge and the measurement is considered an estimation.

**The water at HMS-007 was ~1" below the top of the gauge.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~50°s F
Sample ID: HYG-1

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1119

Odor: None
Appearance: Clear

Temperature (°C): 6.2
Spec. Cond. (µmhos/cm @ 25°C): 531
Conductivity µmhos): 340
pH (SU): NM
D.O. (ppm): 7.5
ORP (mV): 87
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 8 ft
Water column in well: 20 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~24

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0955						7.63
1110	6.2	530	7.7	94	15	7.63
1113	6.2	530	7.6	91	18	7.72
1116	6.2	530	7.5	89	21	7.72
1119	6.2	531	7.5	87	24	7.72

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-1

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1339

Odor: None
Appearance: Slight tannin

Temperature (°C): 8.8
Spec. Cond. (µmhos/cm @ 25°C): 474
Conductivity (µmhos): 327
pH (SU): 7.2
D.O. (ppm): <0.05
ORP (mV): -79
Turbidity (NTU): 32

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 6 ft
Water column in well: 71 ft
Volume/foot: 1.47 gal/ft
Well volume: 105 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~19

Evacuation method: Submersible pump with new tubing

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Pumped well for ~30 minutes in morning to clear black muck prior to stabilizing and sampling.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1320							5.83
1326	9.0	475	7.3	0.05	-96	6	6.10
1331	9.0	474	7.2	<0.05	-87	11	6.11
1336	8.8	473	7.2	<0.05	-85	16	6.13
1339	8.8	474	7.2	<0.05	-79	19	6.14

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: HW-1A

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1001

Odor: None
Appearance: Clear

Temperature (°C): 5.1
Spec. Cond. (µmhos/cm @ 25°C): 525
Conductivity µmhos): 325
pH (SU): 8.4
D.O. (ppm): 8.9
ORP (mV): 6
Turbidity (NTU): 20

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 6 ft
Water column in well: 26 ft
Volume/foot: 1.47 gal/ft
Well volume: 38 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~51

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Masked duplicate (DUP-001) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0910							6.86
0926	5.0	527	6.7	10.0	60	16	6.59
0931	5.0	524	6.8	9.3	55	21	6.61
0936	5.0	524	7.5	9.0	32	26	6.61
0941	5.0	525	7.8	9.1	23	31	6.61
0946	5.0	524	8.1	10.0	14	36	6.61
0951	5.1	525	8.2	9.0	8	41	6.61
0956	5.0	524	8.3	8.9	4	46	6.60
1001	5.1	525	8.4	8.9	6	51	6.60

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-2

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1304

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 5.8
Spec. Cond. (µmhos/cm @ 25°C): 508
Conductivity µmhos): 318
pH (SU): 7.7
D.O. (ppm): 0.4
ORP (mV): -117
Turbidity (NTU): 19

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 9 ft
Water column in well: 23 ft
Volume/foot: 1.47 gal/ft
Well volume: 34 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~16

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1232							8.49
1240	5.4	479	8.1	<0.05	-151	4	9.65
1245	5.6	495	7.8	0.1	-122	7	9.62
1250	5.7	499	7.7	0.2	-122	9	9.59
1255	5.7	501	7.7	0.2	-120	12	9.58
1258	5.8	503	7.7	0.4	-119	13	9.57
1301	5.8	503	7.7	0.4	-117	15	9.57
1304	5.8	503	7.7	0.4	-117	16	9.57

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-3

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1534

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.0
Spec. Cond. (µmhos/cm @ 25°C): 133
Conductivity µmhos): 90
pH (SU): 5.6
D.O. (ppm): <0.05
ORP (mV): 13
Turbidity (NTU): 1

Description of measuring point Mark on riser

Total depth: 45 ft
Approx. Depth to water: 35 ft
Water column in well: 10 ft
Volume/foot: 1.47 gal/ft
Well volume: 15 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1515							34.91
1520	8.0	138	6.0	<0.05	-10	3	34.98
1525	8.0	135	5.8	<0.05	5	5	34.99
1528	8.0	134	5.7	<0.05	12	7	34.99
1531	8.0	134	5.7	<0.05	11	8	34.99
1534	8.0	133	5.6	<0.05	13	10	34.99

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-4

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1616

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 6.8
Spec. Cond. (µmhos/cm @ 25°C): 501
Conductivity µmhos): 319
pH (SU): 7.2
D.O. (ppm): <0.05
ORP (mV): -160
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 28 ft
Water column in well: 48 ft
Volume/foot: 1.47 gal/ft
Well volume: 71 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1550							28.45
1553	6.8	545	7.6	<0.05	-205	2	29.93
1558	6.7	523	7.4	<0.05	-180	4	29.93
1603	6.6	524	7.3	NM	-174	7	31.52
1608	6.8	505	7.3	<0.05	-164	9	30.01
1613	6.8	503	7.2	<0.05	-157	12	29.92
1616	6.8	501	7.2	<0.05	-160	13	29.88

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~50°s F
Sample ID: HW-5

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1436

Odor: None
Appearance: Tan

Temperature (°C): 8.2
Spec. Cond. (µmhos/cm @ 25°C): 516
Conductivity (µmhos): 348
pH (SU): 7.8
D.O. (ppm): <0.05
ORP (mV): -185
Turbidity (NTU): 11

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 6 ft
Water column in well: 65 ft
Volume/foot: 1.47 gal/ft
Well volume: 95 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~26

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1410							6.16
1423	7.9	460	8.5	<0.05	-313	13	6.67
1427	7.9	505	8.0	<0.05	-223	17	6.66
1430	7.9	514	7.8	<0.05	-195	20	6.65
1433	7.9	516	7.8	<0.05	-192	23	6.65
1436	8.2	516	7.8	<0.05	-185	26	6.65

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-5A

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1436

Odor: None
Appearance: Slight tan

Temperature (°C): 4.9
Spec. Cond. (µmhos/cm @ 25°C): 524
Conductivity µmhos): 323
pH (SU): NM
D.O. (ppm): 7.4
ORP (mV): -28
Turbidity (NTU): 31

Description of measuring point Mark on riser

Total depth: 31 ft
Approx. Depth to water: 6 ft
Water column in well: 25 ft
Volume/foot: 1.47 gal/ft
Well volume: 36 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~30

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Instrument malfunction for pH measurement so no pH values recorded for stabilization.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1406						6.24
1410	4.9	507	7.2	-96	4	6.84
1415	4.9	519	7.3	-81	9	6.82
1420	5.0	522	7.5	-62	14	6.81
1425	5.0	523	7.5	-48	19	6.74
1430	5.0	523	7.5	-36	24	6.69
1433	5.0	523	7.5	-32	27	6.68
1436	4.9	524	7.4	-28	30	6.69

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~50°s F
Sample ID: HW-6

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1153

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 9.1
Spec. Cond. (µmhos/cm @ 25°C): 513
Conductivity µmhos): 357
pH (SU): NM
D.O. (ppm): <0.05
ORP (mV): -225
Turbidity (NTU): 9

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 4 ft
Water column in well: 67 ft
Volume/foot: 1.47 gal/ft
Well volume: 99 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~23

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1130						3.71
1140	9.0	524	<0.05	-201	10	3.80
1145	9.1	517	<0.05	-219	15	3.80
1150	9.1	519	<0.05	-220	20	3.81
1153	9.1	513	<0.05	-225	23	3.81

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-6A

Date: 5/21/08
Sampler(s): CEC/CLS
Sampling time: 1223

Odor: None
Appearance: Clear

Temperature (°C): 7.9
Spec. Cond. (µmhos/cm @ 25°C): 481
Conductivity (µmhos): 325
pH (SU): 7.8
D.O. (ppm): <0.05
ORP (mV): -163
Turbidity (NTU): 14

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 3 ft
Water column in well: 25 ft
Volume/foot: 1.47 gal/ft
Well volume: 36 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~43

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1140							3.35
1155	7.5	469	8.9	0.2	-327	15	4.67
1200	7.7	473	8.7	<0.05	-286	20	4.64
1205	7.6	474	8.6	<0.05	-281	25	4.66
1210	7.8	478	8.3	<0.05	-226	30	4.66
1215	7.9	480	7.9	<0.05	-162	35	4.67
1220	7.9	481	7.9	<0.05	-157	40	4.67
1223	7.9	481	7.8	<0.05	-163	43	4.66

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-2

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1405

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 9.4
Spec. Cond. (µmhos/cm @ 25°C): 942
Conductivity (µmhos): 689
pH (SU): 6.4
D.O. (ppm): <0.05
ORP (mV): -64
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 19 ft
Approx. Depth to water: 5 ft
Water column in well: 14 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~15

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.3 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1315							5.10
1325	9.0	429	6.8	<0.05	-96	3	5.60
1330	9.1	588	6.7	<0.05	-90	5	5.61
1335	9.2	697	6.6	<0.05	-84	6	5.61
1340	9.2	786	6.5	<0.05	-78	8	5.61
1345	9.3	846	6.5	<0.05	-74	9	5.61
1350	9.3	886	6.5	<0.05	-71	11	5.61
1355	9.3	925	6.4	<0.05	-69	12	5.61
1400	9.4	948	6.4	<0.05	-67	14	5.61
1405	9.4	942	6.4	<0.05	-64	15	5.61

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-3

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 1545

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.2
Spec. Cond. (µmhos/cm @ 25°C): 466
Conductivity µmhos): 317
pH (SU): 6.5
D.O. (ppm): <0.05
ORP (mV): -67
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 13 ft
Water column in well: 19 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1520							13.15
1530	8.2	457	6.6	<0.05	-67	10	13.61
1535	8.2	461	6.5	<0.05	-66	15	13.61
1540	8.2	464	6.5	<0.05	-67	20	13.62
1545	8.2	466	6.5	<0.05	-67	25	13.62

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-4

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 1630

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 7.0
Spec. Cond. (µmhos/cm @ 25°C): 335
Conductivity (µmhos): 219
pH (SU): 6.4
D.O. (ppm): <0.05
ORP (mV): -0.2
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 43 ft
Approx. Depth to water: 26 ft
Water column in well: 17 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1605							25.75
1615	6.9	345	6.5	<0.05	-4	10	26.08
1620	6.9	341	6.4	<0.05	-2	15	26.08
1625	6.9	338	6.4	<0.05	-0.7	20	26.08
1630	7.0	335	6.4	<0.05	-0.2	25	26.07

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~50°s F
Sample ID: KMW-5

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1410

Odor: None
Appearance: Brown

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 53 ft
Approx. Depth to water: 38 ft
Water column in well: 15 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.07 gpm
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~50°s F
Sample ID: KMW-7

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1147

Odor: None
Appearance: Clear

Temperature (°C): 8.7
Spec. Cond. (µmhos/cm @ 25°C): 1065
Conductivity µmhos): 732
pH (SU): 5.8
D.O. (ppm): <0.05
ORP (mV): -8
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 30 ft
Approx. Depth to water: 23 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1.1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~8

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1131							23.17
1134	8.7	1071	5.8	<0.05	-4	2	23.36
1139	8.7	1068	5.8	<0.05	-5	4	23.36
1144	8.7	1065	5.8	<0.05	-7	7	23.37
1147	8.7	1065	5.8	<0.05	-8	8	23.37

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-9

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1010

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 7.8
Spec. Cond. (µmhos/cm @ 25°C): 572
Conductivity µmhos): 385
pH (SU): 6.1
D.O. (ppm): <0.05
ORP (mV): 26
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 23 ft
Water column in well: 9 ft
Volume/foot: 0.16 gal/ft
Well volume: 1.4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~35

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0935							23.23
0955	7.9	574	6.1	<0.05	27	20	23.68
1000	7.8	574	6.1	<0.05	27	25	23.68
1005	7.8	573	6.1	<0.05	26	30	23.68
1010	7.8	572	6.1	<0.05	26	35	23.68

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-9P

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 0920

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.3
Spec. Cond. (µmhos/cm @ 25°C): 1731
Conductivity µmhos): 1179
pH (SU): 6.2
D.O. (ppm): <0.05
ORP (mV): -63
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 57 ft
Approx. Depth to water: 23 ft
Water column in well: 34 ft
Volume/foot: 0.16 gal/ft
Well volume: 6 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~19

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0855							23.09
0905	8.3	1721	6.2	<0.05	-55	8	23.41
0910	8.3	1726	6.2	<0.05	-58	11	23.41
0915	8.3	1729	6.2	<0.05	-61	15	23.41
0920	8.3	1731	6.2	<0.05	-63	19	23.41

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-10

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 1205

Odor: None
Appearance: Clear

Temperature (°C): 6.8
Spec. Cond. (µmhos/cm @ 25°C): 125
Conductivity µmhos): 81
pH (SU): 6.6
D.O. (ppm): 1.3
ORP (mV): -63
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 8 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~33

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1.3 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1140							7.24
1155	6.7	125	6.6	1.4	-62	20	7.25
1200	6.8	125	6.6	1.3	-61	26	7.24
1205	6.8	125	6.6	1.3	-63	33	7.24

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~50°s F
Sample ID: MW-5

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1345

Odor: Slight fuel
Appearance: Slight tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 17 ft
Approx. Depth to water: 6 ft
Water column in well: 11 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
2	40 ml glass	HCl	VOCs	2 of 3 collected
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry and sampled.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~40°s F
Sample ID: MW-11

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 1335

Odor: Hydrogen sulfide
Appearance: Light yellow

Temperature (°C): 7.3
Spec. Cond. (µmhos/cm @ 25°C): 2235
Conductivity (µmhos): 1478
pH (SU): 6.1
D.O. (ppm): <0.05
ORP (mV): -75
Turbidity (NTU): 6

Description of measuring point Mark on riser

Total depth: 12 ft
Approx. Depth to water: 6 ft
Water column in well: 6 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~4

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.08 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1245							5.62
1315	7.4	2220	6.1	<0.05	-59	2.4	8.92
1320	7.4	2230	6.1	<0.05	-66	2.8	8.84
1325	7.2	2236	6.1	<0.05	-69	3.2	8.80
1330	7.4	2237	6.1	<0.05	-72	3.6	8.79
1335	7.3	2235	6.1	<0.05	-75	4.0	8.80

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~40°s F
Sample ID: MW-12

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 1455

Odor: None
Appearance: Clear

Temperature (°C): 9.4
Spec. Cond. (µmhos/cm @ 25°C): 298
Conductivity µmhos): 205
pH (SU): 7.1
D.O. (ppm): <0.05
ORP (mV): -118
Turbidity (NTU): NM

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 4 ft
Water column in well: 11 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~9

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.25 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1420							4.26
1430	10.3	301	7.0	<0.05	-120	3	5.42
1435	9.4	302	7.1	<0.05	-102	4	5.44
1440	9.4	302	7.1	<0.05	-103	5	5.47
1445	11.0	300	7.1	<0.05	-127	6	5.48
1450	9.0	302	7.1	<0.05	-110	8	5.49
1455	9.4	298	7.1	<0.05	-118	9	5.50

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: MW-101

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1316

Odor: Unknown
Appearance: Clear

Temperature (°C): 7.2
Spec. Cond. (µmhos/cm @ 25°C): 387
Conductivity µmhos): 255
pH (SU): 6.6
D.O. (ppm): <0.05
ORP (mV): -97
Turbidity (NTU): 3

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 4 ft
Water column in well: 17 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~8

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1300							4.13
1303	7.1	371	6.8	<0.05	-104	2	4.17
1308	7.2	381	6.6	<0.05	-96	4	4.17
1313	7.2	385	6.6	<0.05	-96	7	4.18
1316	7.2	387	6.6	<0.05	-97	8	4.18

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~50°s F
Sample ID: MW-102

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1320

Odor: None
Appearance: Yellow/brown

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 9 ft
Approx. Depth to water: 6 ft
Water column in well: 3 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.5 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~0.5

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry and sampled.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: MW-103

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1351

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 7.7
Spec. Cond. (µmhos/cm @ 25°C): 692
Conductivity µmhos): 464
pH (SU): 6.6
D.O. (ppm): <0.05
ORP (mV): -88
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 22 ft
Approx. Depth to water: 8 ft
Water column in well: 14 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~18

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1333							7.89
1335	7.5	655	6.6	<0.05	-64	2	8.27
1340	7.6	676	6.6	<0.05	-77	7	8.27
1345	7.7	688	6.6	<0.05	-85	12	8.27
1348	7.7	690	6.6	<0.05	-87	15	8.27
1351	7.7	692	6.6	<0.05	-88	18	8.27

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: MW-601

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1435

Odor: None
Appearance: Brown

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 3 ft
Water column in well: 11 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pumped dry and sampled.
Insufficient water for collection of field parameters or stabilization record.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, breezy, ~50°s F
Sample ID: MW-602

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1115

Odor: None
Appearance: Clear

Temperature (°C): 7.5
Spec. Cond. (µmhos/cm @ 25°C): 151
Conductivity (µmhos): 101
pH (SU): 6.6
D.O. (ppm): 3.9
ORP (mV): -34
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 14 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1.1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~30

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1055							14.36
1100	7.4	149	6.5	5.5	-8	8	14.88
1105	7.4	151	6.6	4.3	-22	15	14.88
1110	7.4	151	6.6	4.1	-28	23	14.88
1115	7.5	151	6.6	3.9	-34	30	14.88

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~40°s F
Sample ID: MW-603

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 1105

Odor: None
Appearance: Clear

Temperature (°C): 8.1
Spec. Cond. (µmhos/cm @ 25°C): 131
Conductivity µmhos): 89
pH (SU): 6.4
D.O. (ppm): 1.4
ORP (mV): 35.5
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 24 ft
Approx. Depth to water: 16 ft
Water column in well: 8 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~21

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1012							16.17
1055	8.1	131	6.4	1.7	36	17	16.46
1100	8.1	131	6.4	1.4	34	19	16.46
1105	8.1	131	6.4	1.4	36	21	16.47

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: MW-604

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1020

Odor: None
Appearance: Clear

Temperature (°C): 5.8
Spec. Cond. (µmhos/cm @ 25°C): 202
Conductivity µmhos): 127
pH (SU): 6.8
D.O. (ppm): <0.05
ORP (mV): -96
Turbidity (NTU): 15

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 6 ft
Water column in well: 8 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~23

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1005							5.94
1008	5.8	198	6.9	1.2	-92	5	5.95
1011	5.8	206	6.9	0.1	-102	9	5.95
1014	5.8	206	6.8	<0.05	-101	14	5.96
1017	5.8	206	6.8	<0.05	-99	18	5.95
1020	5.8	202	6.8	<0.05	-96	23	5.95

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~40°s F
Sample ID: MW-605

Date: 5/27/08
Sampler(s): CEC/RRE
Sampling time: 1101

Odor: None
Appearance: Clear

Temperature (°C): 7.2
Spec. Cond. (µmhos/cm @ 25°C): 192
Conductivity µmhos): 126
pH (SU): 6.6
D.O. (ppm): 2.8
ORP (mV): 70
Turbidity (NTU): 2

Description of measuring point Mark on PVC riser

Total depth: 14 ft
Approx. Depth to water: 6 ft
Water column in well: 8 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~16

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.
Masked duplicate (DUP-003) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1045							5.76
1048	7.4	197	6.6	5.1	61	3	5.89
1053	7.3	193	6.6	3.2	71	8	5.90
1058	7.2	192	6.6	2.9	70	13	5.90
1101	7.2	192	6.6	2.8	70	16	5.91

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: MW-606

Date: 5/21/08
Sampler(s): CEC/RRE/CLS
Sampling time: 0935

Odor: None
Appearance: Clear

Temperature (°C): 7.2
Spec. Cond. (µmhos/cm @ 25°C): 191
Conductivity µmhos): 127
pH (SU): 7.2
D.O. (ppm): <0.05
ORP (mV): -59
Turbidity (NTU): <1

Description of measuring point Mark on PVC riser

Total depth: 16 ft
Approx. Depth to water: 12 ft
Water column in well: 4 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.7 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~14

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0900							11.65
0905	7.4	191	7.2	<0.05	-73	2	11.97
0910	7.2	191	7.2	<0.05	-77	4	12.02
0915	7.2	191	7.2	<0.05	-81	6	12.02
0920	7.3	191	7.2	<0.05	-85	8	12.03
0925	7.4	191	7.2	<0.05	-58	10	12.03
0930	7.2	191	7.2	<0.05	-56	12	12.04
0935	7.2	191	7.2	<0.05	-59	14	12.05

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: P-602

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1214

Odor: None
Appearance: Clear with gas bubbles

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 115
Conductivity µmhos): 84
pH (SU): 7.6
D.O. (ppm): <0.05
ORP (mV): -148
Turbidity (NTU): 25

Description of measuring point Mark on riser

Total depth: 46 ft
Approx. Depth to water: 14 ft
Water column in well: 32 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~8

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1154							14.20
1201	10.0	108	7.4	<0.05	-112	3	14.86
1206	10.5	111	7.6	<0.05	-157	5	14.73
1211	10.5	113	7.6	<0.05	-151	7	14.78
1214	10.6	115	7.6	<0.05	-148	8	14.78

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: P-604

Date: 5/22/08
Sampler(s): CEC/RRE
Sampling time: 0941

Odor: None
Appearance: Clear

Temperature (°C): 6.9
Spec. Cond. (µmhos/cm @ 25°C): 170
Conductivity µmhos): 112
pH (SU): 6.6
D.O. (ppm): 2
ORP (mV): 34
Turbidity (NTU): 3

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 6 ft
Water column in well: 22 ft
Volume/foot: 0.16 gal/ft
Well volume: 4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~8

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.
Masked duplicate (DUP-002) collected here. Sample matrix indicates sulfide container should have been collected.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0925							6.12
0930	6.3	171	6.5	2	32	3	6.38
0935	6.8	170	6.5	2	35	5	6.37
0938	6.9	170	6.6	2	34	7	6.37
0941	6.9	170	6.6	2	34	8	6.38

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: P-605

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1106

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.1
Spec. Cond. (µmhos/cm @ 25°C): 246
Conductivity µmhos): 166
pH (SU): 7.2
D.O. (ppm): <0.05
ORP (mV): -120
Turbidity (NTU): <1

Description of measuring point Mark on PVC riser

Total depth: 35 ft
Approx. Depth to water: 6 ft
Water column in well: 29 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.7 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1052							5.55
1055	8.0	251	7.2	<0.05	-101	2	5.58
1100	8.1	248	7.2	<0.05	-112	6	5.58
1103	8.1	247	7.2	<0.05	-114	8	5.58
1106	8.1	246	7.2	<0.05	-120	10	5.58

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: PW-2

Date: 5/22/08
Sampler(s): RRE/CEC
Sampling time: 1215

Odor: None
Appearance: Clear

Temperature (°C): 9.1
Spec. Cond. (µmhos/cm @ 25°C): 591
Conductivity (µmhos): 412
pH (SU): 6.3
D.O. (ppm): 0.6
ORP (mV): 109
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 41 ft
Approx. Depth to water: 37 ft
Water column in well: 4 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.6 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1145							36.88
1155	9.1	552	6.3	0.6	85	4	39.34
1200	9.1	568	6.3	0.6	95	6	39.31
1205	9.1	579	6.3	0.6	101	8	39.31
1210	9.1	587	6.3	0.6	105	10	39.28
1215	9.1	591	6.3	0.6	109	12	39.26

July 2008

NORTH
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COMPANY

1004 Harbor Hills Drive, Suite 102 • Marquette, Michigan • 906.225.6787

July 31, 2008

Mr. Stephen V. Donohue
2737 South Ridge Road
P.O. Box 19012
Green Bay, WI 54307

Re: Humboldt Mill Site July 2008 Groundwater Monitoring Event

Dear Mr. Donohue:

Attached is the draft Humboldt Mill Site July 2008 Groundwater Monitoring Field Report.

If you have any questions, please call.

Sincerely,

Kari Paulson

North Jackson Company
Groundwater Monitoring Report

Project Name: Humboldt Mill Site

Contact: North Jackson Company
1004 Harbor Hills Drive, Suite 102
Marquette, Michigan 49855
Phone (906) 225-6787

Summary of Monitoring Activities

Field Date(s): 7/15/08, 7/16/08, 7/17/08

Activities: Collected groundwater samples from wells HYG-1, HW-1, HW-1A, HW-2, HW-3, HW-4, HW-5, HW-5A, HW-6, HW-6A, KMW-2, KMW-3, KMW-4, KMW-5, KMW-7, KMW-9, KMW-9P, KMW-10, MW-5, MW-11, MW-12, MW-101, MW-102, MW-103, MW-601, MW-602, MW-603, MW-604, MW-605, MW-606, P-602, P-604, P-605, and PW-2.

Collected QA/QC samples, including 3 masked duplicates and 3 field (atmospheric) blanks.

Measured water levels at 57 monitoring locations on 7/15/08.

Field methods: Temperature - EPA 170.1
Specific conductance - EPA 120.1
Turbidity (NTU) - EPA 180.1
Turbidity (FAU) - ISO 7027
D.O. >1 (small YSI hand held) - EPA 360.1
D.O. <1 (ChemMetrics snap tubes) - Rhodazine D Method
Exceptions noted in remarks.

Field Report Attachments

Field Analytical Data Summary	Yes
Flow Measurement	No
Water Sampling Log	34
Quality Control Summary	Yes
Chain of Custody Numbers	20080715, 20080716, 20080717

Laboratory Analysis

Pace - Metals, anions, cations, BTEX (MW-5 only), general chemistry

Sampler Name(s): Richard Eagle (RRE), Curt Sheffield (CLS) and Chris Cantway (CEC)

North Jackson Company
Groundwater Quality Control Sampling Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Description
DUP-001	7/15/08	Masked duplicate (KMW-9)
DUP-002	7/16/08	Masked duplicate (HW-5)
DUP-003	7/17/08	Masked duplicate (MW-601)
FBK-001	7/15/08	Field blank
FBK-002	7/16/08	Field blank
FBK-003	7/17/08	Field blank

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU or FAU)
HYG-1'	7/16/08	7.1	482	7.4	5.9	53	<1
HW-1'	7/17/08	9.8	445	7.1	0.03	-37	<1
HW-1A'	7/16/08	4.5	401	7.8	6.6	-28	<1
HW-2'	7/16/08	8.5	396	7.9	0.2	-148	15
HW-3'	7/16/08	8.3	145	5.3	0.01	119	<1
HW-4'	7/16/08	8.6	497	7.2	<0.05	-201	21
HW-5'	7/16/08	8.2	404	7.9	<0.005	-169	5
HW-5A'	7/16/08	6.7	475	7.5	5.1	-38	9
HW-6'	7/16/08	9.0	384	8.1	<0.005	-183	3
HW-6A'	7/16/08	9.6	375	7.8	2	-125	8
KMW-2'	7/16/08	17	847	6.4	<0.005	-58	12
KMW-3'	7/16/08	8.5	339	6.5	<0.005	-45	5
KMW-4'	7/15/08	7.1	249	6.9	<0.005	-158	15
KMW-5'	7/17/08	i	i	i	i	i	i
KMW-7'	7/15/08	8.5	948	6.5	<0.005	-96	7
KMW-9'	7/15/08	8.0	445	6.8	<0.005	-178	1
KMW-9P'	7/15/08	8.3	1,309	6.8	<0.005	-161	5
KMW-10'	7/16/08	11	139	6.4	<0.005	-24	<1
MW-5'	7/17/08	i	i	i	i	i	i
MW-11'	7/17/08	14	1,562	6.5	0.4	-93	23
MW-12'	7/16/08	12	250	6.9	<0.005	-114	NM

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU or FAU)
MW-101'	7/17/08	9.1	332	6.6	<0.005	-98	11
MW-102'	7/17/08	i	i	i	i	i	i
MW-103'	7/16/08	8.4	705	6.4	<0.05	-115	<1
MW-601'	7/17/08	i	i	i	i	i	i
MW-602'	7/16/08	8.8	109	6.5	4.5	-3	1
MW-603'	7/16/08	9.6	92	6.1	1.9	87	<1
MW-604'	7/15/08	13	190	7.1	<0.005	-159	4
MW-605'	7/15/08	12	126	6.9	2.4	2	1
MW-606'	7/16/08	11	108	6.7	3.6	50	4
P-602'	7/16/08	10	99	7.5	<0.005	-166	NM
P-604'	7/15/08	9.0	124	6.9	4.7	-22	2
P-605'	7/15/08	8.0	177	7.4	<0.005	-142	7
PW-2'	7/16/08	9.7	517	6.2	0.8	73	<1

i Insufficient water for collection of field parameters.
NM Not measured.
* Temperature measurements were affected by low-flow methodology and may be considerably warmer or colder than actual conditions.

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill Site

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
MW-5	Monitoring Well	7/15/08	1589.08	6.35	1582.73
MW-6	Monitoring Well	7/15/08	1590.68	20.50	1570.18
MW-7	Monitoring Well	7/15/08	1589.19	20.40	1568.79
MW-9	Monitoring Well	7/15/08	1614.07	24.97	1589.10
MW-11	Monitoring Well	7/15/08	1594.26	6.58	1587.68
MW-12	Monitoring Well	7/15/08	1590.26	4.81	1585.45
MW-101	Monitoring Well	7/15/08	1600.41	4.39	1596.02
MW-102	Monitoring Well	7/15/08	1596.82	6.27	1590.55
MW-103	Monitoring Well	7/15/08	1596.04	8.38	1587.66
MW-104	Monitoring Well	7/15/08	1591.53	7.25	1584.28
MW-601	Monitoring Well	7/15/08	1603.07	4.53	1598.54
MW-602	Monitoring Well	7/15/08	1621.41	14.47	1606.94
MW-603	Monitoring Well	7/15/08	1613.80	16.84	1596.96
MW-604	Monitoring Well	7/15/08	1595.56	6.24	1589.32
MW-605	Monitoring Well	7/15/08	1596.68	6.25	1590.43
MW-606	Monitoring Well	7/15/08	1615.10	10.48	1604.62
P-602	Monitoring Well	7/15/08	1621.32	14.40	1606.92
P-604	Monitoring Well	7/15/08	1595.42	6.56	1588.86
P-605	Monitoring Well	7/15/08	1596.60	6.15	1590.45
PW-1'	Monitoring Well	7/15/08	1589.43	8.37	1581.06
PW-2'	Monitoring Well	7/15/08	1589.59	36.44	1553.15
PW-4'	Monitoring Well	7/15/08	1592.03	7.75	1584.28
KMW-1	Monitoring Well	7/15/08	1588.75	4.59	1584.16
KMW-2	Monitoring Well	7/15/08	1589.19	6.26	1582.93
KMW-3	Monitoring Well	7/15/08	1590.58	13.91	1576.67
KMW-4	Monitoring Well	7/15/08	1586.62	25.47	1561.15
KMW-5	Monitoring Well	7/15/08	1597.88	39.08	1558.80
KMW-6A	Monitoring Well	7/15/08	1598.47	39.54	1558.93
KMW-7	Monitoring Well	7/15/08	1582.50	22.88	1559.62
KMW-9	Monitoring Well	7/15/08	1581.40	22.88	1558.52
KMW-9P	Monitoring Well	7/15/08	1581.47	22.75	1558.72
KMW-10	Monitoring Well	7/15/08	1596.92	7.55	1589.37

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill Site

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
HYG-1	Existing Pit Well	7/15/08	1543.43	7.85	1535.58
HW-1	Existing Pit Well	7/15/08	1541.86	5.83	1536.03
HW-1A	Existing Pit Well	7/15/08	1541.82	5.75	1536.07
HW-2	Existing Pit Well	7/15/08	1544.99	8.35	1536.64
HW-3	Existing Pit Well	7/15/08	1584.85	34.43	1550.42
HW-4	Existing Pit Well	7/15/08	1582.02	27.72	1554.30
HW-5	Existing Pit Well	7/15/08	1543.03	6.07	1536.96
HW-5A	Existing Pit Well	7/15/08	1543.30	6.13	1537.17
HW-6	Existing Pit Well	7/15/08	1537.63	3.81	1533.82
HW-6A	Existing Pit Well	7/15/08	1537.58	3.30	1534.28
HMS-001	Staff Gauge	7/15/08	1597.92	2.93	1600.85
HMS-002	Staff Gauge	7/15/08	1589.79	1.36	1591.15
HMS-003	Staff Gauge	7/15/08	1588.05	2.50	1590.55
HMS-004	Staff Gauge	7/15/08	1587.83	2.42	1590.25
HMS-005	Staff Gauge	7/15/08	1587.81	1.63	1589.44
HMS-006	Staff Gauge	7/15/08	1583.31	1.96	1585.27
HMS-007	Staff Gauge	7/15/08	1574.25	1.02	1575.27
HMP-004	Staff Gauge	7/15/08	1531.11	1.19	1532.30
HMP-005	Staff Gauge	7/15/08	1541.91	1.53	1543.44
HMP-006	Well Point	7/15/08	1752.52	4.39	1748.13
HMP-007	Staff Gauge	7/15/08	1571.17	3.34	1574.51
HMP-008	Staff Gauge	7/15/08	1535.92	1.45*	1537.4
HMP-009	Staff Gauge	7/15/08	1532.64	1.97	1534.61
TDP001	Driven Point	7/15/08	1604.00	Dry	Dry
TDP002	Driven Point	7/15/08	1610.80	2.13	1608.67

Notes: All monitoring well depths measured from top of PVC (at mark, if present). Staff gauges were read directly. Measuring points of staff gauges are assumed to be 0 elevation.

*HMP-008 staff gauge was leaning at time of measurement and the depth to water is considered accurate to +/-0.1'. After being straightened the gauge read 1.40' but was unstable. Gauge was reinstalled and read 2.00'

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~70°s F
Sample ID: HYG-1

Date: 7/16/08
Sampler(s): CEC/CLS
Sampling time: 1110

Odor: None
Appearance: Clear

Temperature (°C): 7.1
Spec. Cond. (µmhos/cm @ 25°C): 482
Conductivity µmhos): 317
pH (SU): 7.4
D.O. (ppm): 5.9
ORP (mV): 53
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 7 ft
Water column in well: 20 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~4

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.25 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1055							7.45
1100	6.7	475	7.4	6.2	41	1.3	7.49
1105	7.0	479	7.4	6.0	45	2.5	7.49
1108	7.1	482	7.4	6.0	50	3.3	7.49
1110	7.1	482	7.4	5.9	53	3.8	7.49

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~70°s F
Sample ID: HW-1

Date: 7/17/08
Sampler(s): RRE/CLS
Sampling time: 1200

Odor: None
Appearance: Clear

Temperature (°C): 9.8
Spec. Cond. (µmhos/cm @ 25°C): 445
Conductivity (µmhos): 316
pH (SU): 7.1
D.O. (ppm): 0.03
ORP (mV): -37
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 6 ft
Water column in well: 71 ft
Volume/foot: 1.47 gal/ft
Well volume: 105 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~46

Evacuation method: Submersible pump with new tubing

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~2 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1137							5.83
1145	9.9	444	7.1	3.3	-44	16	6.31
1150	9.8	445	7.1	0.03	-38	26	6.33
1155	9.8	446	7.1	0.03	-38	36	6.34
1200	9.8	445	7.1	0.03	-37	46	6.34

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~70°s F
Sample ID: HW-1A

Date: 7/16/08
Sampler(s): CLS/CEC
Sampling time: 1039

Odor: None
Appearance: Clear

Temperature (°C): 4.5
Spec. Cond. (µmhos/cm @ 25°C): 401
Conductivity µmhos): 246
pH (SU): 7.8
D.O. (ppm): 6.6
ORP (mV): -28
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 6 ft
Water column in well: 26 ft
Volume/foot: 1.47 gal/ft
Well volume: 39 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~22

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1017							5.74
1022	4.3	401	8.4	3.3	-120	5	6.46
1027	4.3	395	8.1	5.3	-59	10	6.46
1030	4.3	401	8.0	6.2	-35	13	6.45
1033	4.3	395	7.9	6.3	-28	16	6.43
1036	4.3	395	7.9	6.3	-37	19	6.44
1039	4.5	401	7.8	6.6	-28	22	6.44

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~80°s F
Sample ID: HW-2

Date: 7/16/08
Sampler(s): CEC/CLS
Sampling time: 1207

Odor: None
Appearance: Clear

Temperature (°C): 8.5
Spec. Cond. (µmhos/cm @ 25°C): 396
Conductivity (µmhos): 265
pH (SU): 7.9
D.O. (ppm): 0.2
ORP (mV): -148
Turbidity (FAU): 15

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 8 ft
Water column in well: 23 ft
Volume/foot: 1.47 gal/ft
Well volume: 34 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1142							8.41
1144	8.3	386	8.8	0.1	-205	1	8.95
1149	8.5	392	8.3	0.1	-181	4	8.96
1154	8.5	395	8.1	0.1	-160	6	8.95
1159	8.5	396	8.0	0.2	-152	9	8.95
1204	8.5	396	7.9	0.3	-149	11	8.96
1207	8.5	396	7.9	0.2	-148	13	8.96

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~70°s F
Sample ID: HW-3

Date: 7/16/08
Sampler(s): CLS/CEC
Sampling time: 1212

Odor: None
Appearance: Clear

Temperature (°C): 8.3
Spec. Cond. (µmhos/cm @ 25°C): 145
Conductivity µmhos): 98
pH (SU): 5.3
D.O. (ppm): 0.005
ORP (mV): 119
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 45 ft
Approx. Depth to water: 34 ft
Water column in well: 11 ft
Volume/foot: 1.47 gal/ft
Well volume: 16 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~11

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1150							34.42
1158	8.4	147	6.2	3.8	11	4	34.48
1203	8.3	143	5.8	1.4	51	7	34.50
1206	8.3	143	5.6	0.005	73	8	34.49
1209	8.3	144	5.4	0.005	99	10	34.49
1212	8.3	145	5.3	0.005	119	11	34.49

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~70°s F
Sample ID: HW-4

Date: 7/16/08
Sampler(s): CLS/CEC
Sampling time: 1314

Odor: None
Appearance: Tan

Temperature (°C): 8.6
Spec. Cond. (µmhos/cm @ 25°C): 497
Conductivity µmhos): 341
pH (SU): 7.2
D.O. (ppm): <0.05
ORP (mV): -201
Turbidity (NTU): 21

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 28 ft
Water column in well: 49 ft
Volume/foot: 1.47 gal/ft
Well volume: 72 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1255							27.82
1305	8.0	508	7.2	1.1	-179	5	28.39
1308	8.6	506	7.2	<0.05	-201	7	28.54
1311	8.4	500	7.2	<0.05	-203	8	28.55
1314	8.6	497	7.2	<0.05	-201	10	28.54

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~70°s F
Sample ID: HW-5

Date: 7/16/08
Sampler(s): CEC/CLS
Sampling time: 0918

Odor: None
Appearance: Clear

Temperature (°C): 8.2
Spec. Cond. (µmhos/cm @ 25°C): 404
Conductivity µmhos): 268
pH (SU): 7.9
D.O. (ppm): <0.005
ORP (mV): -169
Turbidity (FAU): 5

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 6 ft
Water column in well: 65 ft
Volume/foot: 1.47 gal/ft
Well volume: 95 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~28

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Masked duplicate (DUP-002) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0850							6.07
0855	8.3	340	9.6	3.2	-300	5	6.38
0900	8.3	392	8.5	<0.005	-212	10	6.39
0905	8.2	401	8.1	<0.005	-185	15	6.39
0910	8.2	403	8.0	<0.005	-175	20	6.39
0915	8.2	404	7.9	<0.005	-170	25	6.41
0918	8.2	404	7.9	<0.005	-169	28	6.41

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~60°s F
Sample ID: HW-5A

Date: 7/16/08
Sampler(s): CLS/CEC
Sampling time: 0933

Odor: None
Appearance: Clear

Temperature (°C): 6.7
Spec. Cond. (µmhos/cm @ 25°C): 475
Conductivity µmhos): 308
pH (SU): 7.5
D.O. (ppm): 5.1
ORP (mV): -38
Turbidity (NTU): 9

Description of measuring point Mark on riser

Total depth: 31 ft
Approx. Depth to water: 6 ft
Water column in well: 25 ft
Volume/foot: 1.47 gal/ft
Well volume: 37 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~30

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0903							6.14
0916	6.6	470	NM	3.2	-93	13	6.62
0921	6.6	474	7.8	4.3	-47	18	6.61
0925	6.6	475	7.7	4.8	-41	22	6.61
0928	6.6	476	7.6	4.9	-38	25	6.60
0931	6.6	475	7.5	5.1	-39	28	6.60
0933	6.7	475	7.5	5.1	-38	30	6.60

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~80°s F
Sample ID: HW-6

Date: 7/16/08
Sampler(s): CEC/CLS
Sampling time: 1027

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 9.0
Spec. Cond. (µmhos/cm @ 25°C): 384
Conductivity µmhos): 261
pH (SU): 8.1
D.O. (ppm): <0.005
ORP (mV): -183
Turbidity (NTU): 3

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 4 ft
Water column in well: 67 ft
Volume/foot: 1.47 gal/ft
Well volume: 99 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~18

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1009							3.81
1012	8.9	392	8.5	3.1	-179	3	3.91
1017	8.9	389	8.1	<0.005	-170	8	3.94
1022	8.9	384	8.1	<0.005	-183	13	3.96
1027	9.0	384	8.1	<0.005	-183	18	3.94

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~80°s F
Sample ID: HW-6A

Date: 7/16/08
Sampler(s): CEC/CLS
Sampling time: 1123

Odor: None
Appearance: Clear

Temperature (°C): 9.6
Spec. Cond. (µmhos/cm @ 25°C): 375
Conductivity (µmhos): 259
pH (SU): 7.8
D.O. (ppm): 2
ORP (mV): -125
Turbidity (NTU): 8

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 3 ft
Water column in well: 25 ft
Volume/foot: 1.47 gal/ft
Well volume: 36 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~22

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.
D.O. measured using ChemMetrics snap tubes (Rhodazine D method).

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1040							3.33
1045	9.4	363	9.2	<0.005	-328	3	4.48
1050	9.4	363	9.2	<0.005	-326	5	4.45
1055	9.5	369	8.7	1	-246	8	4.44
1100	9.5	373	8.3	1	-198	10	4.42
1105	9.5	374	8.1	1	-167	13	4.42
1110	9.6	375	7.9	2	-147	15	4.42
1115	9.6	375	7.9	2	-138	18	4.42
1120	9.6	376	7.8	2	-126	20	4.42
1123	9.6	375	7.8	2	-125	22	4.42

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~80°s F
Sample ID: KMW-2

Date: 7/16/08
Sampler(s): CEC/CLS
Sampling time: 1607

Odor: Fuel
Appearance: Fuel to start then clear

Temperature (°C): 17
Spec. Cond. (µmhos/cm @ 25°C): 847
Conductivity (µmhos): 703
pH (SU): 6.4
D.O. (ppm): <0.005
ORP (mV): -58
Turbidity (NTU): 12

Description of measuring point: Mark on riser

Total depth: 19 ft
Approx. Depth to water: 6 ft
Water column in well: 13 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~18

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.25 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1456							6.33
1459	15	287	7.3	NM	-108	1	6.65
1504	16	362	7.0	<0.005	-104	2	6.66
1509	16	482	6.9	<0.005	-93	3	6.67
1514	16	559	6.8	<0.005	-86	5	6.67
1519	16	619	6.7	<0.005	-82	6	6.68
1524	16	662	6.7	<0.005	-77	7	6.68
1529	16	701	6.6	<0.005	-73	8	6.68
1534	17	726	6.6	<0.005	-70	10	6.69
1539	16	744	6.6	<0.005	-68	11	6.69
1544	16	766	6.5	<0.005	-66	12	6.69
1549	16	793	6.5	<0.005	-63	13	6.71
1554	16	807	6.5	<0.005	-62	15	6.72
1559	16	830	6.4	<0.005	-59	16	6.72
1604	17	839	6.4	<0.005	-58	17	6.73
1607	17	847	6.4	<0.005	-58	18	6.73

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~70°s F
Sample ID: KMW-3

Date: 7/16/08
Sampler(s): CEC/RRE
Sampling time: 0920

Odor: NM
Appearance: Clear

Temperature (°C): 8.5
Spec. Cond. (µmhos/cm @ 25°C): 339
Conductivity µmhos): 227
pH (SU): 6.5
D.O. (ppm): <0.005
ORP (mV): -45
Turbidity (NTU): 5

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 14 ft
Water column in well: 18 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~20

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0900							13.99
0905	8.5	330	6.6	1.7	-46	5	14.13
0910	8.5	334	6.6	<0.005	-47	10	14.13
0915	8.5	337	6.6	<0.005	-46	15	14.13
0920	8.5	339	6.5	<0.005	-45	20	14.30

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~70°s F
Sample ID: KMW-4

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1117

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 7.1
Spec. Cond. (µmhos/cm @ 25°C): 249
Conductivity µmhos): 160
pH (SU): 6.9
D.O. (ppm): <0.005
ORP (mV): -158
Turbidity (FAU): 15

Description of measuring point Mark on riser

Total depth: 43 ft
Approx. Depth to water: 25 ft
Water column in well: 18 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~11

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1102							25.49
1104	6.9	274	7.1	<0.005	-168	2	25.77
1109	6.9	255	6.9	<0.005	-155	5	25.72
1114	7.1	251	6.9	<0.005	-152	9	25.69
1117	7.1	249	6.9	<0.005	-158	11	25.68

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~70°s F
Sample ID: KMW-5

Date: 7/17/08
Sampler(s): CEC/CLS
Sampling time: 1325

Odor: None
Appearance: Tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 53 ft
Approx. Depth to water: 39 ft
Water column in well: 14 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent Insufficient water for collection of field parameters or stabilization record.
Partial purge 7/16/08. On 7/17/08 purged dry at 0930 and returned to sample at 1325.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~70°s F
Sample ID: KMW-7

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1045

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.5
Spec. Cond. (µmhos/cm @ 25°C): 948
Conductivity µmhos): 636
pH (SU): 6.5
D.O. (ppm): <0.005
ORP (mV): -96
Turbidity (FAU): 7

Description of measuring point Mark on riser

Total depth: 30 ft
Approx. Depth to water: 23 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1019							22.90
1022	8.7	950	6.4	1.7	-53	2	23.01
1027	8.6	942	6.4	<0.005	-65	4	23.02
1032	8.6	946	6.4	<0.005	-79	7	23.02
1037	8.6	944	6.4	<0.005	-88	9	23.02
1042	8.6	945	6.4	<0.005	-94	12	23.03
1045	8.5	948	6.5	<0.005	-96	13	23.03

North Jackson Company
Groundwater Sampling Log

Proj. Name:	Humboldt Mill Site	**Date:**	7/15/08
Weather:	Clear, ~60°s F	**Sampler(s):**	CEC/RRE
Sample ID:	KMW-9	**Sampling time:**	0920

		Temperature (°C):	8.0
Odor:	Slight hydrogen sulfide	Spec. Cond. (µmhos/cm @ 25°C):	445
Appearance:	Clear	Conductivity µmhos):	294
		pH (SU):	6.8
		D.O. (ppm):	<0.005
		ORP (mV):	-178
		Turbidity (FAU):	1

Description of measuring point Mark on riser

Total depth:	32	ft	Well diameter (in):	2
Approx. Depth to water:	23	ft		
Water column in well:	9	ft	Gallons purged	
Volume/foot:	0.16	gal/ft	prior to sampling:	~15
Well volume:	1	gal		

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.75 gpm.
Masked duplicate (DUP-001) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0900							22.88
0905	7.8	445	7.2	3.5	-196	4	23.22
0910	8.1	435	6.9	1.1	-186	8	23.19
0915	8.1	439	6.8	<0.005	-181	11	23.19
0920	8.0	455	6.8	<0.005	-178	15	23.21

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, breezy, ~70°s F
Sample ID: KMW-9P

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1000

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.3
Spec. Cond. (µmhos/cm @ 25°C): 1309
Conductivity µmhos): 870
pH (SU): 6.8
D.O. (ppm): <0.005
ORP (mV): -161
Turbidity (NTU): 5

Description of measuring point Mark on riser

Total depth: 57 ft
Approx. Depth to water: 23 ft
Water column in well: 34 ft
Volume/foot: 0.16 gal/ft
Well volume: 6 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0947							22.76
0950	8.2	1301	6.8	<0.005	-141	2	23.29
0955	8.2	1306	6.8	<0.005	-153	6	23.28
1000	8.3	1309	6.8	<0.005	-161	10	23.27

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~90°s F
Sample ID: KMW-10

Date: 7/16/08
Sampler(s): RRE/CEC
Sampling time: 1405

Odor: NM
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 139
Conductivity µmhos): 101
pH (SU): 6.4
D.O. (ppm): <0.005
ORP (mV): -24
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 8 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~23

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1350							7.58
1355	11	140	6.4	<0.005	-23	8	7.60
1400	11	139	6.4	<0.005	-23	15	7.60
1405	11	139	6.4	<0.005	-24	23	7.60

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~70°s F
Sample ID: MW-5

Date: 7/17/08
Sampler(s): CEC/CLS
Sampling time: 1040

Odor: Fuel
Appearance: Tan with bubbles

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 17 ft
Approx. Depth to water: 7 ft
Water column in well: 10 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
3	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Insufficient water for collection of field parameters or stabilization record.
Purged dry on 7/16/08. Returned to sample 7/17/08.

North Jackson Company
Groundwater Sampling Log

Proj. Name:	Humboldt Mill Site	**Date:**	7/17/08
Weather:	Cloudy, ~70°s F	**Sampler(s):**	CEC/CLS
Sample ID:	MW-11	**Sampling time:**	1147

		Temperature (°C):	14
Odor:	Hydrogen sulfide	Spec. Cond. (µmhos/cm @ 25°C):	1562
Appearance:	Tan	Conductivity µmhos):	1221
		pH (SU):	6.5
		D.O. (ppm):	0.4
		ORP (mV):	-93
		Turbidity (NTU):	23

Description of measuring point Mark on riser

Total depth:	12	ft	Well diameter (in):	2
Approx. Depth to water:	6	ft		
Water column in well:	6	ft	Gallons purged	
Volume/foot:	0.16	gal/ft	prior to sampling:	~1.7
Well volume:	1	gal		

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1130							6.38
1136	12	1616	6.6	0.4	-80	0.6	8.36
1141	13	1569	6.5	0.4	-90	1.1	8.47
1144	14	1560	6.5	0.4	-93	1.4	8.51
1147	14	1562	6.5	0.4	-93	1.7	8.51

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~90°s F
Sample ID: MW-12

Date: 7/16/08
Sampler(s): RRE/CEC
Sampling time: 1515

Odor: NM
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 250
Conductivity µmhos): 189
pH (SU): 6.9
D.O. (ppm): <0.005
ORP (mV): -114
Turbidity (NTU): NM

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 5 ft
Water column in well: 10 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~8

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.25 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1445							4.87
1455	13	250	7.0	<0.005	-108	3	5.62
1500	13	250	7.0	<0.005	-111	4	5.68
1505	12	250	7.0	<0.005	-115	5	5.66
1510	12	250	6.9	<0.005	-116	6	5.66
1515	12	250	6.9	<0.005	-114	8	5.66

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~70°s F
Sample ID: MW-101

Date: 7/17/08
Sampler(s): CEC/CLS
Sampling time: 1340

Odor: Fuel
Appearance: Clear

Temperature (°C): 9.1
Spec. Cond. (µmhos/cm @ 25°C): 332
Conductivity µmhos): 231
pH (SU): 6.6
D.O. (ppm): <0.005
ORP (mV): -98
Turbidity (NTU): 11

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 4 ft
Water column in well: 17 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~9

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1322							4.34
1325	9.2	332	6.7	1.7	-99	2	4.39
1330	9.2	332	6.6	<0.005	-96	4	4.40
1335	9.1	332	6.6	<0.005	-97	7	4.40
1340	9.1	332	6.6	<0.005	-98	9	4.41

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~70°s F
Sample ID: MW-102

Date: 7/17/08
Sampler(s): CEC/CLS
Sampling time: 1010

Odor: Fuel
Appearance: Tan with bubbles

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 9 ft
Approx. Depth to water: 7 ft
Water column in well: 2 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~0.4

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Insufficient water for collection of field parameters or stabilization record.
Purged dry on 7/16/08. Returned and sampled 7/17/08.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~80°s F
Sample ID: MW-103

Date: 7/16/08
Sampler(s): CLS/CEC
Sampling time: 1518

Odor: None
Appearance: Clear

Temperature (°C): 8.4
Spec. Cond. (µmhos/cm @ 25°C): 705
Conductivity µmhos): 480
pH (SU): 6.4
D.O. (ppm): <0.05
ORP (mV): -115.3
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 22 ft
Approx. Depth to water: 9 ft
Water column in well: 13 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1455							8.54
1500	8.4	652	6.5	<0.05	-106	3	8.78
1505	8.4	676	6.5	<0.05	-108	5	8.77
1510	8.4	693	6.4	<0.05	-112	8	8.77
1515	8.4	702	6.4	<0.05	-114	10	8.76
1518	8.4	705	6.4	<0.05	-115	12	8.76

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~70°s F
Sample ID: MW-601

Date: 7/17/08
Sampler(s): CEC/CLS
Sampling time: 0940

Odor: Hydrogen sulfide
Appearance: Tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 5 ft
Water column in well: 9 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~1

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Insufficient water for collection of field parameters or stabilization record.
Purged dry on 7/16/08. Returned and sampled 7/17/08.
Masked duplicate (DUP-003) collected here.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~90°s F
Sample ID: MW-602

Date: 7/16/08
Sampler(s): RRE/CEC
Sampling time: 1310

Odor: NM
Appearance: Clear

Temperature (°C): 8.8
Spec. Cond. (µmhos/cm @ 25°C): 109
Conductivity µmhos): 75
pH (SU): 6.5
D.O. (ppm): 4.5
ORP (mV): -3
Turbidity (NTU): 1

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 15 ft
Water column in well: 6 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~20

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1255							14.53
1300	8.6	107	6.5	6.0	12	5	14.63
1303	8.7	109	6.5	4.9	0.3	10	14.69
1305	8.8	109	6.5	4.6	-3	15	14.69
1310	8.8	109	6.5	4.5	-3	20	14.70

North Jackson Company
Groundwater Sampling Log

Proj. Name:	Humboldt Mill Site	**Date:**	7/16/08
Weather:	Clear, ~70°s F	**Sampler(s):**	RRE/CEC
Sample ID:	MW-603	**Sampling time:**	1225

		Temperature (°C):	9.6
Odor:	NM	Spec. Cond. (µmhos/cm @ 25°C):	92
Appearance:	Clear	Conductivity µmhos):	65
		pH (SU):	6.1
		D.O. (ppm):	1.9
		ORP (mV):	87
		Turbidity (NTU):	<1

Description of measuring point Mark on riser

Total depth:	24	ft	Well diameter (in):	2
Approx. Depth to water:	16	ft		
Water column in well:	8	ft	Gallons purged	
Volume/foot:	0.16	gal/ft	prior to sampling:	~10
Well volume:	1	gal		

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1005							15.88
1010	9.4	88	6.1	2.1	86	3	16.13
1015	9.4	90	6.1	2.0	89	5	16.13
1020	9.6	91	6.1	1.9	91	8	16.13
1025	9.6	92	6.1	1.9	87	10	16.35

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Clear, ~80°s F
Sample ID: MW-604

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1303

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 13
Spec. Cond. (µmhos/cm @ 25°C): 190
Conductivity µmhos): 143
pH (SU): 7.1
D.O. (ppm): <0.005
ORP (mV): -159
Turbidity (FAU): 4

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 6 ft
Water column in well: 8 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1238							6.28
1240	13	196	7.3	<0.005	-108	2	6.28
1245	13	203	7.2	<0.005	-120	7	6.28
1250	13	201	7.1	<0.005	-137	12	6.28
1255	13	196	7.1	<0.005	-150	17	6.28
1300	13	192	7.1	<0.005	-157	22	6.29
1303	13	190	7.1	<0.005	-159	25	6.29

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, breezy, ~80°s F
Sample ID: MW-605

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1424

Odor: None
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 126
Conductivity µmhos): 94
pH (SU): 6.9
D.O. (ppm): 2.4
ORP (mV): 2
Turbidity (NTU): 1

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 6 ft
Water column in well: 8 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~17

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1407							6.30
1411	12	125	7.0	3.3	3	4	6.42
1416	12	126	6.9	2.6	3	9	6.43
1421	12	126	6.9	2.4	2	14	6.43
1424	12	126	6.9	2.4	2	17	6.43

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~70°s F
Sample ID: MW-606

Date: 7/16/08
Sampler(s): RRE/CEC
Sampling time: 1120

Odor: NM
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 108
Conductivity µmhos): 78
pH (SU): 6.7
D.O. (ppm): 3.6
ORP (mV): 50
Turbidity (NTU): 4

Description of measuring point Mark on riser

Total depth: 16 ft
Approx. Depth to water: 11 ft
Water column in well: 5 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1055							10.54
1100	10	93	6.7	3.7	95	3	10.64
1105	11	98	6.7	3.7	78	5	10.68
1110	11	103	6.7	3.7	67	8	10.69
1115	11	105	6.7	3.7	58	10	10.70
1120	11	108	6.7	3.6	50	13	10.70

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~70°s F
Sample ID: P-602

Date: 7/16/08
Sampler(s): RRE/CEC
Sampling time: 1235

Odor: NM
Appearance: Clear

Temperature (°C): 10
Spec. Cond. (µmhos/cm @ 25°C): 99
Conductivity µmhos): 70
pH (SU): 7.5
D.O. (ppm): <0.005
ORP (mV): -166
Turbidity (NTU): NM

Description of measuring point Mark on riser

Total depth: 46 ft
Approx. Depth to water: 15 ft
Water column in well: 31 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~26

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1200							NM
1205	10	92	7.4	<0.005	-97	4	15.48
1210	10	94	7.4	<0.005	-103	8	15.47
1215	10	96	7.5	<0.005	-98	11	15.46
1220	10	97	7.5	<0.005	-143	15	15.44
1225	10	88	7.5	<0.005	-157	19	15.43
1230	10	99	7.5	<0.005	-166	23	15.43
1235	10	99	7.5	<0.005	-166	26	15.42

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~80°s F
Sample ID: P-604

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1341

Odor: None
Appearance: Clear

Temperature (°C): 9.0
Spec. Cond. (µmhos/cm @ 25°C): 124
Conductivity µmhos): 84
pH (SU): 6.9
D.O. (ppm): 4.7
ORP (mV): -22
Turbidity (FAU): 2

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 7 ft
Water column in well: 21 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1317							6.58
1320	7.5	122	7.1	5.7	-60	2	6.80
1325	8.4	123	7.0	5.2	-44	4	6.78
1330	8.5	124	7.0	4.9	-37	7	6.78
1335	8.7	124	6.9	4.7	-29	9	6.78
1338	9.0	124	6.9	4.7	-24	11	6.78
1341	9.0	124	6.9	4.7	-22	12	6.78

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, breezy, ~80°s F
Sample ID: P-605

Date: 7/15/08
Sampler(s): CEC/RRE
Sampling time: 1457

Odor: Slight hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.0
Spec. Cond. (µmhos/cm @ 25°C): 177
Conductivity µmhos): 117
pH (SU): 7.4
D.O. (ppm): <0.005
ORP (mV): -142
Turbidity (NTU): 7

Description of measuring point Mark on riser

Total depth: 35 ft
Approx. Depth to water: 6 ft
Water column in well: 28 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~22

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1435							6.19
1437	8.0	188	7.4	<0.005	-94	2	6.24
1442	8.0	182	7.4	<0.005	-107	7	6.24
1445	8.0	180	7.4	<0.005	-118	10	6.24
1448	8.0	179	7.4	<0.005	-127	13	6.24
1451	7.9	178	7.4	<0.005	-133	16	6.24
1454	8.0	177	7.4	<0.005	-138	19	6.24
1457	8.0	177	7.4	<0.005	-142	22	6.24

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~80°s F
Sample ID: PW-2

Date: 7/16/08
Sampler(s): CLS/CEC
Sampling time: 1411

Odor: None
Appearance: Clear

Temperature (°C): 9.7
Spec. Cond. (µmhos/cm @ 25°C): 517
Conductivity µmhos): 366
pH (SU): 6.2
D.O. (ppm): 0.8
ORP (mV): 73
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 41 ft
Approx. Depth to water: 36 ft
Water column in well: 4 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~11

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	250 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1350							36.42
1355	9.6	519	6.3	1.9	21	3	38.55
1400	9.7	517	6.2	0.8	52	5	38.24
1405	9.6	517	6.2	0.8	65	8	38.20
1408	9.6	516	6.2	0.8	69	9	38.19
1411	9.7	517	6.2	0.8	73	11	38.19

October 2008

NORTH
JACKSON
COMPANY

1004 Harbor Hills Drive, Suite 102 • Marquette, Michigan • 906.225.0757

November 12, 2008

Mr. Stephen V. Donohue
2737 South Ridge Road
P.O. Box 19012
Green Bay, WI 54307

Re: Humboldt Mill Site October 2008 Groundwater Monitoring Event

Dear Mr. Donohue:

Attached is the draft Humboldt Mill Site October 2008 Groundwater Monitoring Field Report.

If you have any questions, please call.

Sincerely,

Kari Paulson

North Jackson Company
Groundwater Monitoring Report

Project Name: Humboldt Mill Site

Contact: North Jackson Company
1004 Harbor Hills Drive, Suite 102
Marquette, Michigan 49855
Phone (906) 225-6787

Summary of Monitoring Activities

Field Date(s): 10/13/08, 10/14/08, 10/15/08, 10/16/08, 10/21/08 and 10/22/08

Activities: Collected groundwater samples from wells HYG-1, HW-1, HW-1A, HW-2, HW-3, HW-4, HW-5, HW-5A, HW-6, HW-6A, KMW-2, KMW-3, KMW-4, KMW-5, KMW-7, KMW-9, KMW-9P, KMW-10, MW-5, MW-11, MW-12, MW-101, MW-102, MW-103, MW-601, MW-602, MW-603, MW-604, MW-605, MW-606, P-602, P-604, P-605, and PW-2.

Collected QA/QC samples, including 5 masked duplicates and 5 field (atmospheric) blanks.

Measured water levels at 57 monitoring locations on 10/13/08.

Field methods: Temperature - EPA 170.1
Specific conductance - EPA 120.1
Turbidity (NTU) - EPA 180.1
D.O. >1 (small YSI hand held) - EPA 360.1
D.O. <1 (ChemMetrics snap tubes) - Rhodazine D Method
pH - EPA 9040C
Exceptions noted in remarks.

Field Report Attachments

Field Analytical Data Summary	Yes
Flow Measurement	No
Water Sampling Log	34
Quality Control Summary	Yes
Chain of Custody Numbers	20081013, 20081014, 20081015, 20081016, 20081022

Laboratory Analysis

Pace - Metals, anions, cations, BTEX (MW-5 only), general chemistry

Sampler Name(s): Curt Sheffield (CLS) and Andrew Maracini (AJM)

North Jackson Company
Groundwater Quality Control Sampling Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Description
DUP-001	10/13/08	Masked duplicate (MW-602)
DUP-002	10/14/08	Masked duplicate (MW-605)
DUP-003	10/15/08	Masked duplicate (KMW-9)
DUP-004	10/16/08	Masked duplicate (HW-5A)
DUP-005	10/22/08	Masked duplicate (HW-2)
FBK-001	10/13/08	Field blank (collected at MW-606)
FBK-002	10/14/08	Field blank (collected at P-605)
FBK-003	10/15/08	Field blank (collected at MW-12)
FBK-004	10/16/08	Field blank (collected at MW-102)
FBK-005	10/22/08	Field blank

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU)
HYG-1	10/16/08	12	714	7.3	0.3	-48	<1
HW-1	10/16/08	11	463	8.0	<0.005	-262	3
HW-1A	10/16/08	15	712	7.5	0.3	-45	<1
HW-2	10/22/08	14	456	7.7	0.05	172	<1
HW-3	10/15/08	7.8	222	5.5	0.005	81	<1
HW-4	10/15/08	7.6	518	7.7	<0.005	-253	8
HW-5	10/16/08	9.6	259	9.4	0	-315	17
HW-5A	10/16/08	13	444	7.7	0.3	-61	2
HW-6	10/16/08	9.4	464	7.9	0.005	-210	5
HW-6A	10/16/08	11	473	7.5	6.0	-82	5
KMW-2	10/22/08	14	594	6.7	<0.005	-115	<1
KMW-3	10/14/08	8.6	757	6.6	0.005	-72	<1
KMW-4	10/14/08	7.1	550	6.5	0.005	-10	<1
KMW-5	10/22/08	i	i	i	i	i	i
KMW-7	10/15/08	8.9	1,837	6.0	<0.005	-4	<1
KMW-9	10/15/08	8.6	704	6.2	<0.005	21	<1
KMW-9P	10/15/08	8.4	2,382	6.4	<0.005	-63	NM
KMW-10	10/14/08	13	186	6.7	<0.005	-100	<1
MW-5	10/16/08	i	i	i	i	i	i
MW-11	10/14/08	14	1,950	6.1	NM	-49	22
MW-12	10/15/08	11	448	7.0	<0.005	-122	<1

North Jackson Company
Groundwater Field Data Summary

Project Name: Humboldt Mill Site

Sample ID	Sampling Date	Temp (°C)*	Spec Cond (µmhos/cm @ 25°C)	pH (SU)	DO (ppm)	ORP (mV)	Turbidity (NTU)
MW-101	10/14/08	12	340	6.7	<0.005	-100	6
MW-102	10/16/08	i	i	i	i	i	i
MW-103	10/15/08	9.6	650	6.6	<0.005	-112	<1
MW-601	10/16/08	i	i	i	i	i	i
MW-602	10/13/08	11	250	6.7	2.1	-9	<1
MW-603	10/13/08	11	155	6.2	0.05	46	<1
MW-604	10/14/08	12	366	6.8	0.005	-112	2
MW-605	10/14/08	12	285	6.9	0.015	-17	<1
MW-606	10/13/08	12	173	6.8	3.5	96	<1
P-602	10/13/08	9.9	175	7.5	0.05	-184	3
P-604	10/14/08	11	283	6.8	1.3	36	<1
P-605	10/14/08	8.5	331	7.2	0.005	-125	<1
PW-2	10/15/08	8.9	849	6.3	1.7	104	28

i Insufficient water for collection of field parameters.
NM Not measured.
* Temperature measurements were affected by low-flow methodology and may be considerably warmer or colder than actual conditions.

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill Site

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
MW-5	Monitoring Well	10/13/08	1589.08	8.49	1580.59
MW-6	Monitoring Well	10/13/08	1590.68	23.78	1566.90
MW-7	Monitoring Well	10/13/08	1589.19	24.43	1564.76
MW-9	Monitoring Well	10/13/08	1614.07	27.60	1586.47
MW-11	Monitoring Well	10/13/08	1594.26	6.42	1587.84
MW-12	Monitoring Well	10/13/08	1590.26	5.68	1584.58
MW-101	Monitoring Well	10/13/08	1600.41	7.79	1592.62
MW-102	Monitoring Well	10/13/08	1596.82	7.76	1589.06
MW-103	Monitoring Well	10/13/08	1596.04	9.45	1586.59
MW-104	Monitoring Well	10/13/08	1591.53	10.22	1581.31
MW-601	Monitoring Well	10/13/08	1603.07	7.65	1595.42
MW-602	Monitoring Well	10/13/08	1621.41	16.99	1604.42
MW-603	Monitoring Well	10/13/08	1613.80	16.96	1596.84
MW-604	Monitoring Well	10/13/08	1595.56	6.86	1588.70
MW-605	Monitoring Well	10/13/08	1596.68	7.46	1589.22
MW-606	Monitoring Well	10/13/08	1615.10	11.98	1603.12
P-602	Monitoring Well	10/13/08	1621.32	16.91	1604.41
P-604	Monitoring Well	10/13/08	1595.42	7.43	1587.99
P-605	Monitoring Well	10/13/08	1596.60	7.36	1589.24
PW-1	Monitoring Well	10/13/08	1589.43	12.28	1577.15
PW-2	Monitoring Well	10/13/08	1589.59	37.33	1552.26
PW-4	Monitoring Well	10/13/08	1592.03	11.78	1580.25
KMW-1	Monitoring Well	10/13/08	1588.75	9.16	1579.59
KMW-2	Monitoring Well	10/13/08	1589.19	8.00	1581.19
KMW-3	Monitoring Well	10/13/08	1590.58	16.38	1574.20
KMW-4	Monitoring Well	10/13/08	1586.62	27.59	1559.03
KMW-5	Monitoring Well	10/13/08	1597.88	41.48	1556.40
KMW-6A	Monitoring Well	10/13/08	1598.47	41.13	1557.34
KMW-7	Monitoring Well	10/13/08	1582.50	24.61	1557.89
KMW-9	Monitoring Well	10/13/08	1581.40	24.41	1556.99
KMW-9P	Monitoring Well	10/13/08	1581.47	24.27	1557.20
KMW-10	Monitoring Well	10/13/08	1596.92	8.16	1588.76

North Jackson Company
Water Level Summary

Project Name: Humboldt Mill Site

Location	Description of Measuring Point	Date	Measuring Point Elevation (ft MSL)	Depth to Water (ft)	Water Elevation (ft MSL)
HYG-1	Existing Pit Well	10/13/08	1543.43	7.80	1535.63
HW-1	Existing Pit Well	10/13/08	1541.86	6.26	1535.60
HW-1A	Existing Pit Well	10/13/08	1541.82	6.09	1535.73
HW-2	Existing Pit Well	10/13/08	1544.99	8.76	1536.23
HW-3	Existing Pit Well	10/13/08	1584.85	35.03	1549.82
HW-4	Existing Pit Well	10/13/08	1582.02	28.26	1553.76
HW-5	Existing Pit Well	10/13/08	1543.03	6.83	1536.20
HW-5A	Existing Pit Well	10/13/08	1543.30	6.66	1536.64
HW-6	Existing Pit Well	10/13/08	1537.63	3.91	1533.72
HW-6A	Existing Pit Well	10/13/08	1537.58	3.74	1533.84
HMS-001	Staff Gauge	10/13/08	1597.60	0.57	1598.17
HMS-002	Staff Gauge	10/13/08	1589.75	Dry	Dry
HMS-003	Staff Gauge	10/13/08	1587.97	1.10	1589.07
HMS-004	Staff Gauge	10/13/08	1587.78	1.14	1588.92
HMS-005	Staff Gauge	10/13/08	1587.73	0.98	1588.71
HMS-006	Staff Gauge	10/13/08	1583.24	1.34	1584.58
HMS-007	Staff Gauge	10/13/08	1574.96	0.77	1575.73
HMP-004	Staff Gauge	10/13/08	1531.17	0.91	1532.08
HMP-005	Staff Gauge	10/13/08	1541.91	1.60	1543.51
HMP-006	Well Point	10/13/08	1752.52	Dry	Dry
HMP-007	Staff Gauge	10/13/08	1570.94	Dry	Dry
HMP-008	Staff Gauge	10/13/08	1535.92	1.99	1537.91
HMP-009	Staff Gauge	10/13/08	1532.59	1.54	1534.13
TDP001	Driven Point	10/13/08	1604.00	Dry	Dry
TDP002	Driven Point	10/13/08	1610.80	3.82	1606.98

Notes: All monitoring well depths measured from top of PVC (at mark, if present). Staff gauges were read directly. Measuring points of staff gauges are assumed to be 0 elevation.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: HYG-1

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1453

Odor: None
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 714
Conductivity (µmhos): 542
pH (SU): 7.3
D.O. (ppm): 0.3
ORP (mV): -48
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 8 ft
Water column in well: 20 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1420							7.81
1425	12	716	NM	2.5	-105	4	7.89
1430	12	716	NM	0.3	-87	8	7.89
1435	12	715	NM	0.3	-74	11	7.89
1438	12	715	NM	0.3	-67	14	7.89
1441	12	715	7.3	0.3	-61	16	7.89
1444	12	715	7.3	0.3	-57	18	7.89
1447	12	714	7.3	0.3	-55	20	7.89
1450	12	714	7.3	0.3	-52	23	7.89
1453	12	714	7.3	0.3	-48	25	7.89

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~50°s F
Sample ID: HW-1

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1409

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 463
Conductivity (µmhos): 334
pH (SU): 8.0
D.O. (ppm): <0.005
ORP (mV): -262
Turbidity (NTU): 3

Description of measuring point: Mark on riser

Total depth: 77 ft
Approx. Depth to water: 6 ft
Water column in well: 71 ft
Volume/foot: 1.47 gal/ft
Well volume: 104 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~42

Evacuation method: Submersible pump with new tubing

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	Volume Removed (gal)	Depth to Water (ft)
1327						6.35
1334	13	288	9.1	<0.005	7	6.50
1337	13	295	9.1	<0.005	10	6.53
1340	13	302	9.0	<0.005	13	6.54
1343	12	316	9.0	<0.005	16	6.54
1346	12	328	8.9	<0.005	19	6.53
1349	12	347	8.8	<0.005	22	6.53
1352	11	381	8.7	<0.005	25	6.56
1400	11	448	8.4	<0.005	33	6.55
1403	11	458	8.2	<0.005	36	6.54
1406	11	463	8.1	<0.005	39	6.55
1409	11	463	8.0	<0.005	42	6.54

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: HW-1A

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1402

Odor: None
Appearance: Clear

Temperature (°C): 15
Spec. Cond. (µmhos/cm @ 25°C): 712
Conductivity (µmhos): 574
pH (SU): 7.5
D.O. (ppm): 0.3
ORP (mV): -45
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 6 ft
Water column in well: 26 ft
Volume/foot: 1.47 gal/ft
Well volume: 38 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~19

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1337							6.13
1342	15	710	7.8	1.3	-60	4	6.55
1347	15	711	7.7	0.4	-58	8	6.56
1352	15	712	7.6	0.3	-50	11	6.56
1357	15	712	7.5	0.3	-47	15	6.56
1402	15	712	7.5	0.3	-45	19	6.53

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~30°s F
Sample ID: HW-2

Date: 10/22/08
Sampler(s): CLS/AJM
Sampling time: 1041

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 14
Spec. Cond. (µmhos/cm @ 25°C): 456
Conductivity (µmhos): 362
pH (SU): 7.7
D.O. (ppm): 0.05
ORP (mV): 172
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 9 ft
Water column in well: 23 ft
Volume/foot: 1.47 gal/ft
Well volume: 34 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.
Masked duplicate (DUP-005) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1018							8.81
1020	14	455	8.5	0.1	-220	1	9.35
1023	14	459	8.5	0.1	-216	3	9.39
1026	14	456	8.3	0.1	-192	4	9.41
1029	14	457	8.0	0.05	-183	6	9.40
1032	14	457	7.9	0.05	-180	7	9.35
1035	14	458	7.8	0.05	-180	9	9.37
1038	14	456	7.8	0.05	-171	10	9.38
1041	14	456	7.7	0.05	-172	12	9.38

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: HW-3

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1439

Odor: None
Appearance: Clear

Temperature (°C): 7.8
Spec. Cond. (µmhos/cm @ 25°C): 222
Conductivity (µmhos): 149
pH (SU): 5.5
D.O. (ppm): 0.005
ORP (mV): 81
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 45 ft
Approx. Depth to water: 35 ft
Water column in well: 10 ft
Volume/foot: 1.47 gal/ft
Well volume: 15 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~17

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1405							35.05
1410	8.1	235	6.4	3.6	5	3	35.18
1415	8.1	222	5.9	1.1	40	5	35.18
1420	8.0	220	5.8	0.005	55	8	35.18
1425	7.8	220	5.7	0.005	68	10	35.18
1430	7.8	220	5.6	0.005	71	13	35.18
1433	7.8	221	5.6	0.005	76	14	35.18
1436	7.8	221	5.5	0.005	79	16	35.18
1439	7.8	222	5.5	0.005	81	17	35.18

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: HW-4

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1539

Odor: Petroleum
Appearance: Greenish tint, yellowish

Temperature (°C): 7.6
Spec. Cond. (µmhos/cm @ 25°C): 518
Conductivity (µmhos): 346
pH (SU): 7.7
D.O. (ppm): <0.005
ORP (mV): -253
Turbidity (NTU): 8

Description of measuring point Mark on riser

Total depth: 77 ft
Approx. Depth to water: 28 ft
Water column in well: 48 ft
Volume/foot: 1.47 gal/ft
Well volume: 71 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~4

Evacuation method: Submersible pump with new tubing

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1528							28.19
1530	6.9	517	7.5	<0.005	-258	1	29.69
1533	7.4	518	7.6	<0.005	-251	2	29.69
1536	7.6	518	7.6	<0.005	-253	3	29.72
1539	7.6	518	7.7	<0.005	-253	4	29.73

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~40°s F
Sample ID: HW-5

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1139

Odor: Unidentifiable odor
Appearance: Initially very dark/cloudy, cleared up

Temperature (°C): 9.6
Spec. Cond. (µmhos/cm @ 25°C): 259
Conductivity (µmhos): 183
pH (SU): 9.4
D.O. (ppm): 0.01
ORP (mV): -315
Turbidity (NTU): 17

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 7 ft
Water column in well: 64 ft
Volume/foot: 1.47 gal/ft
Well volume: 94 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~21

Evacuation method: Submersible pump with new tubing

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.8 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1113							6.87
1130	11	258	9.2	0.01	-315	14	7.35
1133	10	258	9.3	0.01	-316	16	7.35
1136	9.9	258	9.4	0.01	-316	18	7.35
1139	9.6	259	9.4	0.01	-315	21	7.35

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Partly cloudy, ~40°s F
Sample ID: HW-5A

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1025

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 13
Spec. Cond. (µmhos/cm @ 25°C): 444
Conductivity (µmhos): 342
pH (SU): 7.7
D.O. (ppm): 0.3
ORP (mV): -61
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 31 ft
Approx. Depth to water: 7 ft
Water column in well: 24 ft
Volume/foot: 1.47 gal/ft
Well volume: 36 gal

Well diameter (in): 6
Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.
Masked duplicate (DUP-004) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1005							6.69
1010	13	444	8.0	0.3	-99	3	6.98
1013	13	445	7.9	0.3	-87	4	6.95
1016	13	445	7.8	0.3	-76	6	6.95
1019	13	445	7.7	0.3	-68	7	6.95
1022	13	445	7.7	0.3	-63	9	6.95
1025	13	444	7.7	0.3	-61	10	6.95

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: HW-6

Date: 10/16/2008
Sampler(s): CLS/AJM
Sampling time: 1602

Odor: None
Appearance: Clear

Temperature (°C): 9.4
Spec. Cond. (µmhos/cm @ 25°C): 464
Conductivity (µmhos): 326
pH (SU): 7.9
D.O. (ppm): 0.005
ORP (mV): -210
Turbidity (NTU): 5

Description of measuring point Mark on riser

Total depth: 71 ft
Approx. Depth to water: 4 ft
Water column in well: 67 ft
Volume/foot: 1.47 gal/ft
Well volume: 98 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~24

Evacuation method: Submersible pump with new tubing

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	Volume Removed (gal)	Depth to Water (ft)
1538						3.97
1540	9.5	328	8.6	0.005	2	4.05
1544	9.5	381	8.5	0.005	6	4.08
1547	9.5	412	8.5	0.005	9	4.10
1550	9.4	425	8.4	0.005	12	4.10
1553	9.4	454	8.3	0.005	15	4.09
1556	9.4	462	8.0	0.005	18	4.09
1559	9.4	464	7.9	0.005	21	4.09
1602	9.4	464	7.9	0.005	24	4.09

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: HW-6A

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1510

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 473
Conductivity (µmhos): 347
pH (SU): 7.5
D.O. (ppm): 6
ORP (mV): -82
Turbidity (NTU): 5

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 4 ft
Water column in well: 24 ft
Volume/foot: 1.47 gal/ft
Well volume: 36 gal

Well diameter (in): 6

Gallons purged prior to sampling: ~17

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.
All DO measurements made using Rhodazine D Method.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	Volume Removed (gal)	Depth to Water (ft)
1437						3.78
1442	11	405	9.1	0.3	3	5.25
1445	11	405	9.1	<0.005	4	5.24
1448	11	405	9.1	<0.005	6	5.24
1451	11	433	8.8	1	7	5.10
1454	11	465	8.0	4	9	5.11
1458	11	467	7.8	6	11	5.11
1502	11	471	7.6	6	13	5.05
1506	11	472	7.5	6	15	5.10
1510	11	473	7.5	6	17	5.11

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: KMW-2

Date: 10/22/08
Sampler(s): CLS/AJM
Sampling time: 1219

Odor: Fuel
Appearance: Clear

Temperature (°C): 14
Spec. Cond. (µmhos/cm @ 25°C): 594
Conductivity (µmhos): 467
pH (SU): 6.7
D.O. (ppm): <0.005
ORP (mV): -115
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 19 ft
Approx. Depth to water: 8 ft
Water column in well: 11 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~11

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.3 gpm.

Time	Temp (°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1143						8.18
1147	14	7.1	<0.005	-131	1	9.65
1150	14	7.0	<0.005	-134	2	9.69
1153	14	7.0	<0.005	-134	3	9.72
1156	14	6.9	<0.005	-131	4	9.60
1201	14	6.8	<0.005	NM	5	9.71
1205	14	6.8	<0.005	-123	7	9.66
1209	14	6.8	<0.005	-121	8	9.66
1213	14	6.7	<0.005	-118	9	9.64
1216	14	6.7	<0.005	-116	10	9.64
1219	14	6.7	<0.005	-115	11	9.64

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: KMW-3

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1355

Odor: None
Appearance: Clear

Temperature (°C): 8.6
Spec. Cond. (µmhos/cm @ 25°C): 757
Conductivity (µmhos): 521
pH (SU): 6.6
D.O. (ppm): 0.005
ORP (mV): -72
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 16 ft
Water column in well: 16 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~15

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1335							16.41
1340	8.6	740	6.7	2.3	-67	4	16.71
1345	8.6	750	6.6	0.005	-70	8	16.76
1350	8.6	755	6.6	0.005	-71	11	16.76
1355	8.6	757	6.6	0.005	-72	15	16.76

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: KMW-4

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1445

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 7.1
Spec. Cond. (µmhos/cm @ 25°C): 550
Conductivity (µmhos): 362
pH (SU): 6.5
D.O. (ppm): 0.005
ORP (mV): -10
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 43 ft
Approx. Depth to water: 28 ft
Water column in well: 15 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~15

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1425							27.60
1430	7.1	565	6.6	2.2	-25	4	27.88
1435	7.1	555	6.5	0.005	-16	8	27.88
1440	7.1	552	6.5	0.005	-12	11	27.88
1445	7.1	550	6.5	0.005	-10	15	27.88

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: KMW-5

Date: 10/22/08
Sampler(s): CLS/AJM
Sampling time: 1200

Odor: None
Appearance: Clear

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 53 ft
Approx. Depth to water: 41 ft
Water column in well: 12 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent Insufficient water for collection of field parameters or stabilization record.
Purged dry on 10/21/08. Sampled on 10/22/08.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: KMW-7

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1056

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.9
Spec. Cond. (µmhos/cm @ 25°C): 1,837
Conductivity (µmhos): 1,273
pH (SU): 6.0
D.O. (ppm): <0.005
ORP (mV): -4
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 30 ft
Approx. Depth to water: 25 ft
Water column in well: 5 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1030							24.63
1035	8.9	1,827	6.0	1.4	6	3	24.81
1040	8.9	1,836	6.0	<0.005	1	5	24.79
1045	8.9	1,837	6.0	<0.005	-1	8	24.80
1050	8.9	1,839	6.0	<0.005	-3	10	24.80
1053	8.9	1,838	6.0	<0.005	-3	12	24.80
1056	8.9	1,837	6.0	<0.005	-4	13	24.80

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-9

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1248

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.6
Spec. Cond. (µmhos/cm @ 25°C): 704
Conductivity (µmhos): 484
pH (SU): 6.2
D.O. (ppm): <0.005
ORP (mV): 21
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 32 ft
Approx. Depth to water: 24 ft
Water column in well: 8 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~15

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.75 gpm.
Masked duplicate (DUP-003) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1228							24.40
1233	8.2	708	6.3	2.4	18	4	24.66
1238	8.5	704	6.2	<0.005	21	8	24.55
1243	8.6	705	6.2	<0.005	21	11	24.55
1248	8.6	704	6.2	<0.005	21	15	24.55

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: KMW-9P

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1150

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 8.4
Spec. Cond. (µmhos/cm @ 25°C): 2,382
Conductivity (µmhos): 1,589
pH (SU): 6.4
D.O. (ppm): <0.005
ORP (mV): -63
Turbidity (NTU): NM

Description of measuring point Mark on riser

Total depth: 57 ft
Approx. Depth to water: 24 ft
Water column in well: 33 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~19

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.75 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1125							24.30
1130	8.3	2,365	6.3	1.5	-48	4	24.53
1135	8.3	2,375	6.4	<0.005	-57	8	24.52
1140	8.3	2,377	6.4	<0.005	-60	11	24.52
1145	8.4	2,379	6.4	<0.005	-62	15	24.52
1150	8.4	2,382	6.4	<0.005	-63	19	24.52

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: KMW-10

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1316

Odor: Strong hydrogen sulfide
Appearance: Clear

Temperature (°C): 13
Spec. Cond. (µmhos/cm @ 25°C): 186
Conductivity (µmhos): 140
pH (SU): 6.7
D.O. (ppm): <0.005
ORP (mV): -100
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 8 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~16

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1300							8.16
1303	13	187	6.8	<0.005	-121	3	8.18
1310	13	186	6.8	<0.005	-108	10	8.18
1313	13	186	6.7	<0.005	-104	13	8.18
1316	13	186	6.7	<0.005	-100	16	8.18

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: MW-5

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 0940

Odor: Fuel
Appearance: Tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 17 ft
Approx. Depth to water: 10 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~1

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
3	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Insufficient water for collection of field parameters or stabilization record.
Purged dry on 10/15/08. Returned to sample 10/16/08.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: MW-11

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1418

Odor: Strong hydrogen sulfide
Appearance: Clear/yellow, oily sheen

Temperature (°C): 14
Spec. Cond. (µmhos/cm @ 25°C): 1,950
Conductivity (µmhos): 1,529
pH (SU): 6.1
D.O. (ppm): NM
ORP (mV): -49
Turbidity (NTU): 22

Description of measuring point Mark on riser

Total depth: 12 ft
Approx. Depth to water: 6 ft
Water column in well: 6 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1400						6.36
1403	13	1,958	6.2	-64	0.3	9.02
1406	13	1,950	6.2	-57	0.6	9.49
1412	13	1,946	6.2	-52	1.2	9.40
1415	14	1,948	6.2	-50	1.5	9.38
1418	14	1,950	6.1	-49	1.8	9.38

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: MW-12

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 0945

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 448
Conductivity (µmhos): 327
pH (SU): 7.0
D.O. (ppm): <0.005
ORP (mV): -122
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 15 ft
Approx. Depth to water: 6 ft
Water column in well: 9 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~6

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite/Nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.25 gpm.
Field blank (FBK-003) collected here at 1000.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0920							5.64
0925	11	446	7.0	1.8	-106	1	6.99
0930	11	449	7.0	<0.005	-120	3	6.99
0935	11	449	7.0	<0.005	-121	4	7.00
0940	11	448	7.0	<0.005	-123	5	7.00
0945	11	448	7.0	<0.005	-122	6	7.00

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: MW-101

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1513

Odor: Petroleum, fuel oil
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 340
Conductivity (µmhos): 254
pH (SU): 6.7
D.O. (ppm): <0.005
ORP (mV): -100
Turbidity (NTU): 6

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 8 ft
Water column in well: 13 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~13

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1500							7.80
1504	12	337	6.7	<0.005	-96	4	7.87
1507	12	337	6.7	<0.005	-97	7	7.87
1510	12	339	6.7	<0.005	-98	10	7.87
1513	12	340	6.7	<0.005	-100	13	7.87

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: MW-102

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1055

Odor: Fuel
Appearance: Tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 9 ft
Approx. Depth to water: 8 ft
Water column in well: 1 ft
Volume/foot: 0.16 gal/ft
Well volume: 0.2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~0.2

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Insufficient water for collection of field parameters or stabilization record.
Purged dry on 10/15/08. Returned and sampled 10/16/08. Field blank (FBK-004) collected here at 1118.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~50°s F
Sample ID: MW-103

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1420

Odor: Hydrogen sulfide
Appearance: Clear

Temperature (°C): 9.6
Spec. Cond. (µmhos/cm @ 25°C): 650
Conductivity (µmhos): 459
pH (SU): 6.6
D.O. (ppm): <0.005
ORP (mV): -112
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 22 ft
Approx. Depth to water: 9 ft
Water column in well: 13 ft
Volume/foot: 0.16 gal/ft
Well volume: 2 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~16

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1404							9.38
1411	9.7	645	6.6	<0.005	-108	7	9.85
1414	9.7	650	6.6	<0.005	-108	10	9.85
1417	9.7	651	6.6	<0.005	-109	13	9.87
1420	9.6	650	6.6	<0.005	-112	16	9.87

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: MW-601

Date: 10/16/08
Sampler(s): CLS/AJM
Sampling time: 1203

Odor: Hydrogen sulfide
Appearance: Tan

Temperature (°C): i
Spec. Cond. (µmhos/cm @ 25°C): i
Conductivity (µmhos): i
pH (SU): i
D.O. (ppm): i
ORP (mV): i
Turbidity (NTU): i

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 8 ft
Water column in well: 6 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~1

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Insufficient water for collection of field parameters or stabilization record.
Purged dry on 10/15/08. Returned and sampled 10/16/08.

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~60°s F
Sample ID: MW-602

Date: 10/13/08
Sampler(s): CLS/AJM
Sampling time: 1229

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 250
Conductivity (µmhos): 184
pH (SU): 6.7
D.O. (ppm): 2.1
ORP (mV): -9
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 21 ft
Approx. Depth to water: 17 ft
Water column in well: 4 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~30

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
2	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1.5 gpm.
Masked duplicate (DUP-001) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1209							16.97
1214	11	245	6.9	3.0	-3	8	17.19
1217	11	252	6.8	2.2	-6	12	17.19
1220	11	250	6.7	2.2	-7	17	17.18
1223	11	250	6.7	2.1	-7	21	17.19
1226	11	250	6.7	2.0	-8	26	17.19
1229	11	250	6.7	2.1	-9	30	17.19

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, windy, ~70°s F
Sample ID: MW-603

Date: 10/13/08
Sampler(s): CLS/AJM
Sampling time: 1504

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 155
Conductivity (µmhos): 115
pH (SU): 6.2
D.O. (ppm): 0.05
ORP (mV): 46
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 24 ft
Approx. Depth to water: 17 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~16

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1425							16.92
1430	12	129	6.5	3.2	88	2	17.09
1435	12	141	6.3	2.0	66	4	17.10
1438	12	144	6.3	1.4	63	5	17.10
1441	12	145	6.2	1.4	61	6	17.10
1444	12	149	6.2	1.2	56	8	17.10
1458	11	153	6.2	1.0	48	13	17.10
1501	11	154	6.2	1.0	47	14	17.10
1504	11	155	6.2	1.0	46	16	17.10

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: MW-604

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1304

Odor: None
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 366
Conductivity (µmhos): 273
pH (SU): 6.8
D.O. (ppm): 0.005
ORP (mV): -112
Turbidity (NTU): 2

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 7 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2
Gallons purged prior to sampling: ~21

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~1 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1243							6.79
1248	12	393	6.9	0.005	-121	5	6.86
1253	12	381	6.9	0.005	-116	10	6.86
1258	12	372	6.8	0.005	-113	15	6.86
1301	12	369	6.8	0.005	-113	18	6.86
1304	12	366	6.8	0.005	-112	21	6.86

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: MW-605

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1049

Odor: None
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 285
Conductivity (µmhos): 212
pH (SU): 6.9
D.O. (ppm): 0.015
ORP (mV): -17
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 14 ft
Approx. Depth to water: 7 ft
Water column in well: 7 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~25

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
2	500 ml plastic	HNO3	Metals, hardness	
2	250 ml plastic	HNO3	Lithium	
2	500 ml clear glass	None	LL Hg	
2	250 ml plastic	None	Nitrite, nitrate	
2	250 ml plastic	NaOH	Cyanide	
2	250 ml plastic	H2SO4	Ammonia	
2	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~1 gpm.
Masked duplicate (DUP-002) collected here.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1024							7.45
1029	12	297	7.1	0.05	-1	5	7.52
1034	12	290	7.0	0.02	-20	10	7.52
1039	12	287	7.0	0.02	-19	15	7.52
1044	12	286	6.9	0.015	-17	20	7.52
1049	12	285	6.9	0.015	-17	25	7.52

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, windy, ~60°s F
Sample ID: MW-606

Date: 10/13/08
Sampler(s): CLS/AJM
Sampling time: 1353

Odor: None
Appearance: Clear

Temperature (°C): 12
Spec. Cond. (µmhos/cm @ 25°C): 173
Conductivity (µmhos): 130
pH (SU): 6.8
D.O. (ppm): 3.5
ORP (mV): 96
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 16 ft
Approx. Depth to water: 12 ft
Water column in well: 4 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
0	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.
Field blank (FBK-001) collected here at 1245.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1329							11.95
1332	12	141	7.1	6.1	75	2	12.16
1335	12	150	7.0	6.0	84	3	12.15
1338	12	159	6.9	4.7	90	5	12.16
1341	12	164	6.8	4.7	91	6	12.16
1344	12	167	6.8	3.8	94	8	12.16
1347	12	170	6.8	3.9	95	9	12.16
1350	12	172	6.8	3.5	95	11	12.16
1353	12	173	6.8	3.5	96	12	12.16

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~60°s F
Sample ID: P-602

Date: 10/13/08
Sampler(s): CLS/AJM
Sampling time: 1152

Odor: None
Appearance: Clear

Temperature (°C): 9.9
Spec. Cond. (µmhos/cm @ 25°C): 175
Conductivity (µmhos): 127
pH (SU): 7.5
D.O. (ppm): 0.05
ORP (mV): -184
Turbidity (NTU): 3

Description of measuring point Mark on riser

Total depth: 46 ft
Approx. Depth to water: 18 ft
Water column in well: 28 ft
Volume/foot: 0.16 gal/ft
Well volume: 5 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~14

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1125							16.89
1133	9.6	153	7.5	1.3	-118	4	17.87
1138	9.9	164	7.5	0.05	-152	7	17.84
1143	10	172	7.5	0.05	-174	9	17.89
1146	10	175	7.5	0.05	-178	11	17.88
1149	9.9	175	7.5	0.05	-180	12	17.88
1152	9.9	175	7.5	0.05	-184	14	17.88

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Sunny, ~40°s F
Sample ID: P-604

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 1224

Odor: None
Appearance: Clear

Temperature (°C): 11
Spec. Cond. (µmhos/cm @ 25°C): 283
Conductivity (µmhos): 207
pH (SU): 6.8
D.O. (ppm): 1.3
ORP (mV): 36
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 28 ft
Approx. Depth to water: 7 ft
Water column in well: 21 ft
Volume/foot: 0.16 gal/ft
Well volume: 3 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~10

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.5 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1205							7.44
1210	11	278	7.2	2.1	-5	3	7.59
1215	11	282	7.0	1.9	17	5	7.58
1218	11	282	6.9	1.7	25	7	7.58
1221	11	282	6.9	1.3	31	8	7.58
1224	11	283	6.8	1.3	36	10	7.58

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~40°s F
Sample ID: P-605

Date: 10/14/08
Sampler(s): CLS/AJM
Sampling time: 0943

Odor: None
Appearance: Clear

Temperature (°C): 8.5
Spec. Cond. (µmhos/cm @ 25°C): 331
Conductivity (µmhos): 226
pH (SU): 7.2
D.O. (ppm): 0.005
ORP (mV): -125
Turbidity (NTU): <1

Description of measuring point Mark on riser

Total depth: 35 ft
Approx. Depth to water: 7 ft
Water column in well: 27 ft
Volume/foot: 0.16 gal/ft
Well volume: 4 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~9

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None

Remarks: Well condition excellent. Pump rate ~0.5 gpm.
Field blank (FBK-002) collected here at 0959.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
0926							7.35
0931	8.6	328	7.1	2.4	-70	3	7.38
0934	8.4	332	7.1	0.005	-106	4	7.39
0937	8.4	331	7.2	0.005	-116	6	7.39
0940	8.4	331	7.2	0.005	-121	7	7.39
0943	8.5	331	7.2	0.005	-125	9	7.39

North Jackson Company
Groundwater Sampling Log

Proj. Name: Humboldt Mill Site
Weather: Cloudy, ~50°s F
Sample ID: PW-2

Date: 10/15/08
Sampler(s): CLS/AJM
Sampling time: 1551

Odor: None
Appearance: Brown/sandy

Temperature (°C): 8.9
Spec. Cond. (µmhos/cm @ 25°C): 849
Conductivity (µmhos): 576
pH (SU): 6.3
D.O. (ppm): 1.7
ORP (mV): 104
Turbidity (NTU): 28

Description of measuring point Mark on riser

Total depth: 41 ft
Approx. Depth to water: 37 ft
Water column in well: 3 ft
Volume/foot: 0.16 gal/ft
Well volume: 1 gal

Well diameter (in): 2

Gallons purged prior to sampling: ~12

Evacuation method: Dedicated submersible pump

	Bottle	Preservative	Parameter	Comment
0	40 ml glass	HCl	VOCs	
1	500 ml plastic	HNO3	Metals, hardness	
1	250 ml plastic	HNO3	Lithium	
1	500 ml clear glass	None	LL Hg	
1	250 ml plastic	None	Nitrite, nitrate	
1	250 ml plastic	NaOH	Cyanide	
1	250 ml plastic	H2SO4	Ammonia	
1	250 ml plastic	None	Alk2, Cl, Fl, SO4	
1	500 ml plastic	NaOH, ZnAC	Sulfide	

Photographs: None
Remarks: Well condition excellent. Pump rate ~0.4 gpm.

Time	Temp (°C)	Spec. Cond. (µmhos/cm @ 25°C)	pH (SU)	D.O. (ppm)	ORP (mV)	Volume Removed (gal)	Depth to Water (ft)
1522							37.35
1527	9.0	724	6.2	2.9	75	2	38.47
1532	8.8	815	6.3	2.3	85	4	38.46
1537	8.9	808	6.3	1.7	90	6	38.46
1542	9.0	831	6.4	1.8	98	8	38.46
1545	9.0	838	6.4	1.7	101	9	38.46
1548	8.9	846	6.3	1.6	102	10	38.46
1551	8.9	849	6.3	1.7	104	12	38.46

Appendix D

2008 Groundwater Laboratory Reports

March 2008

Batch No. 401546

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

April 02, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on March 14, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
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CERTIFICATIONS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401546001	FBK-002	Water	03/13/08 09:00	03/14/08 09:43
401546002	DUP-002	Water	03/13/08 00:00	03/14/08 09:43
401546003	MW-604	Water	03/13/08 12:39	03/14/08 09:43
401546004	P-604	Water	03/13/08 12:25	03/14/08 09:43
401546005	MW-605	Water	03/13/08 13:35	03/14/08 09:43
401546006	P-605	Water	03/13/08 13:32	03/14/08 09:43
401546007	MW-602	Water	03/13/08 14:45	03/14/08 09:43
401546008	P-602	Water	03/13/08 14:45	03/14/08 09:43

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401546001	FBK-002	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401546002	DUP-002	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401546003	MW-604	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
401546004	P-604	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401546005	MW-605	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
401546006	P-605	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401546007	**MW-602**	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401546008	**P-602**	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	4	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	AWH	1	PASI-G

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: EPA 1631E
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MPRP/1055

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 5778)
  - Calcium
  - Manganese
  - Potassium
  - Zinc

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

Analyte Comments:

QC Batch: MPRP/1055

1j: Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.

- MW-604 (Lab ID: 401546003)
  - Lithium
  - Manganese

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
6 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1099

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401494007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 5834)
  - Sulfide
- MSD (Lab ID: 5835)
  - Sulfide

R1: RPD value was outside control limits.

- MS (Lab ID: 5834)
  - Sulfide
- MSD (Lab ID: 5835)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- DUP-002 (Lab ID: 401546002)
- FBK-002 (Lab ID: 401546001)
- MW-602 (Lab ID: 401546007)
- MW-604 (Lab ID: 401546003)
- MW-605 (Lab ID: 401546005)
- P-602 (Lab ID: 401546008)
- P-604 (Lab ID: 401546004)
- P-605 (Lab ID: 401546006)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1101

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401542001,401544001

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 5649)
  - Chloride
  - Sulfate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1162

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401546007,401652004

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 8411)
  - Cyanide
- MSD (Lab ID: 8412)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
8 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: FBK-002 **Lab ID: 401546001** Collected: 03/13/08 09:00 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.468J**	ng/L	0.50	0.16	1	03/18/08 09:00	03/20/08 14:31	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 21:44	7429-90-5	
Antimony	**0.17J**	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 03:31	7440-36-0	
Arsenic	ND	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 03:31	7440-38-2	
Barium	**0.33J**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 03:31	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 20:07	7440-41-7	
Boron	**227**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 21:44	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 20:07	7440-43-9	
Calcium	**71.6J**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 21:44	7440-70-2	B
Chromium	ND	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 20:07	7440-47-3	
Cobalt	ND	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 20:07	7440-48-4	
Copper	**1.3**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 20:07	7440-50-8	
Iron	ND	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 00:59	7439-89-6	
Lead	**0.18J**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 03:31	7439-92-1	
Lithium	**1.1**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 20:07	7439-93-2	
Magnesium	ND	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 21:44	7439-95-4	
Manganese	**0.18J**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 20:07	7439-96-5	B
Molybdenum	**0.60J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 03:31	7439-98-7	
Nickel	ND	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 00:59	7440-02-0	
Potassium	**124J**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 03:31	7440-09-7	B
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 03:31	7782-49-2	
Silver	**0.24J**	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 20:07	7440-22-4	
Sodium	**2880**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 21:44	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 03:31	7440-28-0	
Total Hardness	**0.29J**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 21:44		
Vanadium	ND	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 03:31	7440-62-2	
Zinc	**5.0J**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 20:07	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**6.7J**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**6.7J**	mg/L	10.0	3.2	1		03/19/08 16:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 15:29	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.0J**	mg/L	5.0	1.1	1		03/14/08 17:36	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/14/08 17:36	16984-48-8	
Sulfate	ND	mg/L	4.0	0.51	1		03/14/08 17:36	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: FBK-002 **Lab ID: 401546001** Collected: 03/13/08 09:00 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:01	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 12:58	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: DUP-002 **Lab ID: 401546002** Collected: 03/13/08 00:00 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.929**	ng/L	0.50	0.16	1	03/18/08 09:00	03/20/08 15:41	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**560**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 21:14	7429-90-5	
Antimony	**0.21J**	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 03:01	7440-36-0	
Arsenic	**0.47J**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 03:01	7440-38-2	
Barium	**17.9**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 03:01	7440-39-3	
Beryllium	**0.18J**	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 19:49	7440-41-7	
Boron	**26.5**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 21:14	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 19:49	7440-43-9	
Calcium	**29200**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 21:14	7440-70-2	
Chromium	**1.1**	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 19:49	7440-47-3	
Cobalt	**1.5**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 19:49	7440-48-4	
Copper	**26.3**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 19:49	7440-50-8	
Iron	**1680**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 01:11	7439-89-6	
Lead	**0.96J**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 03:01	7439-92-1	
Lithium	**1.4**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 19:49	7439-93-2	
Magnesium	**11100**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 21:14	7439-95-4	
Manganese	**37.1**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 19:49	7439-96-5	
Molybdenum	**2.0J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 03:01	7439-98-7	
Nickel	**1.9**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 01:11	7440-02-0	
Potassium	**2280**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 03:01	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 03:01	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 19:49	7440-22-4	
Sodium	**2040**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 21:14	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 03:01	7440-28-0	
Total Hardness	**119**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 21:14		
Vanadium	**1.5**	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 03:01	7440-62-2	
Zinc	**11.1**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 19:49	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**118**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**118**	mg/L	10.0	3.2	1		03/19/08 16:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 16:11	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		03/14/08 17:51	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/14/08 17:51	16984-48-8	
Sulfate	**8.1**	mg/L	4.0	0.51	1		03/14/08 17:51	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: DUP-002 **Lab ID: 401546002** Collected: 03/13/08 00:00 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:02	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 12:58	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: MW-604 **Lab ID: 401546003** Collected: 03/13/08 12:39 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.643**	ng/L	0.50	0.16	1	03/18/08 09:00	03/20/08 14:49	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**18.7J**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 21:32	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 03:37	7440-36-0	
Arsenic	**2.6**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 03:37	7440-38-2	
Barium	**28.4**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 03:37	7440-39-3	
Beryllium	**0.10J**	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 20:13	7440-41-7	
Boron	**59.0**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 21:32	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 20:13	7440-43-9	
Calcium	**27000**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 21:32	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 20:13	7440-47-3	
Cobalt	**0.64J**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 20:13	7440-48-4	
Copper	**0.69J**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 20:13	7440-50-8	
Iron	**13000**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 01:41	7439-89-6	
Lead	**0.13J**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 03:37	7439-92-1	
Lithium	**3.3**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 20:13	7439-93-2	1j
Magnesium	**11200**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 21:32	7439-95-4	
Manganese	**2370**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 20:13	7439-96-5	1j
Molybdenum	**1.2J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 03:37	7439-98-7	
Nickel	**0.43J**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 01:41	7440-02-0	
Potassium	**2700**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 03:37	7440-09-7	
Selenium	**0.26J**	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 03:37	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 20:13	7440-22-4	
Sodium	**1420**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 21:32	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 03:37	7440-28-0	
Total Hardness	**113**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 21:32		
Vanadium	**0.54J**	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 03:37	7440-62-2	
Zinc	**4.8J**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 20:13	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**129**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**129**	mg/L	10.0	3.2	1		03/19/08 16:17		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 16:25	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		03/14/08 18:05	16887-00-6	
Fluoride	**0.44J**	mg/L	0.50	0.059	1		03/14/08 18:05	16984-48-8	
Sulfate	**2.0J**	mg/L	4.0	0.51	1		03/14/08 18:05	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:02	57-12-5	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: MW-604 **Lab ID: 401546003** Collected: 03/13/08 12:39 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:02	7764-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: P-604 **Lab ID: 401546004** Collected: 03/13/08 12:25 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.949**	ng/L	0.50	0.16	1	03/18/08 09:00	03/20/08 14:59	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**678**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 22:02	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 03:49	7440-36-0	
Arsenic	**0.39J**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 03:49	7440-38-2	
Barium	**20.8**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 03:49	7440-39-3	
Beryllium	**0.13J**	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 20:37	7440-41-7	
Boron	**26.4**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 22:02	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 20:37	7440-43-9	
Calcium	**29700**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 22:02	7440-70-2	
Chromium	**1.4**	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 20:37	7440-47-3	
Cobalt	**1.5**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 20:37	7440-48-4	
Copper	**27.0**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 20:37	7440-50-8	
Iron	**1810**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 01:53	7439-89-6	
Lead	**1.3**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 03:49	7439-92-1	
Lithium	**1.4**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 20:37	7439-93-2	
Magnesium	**11400**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 22:02	7439-95-4	
Manganese	**39.5**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 20:37	7439-96-5	
Molybdenum	**1.7J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 03:49	7439-98-7	
Nickel	**2.1**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 01:53	7440-02-0	
Potassium	**2490**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 03:49	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 03:49	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 20:37	7440-22-4	
Sodium	**2080**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 22:02	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 03:49	7440-28-0	
Total Hardness	**121**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 22:02		
Vanadium	**1.7**	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 03:49	7440-62-2	
Zinc	**13.6**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 20:37	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**109**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**109**	mg/L	10.0	3.2	1		03/19/08 16:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 16:40	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		03/14/08 18:19	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/14/08 18:19	16984-48-8	
Sulfate	**8.0**	mg/L	4.0	0.51	1		03/14/08 18:19	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: P-604 **Lab ID: 401546004** Collected: 03/13/08 12:25 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:03	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:02	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: MW-605 **Lab ID: 401546005** Collected: 03/13/08 13:35 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**6.33**	ng/L	0.50	0.16	1	03/18/08 09:00	03/20/08 15:48	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**2120**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 22:08	7429-90-5	
Antimony	**0.19J**	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 03:55	7440-36-0	
Arsenic	**7.4**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 03:55	7440-38-2	
Barium	**51.2**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 03:55	7440-39-3	
Beryllium	**0.12J**	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 20:43	7440-41-7	
Boron	**46.0**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 22:08	7440-42-8	
Cadmium	**0.17J**	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 20:43	7440-43-9	
Calcium	**19100**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 22:08	7440-70-2	
Chromium	**5.1**	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 20:43	7440-47-3	
Cobalt	**3.5**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 20:43	7440-48-4	
Copper	**18.6**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 20:43	7440-50-8	
Iron	**6710**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 01:59	7439-89-6	
Lead	**1.8**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 03:55	7439-92-1	
Lithium	**4.0**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 20:43	7439-93-2	
Magnesium	**11100**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 22:08	7439-95-4	
Manganese	**4160**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 20:43	7439-96-5	
Molybdenum	**3.0J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 03:55	7439-98-7	
Nickel	**10.7**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 01:59	7440-02-0	
Potassium	**4030**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 03:55	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 03:55	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 20:43	7440-22-4	
Sodium	**970**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 22:08	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 03:55	7440-28-0	
Total Hardness	**93.5**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 22:08		
Vanadium	**5.3**	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 03:55	7440-62-2	
Zinc	**20.7**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 20:43	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**102**	mg/L	10.0	3.2	1		03/19/08 16:17		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 16:54	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		03/14/08 18:33	16887-00-6	
Fluoride	**0.44J**	mg/L	0.50	0.059	1		03/14/08 18:33	16984-48-8	
Sulfate	**9.9**	mg/L	4.0	0.51	1		03/14/08 18:33	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:04	57-12-5	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: MW-605 **Lab ID: 401546005** Collected: 03/13/08 13:35 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:03	7764-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: P-605 **Lab ID: 401546006** Collected: 03/13/08 13:32 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.396J**	ng/L	0.50	0.16	1	03/19/08 10:00	03/21/08 12:50	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**23.8J**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 22:14	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 04:01	7440-36-0	
Arsenic	**7.5**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 04:01	7440-38-2	
Barium	**29.8**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 04:01	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 20:49	7440-41-7	
Boron	**49.3**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 22:14	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 20:49	7440-43-9	
Calcium	**20500**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 22:14	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 20:49	7440-47-3	
Cobalt	**1.4**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 20:49	7440-48-4	
Copper	**0.30J**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 20:49	7440-50-8	
Iron	**4970**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 02:05	7439-89-6	
Lead	**0.20J**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 04:01	7439-92-1	
Lithium	**1.7**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 20:49	7439-93-2	
Magnesium	**10700**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 22:14	7439-95-4	
Manganese	**3080**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 20:49	7439-96-5	
Molybdenum	**4.6J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 04:01	7439-98-7	
Nickel	**0.54J**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 02:05	7440-02-0	
Potassium	**4700**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 04:01	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 04:01	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 20:49	7440-22-4	
Sodium	**1090**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 22:14	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 04:01	7440-28-0	
Total Hardness	**95.3**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 22:14		
Vanadium	**0.48J**	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 04:01	7440-62-2	
Zinc	**4.0J**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 20:49	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**129**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**129**	mg/L	10.0	3.2	1		03/19/08 16:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 17:08	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		03/14/08 18:47	16887-00-6	
Fluoride	**0.48J**	mg/L	0.50	0.059	1		03/14/08 18:47	16984-48-8	
Sulfate	**7.2**	mg/L	4.0	0.51	1		03/14/08 18:47	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: P-605 **Lab ID: 401546006** Collected: 03/13/08 13:32 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:05	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:04	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: MW-602 **Lab ID: 401546007** Collected: 03/13/08 14:45 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.356J**	ng/L	0.50	0.16	1	03/19/08 10:00	03/21/08 12:54	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**6.1J**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 22:20	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 04:07	7440-36-0	
Arsenic	**1.2**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 04:07	7440-38-2	
Barium	**13.8**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 04:07	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 20:56	7440-41-7	
Boron	**31.4**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 22:20	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 20:56	7440-43-9	
Calcium	**11900**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 22:20	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 20:56	7440-47-3	
Cobalt	**0.060J**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 20:56	7440-48-4	
Copper	**0.13J**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 20:56	7440-50-8	
Iron	**10800**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 02:11	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 04:07	7439-92-1	
Lithium	**8.8**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 20:56	7439-93-2	
Magnesium	**7100**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 22:20	7439-95-4	
Manganese	**6240**	ug/L	10.0	0.80	10	03/17/08 11:40	04/01/08 12:19	7439-96-5	
Molybdenum	**4.2J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 04:07	7439-98-7	
Nickel	**0.64J**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 02:11	7440-02-0	
Potassium	**2120**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 04:07	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 04:07	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 20:56	7440-22-4	
Sodium	**485J**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 22:20	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 04:07	7440-28-0	
Total Hardness	**59.0**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 22:20		
Vanadium	ND	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 04:07	7440-62-2	
Zinc	**4.1J**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 20:56	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**24.4**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**24.4**	mg/L	10.0	3.2	1		03/19/08 16:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 17:22	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.3J**	mg/L	5.0	1.1	1		03/14/08 19:30	16887-00-6	
Fluoride	**0.48J**	mg/L	0.50	0.059	1		03/14/08 19:30	16984-48-8	
Sulfate	**62.3**	mg/L	4.0	0.51	1		03/14/08 19:30	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: MW-602 **Lab ID: 401546007** Collected: 03/13/08 14:45 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/25/08 14:06	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:07	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: P-602 **Lab ID: 401546008** Collected: 03/13/08 14:45 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.294J**	ng/L	0.50	0.16	1	03/19/08 10:00	03/21/08 12:59	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**15.6J**	ug/L	50.0	4.4	1	03/17/08 11:40	03/31/08 22:27	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/17/08 11:40	03/21/08 04:13	7440-36-0	
Arsenic	**7.8**	ug/L	1.0	0.093	1	03/17/08 11:40	03/21/08 04:13	7440-38-2	
Barium	**25.1**	ug/L	1.0	0.072	1	03/17/08 11:40	03/21/08 04:13	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/17/08 11:40	03/21/08 21:02	7440-41-7	
Boron	**39.6**	ug/L	10.0	1.1	1	03/17/08 11:40	03/31/08 22:27	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/17/08 11:40	03/21/08 21:02	7440-43-9	
Calcium	**15400**	ug/L	500	10.0	1	03/17/08 11:40	03/31/08 22:27	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/17/08 11:40	03/21/08 21:02	7440-47-3	
Cobalt	**0.12J**	ug/L	1.0	0.059	1	03/17/08 11:40	03/21/08 21:02	7440-48-4	
Copper	**0.55J**	ug/L	1.0	0.12	1	03/17/08 11:40	03/21/08 21:02	7440-50-8	
Iron	**3600**	ug/L	50.0	2.9	1	03/17/08 11:40	03/27/08 02:17	7439-89-6	
Lead	**0.060J**	ug/L	1.0	0.044	1	03/17/08 11:40	03/21/08 04:13	7439-92-1	
Lithium	**3.2**	ug/L	1.0	0.085	1	03/17/08 11:40	03/21/08 21:02	7439-93-2	
Magnesium	**8190**	ug/L	500	52.6	1	03/17/08 11:40	03/31/08 22:27	7439-95-4	
Manganese	**1800**	ug/L	1.0	0.080	1	03/17/08 11:40	03/21/08 21:02	7439-96-5	
Molybdenum	**8.5J**	ug/L	10.0	0.11	1	03/17/08 11:40	03/21/08 04:13	7439-98-7	
Nickel	**0.23J**	ug/L	1.0	0.074	1	03/17/08 11:40	03/27/08 02:17	7440-02-0	
Potassium	**3270**	ug/L	500	6.2	1	03/17/08 11:40	03/21/08 04:13	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/17/08 11:40	03/21/08 04:13	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/17/08 11:40	03/21/08 21:02	7440-22-4	
Sodium	**686**	ug/L	500	46.0	1	03/17/08 11:40	03/31/08 22:27	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/17/08 11:40	03/21/08 04:13	7440-28-0	
Total Hardness	**72.2**	mg/L	5.0	0.15	1	03/17/08 11:40	03/31/08 22:27		
Vanadium	ND	ug/L	1.0	0.41	1	03/17/08 11:40	03/21/08 04:13	7440-62-2	
Zinc	**4.9J**	ug/L	10.0	2.1	1	03/17/08 11:40	03/21/08 21:02	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**86.6**	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/19/08 16:17		
Alkalinity, Total as CaCO3	**86.6**	mg/L	10.0	3.2	1		03/19/08 16:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrite as N	ND	mg/L	0.10	0.036	1		03/17/08 17:36	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		03/14/08 19:44	16887-00-6	
Fluoride	**0.35J**	mg/L	0.50	0.059	1		03/14/08 19:44	16984-48-8	
Sulfate	**1.8J**	mg/L	4.0	0.51	1		03/14/08 19:44	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Sample: P-602 **Lab ID: 401546008** Collected: 03/13/08 14:45 Received: 03/14/08 09:43 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.013J**	mg/L	0.020	0.0060	1		03/25/08 14:11	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:08	7764-41-7	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WETA/1100 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

METHOD BLANK: 5638
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrite as N	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 5639

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	.8	0.88	110	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5640 5641

Parameter	Units	401544001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrite as N	mg/L	<0.036	.8	.8	0.79	0.80	99	100	90-110	1	20	H1

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WETA/1101 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

METHOD BLANK: 5644
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 5645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	
Fluoride	mg/L	2	2.1	106	90-110	
Sulfate	mg/L	16	16.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5646 5647

Parameter	Units	401542001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	34.9	100	100	127	127	92	92	90-110	.2	20	
Fluoride	mg/L	<0.30	10	10	10.0	10.0	100	100	90-110	.5	20	
Sulfate	mg/L	82.2	80	80	158	157	95	93	90-110	.7	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5648 5649

Parameter	Units	401544001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	22.5	20	20	44.4	45.0	110	113	90-110	1	20	M0
Fluoride	mg/L	0.23J	2	2	2.1	2.1	94	95	90-110	.9	20	
Sulfate	mg/L	27.6	16	16	45.2	45.5	110	112	90-110	.8	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: MPRP/1055 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007

METHOD BLANK: 5778
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	50.0	
Antimony	ug/L	ND	1.0	
Arsenic	ug/L	ND	1.0	
Barium	ug/L	ND	1.0	
Beryllium	ug/L	ND	1.0	
Boron	ug/L	ND	10.0	
Cadmium	ug/L	ND	1.0	
Calcium	ug/L	21.8J	500	B
Chromium	ug/L	ND	1.0	
Cobalt	ug/L	ND	1.0	
Copper	ug/L	ND	1.0	
Iron	ug/L	ND	50.0	
Lead	ug/L	ND	1.0	
Lithium	ug/L	ND	1.0	
Magnesium	ug/L	ND	500	
Manganese	ug/L	0.090J	1.0	B
Molybdenum	ug/L	ND	10.0	
Nickel	ug/L	ND	1.0	
Potassium	ug/L	6.6J	500	B
Selenium	ug/L	ND	1.0	
Silver	ug/L	ND	0.50	
Sodium	ug/L	ND	500	
Thallium	ug/L	ND	1.0	
Vanadium	ug/L	ND	1.0	
Zinc	ug/L	4.5J	10.0	B

LABORATORY CONTROL SAMPLE: 5779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	9280	93	75-125	
Antimony	ug/L	200	223	112	75-125	
Arsenic	ug/L	200	221	111	75-125	
Barium	ug/L	200	234	117	75-125	
Beryllium	ug/L	200	204	102	75-125	
Boron	ug/L	200	202	101	75-125	
Cadmium	ug/L	200	222	111	75-125	
Calcium	ug/L	10000	9880	99	75-125	
Chromium	ug/L	200	224	112	75-125	
Cobalt	ug/L	200	222	111	75-125	
Copper	ug/L	200	226	113	75-125	
Iron	ug/L	10000	10200	102	75-125	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

LABORATORY CONTROL SAMPLE: 5779

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	200	230	115	75-125	
Lithium	ug/L	200	209	105	75-125	
Magnesium	ug/L	10000	9420	94	75-125	
Manganese	ug/L	200	229	114	75-125	
Molybdenum	ug/L	200	213	106	75-125	
Nickel	ug/L	200	225	112	75-125	
Potassium	ug/L	10000	10400	104	75-125	
Selenium	ug/L	200	214	107	75-125	
Silver	ug/L	100	101	101	75-125	
Sodium	ug/L	10000	9420	94	75-125	
Thallium	ug/L	200	219	110	75-125	
Vanadium	ug/L	200	223	112	75-125	
Zinc	ug/L	200	214	107	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5782 5783

Parameter	Units	401546002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	560	10000	10000	9710	9570	91	90	75-125	1	20	
Antimony	ug/L	0.21J	200	200	197	210	98	105	75-125	6	20	
Arsenic	ug/L	0.47J	200	200	206	213	103	106	75-125	3	20	
Barium	ug/L	17.9	200	200	228	243	105	112	75-125	6	20	
Beryllium	ug/L	0.18J	200	200	194	197	97	98	75-125	2	20	
Boron	ug/L	26.5	200	200	221	216	97	95	75-125	2	20	
Cadmium	ug/L	ND	200	200	212	213	106	106	75-125	.4	20	
Calcium	ug/L	29200	10000	10000	38100	37600	89	84	75-125	1	20	
Chromium	ug/L	1.1	200	200	209	208	104	104	75-125	.4	20	
Cobalt	ug/L	1.5	200	200	203	201	101	100	75-125	1	20	
Copper	ug/L	26.3	200	200	224	225	99	100	75-125	.8	20	
Iron	ug/L	1680	10000	10000	10900	10500	92	88	75-125	4	20	
Lead	ug/L	0.96J	200	200	206	221	103	110	75-125	7	20	
Lithium	ug/L	1.4	200	200	204	205	101	102	75-125	.7	20	
Magnesium	ug/L	11100	10000	10000	20100	19700	90	85	75-125	2	20	
Manganese	ug/L	37.1	200	200	249	245	106	104	75-125	1	20	
Molybdenum	ug/L	2.0J	200	200	190	206	94	102	75-125	8	20	
Nickel	ug/L	1.9	200	200	199	193	99	95	75-125	3	20	
Potassium	ug/L	2280	10000	10000	11400	12200	92	99	75-125	6	20	
Selenium	ug/L	ND	200	200	200	206	100	103	75-125	3	20	
Silver	ug/L	ND	100	100	95.8	97.4	96	97	75-125	2	20	
Sodium	ug/L	2040	10000	10000	11000	11000	89	89	75-125	0	20	
Thallium	ug/L	ND	200	200	198	212	99	106	75-125	7	20	
Vanadium	ug/L	1.5	200	200	196	209	98	104	75-125	6	20	
Zinc	ug/L	11.1	200	200	210	216	100	103	75-125	3	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WET/1099 — Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) — Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 401546001, 401546002, 401546004, 401546006, 401546007, 401546008

METHOD BLANK: 5832
Associated Lab Samples: 401546001, 401546002, 401546004, 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 5833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	40	40.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5834 5835

Parameter	Units	401494007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	40	40	ND	4.0J	1	8	80-120		20	M0,R1

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: CVFS/1021 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

METHOD BLANK: 6842
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.164J	0.50	

METHOD BLANK: 7475
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.211J	0.50	

METHOD BLANK: 6843
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.199J	0.50	

METHOD BLANK: 7476
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.316J	0.50	

METHOD BLANK: 6844
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.218J	0.50	

METHOD BLANK: 7477
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	ND	0.50	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

LABORATORY CONTROL SAMPLE & LCSD: 6845 6846

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	6.00	5.76	120	115	79-121	4	24	

LABORATORY CONTROL SAMPLE & LCSD: 7478 7479

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.43	5.32	109	106	79-121	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7065 7066

Parameter	Units	401533003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.43	10	10	11.3	12.5	99	110	75-124	10	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7469 7470

Parameter	Units	401529004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	72.2	201	201	282	288	104	107	75-124	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7471 7472

Parameter	Units	9215371002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	657	2000	2000	2710	2940	103	114	75-124	8	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7473 7474

Parameter	Units	9215371006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	333	401	401	769	707	109	93	75-124	8	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WET/1117 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

METHOD BLANK: 6872
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 6873

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	504	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6874 6875

Parameter	Units	401544001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	239	500	500	819	777	116	108	80-120	5	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: CVFS/1022 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401546006, 401546007, 401546008

METHOD BLANK: 7031
Associated Lab Samples: 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.261J	0.50	

METHOD BLANK: 7032
Associated Lab Samples: 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.206J	0.50	

METHOD BLANK: 7033
Associated Lab Samples: 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	ND	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 7034 7035

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.39	5.32	108	106	79-121	1	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8201 8202

Parameter	Units	401576001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	21.5	110	110	131	108	99	79	75-124	19	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8203 8204

Parameter	Units	401693002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	29.4	31	31	58.2	60.6	93	101	75-124	4	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8205 8206

Parameter	Units	9215626002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	31.6	151	151	170	190	91	105	75-124	11	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WETA/1162 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

METHOD BLANK: 8407
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006, 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 8408

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8409 8410

Parameter	Units	401546007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.11	109	106	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8411 8412

Parameter	Units	401652004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.019J	.1	.1	0.14	0.13	123	113	90-110	8	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WETA/1179 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006

METHOD BLANK: 9393
Associated Lab Samples: 401546001, 401546002, 401546003, 401546004, 401546005, 401546006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 9394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9395 9396

Parameter	Units	401526001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.8	10	10	11.8	11.3	101	96	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9397 9398

Parameter	Units	401546006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	10	10	10.4	10.3	102	101	90-110	.8	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

QC Batch: WETA/1180 — Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 — Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401546007, 401546008

METHOD BLANK: 9399
Associated Lab Samples: 401546007, 401546008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 9400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9401 9402

Parameter	Units	401652006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	10	10	10.1	10	100	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9403 9404

Parameter	Units	401698002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.2	10	10	11.3	10.7	102	95	90-110	6	20	

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QUALIFIERS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

1j	Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.
B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the EPA method holding time.
M0	Matrix spike recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401546001	FBK-002	EPA 300.0	WETA/1100		
401546002	DUP-002	EPA 300.0	WETA/1100		
401546003	MW-604	EPA 300.0	WETA/1100		
401546004	P-604	EPA 300.0	WETA/1100		
401546005	MW-605	EPA 300.0	WETA/1100		
401546006	P-605	EPA 300.0	WETA/1100		
401546007	MW-602	EPA 300.0	WETA/1100		
401546008	P-602	EPA 300.0	WETA/1100		
401546001	FBK-002	EPA 300.0	WETA/1101		
401546002	DUP-002	EPA 300.0	WETA/1101		
401546003	MW-604	EPA 300.0	WETA/1101		
401546004	P-604	EPA 300.0	WETA/1101		
401546005	MW-605	EPA 300.0	WETA/1101		
401546006	P-605	EPA 300.0	WETA/1101		
401546007	MW-602	EPA 300.0	WETA/1101		
401546008	P-602	EPA 300.0	WETA/1101		
401546001	FBK-002	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546002	DUP-002	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546003	MW-604	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546004	P-604	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546005	MW-605	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546006	P-605	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546007	MW-602	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546008	P-602	EPA 3020	MPRP/1055	EPA 6020	ICPM/1024
401546001	FBK-002	SM 4500-S F (2000)	WET/1099		
401546002	DUP-002	SM 4500-S F (2000)	WET/1099		
401546004	P-604	SM 4500-S F (2000)	WET/1099		
401546006	P-605	SM 4500-S F (2000)	WET/1099		
401546007	MW-602	SM 4500-S F (2000)	WET/1099		
401546008	P-602	SM 4500-S F (2000)	WET/1099		
401546001	FBK-002	EPA 1631E	CVFS/1021	EPA 1631E	CVFS/1024
401546002	DUP-002	EPA 1631E	CVFS/1021	EPA 1631E	CVFS/1024
401546003	MW-604	EPA 1631E	CVFS/1021	EPA 1631E	CVFS/1024
401546004	P-604	EPA 1631E	CVFS/1021	EPA 1631E	CVFS/1024
401546005	MW-605	EPA 1631E	CVFS/1021	EPA 1631E	CVFS/1024
401546001	FBK-002	SM 2320B	WET/1117		
401546002	DUP-002	SM 2320B	WET/1117		
401546003	MW-604	SM 2320B	WET/1117		
401546004	P-604	SM 2320B	WET/1117		
401546005	MW-605	SM 2320B	WET/1117		
401546006	P-605	SM 2320B	WET/1117		
401546007	MW-602	SM 2320B	WET/1117		
401546008	P-602	SM 2320B	WET/1117		
401546006	P-605	EPA 1631E	CVFS/1022	EPA 1631E	CVFS/1025
401546007	MW-602	EPA 1631E	CVFS/1022	EPA 1631E	CVFS/1025
401546008	P-602	EPA 1631E	CVFS/1022	EPA 1631E	CVFS/1025

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401546

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401546001	FBK-002	EPA 335.4	WETA/1162		
401546002	DUP-002	EPA 335.4	WETA/1162		
401546003	MW-604	EPA 335.4	WETA/1162		
401546004	P-604	EPA 335.4	WETA/1162		
401546005	MW-605	EPA 335.4	WETA/1162		
401546006	P-605	EPA 335.4	WETA/1162		
401546007	MW-602	EPA 335.4	WETA/1162		
401546008	P-602	EPA 335.4	WETA/1162		
401546001	FBK-002	EPA 350.1	WETA/1179		
401546002	DUP-002	EPA 350.1	WETA/1179		
401546003	MW-604	EPA 350.1	WETA/1179		
401546004	P-604	EPA 350.1	WETA/1179		
401546005	MW-605	EPA 350.1	WETA/1179		
401546006	P-605	EPA 350.1	WETA/1179		
401546007	MW-602	EPA 350.1	WETA/1180		
401546008	P-602	EPA 350.1	WETA/1180		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Co Project # 401546

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used JB Type of Ice: Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 2°C Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C Comments: AB

Date and Initials of person examining contents: 3/14/08 AB

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☒Yes ☐No ☐N/A	6. Nitrates
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☒Yes ☐No ☐N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed AB / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.
Trip Blank Present:	☐Yes ☐No ☒N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] **Date:** 3/14/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

COC No. 20080313

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	NORTH JACKSON CO
Branch/Location:	MARQUETTE, MI
Project Contact:	SHARON FELIX
Phone:	
Project Number:	
Project Name:	HUMBOLDT MILL/GW
Project State:	MI
Sampled By (Print):	Chris Contreras
Sampled By (Sign):	[signature]
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	JANIS KESY
Mail To Company:	FOTH I & E
Mail To Address:	GREEN BAY, WI
Invoice To Contact:	SAME AS ABOVE
Invoice To Company:	SAME AS ABOVE
Invoice To Address:	SAME AS ABOVE
Invoice To Phone:	SAME AS ABOVE

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

AB✓

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☑ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: All AlK2, Cl, F, SO4, Nitrate, Nitrite/LLHg	Ammonia	Metals (Lithium)	Cyanide	Sulfide	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	FILTERED? (YES/NO) PRESERVATION (CODE)*				Y/N: N	N	N	N	N			
					Pick Letter: A	C	D	G	J			
001	FBK-002	3/13/08	0900	W	3	1	2	1	1	1-500ml cg+, 1-1000ml P, 1-250ml P		
002	DUP-002		—	GW	3	1	2	1	1			
003	MW-604		1239	GW	3	1	2	1	0			
004	P-604		1225	GW	3	1	2	1	1			
005	MW-605		1335	GW	3	1	2	1	0			
006	P-605		1332	GW	3	1	2	1	1			
007	MW-602		1445	GW	3	1	2	1	1			
008	P-602		1505	GW	3	1	2	1	1			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Richard Eagle	3/13/08 1830	FED EX	
FED EX	3/14/08 1025	Shirley Bunsky	3/14/08 1025

PACE Project No. 401546
Receipt Temp = 2 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present Intact / Not Intact

Version 6.0 06/14/06

Batch No. 401652

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April 02, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on March 18, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,
for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401652001	FBK-003	Water	03/17/08 10:00	03/18/08 09:44
401652002	DUP-003	Water	03/17/08 00:00	03/18/08 09:44
401652003	HW-6A	Water	03/17/08 10:20	03/18/08 09:44
401652004	HW-6	Water	03/17/08 11:00	03/18/08 09:44
401652005	HW-5	Water	03/17/08 13:05	03/18/08 09:44
401652006	HW-5A	Water	03/17/08 12:25	03/18/08 09:44
401652007	HYG-1	Water	03/17/08 13:50	03/18/08 09:44
401652008	HW-1A	Water	03/17/08 14:20	03/18/08 09:44
401652009	HW-2	Water	03/17/08 15:15	03/18/08 09:44

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401652001	FBK-003	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652002	DUP-003	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652003	HW-6A	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652004	HW-6	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652005	HW-5	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652006	HW-5A	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652007	HYG-1	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652008	HW-1A	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401652009	HW-2	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MPRP/1062

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 6636)
  - Barium
  - Boron
  - Calcium
  - Manganese
  - Potassium
  - Zinc

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

Batch Comments:

Internal standard limits of 30-140% used. All QC within control limits.
- QC Batch: ICPM / 1027

Analyte Comments:

QC Batch: MPRP/1062

1j: Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.
- HW-6A (Lab ID: 401652003)
  - Boron

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.
- HW-2 (Lab ID: 401652009)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/1126

- MS (Lab ID: 7534)
  - Nitrate as N
- MSD (Lab ID: 7535)
  - Nitrate as N

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: EPA 300.0
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1127

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401652002,401668001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 7537)
  - Sulfate
- MSD (Lab ID: 7538)
  - Sulfate

QC Batch: WETA/1175

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401639001,9215747001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 9012)
  - Chloride
- MSD (Lab ID: 9013)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1162

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401546007,401652004

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 8411)
  - Cyanide
- MSD (Lab ID: 8412)
  - Cyanide

QC Batch: WETA/1202

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698005,401736001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 10719)
  - Cyanide
- MSD (Lab ID: 10720)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 02, 2008

General Information:
9 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: FBK-003 **Lab ID: 401652001** Collected: 03/17/08 10:00 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.191J**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 10:14	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 20:08	7429-90-5	
Antimony	**0.19J**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 16:55	7440-36-0	
Arsenic	ND	ug/L	1.0	0.093	1	03/20/08 11:46	03/20/08 23:55	7440-38-2	
Barium	**0.28J**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 16:55	7440-39-3	B
Beryllium	**0.080J**	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 16:55	7440-41-7	
Boron	**2.5J**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 20:08	7440-42-8	B
Cadmium	**0.22J**	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 16:55	7440-43-9	
Calcium	**168J**	ug/L	500	10.0	1	03/20/08 11:46	03/31/08 20:08	7440-70-2	B
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 16:55	7440-47-3	
Cobalt	ND	ug/L	1.0	0.059	1	03/20/08 11:46	03/20/08 23:55	7440-48-4	
Copper	**0.41J**	ug/L	1.0	0.12	1	03/20/08 11:46	03/20/08 23:55	7440-50-8	
Iron	**5.8J**	ug/L	50.0	2.9	1	03/20/08 11:46	03/20/08 23:55	7439-89-6	
Lead	**0.12J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 16:55	7439-92-1	
Lithium	**0.17J**	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 16:55	7439-93-2	
Magnesium	ND	ug/L	500	52.6	1	03/20/08 11:46	03/31/08 20:08	7439-95-4	
Manganese	**5.7**	ug/L	1.0	0.080	1	03/20/08 11:46	03/20/08 23:55	7439-96-5	
Molybdenum	**0.19J**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 16:55	7439-98-7	
Nickel	**0.14J**	ug/L	1.0	0.074	1	03/20/08 11:46	03/20/08 23:55	7440-02-0	
Potassium	**132J**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 16:55	7440-09-7	B
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 11:46	03/20/08 23:55	7782-49-2	
Silver	**0.30J**	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 16:55	7440-22-4	
Sodium	**1270**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 20:08	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/20/08 23:55	7440-28-0	
Total Hardness	**0.60J**	mg/L	5.0	0.15	1	03/20/08 11:46	03/31/08 20:08		
Vanadium	ND	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 16:55	7440-62-2	
Zinc	**10.0**	ug/L	10.0	2.1	1	03/20/08 11:46	03/20/08 23:55	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		03/25/08 14:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:18		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		03/25/08 14:18		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		03/18/08 13:01	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 19:24	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.7J**	mg/L	5.0	1.1	1		03/19/08 13:03	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/19/08 13:03	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: FBK-003 **Lab ID: 401652001** Collected: 03/17/08 10:00 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	ND	mg/L	4.0	0.51	1		03/18/08 13:01	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.019J**	mg/L	0.020	0.0060	1		03/25/08 14:16	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:13	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: DUP-003 **Lab ID: 401652002** Collected: 03/17/08 00:00 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.812**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 10:25	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**5.1J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 17:03	7429-90-5	
Antimony	**8.2**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 16:25	7440-36-0	
Arsenic	**0.21J**	ug/L	1.0	0.093	1	03/20/08 11:46	03/20/08 23:24	7440-38-2	
Barium	**42.9**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 16:25	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 16:25	7440-41-7	
Boron	**110**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 18:34	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 16:25	7440-43-9	
Calcium	**48800**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 19:34	7440-70-2	
Chromium	**2.8**	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 16:25	7440-47-3	
Cobalt	**1.4**	ug/L	1.0	0.059	1	03/20/08 11:46	03/20/08 23:24	7440-48-4	
Copper	**1.1**	ug/L	1.0	0.12	1	03/20/08 11:46	03/20/08 23:24	7440-50-8	
Iron	**1320**	ug/L	50.0	2.9	1	03/20/08 11:46	03/20/08 23:24	7439-89-6	
Lead	**0.080J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 16:25	7439-92-1	
Lithium	**0.12J**	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 16:25	7439-93-2	
Magnesium	**23900**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 19:34	7439-95-4	
Manganese	**35.3**	ug/L	1.0	0.080	1	03/20/08 11:46	03/20/08 23:24	7439-96-5	
Molybdenum	**11.1**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 16:25	7439-98-7	
Nickel	**1.2**	ug/L	1.0	0.074	1	03/20/08 11:46	03/20/08 23:24	7440-02-0	
Potassium	**8220**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 16:25	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 11:46	03/20/08 23:24	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 16:25	7440-22-4	
Sodium	**14300**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 17:03	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/20/08 23:24	7440-28-0	
Total Hardness	**220**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 19:34		
Vanadium	**0.43J**	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 16:25	7440-62-2	
Zinc	**3.6J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/20/08 23:24	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**111**	mg/L	10.0	3.2	1		03/25/08 14:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:18		
Alkalinity, Total as CaCO3	**111**	mg/L	10.0	3.2	1		03/25/08 14:18		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.1**	mg/L	0.40	0.085	1		03/18/08 13:44	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 19:38	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.8**	mg/L	5.0	1.1	1		03/19/08 13:15	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		03/19/08 13:15	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: DUP-003 **Lab ID: 401652002** Collected: 03/17/08 00:00 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**127**	mg/L	40.0	5.1	10		03/19/08 14:16	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.023**	mg/L	0.020	0.0060	1		03/25/08 14:17	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:13	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-6A **Lab ID: 401652003** Collected: 03/17/08 10:20 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.717**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 10:41	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**8.3J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 17:45	7429-90-5	
Antimony	**8.0**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 17:01	7440-36-0	
Arsenic	**0.29J**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 17:01	7440-38-2	
Barium	**43.5**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 17:01	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 17:01	7440-41-7	
Boron	**114**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 17:45	7440-42-8	1j
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 17:01	7440-43-9	
Calcium	**51200**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 19:56	7440-70-2	
Chromium	**2.3**	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 17:01	7440-47-3	
Cobalt	**1.5**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 17:01	7440-48-4	
Copper	**1.2**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 17:01	7440-50-8	
Iron	**1320**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 17:01	7439-89-6	
Lead	**0.080J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 17:01	7439-92-1	
Lithium	ND	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 17:01	7439-93-2	
Magnesium	**24900**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 19:56	7439-95-4	
Manganese	**37.8**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 17:01	7439-96-5	
Molybdenum	**10.9**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 17:01	7439-98-7	
Nickel	ND	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 17:01	7440-02-0	
Potassium	**8120**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 17:01	7440-09-7	
Selenium	**0.51J**	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 17:01	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 17:01	7440-22-4	
Sodium	**14000**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 17:45	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 17:01	7440-28-0	
Total Hardness	**230**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 19:56		
Vanadium	**0.47J**	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 17:01	7440-62-2	
Zinc	**6.4J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 17:01	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**109**	mg/L	10.0	3.2	1		03/25/08 14:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:19		
Alkalinity, Total as CaCO3	**109**	mg/L	10.0	3.2	1		03/25/08 14:19		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.1**	mg/L	0.40	0.085	1		03/18/08 14:26	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 20:21	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.9**	mg/L	5.0	1.1	1		03/19/08 15:17	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		03/19/08 15:17	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-6A **Lab ID: 401652003** Collected: 03/17/08 10:20 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**129**	mg/L	40.0	5.1	10		03/19/08 15:29	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.022**	mg/L	0.020	0.0060	1		03/25/08 14:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:14	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-6 **Lab ID: 401652004** Collected: 03/17/08 11:00 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.276J**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 10:46	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**17.8J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 17:58	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 17:13	7440-36-0	
Arsenic	**3.6**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 00:12	7440-38-2	
Barium	**36.6**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 17:13	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 17:13	7440-41-7	
Boron	**74.4**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 17:58	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 17:13	7440-43-9	
Calcium	**66000**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 20:14	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 17:13	7440-47-3	
Cobalt	**0.46J**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 00:12	7440-48-4	
Copper	**0.40J**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 00:12	7440-50-8	
Iron	**2300**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 00:12	7439-89-6	
Lead	**0.060J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 17:13	7439-92-1	
Lithium	**4.1**	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 17:13	7439-93-2	
Magnesium	**20800**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 20:14	7439-95-4	
Manganese	**319**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 00:12	7439-96-5	
Molybdenum	**3.8J**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 17:13	7439-98-7	
Nickel	**0.58J**	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 00:12	7440-02-0	
Potassium	**3440**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 17:13	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 00:12	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 17:13	7440-22-4	
Sodium	**15600**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 17:58	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 00:12	7440-28-0	
Total Hardness	**250**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 20:14		
Vanadium	ND	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 17:13	7440-62-2	
Zinc	**5.7J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 00:12	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**147**	mg/L	10.0	3.2	1		03/25/08 14:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:19		
Alkalinity, Total as CaCO3	**147**	mg/L	10.0	3.2	1		03/25/08 14:19		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/18/08 14:40	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 20:35	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.9**	mg/L	5.0	1.1	1		03/19/08 15:41	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		03/19/08 15:41	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-6 **Lab ID: 401652004** Collected: 03/17/08 11:00 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**111**	mg/L	40.0	5.1	10		03/19/08 15:54	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.019J**	mg/L	0.020	0.0060	1		03/25/08 14:22	57-12-5	M0
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:15	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-5 **Lab ID: 401652005** Collected: 03/17/08 13:05 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.223J**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 10:57	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**9.1J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 18:04	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 17:19	7440-36-0	
Arsenic	**6.3**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 00:19	7440-38-2	
Barium	**113**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 17:19	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 17:19	7440-41-7	
Boron	**91.5**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 18:04	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 17:19	7440-43-9	
Calcium	**62000**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 20:20	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 17:19	7440-47-3	
Cobalt	**0.48J**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 00:19	7440-48-4	
Copper	**0.26J**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 00:19	7440-50-8	
Iron	**5950**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 00:19	7439-89-6	
Lead	**0.080J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 17:19	7439-92-1	
Lithium	**3.2**	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 17:19	7439-93-2	
Magnesium	**24200**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 20:20	7439-95-4	
Manganese	**431**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 00:19	7439-96-5	
Molybdenum	**14.6**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 17:19	7439-98-7	
Nickel	**0.53J**	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 00:19	7440-02-0	
Potassium	**7680**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 17:19	7440-09-7	
Selenium	**0.16J**	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 00:19	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 17:19	7440-22-4	
Sodium	**14600**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 18:04	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 00:19	7440-28-0	
Total Hardness	**255**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 20:20		
Vanadium	ND	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 17:19	7440-62-2	
Zinc	**5.1J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 00:19	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**127**	mg/L	10.0	3.2	1		03/25/08 14:20		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:20		
Alkalinity, Total as CaCO3	**127**	mg/L	10.0	3.2	1		03/25/08 14:20		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/18/08 14:55	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 21:17	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**13.5**	mg/L	5.0	1.1	1		03/19/08 16:06	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/19/08 16:06	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-5 **Lab ID: 401652005** Collected: 03/17/08 13:05 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**137**	mg/L	40.0	5.1	10		03/19/08 16:18	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.021**	mg/L	0.020	0.0060	1		03/31/08 14:55	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:15	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-5A **Lab ID: 401652006** Collected: 03/17/08 12:25 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.666**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 11:02	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 18:10	7429-90-5	
Antimony	**10.4**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 17:25	7440-36-0	
Arsenic	**0.23J**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 00:25	7440-38-2	
Barium	**52.2**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 17:25	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 17:25	7440-41-7	
Boron	**52.9**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 18:10	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 17:25	7440-43-9	
Calcium	**51800**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 20:26	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 17:25	7440-47-3	
Cobalt	**2.9**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 00:25	7440-48-4	
Copper	**0.98J**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 00:25	7440-50-8	
Iron	**3180**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 00:25	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 17:25	7439-92-1	
Lithium	ND	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 17:25	7439-93-2	
Magnesium	**23400**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 20:26	7439-95-4	
Manganese	**19.8**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 00:25	7439-96-5	
Molybdenum	**10.6**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 17:25	7439-98-7	
Nickel	**25.6**	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 00:25	7440-02-0	
Potassium	**9540**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 17:25	7440-09-7	
Selenium	**0.25J**	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 00:25	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 17:25	7440-22-4	
Sodium	**11800**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 18:10	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 00:25	7440-28-0	
Total Hardness	**226**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 20:26		
Vanadium	**0.56J**	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 17:25	7440-62-2	
Zinc	**7.3J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 00:25	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**104**	mg/L	10.0	3.2	1		03/25/08 14:20		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:20		
Alkalinity, Total as CaCO3	**104**	mg/L	10.0	3.2	1		03/25/08 14:20		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.9**	mg/L	0.40	0.085	1		03/18/08 15:09	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 21:32	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.4**	mg/L	5.0	1.1	1		03/19/08 17:19	16887-00-6	
Fluoride	**0.29J**	mg/L	0.50	0.059	1		03/19/08 17:19	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-5A **Lab ID: 401652006** Collected: 03/17/08 12:25 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**138**	mg/L	40.0	5.1	10		03/19/08 17:31	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.018J**	mg/L	0.020	0.0060	1		03/31/08 14:56	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:16	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HYG-1 **Lab ID: 401652007** Collected: 03/17/08 13:50 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.934**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 11:07	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**4.8J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 18:16	7429-90-5	
Antimony	**11.7**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 17:32	7440-36-0	
Arsenic	**0.27J**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 00:31	7440-38-2	
Barium	**55.9**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 17:32	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 17:32	7440-41-7	
Boron	**51.2**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 18:16	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 17:32	7440-43-9	
Calcium	**53000**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 20:32	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 17:32	7440-47-3	
Cobalt	**2.6**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 00:31	7440-48-4	
Copper	**1.8**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 00:31	7440-50-8	
Iron	**116**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 00:31	7439-89-6	
Lead	**0.080J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 17:32	7439-92-1	
Lithium	ND	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 17:32	7439-93-2	
Magnesium	**21600**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 20:32	7439-95-4	
Manganese	**0.68J**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 00:31	7439-96-5	B
Molybdenum	**11.1**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 17:32	7439-98-7	
Nickel	**0.57J**	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 00:31	7440-02-0	
Potassium	**9280**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 17:32	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 00:31	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 17:32	7440-22-4	
Sodium	**11500**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 18:16	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 00:31	7440-28-0	
Total Hardness	**221**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 20:32		
Vanadium	**0.76J**	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 17:32	7440-62-2	
Zinc	**7.0J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 00:31	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	10.0	3.2	1		03/25/08 14:21		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:21		
Alkalinity, Total as CaCO3	**102**	mg/L	10.0	3.2	1		03/25/08 14:21		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.6**	mg/L	0.40	0.085	1		03/18/08 15:23	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 21:46	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.1**	mg/L	5.0	1.1	1		03/19/08 17:43	16887-00-6	
Fluoride	**0.32J**	mg/L	0.50	0.059	1		03/19/08 17:43	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HYG-1 **Lab ID: 401652007** Collected: 03/17/08 13:50 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**136**	mg/L	40.0	5.1	10		03/19/08 17:55	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.016J**	mg/L	0.020	0.0060	1		03/31/08 14:56	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:21	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-1A **Lab ID: 401652008** Collected: 03/17/08 14:20 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.803**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 11:12	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**5.2J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 18:22	7429-90-5	
Antimony	**8.6**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 17:38	7440-36-0	
Arsenic	**0.32J**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 00:37	7440-38-2	
Barium	**78.9**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 17:38	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 17:38	7440-41-7	
Boron	**47.7**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 18:22	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 17:38	7440-43-9	
Calcium	**59600**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 20:50	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 17:38	7440-47-3	
Cobalt	**2.5**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 00:37	7440-48-4	
Copper	**1.2**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 00:37	7440-50-8	
Iron	**5060**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 00:37	7439-89-6	
Lead	**0.060J**	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 17:38	7439-92-1	
Lithium	ND	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 17:38	7439-93-2	
Magnesium	**25800**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 20:50	7439-95-4	
Manganese	**31.7**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 00:37	7439-96-5	
Molybdenum	**7.8J**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 17:38	7439-98-7	
Nickel	**0.59J**	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 00:37	7440-02-0	
Potassium	**8840**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 17:38	7440-09-7	
Selenium	**0.28J**	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 00:37	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 17:38	7440-22-4	
Sodium	**12000**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 18:22	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 00:37	7440-28-0	
Total Hardness	**255**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 20:50		
Vanadium	**0.74J**	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 17:38	7440-62-2	
Zinc	**6.2J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 00:37	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**111**	mg/L	10.0	3.2	1		03/25/08 14:21		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:21		
Alkalinity, Total as CaCO3	**111**	mg/L	10.0	3.2	1		03/25/08 14:21		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.8**	mg/L	0.40	0.085	1		03/18/08 15:37	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/18/08 22:00	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**14.2**	mg/L	5.0	1.1	1		03/19/08 18:07	16887-00-6	
Fluoride	**0.39J**	mg/L	0.50	0.059	1		03/19/08 18:07	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-1A **Lab ID: 401652008** Collected: 03/17/08 14:20 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**146**	mg/L	40.0	5.1	10		03/19/08 18:20	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.015J**	mg/L	0.020	0.0060	1		03/31/08 14:57	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:21	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-2 **Lab ID: 401652009** Collected: 03/17/08 15:15 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.44**	ng/L	0.50	0.16	1	03/24/08 09:00	03/25/08 12:23	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**8.2J**	ug/L	50.0	4.4	1	03/20/08 11:46	03/31/08 18:28	7429-90-5	
Antimony	**7.5**	ug/L	1.0	0.10	1	03/20/08 11:46	03/21/08 18:07	7440-36-0	
Arsenic	**0.38J**	ug/L	1.0	0.093	1	03/20/08 11:46	03/21/08 01:19	7440-38-2	
Barium	**15.0**	ug/L	1.0	0.072	1	03/20/08 11:46	03/21/08 18:07	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 11:46	03/21/08 18:07	7440-41-7	
Boron	**69.9**	ug/L	10.0	1.1	1	03/20/08 11:46	03/31/08 18:28	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 11:46	03/21/08 18:07	7440-43-9	
Calcium	**57900**	ug/L	5000	100	10	03/20/08 11:46	03/31/08 20:56	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 11:46	03/21/08 18:07	7440-47-3	
Cobalt	**2.1**	ug/L	1.0	0.059	1	03/20/08 11:46	03/21/08 01:19	7440-48-4	
Copper	**0.50J**	ug/L	1.0	0.12	1	03/20/08 11:46	03/21/08 01:19	7440-50-8	
Iron	**1400**	ug/L	50.0	2.9	1	03/20/08 11:46	03/21/08 01:19	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/20/08 11:46	03/21/08 18:07	7439-92-1	
Lithium	**0.74J**	ug/L	1.0	0.085	1	03/20/08 11:46	03/21/08 18:07	7439-93-2	
Magnesium	**23400**	ug/L	5000	526	10	03/20/08 11:46	03/31/08 20:56	7439-95-4	
Manganese	**308**	ug/L	1.0	0.080	1	03/20/08 11:46	03/21/08 01:19	7439-96-5	
Molybdenum	**8.3J**	ug/L	10.0	0.11	1	03/20/08 11:46	03/21/08 18:07	7439-98-7	
Nickel	**0.89J**	ug/L	1.0	0.074	1	03/20/08 11:46	03/21/08 01:19	7440-02-0	
Potassium	**5720**	ug/L	500	6.2	1	03/20/08 11:46	03/21/08 18:07	7440-09-7	
Selenium	**0.26J**	ug/L	1.0	0.15	1	03/20/08 11:46	03/21/08 01:19	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 11:46	03/21/08 18:07	7440-22-4	
Sodium	**12400**	ug/L	500	46.0	1	03/20/08 11:46	03/31/08 18:28	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 11:46	03/21/08 01:19	7440-28-0	
Total Hardness	**241**	mg/L	50.0	1.5	10	03/20/08 11:46	03/31/08 20:56		
Vanadium	ND	ug/L	1.0	0.41	1	03/20/08 11:46	03/21/08 18:07	7440-62-2	
Zinc	**6.3J**	ug/L	10.0	2.1	1	03/20/08 11:46	03/21/08 01:19	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**118**	mg/L	10.0	3.2	1		03/25/08 14:22		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:22		
Alkalinity, Total as CaCO3	**118**	mg/L	10.0	3.2	1		03/25/08 14:22		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/19/08 13:32		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.1**	mg/L	0.40	0.085	1		03/18/08 15:51	14797-55-8	
Nitrite as N	**0.11**	mg/L	0.10	0.036	1		03/19/08 17:37	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.7**	mg/L	5.0	1.1	1		03/26/08 19:28	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		03/26/08 19:28	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Sample: HW-2 **Lab ID: 401652009** Collected: 03/17/08 15:15 Received: 03/18/08 09:44 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**139**	mg/L	40.0	5.1	10		03/27/08 20:27	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.019J**	mg/L	0.020	0.0060	1		03/31/08 14:58	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:22	7764-41-7	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WET/1114 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 6554
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 6555

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	38	44.0	116	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6556 6557

Parameter	Units	401652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	38	38	44.4	42.4	116	111	80-120	5	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: MPRP/1062 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007

METHOD BLANK: 6636
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	50.0	
Antimony	ug/L	ND	1.0	
Arsenic	ug/L	ND	1.0	
Barium	ug/L	0.11J	1.0	B
Beryllium	ug/L	ND	1.0	
Boron	ug/L	2.5J	10.0	B
Cadmium	ug/L	ND	1.0	
Calcium	ug/L	103J	500	B
Chromium	ug/L	ND	1.0	
Cobalt	ug/L	ND	1.0	
Copper	ug/L	ND	1.0	
Iron	ug/L	ND	50.0	
Lead	ug/L	ND	1.0	
Lithium	ug/L	ND	1.0	
Magnesium	ug/L	ND	500	
Manganese	ug/L	0.14J	1.0	B
Molybdenum	ug/L	ND	10.0	
Nickel	ug/L	ND	1.0	
Potassium	ug/L	22.3J	500	B
Selenium	ug/L	ND	1.0	
Silver	ug/L	ND	0.50	
Sodium	ug/L	ND	500	
Thallium	ug/L	ND	1.0	
Vanadium	ug/L	ND	1.0	
Zinc	ug/L	5.7J	10.0	B

LABORATORY CONTROL SAMPLE: 6637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	9470	95	75-125	
Antimony	ug/L	200	208	104	75-125	
Arsenic	ug/L	200	221	111	75-125	
Barium	ug/L	200	214	107	75-125	
Beryllium	ug/L	200	215	107	75-125	
Boron	ug/L	200	199	100	75-125	
Cadmium	ug/L	200	217	109	75-125	
Calcium	ug/L	10000	9830	98	75-125	
Chromium	ug/L	200	218	109	75-125	
Cobalt	ug/L	200	212	106	75-125	
Copper	ug/L	200	208	104	75-125	
Iron	ug/L	10000	9620	96	75-125	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

LABORATORY CONTROL SAMPLE: 6637

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	200	223	111	75-125	
Lithium	ug/L	200	221	111	75-125	
Magnesium	ug/L	10000	9640	96	75-125	
Manganese	ug/L	200	215	108	75-125	
Molybdenum	ug/L	200	200	100	75-125	
Nickel	ug/L	200	214	107	75-125	
Potassium	ug/L	10000	9740	97	75-125	
Selenium	ug/L	200	218	109	75-125	
Silver	ug/L	100	100	100	75-125	
Sodium	ug/L	10000	9500	95	75-125	
Thallium	ug/L	200	219	110	75-125	
Vanadium	ug/L	200	218	109	75-125	
Zinc	ug/L	200	217	109	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7223 7224

Parameter	Units	401652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	5.1J	10000	10000	10000	9910	100	99	75-125	1	20	
Antimony	ug/L	8.2	200	200	225	216	108	104	75-125	4	20	
Arsenic	ug/L	0.21J	200	200	215	227	107	114	75-125	6	20	
Barium	ug/L	42.9	200	200	266	254	112	106	75-125	5	20	
Beryllium	ug/L	ND	200	200	200	189	100	94	75-125	6	20	
Boron	ug/L	110	200	200	313	297	101	93	75-125	5	20	
Cadmium	ug/L	ND	200	200	223	214	112	107	75-125	4	20	
Calcium	ug/L	48800	10000	10000	60400	60200	117	114	75-125	.4	20	
Chromium	ug/L	2.8	200	200	225	216	111	107	75-125	4	20	
Cobalt	ug/L	1.4	200	200	191	211	95	105	75-125	10	20	
Copper	ug/L	1.1	200	200	188	208	94	103	75-125	10	20	
Iron	ug/L	1320	10000	10000	9930	11000	86	97	75-125	10	20	
Lead	ug/L	0.080J	200	200	233	225	117	112	75-125	4	20	
Lithium	ug/L	0.12J	200	200	211	202	106	101	75-125	5	20	
Magnesium	ug/L	23900	10000	10000	34000	34400	101	104	75-125	1	20	
Manganese	ug/L	35.3	200	200	231	255	98	110	75-125	10	20	
Molybdenum	ug/L	11.1	200	200	217	212	103	100	75-125	3	20	
Nickel	ug/L	1.2	200	200	189	211	94	105	75-125	11	20	
Potassium	ug/L	8220	10000	10000	17900	16900	97	87	75-125	6	20	
Selenium	ug/L	ND	200	200	207	219	104	109	75-125	5	20	
Silver	ug/L	ND	100	100	101	98.0	101	98	75-125	3	20	
Sodium	ug/L	14300	10000	10000	25100	24200	108	100	75-125	4	20	
Thallium	ug/L	ND	200	200	206	228	103	114	75-125	10	20	
Vanadium	ug/L	0.43J	200	200	224	215	112	107	75-125	4	20	
Zinc	ug/L	3.6J	200	200	204	213	100	105	75-125	4	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WETA/1126 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 6721
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	ND	0.40	
Nitrite as N	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 6722

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.7	104	90-110	
Nitrite as N	mg/L	.8	0.81	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6723 6724

Parameter	Units	401652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	1.1	1.6	1.6	2.7	2.8	101	104	90-110	1	20	
Nitrite as N	mg/L	ND	.8	.8	0.78	0.79	98	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7534 7535

Parameter	Units	401668001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	1.8	1.6	1.6	3.4	3.4	104	104	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.85	0.86	106	108	90-110	1	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WETA/1127 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 6726
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 6727

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.2	96	90-110	
Fluoride	mg/L	2	2.0	100	90-110	
Sulfate	mg/L	16	16.6	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6728 6729

Parameter	Units	401652002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.8	20	20	30.8	31.1	95	96	90-110	.7	20	
Fluoride	mg/L	0.30J	2	2	2.1	2.1	90	92	90-110	.9	20	
Sulfate	mg/L	127	160	160	273	273	92	91	90-110	.04	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7537 7538

Parameter	Units	401668001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.8	20	20	31.7	31.2	99	97	90-110	2	20	
Fluoride	mg/L	0.22J	2	2	2.1	2.1	94	94	90-110	0	20	
Sulfate	mg/L	57.8	16	16	77.1	76.7	121	118	90-110	.5	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: CVFS/1026 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 8304
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.337J	0.50	

METHOD BLANK: 8305
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.219J	0.50	

METHOD BLANK: 8306
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.204J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 8307 8308

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.81	5.42	116	108	79-121	7	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8647 8648

Parameter	Units	401578001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.09	5	5	6.46	5.08	107	80	75-124	24	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8649 8650

Parameter	Units	9215543001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1460	2000	2000	3430	3650	98	109	75-124	6	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WETA/1162 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004

METHOD BLANK: 8407
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 8408

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8409 8410

Parameter	Units	401546007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.11	109	106	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8411 8412

Parameter	Units	401652004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.019J	.1	.1	0.14	0.13	123	113	90-110	8	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WET/1143 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 8413

Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	10.0	
Alkalinity, Total as CaCO3	mg/L	ND	10.0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 8414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L		ND			
Alkalinity, Total as CaCO3	mg/L	500	504	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8463 8464

Parameter	Units	401652003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Carbonate (CaCO3)	mg/L	ND			ND	ND					20	
Alkalinity, Total as CaCO3	mg/L	109	500	500	610	610	100	100	80-120	0	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WETA/1175 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401652009

METHOD BLANK: 9008
Associated Lab Samples: 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 9009

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.4	97	90-110	
Fluoride	mg/L	2	2.0	99	90-110	
Sulfate	mg/L	16	15.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9010 9011

Parameter	Units	9215747001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.6	20	20	24.8	24.9	91	91	90-110	.6	20	
Fluoride	mg/L	ND	2	2	2.0	2.1	102	104	90-110	1	20	
Sulfate	mg/L	7.8	16	16	22.5	22.6	92	93	90-110	.4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9012 9013

Parameter	Units	401639001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	905	400	400	1430	1430	132	130	90-110	.5	20	M0
Fluoride	mg/L	2.4J	20	20	20.6	20.6	91	91	90-110	0	20	
Sulfate	mg/L	74.4	160	160	221	222	92	93	90-110	.7	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WETA/1180 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 9399
Associated Lab Samples: 401652001, 401652002, 401652003, 401652004, 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 9400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9401 9402

Parameter	Units	401652006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	10	10	10.1	10	100	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9403 9404

Parameter	Units	401698002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.2	10	10	11.3	10.7	102	95	90-110	6	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

QC Batch: WETA/1202 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401652005, 401652006, 401652007, 401652008, 401652009

METHOD BLANK: 10715
Associated Lab Samples: 401652005, 401652006, 401652007, 401652008, 401652009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 10716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10717 10718

Parameter	Units	401698005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.11	103	105	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10719 10720

Parameter	Units	401736001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.020	.1	.1	0.090	0.084	77	71	90-110	7	20	M0

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QUALIFIERS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: ICPM/1027

[1] Internal standard limits of 30-140% used. All QC within control limits.

ANALYTE QUALIFIERS

1j Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.

B Analyte was detected in the associated method blank.

H1 Analysis conducted outside the EPA method holding time.

M0 Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401652001	FBK-003	SM 4500-S F (2000)	WET/1114		
401652002	DUP-003	SM 4500-S F (2000)	WET/1114		
401652003	HW-6A	SM 4500-S F (2000)	WET/1114		
401652004	HW-6	SM 4500-S F (2000)	WET/1114		
401652005	HW-5	SM 4500-S F (2000)	WET/1114		
401652006	HW-5A	SM 4500-S F (2000)	WET/1114		
401652007	HYG-1	SM 4500-S F (2000)	WET/1114		
401652008	HW-1A	SM 4500-S F (2000)	WET/1114		
401652009	HW-2	SM 4500-S F (2000)	WET/1114		
401652001	FBK-003	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652002	DUP-003	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652003	HW-6A	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652004	HW-6	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652005	HW-5	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652006	HW-5A	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652007	HYG-1	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652008	HW-1A	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652009	HW-2	EPA 3020	MPRP/1062	EPA 6020	ICPM/1027
401652001	FBK-003	EPA 300.0	WETA/1126		
401652002	DUP-003	EPA 300.0	WETA/1126		
401652003	HW-6A	EPA 300.0	WETA/1126		
401652004	HW-6	EPA 300.0	WETA/1126		
401652005	HW-5	EPA 300.0	WETA/1126		
401652006	HW-5A	EPA 300.0	WETA/1126		
401652007	HYG-1	EPA 300.0	WETA/1126		
401652008	HW-1A	EPA 300.0	WETA/1126		
401652009	HW-2	EPA 300.0	WETA/1126		
401652001	FBK-003	EPA 300.0	WETA/1127		
401652002	DUP-003	EPA 300.0	WETA/1127		
401652003	HW-6A	EPA 300.0	WETA/1127		
401652004	HW-6	EPA 300.0	WETA/1127		
401652005	HW-5	EPA 300.0	WETA/1127		
401652006	HW-5A	EPA 300.0	WETA/1127		
401652007	HYG-1	EPA 300.0	WETA/1127		
401652008	HW-1A	EPA 300.0	WETA/1127		
401652009	HW-2	EPA 300.0	WETA/1127		
401652001	FBK-003	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652002	DUP-003	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652003	HW-6A	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652004	HW-6	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652005	HW-5	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652006	HW-5A	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652007	HYG-1	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652008	HW-1A	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652009	HW-2	EPA 1631E	CVFS/1026	EPA 1631E	CVFS/1027
401652001	FBK-003	EPA 335.4	WETA/1162		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401652

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401652002	DUP-003	EPA 335.4	WETA/1162		
401652003	HW-6A	EPA 335.4	WETA/1162		
401652004	HW-6	EPA 335.4	WETA/1162		
401652001	FBK-003	SM 2320B	WET/1143		
401652002	DUP-003	SM 2320B	WET/1143		
401652003	HW-6A	SM 2320B	WET/1143		
401652004	HW-6	SM 2320B	WET/1143		
401652005	HW-5	SM 2320B	WET/1143		
401652006	HW-5A	SM 2320B	WET/1143		
401652007	HYG-1	SM 2320B	WET/1143		
401652008	HW-1A	SM 2320B	WET/1143		
401652009	HW-2	SM 2320B	WET/1143		
401652009	HW-2	EPA 300.0	WETA/1175		
401652001	FBK-003	EPA 350.1	WETA/1180		
401652002	DUP-003	EPA 350.1	WETA/1180		
401652003	HW-6A	EPA 350.1	WETA/1180		
401652004	HW-6	EPA 350.1	WETA/1180		
401652005	HW-5	EPA 350.1	WETA/1180		
401652006	HW-5A	EPA 350.1	WETA/1180		
401652007	HYG-1	EPA 350.1	WETA/1180		
401652008	HW-1A	EPA 350.1	WETA/1180		
401652009	HW-2	EPA 350.1	WETA/1180		
401652005	HW-5	EPA 335.4	WETA/1202		
401652006	HW-5A	EPA 335.4	WETA/1202		
401652007	HYG-1	EPA 335.4	WETA/1202		
401652008	HW-1A	EPA 335.4	WETA/1202		
401652009	HW-2	EPA 335.4	WETA/1202		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Project # 401652

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

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

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

Cooler Temperature 2° **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: GA 3/18/08 GA 3/18/08

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12. No Collection Date
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: NH **Date:** 3/18/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Company Name:	North Jackson CO
Branch/Location:	Marquette, MI
Project Contact:	Sharon Felix
Phone:	
Project Number:	
Project Name:	Humboldt Mill
Project State:	MI
Sampled By (Print):	A Mavacini P Sabee
Sampled By (Sign):	
PO #:	Regulatory Program:

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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 1

401652

COC No. 015120

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other ZnAc NaOH

Quote #:	
Mail To Contact:	
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Alk, Alk2, Cl, F, SO4, Nitrate, Nitrite, LLHg	Ammonia	Metals (Lithium)	Cyanide	Sulfide	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
FILTERED? (YES/NO)					N	N	N	N	N			
PRESERVATION (CODE)*					A	C	D	G	J			
001	FBK-003		1000	W	3	1	2	1	1	1-500mL P, 1-500mL, 1-500mL, 3-250mL C,P,J, 2-250mL		
002	~~FB~~ DUP-003		—	GW	3	1	2	1	1			
003	HW ~~GA~~ GA		1020	Grd								
004	HW ~~GA~~ 6		1100									
005	HW-5		1305									
006	HW-5A		1225									
007	HWG-1		1350									
008	HW-6A		1420									
009	HW-2		1550									

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
P Sabee	3-17-08 1730	Fedex	
Fedex	3/18/08 1040		3/18/08 1040

PACE Project No. 401652

Receipt Temp = 2 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Batch No. 401698

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1241 Bellevue Street
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April 03, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on March 19, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401698001	**FBK-004**	Water	03/18/08 09:00	03/19/08 08:16
401698002	**DUP-004**	Water	03/18/08 00:00	03/19/08 08:16
401698003	**MW-101**	Water	03/18/08 16:05	03/19/08 08:16
401698004	**KMW-5**	Water	03/18/08 13:13	03/19/08 08:16
401698005	**HW-3**	Water	03/18/08 14:17	03/19/08 08:16
401698006	**HW-4**	Water	03/18/08 13:08	03/19/08 08:16

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401698001	FBK-004	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401698002	DUP-004	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401698003	MW-101	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401698004	KMW-5	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401698005	HW-3	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401698006	HW-4	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: EPA 6020
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

QC Batch: MPRP/1068

B: Analyte was detected in the associated method blank.

- BLANK (Lab ID: 7107)
  - Boron
  - Potassium
  - Zinc

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/1068

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698002

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 7481)
  - Calcium
  - Iron
  - Magnesium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

Additional Comments:

Batch Comments:

Internal standard limits of 30-140% used. All QC within limits.
- QC Batch: ICPM / 1031

Analyte Comments:

QC Batch: MPRP/1068

1j: Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.
- MW-101 (Lab ID: 401698003)
  - Manganese
  - Vanadium
  - Aluminum

- MS (Lab ID: 7480)
  - Calcium
  - Iron
  - Magnesium
  - Manganese

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1132

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698002

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 7739)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: EPA 300.0
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1137

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698005,401728001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 7611)
  - Nitrite as N
- MSD (Lab ID: 7612)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1138

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698005,401728001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 7625)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: EPA 335.4
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1202

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698005,401736001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 10719)
  - Cyanide
- MSD (Lab ID: 10720)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 03, 2008

General Information:
6 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1220

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401735001,401753007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 11681)
  - Nitrogen, Ammonia
- MSD (Lab ID: 11682)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: FBK-004 **Lab ID: 401698001** Collected: 03/18/08 09:00 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.378J**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 09:20	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**6.8J**	ug/L	50.0	4.4	1	03/20/08 09:32	03/27/08 03:18	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/20/08 09:32	03/27/08 03:18	7440-36-0	
Arsenic	ND	ug/L	1.0	0.093	1	03/20/08 09:32	03/27/08 03:18	7440-38-2	
Barium	**0.15J**	ug/L	1.0	0.072	1	03/20/08 09:32	03/27/08 03:18	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 09:32	03/27/08 03:18	7440-41-7	
Boron	**3.6J**	ug/L	10.0	1.1	1	03/20/08 09:32	03/27/08 03:18	7440-42-8	B
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 09:32	03/27/08 03:18	7440-43-9	
Calcium	**101J**	ug/L	500	10.0	1	03/20/08 09:32	03/27/08 03:18	7440-70-2	B
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 09:32	03/27/08 03:18	7440-47-3	
Cobalt	ND	ug/L	1.0	0.059	1	03/20/08 09:32	03/27/08 03:18	7440-48-4	
Copper	**0.40J**	ug/L	1.0	0.12	1	03/20/08 09:32	03/27/08 03:18	7440-50-8	
Iron	ND	ug/L	50.0	2.9	1	03/20/08 09:32	03/27/08 03:18	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/20/08 09:32	03/27/08 03:18	7439-92-1	
Lithium	ND	ug/L	1.0	0.085	1	03/20/08 09:32	03/27/08 03:18	7439-93-2	
Magnesium	ND	ug/L	500	52.6	1	03/20/08 09:32	03/27/08 03:18	7439-95-4	
Manganese	**5.7**	ug/L	1.0	0.080	1	03/20/08 09:32	03/27/08 03:18	7439-96-5	
Molybdenum	ND	ug/L	10.0	0.11	1	03/20/08 09:32	03/27/08 03:18	7439-98-7	
Nickel	**0.13J**	ug/L	1.0	0.074	1	03/20/08 09:32	03/27/08 03:18	7440-02-0	
Potassium	**134J**	ug/L	500	6.2	1	03/20/08 09:32	03/27/08 03:18	7440-09-7	B
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 09:32	03/27/08 03:18	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 09:32	03/27/08 03:18	7440-22-4	
Sodium	**1510**	ug/L	500	46.0	1	03/20/08 09:32	03/27/08 03:18	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 09:32	03/27/08 03:18	7440-28-0	
Total Hardness	**0.42J**	mg/L	5.0	0.15	1	03/20/08 09:32	03/27/08 03:18		
Vanadium	ND	ug/L	1.0	0.41	1	03/20/08 09:32	03/27/08 03:18	7440-62-2	
Zinc	**5.7J**	ug/L	10.0	2.1	1	03/20/08 09:32	03/27/08 03:18	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		03/25/08 14:24		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:24		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		03/25/08 14:24		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/19/08 22:23	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/19/08 19:02	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.7J**	mg/L	5.0	1.1	1		03/19/08 22:23	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/19/08 22:23	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: FBK-004 **Lab ID: 401698001** Collected: 03/18/08 09:00 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	ND	mg/L	4.0	0.51	1		03/19/08 22:23	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.014J**	mg/L	0.020	0.0060	1		03/31/08 14:59	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 13:23	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: DUP-004 **Lab ID: 401698002** Collected: 03/18/08 00:00 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.495J**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 09:24	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**5.0J**	ug/L	50.0	4.4	1	03/20/08 09:32	04/01/08 00:38	7429-90-5	
Antimony	**0.10J**	ug/L	1.0	0.10	1	03/20/08 09:32	03/27/08 04:48	7440-36-0	
Arsenic	**4.2**	ug/L	1.0	0.093	1	03/20/08 09:32	03/27/08 04:48	7440-38-2	
Barium	**158**	ug/L	1.0	0.072	1	03/20/08 09:32	03/27/08 04:48	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 09:32	04/01/08 00:38	7440-41-7	
Boron	**79.0**	ug/L	10.0	1.1	1	03/20/08 09:32	04/01/08 00:38	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 09:32	03/27/08 04:48	7440-43-9	
Calcium	**54500**	ug/L	5000	100	10	03/20/08 09:32	03/27/08 03:30	7440-70-2	M0
Chromium	**0.58J**	ug/L	1.0	0.43	1	03/20/08 09:32	03/27/08 04:48	7440-47-3	
Cobalt	**0.10J**	ug/L	1.0	0.059	1	03/20/08 09:32	03/27/08 04:48	7440-48-4	
Copper	**0.26J**	ug/L	1.0	0.12	1	03/20/08 09:32	03/27/08 04:48	7440-50-8	
Iron	**29300**	ug/L	50.0	2.9	1	03/20/08 09:32	03/27/08 04:48	7439-89-6	M0
Lead	**2.6**	ug/L	1.0	0.044	1	03/20/08 09:32	03/27/08 04:48	7439-92-1	
Lithium	**2.6**	ug/L	1.0	0.085	1	03/20/08 09:32	03/27/08 04:48	7439-93-2	
Magnesium	**26700**	ug/L	5000	526	10	03/20/08 09:32	03/27/08 03:30	7439-95-4	M0
Manganese	**929**	ug/L	1.0	0.080	1	03/20/08 09:32	03/27/08 04:48	7439-96-5	P6
Molybdenum	**1.2J**	ug/L	10.0	0.11	1	03/20/08 09:32	03/27/08 04:48	7439-98-7	
Nickel	**0.30J**	ug/L	1.0	0.074	1	03/20/08 09:32	03/27/08 04:48	7440-02-0	
Potassium	**5950**	ug/L	500	6.2	1	03/20/08 09:32	03/27/08 04:48	7440-09-7	
Selenium	**0.22J**	ug/L	1.0	0.15	1	03/20/08 09:32	03/27/08 04:48	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 09:32	03/27/08 04:48	7440-22-4	
Sodium	**4830**	ug/L	500	46.0	1	03/20/08 09:32	04/01/08 00:38	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 09:32	03/27/08 04:48	7440-28-0	
Total Hardness	**246**	mg/L	50.0	1.5	10	03/20/08 09:32	03/27/08 03:30		
Vanadium	**1.3**	ug/L	1.0	0.41	1	03/20/08 09:32	03/27/08 04:48	7440-62-2	
Zinc	**6.9J**	ug/L	10.0	2.1	1	03/20/08 09:32	03/27/08 04:48	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**258**	mg/L	10.0	3.2	1		03/25/08 14:25		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:25		
Alkalinity, Total as CaCO3	**258**	mg/L	10.0	3.2	1		03/25/08 14:25		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		M0
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/19/08 22:35	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/19/08 19:45	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.5**	mg/L	5.0	1.1	1		03/19/08 22:35	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		03/19/08 22:35	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: DUP-004 **Lab ID: 401698002** Collected: 03/18/08 00:00 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**6.1**	mg/L	4.0	0.51	1		03/19/08 22:35	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.016J**	mg/L	0.020	0.0060	1		03/31/08 15:00	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	1.0	0.50	1		03/27/08 13:24	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: MW-101 **Lab ID: 401698003** Collected: 03/18/08 16:05 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**2.01**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 09:44	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**689**	ug/L	50.0	4.4	1	03/20/08 09:32	04/01/08 00:57	7429-90-5	1j
Antimony	**0.10J**	ug/L	1.0	0.10	1	03/20/08 09:32	03/27/08 05:18	7440-36-0	
Arsenic	**19.8**	ug/L	1.0	0.093	1	03/20/08 09:32	03/27/08 05:18	7440-38-2	
Barium	**74.1**	ug/L	1.0	0.072	1	03/20/08 09:32	03/27/08 05:18	7440-39-3	
Beryllium	**0.17J**	ug/L	1.0	0.070	1	03/20/08 09:32	04/01/08 17:17	7440-41-7	
Boron	**107**	ug/L	10.0	1.1	1	03/20/08 09:32	04/01/08 00:57	7440-42-8	
Cadmium	**0.15J**	ug/L	1.0	0.098	1	03/20/08 09:32	03/27/08 05:18	7440-43-9	
Calcium	**34900**	ug/L	5000	100	10	03/20/08 09:32	03/31/08 23:51	7440-70-2	
Chromium	**2.0**	ug/L	1.0	0.43	1	03/20/08 09:32	03/27/08 05:18	7440-47-3	
Cobalt	**0.79J**	ug/L	1.0	0.059	1	03/20/08 09:32	03/27/08 05:18	7440-48-4	
Copper	**1.6**	ug/L	1.0	0.12	1	03/20/08 09:32	03/27/08 05:18	7440-50-8	
Iron	**33800**	ug/L	50.0	2.9	1	03/20/08 09:32	03/27/08 05:18	7439-89-6	
Lead	**0.40J**	ug/L	1.0	0.044	1	03/20/08 09:32	03/27/08 05:18	7439-92-1	
Lithium	**0.68J**	ug/L	1.0	0.085	1	03/20/08 09:32	03/27/08 05:18	7439-93-2	
Magnesium	**9330**	ug/L	5000	526	10	03/20/08 09:32	03/31/08 23:51	7439-95-4	
Manganese	**6760**	ug/L	10.0	0.80	10	03/20/08 09:32	03/27/08 03:48	7439-96-5	1j
Molybdenum	**1.2J**	ug/L	10.0	0.11	1	03/20/08 09:32	03/27/08 05:18	7439-98-7	
Nickel	**1.5**	ug/L	1.0	0.074	1	03/20/08 09:32	03/27/08 05:18	7440-02-0	
Potassium	**3620**	ug/L	500	6.2	1	03/20/08 09:32	03/27/08 05:18	7440-09-7	
Selenium	**0.35J**	ug/L	1.0	0.15	1	03/20/08 09:32	03/27/08 05:18	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 09:32	03/27/08 05:18	7440-22-4	
Sodium	**7750**	ug/L	500	46.0	1	03/20/08 09:32	04/01/08 00:57	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 09:32	03/27/08 05:18	7440-28-0	
Total Hardness	**126**	mg/L	50.0	1.5	10	03/20/08 09:32	03/31/08 23:51		
Vanadium	**4.0**	ug/L	1.0	0.41	1	03/20/08 09:32	03/27/08 05:18	7440-62-2	1j
Zinc	**9.0J**	ug/L	10.0	2.1	1	03/20/08 09:32	03/27/08 05:18	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**162**	mg/L	10.0	3.2	1		03/25/08 14:25		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:25		
Alkalinity, Total as CaCO3	**162**	mg/L	10.0	3.2	1		03/25/08 14:25		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**2.8J**	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/19/08 22:48	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/19/08 19:59	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.3J**	mg/L	5.0	1.1	1		03/19/08 22:48	16887-00-6	
Fluoride	**0.45J**	mg/L	0.50	0.059	1		03/19/08 22:48	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: MW-101 **Lab ID: 401698003** Collected: 03/18/08 16:05 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	ND	mg/L	4.0	0.51	1		03/19/08 22:48	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.012J**	mg/L	0.020	0.0060	1		03/31/08 15:00	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:10	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: KMW-5 **Lab ID: 401698004** Collected: 03/18/08 13:13 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.42**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 09:49	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**941**	ug/L	50.0	4.4	1	03/20/08 09:32	04/01/08 01:44	7429-90-5	
Antimony	**0.12J**	ug/L	1.0	0.10	1	03/20/08 09:32	03/27/08 05:30	7440-36-0	
Arsenic	**4.1**	ug/L	1.0	0.093	1	03/20/08 09:32	03/27/08 05:30	7440-38-2	
Barium	**16.3**	ug/L	1.0	0.072	1	03/20/08 09:32	03/27/08 05:30	7440-39-3	
Beryllium	**0.34J**	ug/L	1.0	0.070	1	03/20/08 09:32	04/01/08 17:29	7440-41-7	
Boron	**70.6**	ug/L	10.0	1.1	1	03/20/08 09:32	04/01/08 01:44	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/20/08 09:32	03/27/08 05:30	7440-43-9	
Calcium	**34200**	ug/L	5000	100	10	03/20/08 09:32	04/01/08 00:09	7440-70-2	
Chromium	**4.5**	ug/L	1.0	0.43	1	03/20/08 09:32	03/27/08 05:30	7440-47-3	
Cobalt	**230**	ug/L	1.0	0.059	1	03/20/08 09:32	03/27/08 05:30	7440-48-4	
Copper	**1.9**	ug/L	1.0	0.12	1	03/20/08 09:32	03/27/08 05:30	7440-50-8	
Iron	**25600**	ug/L	50.0	2.9	1	03/20/08 09:32	03/27/08 05:30	7439-89-6	
Lead	**1.4**	ug/L	1.0	0.044	1	03/20/08 09:32	03/27/08 05:30	7439-92-1	
Lithium	**8.8**	ug/L	1.0	0.085	1	03/20/08 09:32	03/27/08 05:30	7439-93-2	
Magnesium	**17700**	ug/L	5000	526	10	03/20/08 09:32	04/01/08 00:09	7439-95-4	
Manganese	**1610**	ug/L	1.0	0.080	1	03/20/08 09:32	03/27/08 05:30	7439-96-5	
Molybdenum	**3.3J**	ug/L	10.0	0.11	1	03/20/08 09:32	03/27/08 05:30	7439-98-7	
Nickel	**18.0**	ug/L	1.0	0.074	1	03/20/08 09:32	03/27/08 05:30	7440-02-0	
Potassium	**4450**	ug/L	500	6.2	1	03/20/08 09:32	03/27/08 05:30	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 09:32	03/27/08 05:30	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 09:32	03/27/08 05:30	7440-22-4	
Sodium	**18800**	ug/L	500	46.0	1	03/20/08 09:32	04/01/08 01:44	7440-23-5	
Thallium	**0.050J**	ug/L	1.0	0.030	1	03/20/08 09:32	03/27/08 05:30	7440-28-0	
Total Hardness	**158**	mg/L	50.0	1.5	10	03/20/08 09:32	04/01/08 00:09		
Vanadium	**1.8**	ug/L	1.0	0.41	1	03/20/08 09:32	03/27/08 05:30	7440-62-2	
Zinc	**11.9**	ug/L	10.0	2.1	1	03/20/08 09:32	03/27/08 05:30	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**104**	mg/L	10.0	3.2	1		03/25/08 14:26		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/25/08 14:26		
Alkalinity, Total as CaCO3	**104**	mg/L	10.0	3.2	1		03/25/08 14:26		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/19/08 23:00	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/19/08 20:13	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.5J**	mg/L	5.0	1.1	1		03/19/08 23:00	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/19/08 23:00	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: KMW-5 **Lab ID: 401698004** Collected: 03/18/08 13:13 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**104**	mg/L	40.0	5.1	10		03/20/08 14:46	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.017J**	mg/L	0.020	0.0060	1		03/31/08 15:04	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:10	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: HW-3 **Lab ID: 401698005** Collected: 03/18/08 14:17 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.210J**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 10:02	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**192**	ug/L	50.0	4.4	1	03/20/08 09:32	04/01/08 01:51	7429-90-5	
Antimony	**0.11J**	ug/L	1.0	0.10	1	03/20/08 09:32	03/27/08 05:36	7440-36-0	
Arsenic	**0.81J**	ug/L	1.0	0.093	1	03/20/08 09:32	03/27/08 05:36	7440-38-2	
Barium	**13.3**	ug/L	1.0	0.072	1	03/20/08 09:32	03/27/08 05:36	7440-39-3	
Beryllium	**0.21J**	ug/L	1.0	0.070	1	03/20/08 09:32	04/01/08 17:35	7440-41-7	
Boron	**10.3**	ug/L	10.0	1.1	1	03/20/08 09:32	04/01/08 01:51	7440-42-8	B
Cadmium	**0.21J**	ug/L	1.0	0.098	1	03/20/08 09:32	03/27/08 05:36	7440-43-9	
Calcium	**5970**	ug/L	500	10.0	1	03/20/08 09:32	04/01/08 01:51	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/20/08 09:32	03/27/08 05:36	7440-47-3	
Cobalt	**11.0**	ug/L	1.0	0.059	1	03/20/08 09:32	03/27/08 05:36	7440-48-4	
Copper	**13.6**	ug/L	1.0	0.12	1	03/20/08 09:32	03/27/08 05:36	7440-50-8	
Iron	**1610**	ug/L	50.0	2.9	1	03/20/08 09:32	03/27/08 05:36	7439-89-6	
Lead	**0.050J**	ug/L	1.0	0.044	1	03/20/08 09:32	03/27/08 05:36	7439-92-1	
Lithium	**1.9**	ug/L	1.0	0.085	1	03/20/08 09:32	03/27/08 05:36	7439-93-2	
Magnesium	**2660**	ug/L	500	52.6	1	03/20/08 09:32	04/01/08 01:51	7439-95-4	
Manganese	**47.2**	ug/L	1.0	0.080	1	03/20/08 09:32	03/27/08 05:36	7439-96-5	
Molybdenum	**0.12J**	ug/L	10.0	0.11	1	03/20/08 09:32	03/27/08 05:36	7439-98-7	
Nickel	**38.9**	ug/L	1.0	0.074	1	03/20/08 09:32	03/27/08 05:36	7440-02-0	
Potassium	**1670**	ug/L	500	6.2	1	03/20/08 09:32	03/27/08 05:36	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 09:32	03/27/08 05:36	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 09:32	03/27/08 05:36	7440-22-4	
Sodium	**16200**	ug/L	500	46.0	1	03/20/08 09:32	04/01/08 01:51	7440-23-5	
Thallium	**0.030J**	ug/L	1.0	0.030	1	03/20/08 09:32	03/27/08 05:36	7440-28-0	
Total Hardness	**25.9**	mg/L	5.0	0.15	1	03/20/08 09:32	04/01/08 01:51		
Vanadium	**1.0**	ug/L	1.0	0.41	1	03/20/08 09:32	03/27/08 05:36	7440-62-2	
Zinc	**16.3**	ug/L	10.0	2.1	1	03/20/08 09:32	03/27/08 05:36	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		03/26/08 11:57		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/26/08 11:57		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		03/26/08 11:57		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/19/08 23:12	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/19/08 20:27	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**17.8**	mg/L	5.0	1.1	1		03/19/08 23:12	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/19/08 23:12	16984-48-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: HW-3 **Lab ID: 401698005** Collected: 03/18/08 14:17 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**36.3**	mg/L	4.0	0.51	1		03/19/08 23:12	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		03/31/08 15:05	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:11	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: HW-4 **Lab ID: 401698006** Collected: 03/18/08 13:08 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.416J**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 10:08	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**6.4J**	ug/L	50.0	4.4	1	03/20/08 09:32	04/01/08 01:57	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/20/08 09:32	03/27/08 05:42	7440-36-0	
Arsenic	**3.9**	ug/L	1.0	0.093	1	03/20/08 09:32	03/27/08 05:42	7440-38-2	
Barium	**148**	ug/L	1.0	0.072	1	03/20/08 09:32	03/27/08 05:42	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/20/08 09:32	04/01/08 17:41	7440-41-7	
Boron	**74.2**	ug/L	10.0	1.1	1	03/20/08 09:32	04/01/08 01:57	7440-42-8	
Cadmium	**0.11J**	ug/L	1.0	0.098	1	03/20/08 09:32	03/27/08 05:42	7440-43-9	
Calcium	**57000**	ug/L	5000	100	10	03/20/08 09:32	04/01/08 00:32	7440-70-2	
Chromium	**0.55J**	ug/L	1.0	0.43	1	03/20/08 09:32	03/27/08 05:42	7440-47-3	
Cobalt	**0.090J**	ug/L	1.0	0.059	1	03/20/08 09:32	03/27/08 05:42	7440-48-4	
Copper	**0.24J**	ug/L	1.0	0.12	1	03/20/08 09:32	03/27/08 05:42	7440-50-8	
Iron	**27600**	ug/L	50.0	2.9	1	03/20/08 09:32	03/27/08 05:42	7439-89-6	
Lead	**2.4**	ug/L	1.0	0.044	1	03/20/08 09:32	03/27/08 05:42	7439-92-1	
Lithium	**2.3**	ug/L	1.0	0.085	1	03/20/08 09:32	03/27/08 05:42	7439-93-2	
Magnesium	**26700**	ug/L	5000	526	10	03/20/08 09:32	04/01/08 00:32	7439-95-4	
Manganese	**874**	ug/L	1.0	0.080	1	03/20/08 09:32	03/27/08 05:42	7439-96-5	
Molybdenum	**0.46J**	ug/L	10.0	0.11	1	03/20/08 09:32	03/27/08 05:42	7439-98-7	
Nickel	**0.27J**	ug/L	1.0	0.074	1	03/20/08 09:32	03/27/08 05:42	7440-02-0	
Potassium	**5570**	ug/L	500	6.2	1	03/20/08 09:32	03/27/08 05:42	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/20/08 09:32	03/27/08 05:42	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/20/08 09:32	03/27/08 05:42	7440-22-4	
Sodium	**4590**	ug/L	500	46.0	1	03/20/08 09:32	04/01/08 01:57	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/20/08 09:32	03/27/08 05:42	7440-28-0	
Total Hardness	**252**	mg/L	50.0	1.5	10	03/20/08 09:32	04/01/08 00:32		
Vanadium	**1.2**	ug/L	1.0	0.41	1	03/20/08 09:32	03/27/08 05:42	7440-62-2	
Zinc	**5.6J**	ug/L	10.0	2.1	1	03/20/08 09:32	03/27/08 05:42	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**256**	mg/L	10.0	3.2	1		03/26/08 11:57		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/26/08 11:57		
Alkalinity, Total as CaCO3	**256**	mg/L	10.0	3.2	1		03/26/08 11:57		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/19/08 23:48	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/19/08 21:10	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.5**	mg/L	5.0	1.1	1		03/19/08 23:48	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		03/19/08 23:48	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Sample: HW-4 **Lab ID: 401698006** Collected: 03/18/08 13:08 Received: 03/19/08 08:16 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**6.1**	mg/L	4.0	0.51	1		03/19/08 23:48	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.015J**	mg/L	0.020	0.0060	1		03/31/08 15:08	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.1**	mg/L	1.0	0.50	1		04/02/08 12:12	7764-41-7	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: MPRP/1068 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 7107
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	50.0	
Antimony	ug/L	ND	1.0	
Arsenic	ug/L	ND	1.0	
Barium	ug/L	ND	1.0	
Beryllium	ug/L	ND	1.0	
Boron	ug/L	1.1J	10.0	B
Cadmium	ug/L	ND	1.0	
Calcium	ug/L	34.7J	500	
Chromium	ug/L	ND	1.0	
Cobalt	ug/L	ND	1.0	
Copper	ug/L	ND	1.0	
Iron	ug/L	ND	50.0	
Lead	ug/L	ND	1.0	
Lithium	ug/L	ND	1.0	
Magnesium	ug/L	ND	500	
Manganese	ug/L	0.26J	1.0	
Molybdenum	ug/L	ND	10.0	
Nickel	ug/L	ND	1.0	
Potassium	ug/L	11.0J	500	B
Selenium	ug/L	ND	1.0	
Silver	ug/L	ND	0.50	
Sodium	ug/L	ND	500	
Thallium	ug/L	ND	1.0	
Vanadium	ug/L	ND	1.0	
Zinc	ug/L	4.3J	10.0	B

LABORATORY CONTROL SAMPLE: 7108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	10800	108	75-125	
Antimony	ug/L	200	222	111	75-125	
Arsenic	ug/L	200	239	119	75-125	
Barium	ug/L	200	226	113	75-125	
Beryllium	ug/L	200	234	117	75-125	
Boron	ug/L	200	221	111	75-125	
Cadmium	ug/L	200	244	122	75-125	
Calcium	ug/L	10000	10800	108	75-125	
Chromium	ug/L	200	238	119	75-125	
Cobalt	ug/L	200	232	116	75-125	
Copper	ug/L	200	231	116	75-125	
Iron	ug/L	10000	10600	106	75-125	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

LABORATORY CONTROL SAMPLE: 7108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	200	236	118	75-125	
Lithium	ug/L	200	241	121	75-125	
Magnesium	ug/L	10000	11200	112	75-125	
Manganese	ug/L	200	243	121	75-125	
Molybdenum	ug/L	200	216	108	75-125	
Nickel	ug/L	200	234	117	75-125	
Potassium	ug/L	10000	11000	110	75-125	
Selenium	ug/L	200	227	113	75-125	
Silver	ug/L	100	114	114	75-125	
Sodium	ug/L	10000	10900	109	75-125	
Thallium	ug/L	200	232	116	75-125	
Vanadium	ug/L	200	242	121	75-125	
Zinc	ug/L	200	235	117	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7480 7481

Parameter	Units	401698002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	5.0J	10000	10000	8550	8620	85	86	75-125	.7	20	
Antimony	ug/L	0.10J	200	200	207	183	103	92	75-125	12	20	
Arsenic	ug/L	4.2	200	200	224	209	110	102	75-125	7	20	
Barium	ug/L	158	200	200	373	326	108	84	75-125	14	20	
Beryllium	ug/L	ND	200	200	204	201	102	101	75-125	1	20	
Boron	ug/L	79.0	200	200	260	253	90	87	75-125	3	20	
Cadmium	ug/L	ND	200	200	219	194	109	97	75-125	12	20	
Calcium	ug/L	54500	10000	10000	64400	59400	99	49	75-125	8	20	M0
Chromium	ug/L	0.58J	200	200	211	187	105	93	75-125	12	20	
Cobalt	ug/L	0.10J	200	200	202	178	101	89	75-125	13	20	
Copper	ug/L	0.26J	200	200	198	175	99	87	75-125	13	20	
Iron	ug/L	29300	10000	10000	37600	32500	82	32	75-125	14	20	M0
Lead	ug/L	2.6	200	200	224	200	110	98	75-125	11	20	
Lithium	ug/L	2.6	200	200	216	201	107	99	75-125	7	20	
Magnesium	ug/L	26700	10000	10000	36300	33100	97	64	75-125	9	20	M0
Manganese	ug/L	929	200	200	1090	962	82	16	75-125	13	20	P6
Molybdenum	ug/L	1.2J	200	200	196	176	97	87	75-125	11	20	
Nickel	ug/L	0.30J	200	200	200	176	100	88	75-125	13	20	
Potassium	ug/L	5950	10000	10000	15800	13900	98	80	75-125	12	20	
Selenium	ug/L	0.22J	200	200	208	194	104	97	75-125	7	20	
Silver	ug/L	ND	100	100	98.7	88.8	99	89	75-125	11	20	
Sodium	ug/L	4830	10000	10000	13100	12900	83	81	75-125	1	20	
Thallium	ug/L	ND	200	200	215	196	107	98	75-125	9	20	
Vanadium	ug/L	1.3	200	200	218	192	108	96	75-125	12	20	
Zinc	ug/L	6.9J	200	200	213	197	103	95	75-125	8	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WETA/1137 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 7609
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	ND	0.40	
Nitrite as N	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 7610

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	99	90-110	
Nitrite as N	mg/L	.8	0.80	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7611 7612

Parameter	Units	401728001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.40	1.6	1.6	1.7	1.7	104	106	90-110	2	20	
Nitrite as N	mg/L	<0.10	.8	.8	0.50	0.50	62	62	90-110	0	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7613 7614

Parameter	Units	401698005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	ND	1.6	1.6	1.6	1.6	99	99	90-110	.6	20	
Nitrite as N	mg/L	ND	.8	.8	0.77	0.78	96	98	90-110	1	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WETA/1138 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 7621
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 7622

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.4	97	90-110	
Fluoride	mg/L	2	2.0	99	90-110	
Sulfate	mg/L	16	15.5	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7623 7624

Parameter	Units	401698005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	17.8	20	20	37.8	38.0	100	101	90-110	.3	20	
Fluoride	mg/L	0.27J	2	2	2.1	2.1	90	90	90-110	0	20	
Sulfate	mg/L	36.3	16	16	52.6	52.9	101	104	90-110	.7	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7625 7626

Parameter	Units	401728001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	<5.0	20	20	20.9	21.2	88	90	90-110	2	20	M0
Fluoride	mg/L	<0.50	2	2	2.1	2.1	92	93	90-110	1	20	
Sulfate	mg/L	<4.0	16	16	15.7	15.9	98	99	90-110	1	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WET/1132 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 7736
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 7737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	45.6	41.6	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7738 7739

Parameter	Units	401698002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	45.6	45.6	37.6	36.4	80	78	80-120	3	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WET/1143 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004

METHOD BLANK: 8413
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	10.0	
Alkalinity, Total as CaCO3	mg/L	ND	10.0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 8414

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L		ND			
Alkalinity, Total as CaCO3	mg/L	500	504	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8463 8464

Parameter	Units	401652003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Carbonate (CaCO3)	mg/L	ND			ND	ND					20	
Alkalinity, Total as CaCO3	mg/L	109	500	500	610	610	100	100	80-120	0	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WET/1152 | Analysis Method: SM 2320B
QC Batch Method: SM 2320B | Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401698005, 401698006

METHOD BLANK: 9018
Associated Lab Samples: 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	10.0	
Alkalinity, Total as CaCO3	mg/L	ND	10.0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 9019

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L		ND			
Alkalinity, Total as CaCO3	mg/L	500	493	99	80-120	
Alkalinity,Bicarbonate (CaCO3)	mg/L		ND			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9020 9021

Parameter	Units	401720001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Carbonate (CaCO3)	mg/L	<10.0			ND	ND					20	
Alkalinity, Total as CaCO3	mg/L	12.2	500	500	515	515	101	101	80-120	0	20	
Alkalinity,Bicarbonate (CaCO3)	mg/L	12.2			ND	ND					20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WETA/1180 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401698001, 401698002

METHOD BLANK: 9399
Associated Lab Samples: 401698001, 401698002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 9400

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9401 9402

Parameter	Units	401652006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	10	10	10.1	10	100	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9403 9404

Parameter	Units	401698002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.2	10	10	11.3	10.7	102	95	90-110	6	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: CVFS/1028 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 10604
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.345J	0.50	

METHOD BLANK: 10605
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.271J	0.50	

METHOD BLANK: 10606
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.178J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 10607 10608

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.45	5.11	109	102	79-121	6	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10609 10610

Parameter	Units	401936001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	3.64	10	10	14.9	15.9	113	123	75-124	7	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10611 10612

Parameter	Units	401936003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.65	10	10	14.4	12.2	117	96	75-124	16	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10613 10614

Parameter	Units	401987002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.53	10	10	13.7	14.2	111	116	75-124	4	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WETA/1202 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 10715
Associated Lab Samples: 401698001, 401698002, 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 10716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.092	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10717 10718

Parameter	Units	401698005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.11	103	105	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10719 10720

Parameter	Units	401736001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.020	.1	.1	0.090	0.084	77	71	90-110	7	20	M0

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

QC Batch: WETA/1220 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401698003, 401698004, 401698005, 401698006

METHOD BLANK: 11679
Associated Lab Samples: 401698003, 401698004, 401698005, 401698006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 11680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11681 11682

Parameter	Units	401735001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<1.0	10	10	8.9	8.9	84	85	90-110	.8	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11683 11684

Parameter	Units	401753007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.50J	10	10	10.6	10.3	101	98	90-110	3	20	

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QUALIFIERS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: ICPM/1031

[1] Internal standard limits of 30-140% used. All QC within limits.

ANALYTE QUALIFIERS

1j Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.

B Analyte was detected in the associated method blank.

M0 Matrix spike recovery was outside laboratory control limits.

P6 Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401698001	FBK-004	EPA 3020	MPRP/1068	EPA 6020	ICPM/1031
401698002	DUP-004	EPA 3020	MPRP/1068	EPA 6020	ICPM/1031
401698003	MW-101	EPA 3020	MPRP/1068	EPA 6020	ICPM/1031
401698004	KMW-5	EPA 3020	MPRP/1068	EPA 6020	ICPM/1031
401698005	HW-3	EPA 3020	MPRP/1068	EPA 6020	ICPM/1031
401698006	HW-4	EPA 3020	MPRP/1068	EPA 6020	ICPM/1031
401698001	FBK-004	EPA 300.0	WETA/1137		
401698002	DUP-004	EPA 300.0	WETA/1137		
401698003	MW-101	EPA 300.0	WETA/1137		
401698004	KMW-5	EPA 300.0	WETA/1137		
401698005	HW-3	EPA 300.0	WETA/1137		
401698006	HW-4	EPA 300.0	WETA/1137		
401698001	FBK-004	EPA 300.0	WETA/1138		
401698002	DUP-004	EPA 300.0	WETA/1138		
401698003	MW-101	EPA 300.0	WETA/1138		
401698004	KMW-5	EPA 300.0	WETA/1138		
401698005	HW-3	EPA 300.0	WETA/1138		
401698006	HW-4	EPA 300.0	WETA/1138		
401698001	FBK-004	SM 4500-S F (2000)	WET/1132		
401698002	DUP-004	SM 4500-S F (2000)	WET/1132		
401698003	MW-101	SM 4500-S F (2000)	WET/1132		
401698004	KMW-5	SM 4500-S F (2000)	WET/1132		
401698005	HW-3	SM 4500-S F (2000)	WET/1132		
401698006	HW-4	SM 4500-S F (2000)	WET/1132		
401698001	FBK-004	SM 2320B	WET/1143		
401698002	DUP-004	SM 2320B	WET/1143		
401698003	MW-101	SM 2320B	WET/1143		
401698004	KMW-5	SM 2320B	WET/1143		
401698005	HW-3	SM 2320B	WET/1152		
401698006	HW-4	SM 2320B	WET/1152		
401698001	FBK-004	EPA 350.1	WETA/1180		
401698002	DUP-004	EPA 350.1	WETA/1180		
401698001	FBK-004	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401698002	DUP-004	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401698003	MW-101	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401698004	KMW-5	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401698005	HW-3	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401698006	HW-4	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401698001	FBK-004	EPA 335.4	WETA/1202		
401698002	DUP-004	EPA 335.4	WETA/1202		
401698003	MW-101	EPA 335.4	WETA/1202		
401698004	KMW-5	EPA 335.4	WETA/1202		
401698005	HW-3	EPA 335.4	WETA/1202		
401698006	HW-4	EPA 335.4	WETA/1202		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401698

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401698003	**MW-101**	EPA 350.1	WETA/1220		
401698004	**KMW-5**	EPA 350.1	WETA/1220		
401698005	**HW-3**	EPA 350.1	WETA/1220		
401698006	**HW-4**	EPA 350.1	WETA/1220		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: NORTH JACKSON Co. Project # 401698

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

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

Cooler Temperature 20 **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: G 3/18/08

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☑No ☐N/A	12. SP 004 MATCHED By ~~TIMES SAME SAMPLE~~ NAME ~~A: 005, LEAVE~~ 005 LABELED AS collected ~~TIME~~ 1313 BELONGS with 005 NOT 004
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: DH **Date:** 3/19/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

COC No. 20080318

CHAIN OF CUSTODY

(Please Print Clearly)	
Company Name:	NORTH JACKSON CO
Branch/Location:	MARQUETTE, MI
Project Contact:	SHARON FELIX
Phone:	
Project Number:	
Project Name:	HUMBOLDT MILL/GW
Project State:	MI
Sampled By (Print):	Chris Cantway, Richard Eagle
Sampled By (Sign):	[signature]
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	~~JANIS KESY~~ S. Felix
Mail To Company:	FOTH I & E
Mail To Address:	GREEN BAY, WI
Invoice To Contact:	SAME AS ABOVE
Invoice To Company:	SAME AS ABOVE
Invoice To Address:	SAME AS ABOVE
Invoice To Phone:	SAME AS ABOVE

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other ZnAc NaOH

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☑ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: Alk, NH3, Cl, F, SO4, N-Nitrate, N-Nitrite, Cl Hg	Ammonia	Metals (Lithium)	Cyanide	Sulfide	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
	FILTERED? (YES/NO)				N	N	N	N	N			
	PRESERVATION (CODE)*				A	C	D	G	J			
001	FBK-004	3/18/08	0900	W	3	1	2	1	1			
002	DUP-004	↓	—	GW	3	1	2	1	1			
003	MW-101	↓	1605	↓	3	1	2	1	1			
004	KMW-5	↓	~~1313~~	↓	1		2					
005	KMW-5	↓	1617	↓	2	1		1	1	004		
006	HW-3	↓	1417	↓	3	1	2	1	1	005		
007	HW-4	↓	1308	↓	3	1	2	1	1	006		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Richard Eagle	3/18/08 1830	FedEx	
FedEx	3/18/08 945	[signature]	3/18/08 945

PACE Project No. 401698
Receipt Temp = 2 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

Batch No. 401494

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1241 Bellevue Street
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(920)469-2436

April 04, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on March 13, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Tod Noltemeyer

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401494001	**FBK-001**	Water	03/12/08 08:30	03/13/08 09:18
401494002	**DUP-001**	Water	03/12/08 00:00	03/13/08 09:18
401494003	**MW-12**	Water	03/12/08 12:34	03/13/08 09:18
401494004	**KMW-7**	Water	03/12/08 14:26	03/13/08 09:18
401494005	**KMW-9**	Water	03/12/08 15:41	03/13/08 09:18
401494006	**KMW-3**	Water	03/12/08 12:30	03/13/08 09:18
401494007	**MW-11**	Water	03/12/08 14:30	03/13/08 09:18

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401494001	FBK-001	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401494002	DUP-001	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
401494003	MW-12	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
401494004	KMW-7	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401494005	KMW-9	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401494006	KMW-3	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
401494007	MW-11	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	DEY	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
4 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1099

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401494007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 5834)
  - Sulfide
- MSD (Lab ID: 5835)
  - Sulfide

R1: RPD value was outside control limits.

- MS (Lab ID: 5834)
  - Sulfide
- MSD (Lab ID: 5835)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H5: Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
- MW-11 (Lab ID: 401494007)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/1086

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- MS (Lab ID: 4874)
  - Nitrite as N
- MSD (Lab ID: 4875)
  - Nitrite as N
- MW-11 (Lab ID: 401494007)
  - Nitrite as N

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1087

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401494007

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 4879)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1093

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401494007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 4979)
  - Cyanide
- MSD (Lab ID: 4980)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 04, 2008

General Information:
7 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: FBK-001 **Lab ID: 401494001** Collected: 03/12/08 08:30 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	ND	ng/L	0.50	0.16	1	03/17/08 09:00	03/18/08 11:02	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	50.0	4.4	1	03/14/08 08:30	03/14/08 16:43	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 16:43	7440-36-0	
Arsenic	**0.13J**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 16:43	7440-38-2	B
Barium	ND	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 16:43	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 16:43	7440-41-7	
Boron	**10.8**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 16:50	7440-42-8	B
Cadmium	ND	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 16:43	7440-43-9	
Calcium	**62.2J**	ug/L	500	10.0	1	03/14/08 08:30	03/14/08 16:43	7440-70-2	B
Chromium	**0.78J**	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 16:43	7440-47-3	
Cobalt	ND	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 16:43	7440-48-4	
Copper	**0.46J**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 16:43	7440-50-8	
Iron	ND	ug/L	50.0	2.9	1	03/14/08 08:30	03/14/08 16:43	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 16:43	7439-92-1	
Lithium	**0.19J**	ug/L	1.0	0.085	1	03/14/08 08:30	03/19/08 16:50	7439-93-2	
Magnesium	ND	ug/L	500	52.6	1	03/14/08 08:30	03/14/08 16:43	7439-95-4	
Manganese	**4.4**	ug/L	1.0	0.080	1	03/14/08 08:30	03/14/08 16:43	7439-96-5	
Molybdenum	ND	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 16:43	7439-98-7	
Nickel	**0.14J**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 16:43	7440-02-0	
Potassium	**114J**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 16:43	7440-09-7	B
Selenium	ND	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 16:50	7782-49-2	
Silver	**0.16J**	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 18:33	7440-22-4	B
Sodium	**1480**	ug/L	500	46.0	1	03/14/08 08:30	03/14/08 16:43	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 16:43	7440-28-0	
Total Hardness	**0.24J**	mg/L	5.0	0.15	1	03/14/08 08:30	03/14/08 16:43		
Vanadium	ND	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 16:43	7440-62-2	
Zinc	**4.8J**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 16:43	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		03/17/08 14:13		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.14J**	mg/L	0.40	0.085	1		03/13/08 15:19	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/13/08 19:35	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.0J**	mg/L	5.0	1.1	1		03/13/08 15:19	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/13/08 15:19	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: FBK-001 **Lab ID: 401494001** Collected: 03/12/08 08:30 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	ND	mg/L	4.0	0.51	1		03/13/08 15:19	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.013J**	mg/L	0.020	0.0060	1		03/14/08 14:04	57-12-5	B
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		03/27/08 12:48	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: DUP-001 **Lab ID: 401494002** Collected: 03/12/08 00:00 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.359J**	ng/L	0.50	0.16	1	03/17/08 09:00	03/18/08 11:06	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**40.7J**	ug/L	50.0	4.4	1	03/14/08 08:30	03/19/08 16:56	7429-90-5	
Antimony	**0.13J**	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 18:02	7440-36-0	
Arsenic	**15.8**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 18:02	7440-38-2	
Barium	**78.4**	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 18:02	7440-39-3	
Beryllium	**0.070J**	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 18:02	7440-41-7	
Boron	**46.6**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 16:56	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 18:02	7440-43-9	
Calcium	**45900**	ug/L	5000	100	10	03/14/08 08:30	03/14/08 16:55	7440-70-2	
Chromium	**1.6**	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 18:02	7440-47-3	
Cobalt	**3.6**	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 18:02	7440-48-4	
Copper	**0.49J**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 18:02	7440-50-8	
Iron	**28700**	ug/L	50.0	2.9	1	03/14/08 08:30	03/14/08 18:02	7439-89-6	
Lead	**0.17J**	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 18:02	7439-92-1	
Lithium	**1.8**	ug/L	1.0	0.085	1	03/14/08 08:30	03/14/08 18:02	7439-93-2	
Magnesium	**21100**	ug/L	5000	526	10	03/14/08 08:30	03/14/08 16:55	7439-95-4	
Manganese	**5630**	ug/L	10.0	0.80	10	03/14/08 08:30	03/14/08 16:55	7439-96-5	
Molybdenum	**1.0J**	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 18:02	7439-98-7	
Nickel	**0.88J**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 18:02	7440-02-0	
Potassium	**2570**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 18:02	7440-09-7	
Selenium	**0.45J**	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 16:56	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 18:39	7440-22-4	
Sodium	**3640**	ug/L	500	46.0	1	03/14/08 08:30	03/19/08 16:56	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 18:02	7440-28-0	
Total Hardness	**202**	mg/L	50.0	1.5	10	03/14/08 08:30	03/14/08 16:55		
Vanadium	**0.74J**	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 18:02	7440-62-2	
Zinc	**5.4J**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 18:02	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**82.1**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**82.1**	mg/L	10.0	3.2	1		03/17/08 14:13		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/13/08 15:34	14797-55-8	
Nitrite as N	**0.42**	mg/L	0.10	0.036	1		03/13/08 19:49	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		03/13/08 15:34	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/13/08 15:34	16984-48-8	
Sulfate	**154**	mg/L	40.0	5.1	10		03/14/08 11:42	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: DUP-001 **Lab ID: 401494002** Collected: 03/12/08 00:00 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.012J**	mg/L	0.020	0.0060	1		03/14/08 14:05	57-12-5	B
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.64J**	mg/L	1.0	0.50	1		03/27/08 12:48	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: MW-12 **Lab ID: 401494003** Collected: 03/12/08 12:34 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	ND	ng/L	0.50	0.16	1	03/17/08 09:00	03/18/08 11:10	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**16.3J**	ug/L	50.0	4.4	1	03/14/08 08:30	03/19/08 16:32	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 17:43	7440-36-0	
Arsenic	**8.8**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 17:43	7440-38-2	
Barium	**29.2**	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 17:43	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 17:43	7440-41-7	
Boron	**38.9**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 16:32	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 17:43	7440-43-9	
Calcium	**34500**	ug/L	5000	100	10	03/14/08 08:30	03/14/08 16:25	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 17:43	7440-47-3	
Cobalt	**0.22J**	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 17:43	7440-48-4	
Copper	**2.9**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 17:43	7440-50-8	
Iron	**10100**	ug/L	50.0	2.9	1	03/14/08 08:30	03/14/08 17:43	7439-89-6	
Lead	**0.12J**	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 17:43	7439-92-1	
Lithium	**1.2**	ug/L	1.0	0.085	1	03/14/08 08:30	03/14/08 17:43	7439-93-2	
Magnesium	**13000**	ug/L	5000	526	10	03/14/08 08:30	03/14/08 16:25	7439-95-4	
Manganese	**973**	ug/L	1.0	0.080	1	03/14/08 08:30	03/14/08 17:43	7439-96-5	
Molybdenum	**0.42J**	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 17:43	7439-98-7	
Nickel	**0.17J**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 17:43	7440-02-0	
Potassium	**1640**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 17:43	7440-09-7	
Selenium	**0.25J**	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 16:32	7782-49-2	
Silver	**0.12J**	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 18:03	7440-22-4	B
Sodium	**3900**	ug/L	500	46.0	1	03/14/08 08:30	03/19/08 16:32	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 17:43	7440-28-0	
Total Hardness	**140**	mg/L	50.0	1.5	10	03/14/08 08:30	03/14/08 16:25		
Vanadium	**0.65J**	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 17:43	7440-62-2	
Zinc	**5.4J**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 17:43	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**142**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**142**	mg/L	10.0	3.2	1		03/17/08 14:13		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.23J**	mg/L	0.40	0.085	1		03/13/08 15:48	14797-55-8	
Nitrite as N	**0.48**	mg/L	0.10	0.036	1		03/13/08 20:03	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		03/13/08 15:48	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		03/13/08 15:48	16984-48-8	
Sulfate	**10**	mg/L	4.0	0.51	1		03/13/08 15:48	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: MW-12 **Lab ID: 401494003** Collected: 03/12/08 12:34 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.013J**	mg/L	0.020	0.0060	1		03/14/08 14:09	57-12-5	B
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.61J**	mg/L	1.0	0.50	1		03/27/08 12:49	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: KMW-7 **Lab ID: 401494004** Collected: 03/12/08 14:26 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.243J**	ng/L	0.50	0.16	1	03/17/08 09:00	03/18/08 11:15	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**23.6J**	ug/L	50.0	4.4	1	03/14/08 08:30	03/19/08 17:08	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 18:14	7440-36-0	
Arsenic	**4.1**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 18:14	7440-38-2	
Barium	**49.0**	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 18:14	7440-39-3	
Beryllium	**0.19J**	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 18:14	7440-41-7	
Boron	**80.7**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 17:08	7440-42-8	
Cadmium	**0.10J**	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 18:14	7440-43-9	
Calcium	**111000**	ug/L	5000	100	10	03/14/08 08:30	03/14/08 17:07	7440-70-2	
Chromium	**1.4**	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 18:14	7440-47-3	
Cobalt	**128**	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 18:14	7440-48-4	
Copper	**0.85J**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 18:14	7440-50-8	
Iron	**177000**	ug/L	500	29.2	10	03/14/08 08:30	03/14/08 17:07	7439-89-6	
Lead	**0.12J**	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 18:14	7439-92-1	
Lithium	**3.1**	ug/L	1.0	0.085	1	03/14/08 08:30	03/14/08 18:14	7439-93-2	
Magnesium	**57500**	ug/L	5000	526	10	03/14/08 08:30	03/14/08 17:07	7439-95-4	
Manganese	**19900**	ug/L	10.0	0.80	10	03/14/08 08:30	03/14/08 17:07	7439-96-5	
Molybdenum	**0.46J**	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 18:14	7439-98-7	
Nickel	**92.0**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 18:14	7440-02-0	
Potassium	**6330**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 18:14	7440-09-7	
Selenium	**1.2**	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 17:08	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 18:51	7440-22-4	
Sodium	**5770**	ug/L	500	46.0	1	03/14/08 08:30	03/19/08 17:08	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 18:14	7440-28-0	
Total Hardness	**514**	mg/L	50.0	1.5	10	03/14/08 08:30	03/14/08 17:07		
Vanadium	**4.4**	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 18:14	7440-62-2	
Zinc	**12.0**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 18:14	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**66.6**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**66.6**	mg/L	10.0	3.2	1		03/17/08 14:13		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**9.6**	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/13/08 16:02	14797-55-8	
Nitrite as N	**1.2**	mg/L	0.10	0.036	1		03/13/08 20:17	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.7J**	mg/L	5.0	1.1	1		03/13/08 16:02	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/13/08 16:02	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: KMW-7 **Lab ID: 401494004** Collected: 03/12/08 14:26 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**846**	mg/L	400	51.0	100		03/14/08 11:56	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.012J**	mg/L	0.020	0.0060	1		03/14/08 14:10	57-12-5	B
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.7**	mg/L	1.0	0.50	1		03/27/08 12:52	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: KMW-9 **Lab ID: 401494005** Collected: 03/12/08 15:41 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.409J**	ng/L	0.50	0.16	1	03/17/08 09:00	03/18/08 11:27	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**20.0J**	ug/L	50.0	4.4	1	03/14/08 08:30	03/19/08 17:15	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 18:20	7440-36-0	
Arsenic	**3.8**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 18:20	7440-38-2	
Barium	**66.4**	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 18:20	7440-39-3	
Beryllium	**0.080J**	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 18:20	7440-41-7	
Boron	**59.3**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 17:15	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 18:20	7440-43-9	
Calcium	**57300**	ug/L	5000	100	10	03/14/08 08:30	03/14/08 17:13	7440-70-2	
Chromium	**1.0**	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 18:20	7440-47-3	
Cobalt	**7.8**	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 18:20	7440-48-4	
Copper	**0.90J**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 18:20	7440-50-8	
Iron	**7530**	ug/L	50.0	2.9	1	03/14/08 08:30	03/14/08 18:20	7439-89-6	
Lead	**0.17J**	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 18:20	7439-92-1	
Lithium	**0.28J**	ug/L	1.0	0.085	1	03/14/08 08:30	03/14/08 18:20	7439-93-2	
Magnesium	**24200**	ug/L	5000	526	10	03/14/08 08:30	03/14/08 17:13	7439-95-4	
Manganese	**10300**	ug/L	10.0	0.80	10	03/14/08 08:30	03/14/08 17:13	7439-96-5	
Molybdenum	**0.63J**	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 18:20	7439-98-7	
Nickel	**13.1**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 18:20	7440-02-0	
Potassium	**3140**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 18:20	7440-09-7	
Selenium	**0.24J**	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 17:15	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 18:58	7440-22-4	
Sodium	**4020**	ug/L	500	46.0	1	03/14/08 08:30	03/19/08 17:15	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 18:20	7440-28-0	
Total Hardness	**243**	mg/L	50.0	1.5	10	03/14/08 08:30	03/14/08 17:13		
Vanadium	**2.1**	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 18:20	7440-62-2	
Zinc	**16.7**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 18:20	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**77.7**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**77.7**	mg/L	10.0	3.2	1		03/17/08 14:13		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**3.8J**	mg/L	5.0	2.3	1		03/14/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/13/08 16:16	14797-55-8	
Nitrite as N	**0.44**	mg/L	0.10	0.036	1		03/13/08 20:31	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		03/13/08 16:16	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		03/13/08 16:16	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: KMW-9 **Lab ID: 401494005** Collected: 03/12/08 15:41 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**198**	mg/L	40.0	5.1	10		03/14/08 12:10	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0088J**	mg/L	0.020	0.0060	1		03/14/08 14:10	57-12-5	B
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.56J**	mg/L	1.0	0.50	1		03/27/08 12:53	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: KMW-3 **Lab ID: 401494006** Collected: 03/12/08 12:30 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.640**	ng/L	0.50	0.16	1	03/17/08 09:00	03/18/08 11:40	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**38.2J**	ug/L	50.0	4.4	1	03/14/08 08:30	03/19/08 17:39	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 18:38	7440-36-0	
Arsenic	**15.4**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 18:38	7440-38-2	
Barium	**78.8**	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 18:38	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 18:38	7440-41-7	
Boron	**42.5**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 17:39	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 18:38	7440-43-9	
Calcium	**44300**	ug/L	5000	100	10	03/14/08 08:30	03/19/08 17:33	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 18:38	7440-47-3	
Cobalt	**3.7**	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 18:38	7440-48-4	
Copper	**0.46J**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 18:38	7440-50-8	
Iron	**29700**	ug/L	50.0	2.9	1	03/14/08 08:30	03/14/08 18:38	7439-89-6	
Lead	**0.11J**	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 18:38	7439-92-1	
Lithium	**1.5**	ug/L	1.0	0.085	1	03/14/08 08:30	03/14/08 18:38	7439-93-2	
Magnesium	**20400**	ug/L	5000	526	10	03/14/08 08:30	03/19/08 17:33	7439-95-4	
Manganese	**5280**	ug/L	10.0	0.80	10	03/14/08 08:30	03/19/08 17:33	7439-96-5	
Molybdenum	**0.85J**	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 18:38	7439-98-7	
Nickel	**0.63J**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 18:38	7440-02-0	
Potassium	**2490**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 18:38	7440-09-7	
Selenium	**0.28J**	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 17:39	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 19:04	7440-22-4	
Sodium	**3460**	ug/L	500	46.0	1	03/14/08 08:30	03/19/08 17:39	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 18:38	7440-28-0	
Total Hardness	**195**	mg/L	50.0	1.5	10	03/14/08 08:30	03/19/08 17:33		
Vanadium	**0.58J**	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 18:38	7440-62-2	
Zinc	**8.6J**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 18:38	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**84.4**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**84.4**	mg/L	10.0	3.2	1		03/17/08 14:13		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/13/08 16:59	14797-55-8	
Nitrite as N	**0.44**	mg/L	0.10	0.036	1		03/13/08 20:45	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		03/13/08 16:59	16887-00-6	
Fluoride	**0.28J**	mg/L	0.50	0.059	1		03/13/08 16:59	16984-48-8	
Sulfate	**155**	mg/L	40.0	5.1	10		03/14/08 12:24	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: KMW-3 **Lab ID: 401494006** Collected: 03/12/08 12:30 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0093J**	mg/L	0.020	0.0060	1		03/14/08 14:11	57-12-5	B
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.70J**	mg/L	1.0	0.50	1		03/27/08 12:54	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: MW-11 **Lab ID: 401494007** Collected: 03/12/08 14:30 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**27.1**	ng/L	5.0	1.6	10	03/17/08 09:00	03/18/08 11:45	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**1280**	ug/L	50.0	4.4	1	03/14/08 08:30	03/19/08 17:51	7429-90-5	
Antimony	**0.15J**	ug/L	1.0	0.10	1	03/14/08 08:30	03/14/08 19:08	7440-36-0	
Arsenic	**11.1**	ug/L	1.0	0.093	1	03/14/08 08:30	03/14/08 19:08	7440-38-2	
Barium	**374**	ug/L	1.0	0.072	1	03/14/08 08:30	03/14/08 19:08	7440-39-3	
Beryllium	**3.3**	ug/L	1.0	0.070	1	03/14/08 08:30	03/14/08 19:08	7440-41-7	
Boron	**14.8**	ug/L	10.0	1.1	1	03/14/08 08:30	03/19/08 17:51	7440-42-8	B
Cadmium	ND	ug/L	1.0	0.098	1	03/14/08 08:30	03/14/08 19:08	7440-43-9	
Calcium	**202000**	ug/L	5000	100	10	03/14/08 08:30	03/19/08 17:45	7440-70-2	
Chromium	**9.6**	ug/L	1.0	0.43	1	03/14/08 08:30	03/14/08 19:08	7440-47-3	
Cobalt	**11.1**	ug/L	1.0	0.059	1	03/14/08 08:30	03/14/08 19:08	7440-48-4	
Copper	**2110**	ug/L	1.0	0.12	1	03/14/08 08:30	03/14/08 19:08	7440-50-8	
Iron	**274000**	ug/L	500	29.2	10	03/14/08 08:30	03/14/08 17:37	7439-89-6	
Lead	**58.5**	ug/L	1.0	0.044	1	03/14/08 08:30	03/14/08 19:08	7439-92-1	
Lithium	**1.5**	ug/L	1.0	0.085	1	03/14/08 08:30	03/14/08 19:08	7439-93-2	
Magnesium	**89800**	ug/L	5000	526	10	03/14/08 08:30	03/19/08 17:45	7439-95-4	
Manganese	**18800**	ug/L	10.0	0.80	10	03/14/08 08:30	03/14/08 17:37	7439-96-5	
Molybdenum	**40.1**	ug/L	10.0	0.11	1	03/14/08 08:30	03/14/08 19:08	7439-98-7	
Nickel	**4.8**	ug/L	1.0	0.074	1	03/14/08 08:30	03/14/08 19:08	7440-02-0	
Potassium	**10500**	ug/L	500	6.2	1	03/14/08 08:30	03/14/08 19:08	7440-09-7	
Selenium	**2.0**	ug/L	1.0	0.15	1	03/14/08 08:30	03/19/08 17:51	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/14/08 08:30	03/26/08 19:10	7440-22-4	
Sodium	**43100**	ug/L	500	46.0	1	03/14/08 08:30	03/19/08 17:51	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/14/08 08:30	03/14/08 19:08	7440-28-0	
Total Hardness	**875**	mg/L	50.0	1.5	10	03/14/08 08:30	03/19/08 17:45		
Vanadium	**17.9**	ug/L	1.0	0.41	1	03/14/08 08:30	03/14/08 19:08	7440-62-2	
Zinc	**441**	ug/L	10.0	2.1	1	03/14/08 08:30	03/14/08 19:08	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**424**	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/17/08 14:13		
Alkalinity, Total as CaCO3	**424**	mg/L	10.0	3.2	1		03/17/08 14:13		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/14/08 10:00		M0,R1
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/13/08 17:13	14797-55-8	
Nitrite as N	ND	mg/L	1.0	0.36	10		03/17/08 13:21	14797-65-0	D3,H5
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**35.3**	mg/L	5.0	1.1	1		03/13/08 17:13	16887-00-6	M0
Fluoride	**0.35J**	mg/L	0.50	0.059	1		03/13/08 17:13	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Sample: MW-11 **Lab ID: 401494007** Collected: 03/12/08 14:30 Received: 03/13/08 09:18 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**912**	mg/L	400	51.0	100		03/14/08 12:39	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.013J**	mg/L	0.020	0.0060	1		03/14/08 14:12	57-12-5	B,M0
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**17.0**	mg/L	1.0	0.50	1		03/27/08 12:54	7764-41-7	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: WETA/1086 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

METHOD BLANK: 4872
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	ND	0.40	
Nitrite as N	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 4873

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	102	90-110	
Nitrite as N	mg/L	.8	0.86	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4874 4875

Parameter	Units	401494007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	ND	1.6	1.6	1.6	1.7	101	104	90-110	3	20	
Nitrite as N	mg/L	ND	8	8	8.4	8.6	105	108	90-110	2	20	D3

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: WETA/1087 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

METHOD BLANK: 4876
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 4877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	
Fluoride	mg/L	2	2.1	103	90-110	
Sulfate	mg/L	16	16.2	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4878 4879

Parameter	Units	401494007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	35.3	20	20	57.2	57.5	109	111	90-110	.4	20	M0
Fluoride	mg/L	0.35J	2	2	2.2	2.3	92	96	90-110	4	20	
Sulfate	mg/L	912	1600	1600	2470	2470	98	97	90-110	.2	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: MPRP/1048 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006

METHOD BLANK: 4947
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	50.0	
Antimony	ug/L	ND	1.0	
Arsenic	ug/L	0.15J	1.0	
Barium	ug/L	ND	1.0	
Beryllium	ug/L	ND	1.0	
Boron	ug/L	1.4J	10.0	
Cadmium	ug/L	ND	1.0	
Calcium	ug/L	31.8J	500	
Chromium	ug/L	ND	1.0	
Cobalt	ug/L	ND	1.0	
Copper	ug/L	ND	1.0	
Iron	ug/L	ND	50.0	
Lead	ug/L	ND	1.0	
Lithium	ug/L	ND	1.0	
Magnesium	ug/L	ND	500	
Manganese	ug/L	ND	1.0	
Molybdenum	ug/L	ND	10.0	
Nickel	ug/L	ND	1.0	
Potassium	ug/L	7.6J	500	
Selenium	ug/L	ND	1.0	
Silver	ug/L	0.14J	0.50	
Sodium	ug/L	ND	500	
Thallium	ug/L	ND	1.0	
Vanadium	ug/L	ND	1.0	
Zinc	ug/L	4.3J	10.0	

LABORATORY CONTROL SAMPLE: 4948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	9630	96	75-125	
Antimony	ug/L	200	194	97	75-125	
Arsenic	ug/L	200	192	96	75-125	
Barium	ug/L	200	179	90	75-125	
Beryllium	ug/L	200	203	102	75-125	
Boron	ug/L	200	196	98	75-125	
Cadmium	ug/L	200	188	94	75-125	
Calcium	ug/L	10000	9510	95	75-125	
Chromium	ug/L	200	190	95	75-125	
Cobalt	ug/L	200	187	94	75-125	
Copper	ug/L	200	190	95	75-125	
Iron	ug/L	10000	9700	97	75-125	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

LABORATORY CONTROL SAMPLE: 4948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	200	188	94	75-125	
Lithium	ug/L	200	202	101	75-125	
Magnesium	ug/L	10000	9740	97	75-125	
Manganese	ug/L	200	191	95	75-125	
Molybdenum	ug/L	200	188	94	75-125	
Nickel	ug/L	200	189	95	75-125	
Potassium	ug/L	10000	9670	97	75-125	
Selenium	ug/L	200	192	96	75-125	
Silver	ug/L	100	103	103	75-125	
Sodium	ug/L	10000	9790	98	75-125	
Thallium	ug/L	200	185	92	75-125	
Vanadium	ug/L	200	190	95	75-125	
Zinc	ug/L	200	189	95	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4949 4950

Parameter	Units	401494003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	16.3J	10000	10000	9730	9580	97	96	75-125	2	20	
Antimony	ug/L	ND	200	200	204	199	102	99	75-125	2	20	
Arsenic	ug/L	8.8	200	200	205	203	98	97	75-125	.9	20	
Barium	ug/L	29.2	200	200	220	215	95	93	75-125	2	20	
Beryllium	ug/L	ND	200	200	188	184	94	92	75-125	3	20	
Boron	ug/L	38.9	200	200	234	233	98	97	75-125	.5	20	
Cadmium	ug/L	ND	200	200	192	188	96	94	75-125	2	20	
Calcium	ug/L	34500	10000	10000	43500	46000	90	115	75-125	6	20	
Chromium	ug/L	ND	200	200	196	189	98	95	75-125	3	20	
Cobalt	ug/L	0.22J	200	200	190	184	95	92	75-125	3	20	
Copper	ug/L	2.9	200	200	196	189	97	93	75-125	4	20	
Iron	ug/L	10100	10000	10000	20700	20000	106	99	75-125	3	20	
Lead	ug/L	0.12J	200	200	195	191	98	95	75-125	2	20	
Lithium	ug/L	1.2	200	200	192	189	95	94	75-125	1	20	
Magnesium	ug/L	13000	10000	10000	22200	23500	92	105	75-125	5	20	
Manganese	ug/L	973	200	200	1200	1150	112	88	75-125	4	20	
Molybdenum	ug/L	0.42J	200	200	201	195	100	97	75-125	3	20	
Nickel	ug/L	0.17J	200	200	189	184	94	92	75-125	2	20	
Potassium	ug/L	1640	10000	10000	11300	11000	97	94	75-125	3	20	
Selenium	ug/L	0.25J	200	200	190	189	95	94	75-125	.8	20	
Silver	ug/L	0.12J	100	100	97.1	98.1	97	98	75-125	1	20	
Sodium	ug/L	3900	10000	10000	13800	13500	99	96	75-125	2	20	
Thallium	ug/L	ND	200	200	192	188	96	94	75-125	2	20	
Vanadium	ug/L	0.65J	200	200	195	189	97	94	75-125	3	20	
Zinc	ug/L	5.4J	200	200	189	187	92	91	75-125	1	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: WETA/1093 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

METHOD BLANK: 4977
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	0.0072J	0.020	

LABORATORY CONTROL SAMPLE: 4978

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4979 4980

Parameter	Units	401494007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.013J	.1	.1	0.13	0.13	116	120	90-110	3	20	M0

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: WET/1099 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 401494001, 401494004, 401494005, 401494007

METHOD BLANK: 5832
Associated Lab Samples: 401494001, 401494004, 401494005, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 5833

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	40	40.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5834 5835

Parameter	Units	401494007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	40	40	ND	4.0J	1	8	80-120		20	M0,R1

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: WET/1100 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

METHOD BLANK: 5845
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	10.0	
Alkalinity, Total as CaCO3	mg/L	ND	10.0	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 5846

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	497	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5847 5848

Parameter	Units	401494002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	82.1	500	500	566	562	97	96	80-120	.8	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: CVFS/1019 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

METHOD BLANK: 5956
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.393J	0.50	

METHOD BLANK: 5957
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.240J	0.50	

METHOD BLANK: 5958
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.468J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 5959 5960

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	4.77	4.47	95	89	79-121	6	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6141 6142

Parameter	Units	401413001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	0.676	3	3	3.71	3.44	101	92	75-125	8	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6143 6144

Parameter	Units	9215137007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.88	10	10	12.6	14.2	97	113	75-125	12	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 6145 6146

Parameter	Units	401503001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.09	5	5	5.92	5.58	97	90	75-125	6	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

QC Batch: WETA/1179 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

METHOD BLANK: 9393
Associated Lab Samples: 401494001, 401494002, 401494003, 401494004, 401494005, 401494006, 401494007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 9394

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.1	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9395 9396

Parameter	Units	401526001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.8	10	10	11.8	11.3	101	96	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9397 9398

Parameter	Units	401546006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	ND	10	10	10.4	10.3	102	101	90-110	.8	20	

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QUALIFIERS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H5	Reanalysis conducted in excess of EPA method holding time. Results confirm original analysis performed in hold time.
M0	Matrix spike recovery was outside laboratory control limits.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401494001	FBK-001	EPA 300.0	WETA/1086		
401494002	DUP-001	EPA 300.0	WETA/1086		
401494003	MW-12	EPA 300.0	WETA/1086		
401494004	KMW-7	EPA 300.0	WETA/1086		
401494005	KMW-9	EPA 300.0	WETA/1086		
401494006	KMW-3	EPA 300.0	WETA/1086		
401494007	MW-11	EPA 300.0	WETA/1086		
401494001	FBK-001	EPA 300.0	WETA/1087		
401494002	DUP-001	EPA 300.0	WETA/1087		
401494003	MW-12	EPA 300.0	WETA/1087		
401494004	KMW-7	EPA 300.0	WETA/1087		
401494005	KMW-9	EPA 300.0	WETA/1087		
401494006	KMW-3	EPA 300.0	WETA/1087		
401494007	MW-11	EPA 300.0	WETA/1087		
401494001	FBK-001	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494002	DUP-001	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494003	MW-12	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494004	KMW-7	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494005	KMW-9	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494006	KMW-3	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494007	MW-11	EPA 3020	MPRP/1048	EPA 6020	ICPM/1021
401494001	FBK-001	EPA 335.4	WETA/1093		
401494002	DUP-001	EPA 335.4	WETA/1093		
401494003	MW-12	EPA 335.4	WETA/1093		
401494004	KMW-7	EPA 335.4	WETA/1093		
401494005	KMW-9	EPA 335.4	WETA/1093		
401494006	KMW-3	EPA 335.4	WETA/1093		
401494007	MW-11	EPA 335.4	WETA/1093		
401494001	FBK-001	SM 4500-S F (2000)	WET/1099		
401494004	KMW-7	SM 4500-S F (2000)	WET/1099		
401494005	KMW-9	SM 4500-S F (2000)	WET/1099		
401494007	MW-11	SM 4500-S F (2000)	WET/1099		
401494001	FBK-001	SM 2320B	WET/1100		
401494002	DUP-001	SM 2320B	WET/1100		
401494003	MW-12	SM 2320B	WET/1100		
401494004	KMW-7	SM 2320B	WET/1100		
401494005	KMW-9	SM 2320B	WET/1100		
401494006	KMW-3	SM 2320B	WET/1100		
401494007	MW-11	SM 2320B	WET/1100		
401494001	FBK-001	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020
401494002	DUP-001	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020
401494003	MW-12	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020
401494004	KMW-7	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020
401494005	KMW-9	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020
401494006	KMW-3	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020
401494007	MW-11	EPA 1631E	CVFS/1019	EPA 1631E	CVFS/1020

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401494

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401494001	**FBK-001**	EPA 350.1	WETA/1179		
401494002	**DUP-001**	EPA 350.1	WETA/1179		
401494003	**MW-12**	EPA 350.1	WETA/1179		
401494004	**KMW-7**	EPA 350.1	WETA/1179		
401494005	**KMW-9**	EPA 350.1	WETA/1179		
401494006	**KMW-3**	EPA 350.1	WETA/1179		
401494007	**MW-11**	EPA 350.1	WETA/1179		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: N. Jackson Project # 401494

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

Optional
Proj. Due Date:
Proj. Name:

Tracking #: _____

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

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

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

Cooler Temperature 2° **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: CS 3/13/08
CS 3/13/08

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. 48 hrs
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☐Yes ☑No ☐N/A	8. SP 003 lists 1-500mL which is Not present
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed _____ Lot # of added preservative _____
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: AA **Date:** 3/13/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

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CHAIN OF CUSTODY

COC No. 20080312

(Please Print Clearly)	
Company Name:	NORTH JACKSON CO
Branch/Location:	MARQUETTE, MI
Project Contact:	SHARON FELIX
Phone:	
Project Number:	
Project Name:	HUMBOLDT MILL/GW
Project State:	MI
Sampled By (Print):	Richard Eagle, Chris Conway
Sampled By (Sign):	Richard Eagle
PO #:	
Regulatory Program:	

Quote #:	
Mail To Contact:	JANIS KESY
Mail To Company:	FOTH I & E
Mail To Address:	GREEN BAY, WI
Invoice To Contact:	SAME AS ABOVE
Invoice To Company:	SAME AS ABOVE
Invoice To Address:	SAME AS ABOVE
Invoice To Phone:	SAME AS ABOVE

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other ZnAc NaOH

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☑ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO)	PRESERVATION (CODE)*	Analyses Requested: Alk, Alk2, Cl, F, SO4, Nitrite, Nitrate, Hg	Ammonia	Metals (Lithium)	Cyanide	Sulfide	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
001	FBK-001	3/12/08	0830	W	N	A	3	1	2	1	1	1-500mL A, 2-500mL B,J,D, 3-250mL C,D,G, 2-250mL A		
002	DUP-001	↓	—	GW	N	C	3	1	2	1	0	1-500mL A, 1-500mL D, 3-250mL C,D,G, 2-250mL A		
003	MW-12	↓	1234	↓	N	D	3	1	2	1	1	↓		
004	KMW-7	↓	1426	↓	N	G	3	1	2	1	1	1-500mL A, 2-500mL J,D, 3-250mL C,D,G, 2-250mL A		
005	KMW-9	↓	1541	↓	N	J	3	1	2	1	1	↓		
006	KMW-3	↓	1230	↓	N		3	1	2	1	0	1-500mL A, 1-500mL D, 3-250mL C,D,G, 2-250mL A		
007	MW-11	↓	1430	↓	N		3	1	2	1	3	1-500mL A, 3-500mL J, 1-500mL D, 3-250mL C,D,G, 2-25		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Richard Eagle	3/12/08 1815	FedEx	
FedEx	3/13/08 0945	[illegible]	3/13/08 0945

PACE Project No. 401494

Receipt Temp = 2 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Batch No. 401753

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

April 14, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on March 20, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401753001	**DUP-005**	Water	03/19/08 00:00	03/20/08 08:33
401753002	**FBK-005**	Water	03/19/08 08:40	03/20/08 08:33
401753003	**KMW-2**	Water	03/19/08 11:34	03/20/08 08:33
401753004	**MW-601**	Water	03/19/08 09:10	03/20/08 08:33
401753005	**PW-2**	Water	03/19/08 15:00	03/20/08 08:33
401753006	**MW-606**	Water	03/19/08 11:52	03/20/08 08:33
401753007	**KMW-4**	Water	03/19/08 15:45	03/20/08 08:33
401753008	**KMW-10**	Water	03/19/08 14:00	03/20/08 08:33
401753009	**MW-603**	Water	03/19/08 13:00	03/20/08 08:33
401753010	**MW-102**	Water	03/19/08 09:10	03/20/08 08:33

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401753001	DUP-005	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401753002	FBK-005	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401753003	KMW-2	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401753004	MW-601	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
401753005	PW-2	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401753006	MW-606	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
401753007	**KMW-4**	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
401753008	**KMW-10**	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401753009	**MW-603**	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401753010	**MW-102**	EPA 1631E	TLH	1	PASI-G
		EPA 6020	MES	26	PASI-G

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
10 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
10 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Internal standard limits of 30-140% used. All QC within limits.
- QC Batch: ICPM / 1034

Analyte Comments:

QC Batch: MPRP/1077

1j: Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.
- KMW-2 (Lab ID: 401753003)
  - Calcium

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

Analyte Comments:

QC Batch: MPRP/1077

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-102 (Lab ID: 401753010)
  - Thallium
  - Molybdenum
- MW-601 (Lab ID: 401753004)
  - Silver
  - Cadmium
  - Thallium
- PW-2 (Lab ID: 401753005)
  - Silver
  - Antimony
  - Thallium
  - Beryllium

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1132

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401698002

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 7739)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
9 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1209

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401753008,401798004

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 10998)
  - Cyanide
- MSD (Lab ID: 10999)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
9 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1220

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401735001,401753007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 11681)
  - Nitrogen, Ammonia
- MSD (Lab ID: 11682)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: DUP-005 **Lab ID: 401753001** Collected: 03/19/08 00:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.577**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 11:34	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**136**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 21:18	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/01/08 23:18	7440-36-0	
Arsenic	**3.8**	ug/L	1.0	0.093	1	03/24/08 09:45	04/01/08 23:18	7440-38-2	
Barium	**17.4**	ug/L	1.0	0.072	1	03/24/08 09:45	04/01/08 23:18	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 20:24	7440-41-7	
Boron	**46.7**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 20:24	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/01/08 23:18	7440-43-9	
Calcium	**18200**	ug/L	5000	100	10	03/24/08 09:45	04/01/08 21:12	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/24/08 09:45	04/01/08 23:18	7440-47-3	
Cobalt	**3.1**	ug/L	1.0	0.059	1	03/24/08 09:45	04/01/08 23:18	7440-48-4	
Copper	**2.1**	ug/L	1.0	0.12	1	03/24/08 09:45	04/01/08 23:18	7440-50-8	
Iron	**5850**	ug/L	50.0	2.9	1	03/24/08 09:45	04/01/08 23:18	7439-89-6	
Lead	**0.11J**	ug/L	1.0	0.044	1	03/24/08 09:45	04/01/08 23:18	7439-92-1	
Lithium	**1.7**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 20:24	7439-93-2	
Magnesium	**9970**	ug/L	5000	526	10	03/24/08 09:45	04/01/08 21:12	7439-95-4	
Manganese	**1550**	ug/L	1.0	0.080	1	03/24/08 09:45	04/01/08 23:18	7439-96-5	
Molybdenum	**2.0J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/01/08 23:18	7439-98-7	
Nickel	**1.9**	ug/L	1.0	0.074	1	03/24/08 09:45	04/01/08 23:18	7440-02-0	
Potassium	**2860**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 16:59	7440-09-7	
Selenium	**0.54J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 16:59	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/01/08 23:18	7440-22-4	
Sodium	**1220**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 21:18	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/01/08 23:18	7440-28-0	
Total Hardness	**86.5**	mg/L	50.0	1.5	10	03/24/08 09:45	04/01/08 21:12		
Vanadium	**0.70J**	ug/L	1.0	0.41	1	03/24/08 09:45	04/01/08 23:18	7440-62-2	
Zinc	**4.4J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/01/08 23:18	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**77.7**	mg/L	10.0	3.2	1		03/27/08 13:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:14		
Alkalinity, Total as CaCO3	**77.7**	mg/L	10.0	3.2	1		03/27/08 13:14		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		03/20/08 23:48	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 16:14	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		03/20/08 23:48	16887-00-6	
Fluoride	**0.45J**	mg/L	0.50	0.059	1		03/20/08 23:48	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: DUP-005 **Lab ID: 401753001** Collected: 03/19/08 00:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**17.8**	mg/L	4.0	0.51	1		03/21/08 15:25	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:23	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: FBK-005 **Lab ID: 401753002** Collected: 03/19/08 08:40 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.168J**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 11:02	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	50.0	4.4	1	03/24/08 09:45	04/01/08 20:54	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/01/08 20:54	7440-36-0	
Arsenic	ND	ug/L	1.0	0.093	1	03/24/08 09:45	04/01/08 20:54	7440-38-2	
Barium	**0.11J**	ug/L	1.0	0.072	1	03/24/08 09:45	04/01/08 20:54	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/01/08 20:54	7440-41-7	
Boron	**2.1J**	ug/L	10.0	1.1	1	03/24/08 09:45	04/01/08 20:54	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/01/08 20:54	7440-43-9	
Calcium	**145J**	ug/L	500	10.0	1	03/24/08 09:45	04/01/08 20:54	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/24/08 09:45	04/01/08 20:54	7440-47-3	
Cobalt	ND	ug/L	1.0	0.059	1	03/24/08 09:45	04/01/08 20:54	7440-48-4	
Copper	**0.41J**	ug/L	1.0	0.12	1	03/24/08 09:45	04/01/08 20:54	7440-50-8	
Iron	**2.9J**	ug/L	50.0	2.9	1	03/24/08 09:45	04/01/08 20:54	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/24/08 09:45	04/01/08 20:54	7439-92-1	
Lithium	**0.14J**	ug/L	1.0	0.085	1	03/24/08 09:45	04/01/08 20:54	7439-93-2	
Magnesium	**66.1J**	ug/L	500	52.6	1	03/24/08 09:45	04/01/08 20:54	7439-95-4	
Manganese	**7.7**	ug/L	1.0	0.080	1	03/24/08 09:45	04/01/08 20:54	7439-96-5	
Molybdenum	ND	ug/L	10.0	0.11	1	03/24/08 09:45	04/01/08 20:54	7439-98-7	
Nickel	ND	ug/L	1.0	0.074	1	03/24/08 09:45	04/01/08 20:54	7440-02-0	
Potassium	**176J**	ug/L	500	6.2	1	03/24/08 09:45	04/01/08 20:54	7440-09-7	
Selenium	**0.37J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/01/08 20:54	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/01/08 20:54	7440-22-4	
Sodium	**1370**	ug/L	500	46.0	1	03/24/08 09:45	04/01/08 20:54	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/01/08 20:54	7440-28-0	
Total Hardness	**0.63J**	mg/L	5.0	0.15	1	03/24/08 09:45	04/01/08 20:54		
Vanadium	ND	ug/L	1.0	0.41	1	03/24/08 09:45	04/01/08 20:54	7440-62-2	
Zinc	**4.8J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/01/08 20:54	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**6.7J**	mg/L	10.0	3.2	1		03/27/08 13:15		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:15		
Alkalinity, Total as CaCO3	**6.7J**	mg/L	10.0	3.2	1		03/27/08 13:15		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 00:31	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 16:57	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		03/21/08 00:31	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/21/08 00:31	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: FBK-005 **Lab ID: 401753002** Collected: 03/19/08 08:40 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	ND	mg/L	4.0	0.51	1		03/21/08 16:02	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:23	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: KMW-2 **Lab ID: 401753003** Collected: 03/19/08 11:34 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**5.45**	ng/L	0.50	0.16	1	03/27/08 12:30	03/29/08 11:38	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**940**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 21:48	7429-90-5	
Antimony	**0.23J**	ug/L	1.0	0.10	1	03/24/08 09:45	04/01/08 23:36	7440-36-0	
Arsenic	**30.6**	ug/L	1.0	0.093	1	03/24/08 09:45	04/01/08 23:36	7440-38-2	
Barium	**247**	ug/L	1.0	0.072	1	03/24/08 09:45	04/01/08 23:36	7440-39-3	
Beryllium	**0.090J**	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 20:53	7440-41-7	
Boron	**42.0**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 20:53	7440-42-8	
Cadmium	**0.11J**	ug/L	1.0	0.098	1	03/24/08 09:45	04/01/08 23:36	7440-43-9	
Calcium	**73600**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:03	7440-70-2	1j
Chromium	**4.4**	ug/L	1.0	0.43	1	03/24/08 09:45	04/01/08 23:36	7440-47-3	
Cobalt	**4.5**	ug/L	1.0	0.059	1	03/24/08 09:45	04/01/08 23:36	7440-48-4	
Copper	**5.4**	ug/L	1.0	0.12	1	03/24/08 09:45	04/01/08 23:36	7440-50-8	
Iron	**33700**	ug/L	50.0	2.9	1	03/24/08 09:45	04/01/08 23:36	7439-89-6	
Lead	**0.96J**	ug/L	1.0	0.044	1	03/24/08 09:45	04/01/08 23:36	7439-92-1	
Lithium	**1.8**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 20:53	7439-93-2	
Magnesium	**24900**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:03	7439-95-4	
Manganese	**6240**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 21:30	7439-96-5	
Molybdenum	**3.7J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/01/08 23:36	7439-98-7	
Nickel	**8.2**	ug/L	1.0	0.074	1	03/24/08 09:45	04/01/08 23:36	7440-02-0	
Potassium	**3490**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 17:30	7440-09-7	
Selenium	**0.35J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 17:30	7782-49-2	
Silver	**0.25J**	ug/L	0.50	0.11	1	03/24/08 09:45	04/01/08 23:36	7440-22-4	
Sodium	**4430**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 21:48	7440-23-5	
Thallium	**0.050J**	ug/L	1.0	0.030	1	03/24/08 09:45	04/01/08 23:36	7440-28-0	
Total Hardness	**286**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:03		
Vanadium	**4.4**	ug/L	1.0	0.41	1	03/24/08 09:45	04/01/08 23:36	7440-62-2	
Zinc	**11.8**	ug/L	10.0	2.1	1	03/24/08 09:45	04/01/08 23:36	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**118**	mg/L	10.0	3.2	1		03/27/08 13:15		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:15		
Alkalinity, Total as CaCO3	**118**	mg/L	10.0	3.2	1		03/27/08 13:15		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**2.4J**	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 00:45	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 17:11	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.3J**	mg/L	5.0	1.1	1		03/21/08 00:45	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		03/21/08 00:45	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: KMW-2 **Lab ID: 401753003** Collected: 03/19/08 11:34 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**168**	mg/L	40.0	5.1	10		03/21/08 16:14	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:19	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:24	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-601 **Lab ID: 401753004** Collected: 03/19/08 09:10 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**21.0**	ng/L	1.0	0.33	2	03/27/08 12:30	03/29/08 11:42	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**22300**	ug/L	500	44.3	10	03/24/08 09:45	04/04/08 16:47	7429-90-5	
Antimony	**1.1J**	ug/L	10.0	1.0	10	03/24/08 09:45	04/01/08 21:54	7440-36-0	
Arsenic	**90.9**	ug/L	10.0	0.93	10	03/24/08 09:45	04/01/08 21:54	7440-38-2	
Barium	**405**	ug/L	10.0	0.72	10	03/24/08 09:45	04/01/08 21:54	7440-39-3	
Beryllium	**1.5J**	ug/L	10.0	0.70	10	03/24/08 09:45	04/08/08 22:00	7440-41-7	
Boron	**523**	ug/L	100	11.1	10	03/24/08 09:45	04/08/08 22:00	7440-42-8	
Cadmium	ND	ug/L	10.0	0.98	10	03/24/08 09:45	04/01/08 21:54	7440-43-9	D3
Calcium	**88200**	ug/L	5000	100	10	03/24/08 09:45	04/07/08 22:42	7440-70-2	
Chromium	**57.7**	ug/L	10.0	4.3	10	03/24/08 09:45	04/01/08 21:54	7440-47-3	
Cobalt	**29.0**	ug/L	10.0	0.59	10	03/24/08 09:45	04/01/08 21:54	7440-48-4	
Copper	**96.1**	ug/L	10.0	1.2	10	03/24/08 09:45	04/01/08 21:54	7440-50-8	
Iron	**126000**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 21:54	7439-89-6	
Lead	**28.9**	ug/L	10.0	0.44	10	03/24/08 09:45	04/01/08 21:54	7439-92-1	
Lithium	**21.1**	ug/L	10.0	0.85	10	03/24/08 09:45	04/08/08 22:00	7439-93-2	
Magnesium	**21900**	ug/L	5000	526	10	03/24/08 09:45	04/07/08 22:42	7439-95-4	
Manganese	**8560**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 21:54	7439-96-5	
Molybdenum	**11.5J**	ug/L	100	1.1	10	03/24/08 09:45	04/01/08 21:54	7439-98-7	
Nickel	**73.6**	ug/L	10.0	0.74	10	03/24/08 09:45	04/01/08 21:54	7440-02-0	
Potassium	**11500**	ug/L	5000	62.1	10	03/24/08 09:45	04/04/08 16:47	7440-09-7	
Selenium	**7.8J**	ug/L	10.0	1.5	10	03/24/08 09:45	04/01/08 21:54	7782-49-2	
Silver	ND	ug/L	5.0	1.1	10	03/24/08 09:45	04/01/08 21:54	7440-22-4	D3
Sodium	**27200**	ug/L	5000	460	10	03/24/08 09:45	04/07/08 22:42	7440-23-5	
Thallium	ND	ug/L	10.0	0.30	10	03/24/08 09:45	04/01/08 21:54	7440-28-0	D3
Total Hardness	**310**	mg/L	50.0	1.5	10	03/24/08 09:45	04/07/08 22:42		
Vanadium	**89.5**	ug/L	10.0	4.1	10	03/24/08 09:45	04/01/08 21:54	7440-62-2	
Zinc	**220**	ug/L	100	21.0	10	03/24/08 09:45	04/01/08 21:54	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**397**	mg/L	10.0	3.2	1		03/27/08 13:15		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:15		
Alkalinity, Total as CaCO3	**397**	mg/L	10.0	3.2	1		03/27/08 13:15		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 00:59	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 17:25	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.5J**	mg/L	5.0	1.1	1		03/21/08 00:59	16887-00-6	
Fluoride	**0.54**	mg/L	0.50	0.059	1		03/21/08 00:59	16984-48-8	
Sulfate	**5.4**	mg/L	4.0	0.51	1		03/21/08 16:26	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-601 **Lab ID: 401753004** Collected: 03/19/08 09:10 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:20	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**6.2**	mg/L	1.0	0.50	1		04/02/08 12:27	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: PW-2 **Lab ID: 401753005** Collected: 03/19/08 15:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**8.62**	ng/L	1.0	0.33	2	03/27/08 12:30	03/29/08 11:47	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**11100**	ug/L	500	44.3	10	03/24/08 09:45	04/08/08 22:06	7429-90-5	
Antimony	ND	ug/L	10.0	1.0	10	03/24/08 09:45	04/01/08 22:00	7440-36-0	D3
Arsenic	**20.9**	ug/L	10.0	0.93	10	03/24/08 09:45	04/01/08 22:00	7440-38-2	
Barium	**107**	ug/L	10.0	0.72	10	03/24/08 09:45	04/01/08 22:00	7440-39-3	
Beryllium	ND	ug/L	10.0	0.70	10	03/24/08 09:45	04/08/08 22:06	7440-41-7	D3
Boron	**96.7J**	ug/L	100	11.1	10	03/24/08 09:45	04/08/08 22:06	7440-42-8	
Cadmium	**6.2J**	ug/L	10.0	0.98	10	03/24/08 09:45	04/01/08 22:00	7440-43-9	
Calcium	**72200**	ug/L	5000	100	10	03/24/08 09:45	04/08/08 22:06	7440-70-2	
Chromium	**16.8**	ug/L	10.0	4.3	10	03/24/08 09:45	04/01/08 22:00	7440-47-3	
Cobalt	**229**	ug/L	10.0	0.59	10	03/24/08 09:45	04/01/08 22:00	7440-48-4	
Copper	**50.6**	ug/L	10.0	1.2	10	03/24/08 09:45	04/01/08 22:00	7440-50-8	
Iron	**24300**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:00	7439-89-6	
Lead	**9.2J**	ug/L	10.0	0.44	10	03/24/08 09:45	04/01/08 22:00	7439-92-1	
Lithium	**14.2**	ug/L	10.0	0.85	10	03/24/08 09:45	04/08/08 22:06	7439-93-2	
Magnesium	**37000**	ug/L	5000	526	10	03/24/08 09:45	04/08/08 22:06	7439-95-4	
Manganese	**6280**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 22:00	7439-96-5	
Molybdenum	**6.9J**	ug/L	100	1.1	10	03/24/08 09:45	04/01/08 22:00	7439-98-7	
Nickel	**615**	ug/L	10.0	0.74	10	03/24/08 09:45	04/01/08 22:00	7440-02-0	
Potassium	**5700**	ug/L	5000	62.1	10	03/24/08 09:45	04/08/08 22:06	7440-09-7	
Selenium	**4.7J**	ug/L	10.0	1.5	10	03/24/08 09:45	04/01/08 22:00	7782-49-2	
Silver	ND	ug/L	5.0	1.1	10	03/24/08 09:45	04/01/08 22:00	7440-22-4	D3
Sodium	**4330J**	ug/L	5000	460	10	03/24/08 09:45	04/08/08 22:06	7440-23-5	
Thallium	ND	ug/L	10.0	0.30	10	03/24/08 09:45	04/01/08 22:00	7440-28-0	D3
Total Hardness	**333**	mg/L	50.0	1.5	10	03/24/08 09:45	04/08/08 22:06		
Vanadium	**29.1**	ug/L	10.0	4.1	10	03/24/08 09:45	04/01/08 22:00	7440-62-2	
Zinc	**243**	ug/L	100	21.0	10	03/24/08 09:45	04/01/08 22:00	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**169**	mg/L	10.0	3.2	1		03/27/08 13:16		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:16		
Alkalinity, Total as CaCO3	**169**	mg/L	10.0	3.2	1		03/27/08 13:16		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.55**	mg/L	0.40	0.085	1		03/21/08 01:13	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 17:39	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.4J**	mg/L	5.0	1.1	1		03/21/08 01:13	16887-00-6	
Fluoride	**0.31J**	mg/L	0.50	0.059	1		03/21/08 01:13	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: PW-2 **Lab ID: 401753005** Collected: 03/19/08 15:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**151**	mg/L	40.0	5.1	10		03/21/08 16:38	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:21	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:28	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-606 **Lab ID: 401753006** Collected: 03/19/08 11:52 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.654**	ng/L	0.50	0.16	1	03/29/08 12:00	03/31/08 12:40	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**209**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:00	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:12	7440-36-0	
Arsenic	**1.3**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:12	7440-38-2	
Barium	**15.2**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:12	7440-39-3	
Beryllium	**0.19J**	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:06	7440-41-7	
Boron	**34.3**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:06	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:12	7440-43-9	
Calcium	**18500**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:15	7440-70-2	
Chromium	**0.95J**	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:12	7440-47-3	
Cobalt	**1.4**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:12	7440-48-4	
Copper	**54.3**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:12	7440-50-8	
Iron	**4300**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:06	7439-89-6	
Lead	**1.7**	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:12	7439-92-1	
Lithium	**5.3**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:06	7439-93-2	
Magnesium	**12800**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:15	7439-95-4	
Manganese	**1500**	ug/L	1.0	0.080	1	03/24/08 09:45	04/02/08 00:12	7439-96-5	
Molybdenum	**6.6J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:12	7439-98-7	
Nickel	**11.7**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:12	7440-02-0	
Potassium	**3260**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 17:42	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 17:42	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:12	7440-22-4	
Sodium	**297J**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:00	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:12	7440-28-0	
Total Hardness	**98.9**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:15		
Vanadium	**0.69J**	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:12	7440-62-2	
Zinc	**15.4**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:12	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**68.8**	mg/L	10.0	3.2	1		03/27/08 13:16		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:16		
Alkalinity, Total as CaCO3	**68.8**	mg/L	10.0	3.2	1		03/27/08 13:16		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 01:27	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 17:54	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.3J**	mg/L	5.0	1.1	1		03/21/08 01:27	16887-00-6	
Fluoride	**0.49J**	mg/L	0.50	0.059	1		03/21/08 01:27	16984-48-8	
Sulfate	**28.1**	mg/L	4.0	0.51	1		03/21/08 16:51	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-606 **Lab ID: 401753006** Collected: 03/19/08 11:52 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:22	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:29	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: KMW-4 **Lab ID: 401753007** Collected: 03/19/08 15:45 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.14**	ng/L	0.50	0.16	1	03/29/08 12:00	03/31/08 12:45	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**73.4**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:06	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:18	7440-36-0	
Arsenic	**2.0**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:18	7440-38-2	
Barium	**41.0**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:18	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:12	7440-41-7	
Boron	**68.7**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:12	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:18	7440-43-9	
Calcium	**40300**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:23	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:18	7440-47-3	
Cobalt	**2.8**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:18	7440-48-4	
Copper	**0.96J**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:18	7440-50-8	
Iron	**4210**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:12	7439-89-6	
Lead	**0.070J**	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:18	7439-92-1	
Lithium	**0.58J**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:12	7439-93-2	
Magnesium	**14800**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:23	7439-95-4	
Manganese	**4320**	ug/L	1.0	0.080	1	03/24/08 09:45	04/02/08 00:18	7439-96-5	
Molybdenum	**1.0J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:18	7439-98-7	
Nickel	**4.8**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:18	7440-02-0	
Potassium	**3150**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 17:48	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 17:48	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:18	7440-22-4	
Sodium	**3160**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:06	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:18	7440-28-0	
Total Hardness	**161**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:23		
Vanadium	**0.47J**	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:18	7440-62-2	
Zinc	**5.2J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:18	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**97.7**	mg/L	10.0	3.2	1		03/27/08 13:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:17		
Alkalinity, Total as CaCO3	**97.7**	mg/L	10.0	3.2	1		03/27/08 13:17		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 01:42	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 18:36	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		03/21/08 01:42	16887-00-6	
Fluoride	**0.28J**	mg/L	0.50	0.059	1		03/21/08 01:42	16984-48-8	
Sulfate	**89.8**	mg/L	40.0	5.1	10		03/21/08 17:03	14808-79-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: KMW-4 **Lab ID: 401753007** Collected: 03/19/08 15:45 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:26	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.50J**	mg/L	1.0	0.50	1		04/02/08 12:29	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: KMW-10 **Lab ID: 401753008** Collected: 03/19/08 14:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.771**	ng/L	0.50	0.16	1	03/29/08 12:00	03/31/08 12:51	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**113**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:12	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:24	7440-36-0	
Arsenic	**4.0**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:24	7440-38-2	
Barium	**17.5**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:24	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:18	7440-41-7	
Boron	**50.7**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:18	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:24	7440-43-9	
Calcium	**19300**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:29	7440-70-2	
Chromium	**0.67J**	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:24	7440-47-3	
Cobalt	**3.0**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:24	7440-48-4	
Copper	**2.1**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:24	7440-50-8	
Iron	**5620**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:18	7439-89-6	
Lead	**0.12J**	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:24	7439-92-1	
Lithium	**1.8**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:18	7439-93-2	
Magnesium	**10100**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:29	7439-95-4	
Manganese	**1580**	ug/L	1.0	0.080	1	03/24/08 09:45	04/02/08 00:24	7439-96-5	
Molybdenum	**2.2J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:24	7439-98-7	
Nickel	**2.1**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:24	7440-02-0	
Potassium	**3080**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 17:54	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 17:54	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:24	7440-22-4	
Sodium	**1150**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:12	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:24	7440-28-0	
Total Hardness	**89.7**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:29		
Vanadium	**0.68J**	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:24	7440-62-2	
Zinc	**5.0J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:24	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**77.7**	mg/L	10.0	3.2	1		03/27/08 13:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:17		
Alkalinity, Total as CaCO3	**77.7**	mg/L	10.0	3.2	1		03/27/08 13:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		03/21/08 01:56	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 18:50	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		03/21/08 01:56	16887-00-6	
Fluoride	**0.45J**	mg/L	0.50	0.059	1		03/21/08 01:56	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: KMW-10 **Lab ID: 401753008** Collected: 03/19/08 14:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**18.0**	mg/L	4.0	0.51	1		03/21/08 17:15	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:26	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:33	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-603 **Lab ID: 401753009** Collected: 03/19/08 13:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.297J**	ng/L	0.50	0.16	1	03/29/08 12:00	03/31/08 13:43	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**13.7J**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:18	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:31	7440-36-0	
Arsenic	**4.3**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:31	7440-38-2	
Barium	**8.6**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:31	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:24	7440-41-7	
Boron	**38.0**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:24	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:31	7440-43-9	
Calcium	**10000**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:35	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:31	7440-47-3	
Cobalt	**14.8**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:31	7440-48-4	
Copper	**0.30J**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:31	7440-50-8	
Iron	**4180**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:24	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:31	7439-92-1	
Lithium	**9.0**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:24	7439-93-2	
Magnesium	**7610**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:35	7439-95-4	
Manganese	**2850**	ug/L	1.0	0.080	1	03/24/08 09:45	04/02/08 00:31	7439-96-5	
Molybdenum	**2.4J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:31	7439-98-7	
Nickel	**109**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:31	7440-02-0	
Potassium	**2800**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 18:00	7440-09-7	
Selenium	**0.72J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 18:00	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:31	7440-22-4	
Sodium	**374J**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:18	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:31	7440-28-0	
Total Hardness	**56.4**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:35		
Vanadium	ND	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:31	7440-62-2	
Zinc	**5.5J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:31	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**31.1**	mg/L	10.0	3.2	1		03/27/08 13:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:18		
Alkalinity, Total as CaCO3	**31.1**	mg/L	10.0	3.2	1		03/27/08 13:18		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/21/08 13:24		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 02:38	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/20/08 19:05	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.3J**	mg/L	5.0	1.1	1		03/21/08 02:38	16887-00-6	
Fluoride	**0.61**	mg/L	0.50	0.059	1		03/21/08 02:38	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-603 **Lab ID: 401753009** Collected: 03/19/08 13:00 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**31.8**	mg/L	4.0	0.51	1		03/21/08 17:51	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:29	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:33	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Sample: MW-102 **Lab ID: 401753010** Collected: 03/19/08 09:10 Received: 03/20/08 08:33 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**114**	ng/L	10.0	3.3	20	03/29/08 12:00	03/31/08 15:22	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**269000**	ug/L	500	44.3	10	03/24/08 09:45	04/04/08 16:35	7429-90-5	
Antimony	**7.4J**	ug/L	10.0	1.0	10	03/24/08 09:45	04/01/08 22:30	7440-36-0	
Arsenic	**891**	ug/L	10.0	0.93	10	03/24/08 09:45	04/01/08 22:30	7440-38-2	
Barium	**6.5J**	ug/L	10.0	0.72	10	03/24/08 09:45	04/01/08 22:30	7440-39-3	
Beryllium	**28.3**	ug/L	10.0	0.70	10	03/24/08 09:45	04/08/08 22:12	7440-41-7	
Boron	**107**	ug/L	100	11.1	10	03/24/08 09:45	04/08/08 22:12	7440-42-8	
Cadmium	**46.5**	ug/L	10.0	0.98	10	03/24/08 09:45	04/01/08 22:30	7440-43-9	
Calcium	**282000**	ug/L	5000	100	10	03/24/08 09:45	04/08/08 22:12	7440-70-2	
Chromium	**4330**	ug/L	10.0	4.3	10	03/24/08 09:45	04/01/08 22:30	7440-47-3	
Cobalt	**4940**	ug/L	10.0	0.59	10	03/24/08 09:45	04/01/08 22:30	7440-48-4	
Copper	**7880**	ug/L	10.0	1.2	10	03/24/08 09:45	04/01/08 22:30	7440-50-8	
Iron	**3830000**	ug/L	5000	292	100	03/24/08 09:45	04/04/08 16:23	7439-89-6	
Lead	**6.5J**	ug/L	10.0	0.44	10	03/24/08 09:45	04/01/08 22:30	7439-92-1	
Lithium	**255**	ug/L	10.0	0.85	10	03/24/08 09:45	04/08/08 22:12	7439-93-2	
Magnesium	**277000**	ug/L	5000	526	10	03/24/08 09:45	04/08/08 22:12	7439-95-4	
Manganese	**15700**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 22:30	7439-96-5	
Molybdenum	ND	ug/L	1000	11.5	100	03/24/08 09:45	04/04/08 16:23	7439-98-7	D3
Nickel	**12200**	ug/L	10.0	0.74	10	03/24/08 09:45	04/01/08 22:30	7440-02-0	
Potassium	**239J**	ug/L	5000	62.1	10	03/24/08 09:45	04/04/08 16:35	7440-09-7	
Selenium	**11.2**	ug/L	10.0	1.5	10	03/24/08 09:45	04/01/08 22:30	7782-49-2	
Silver	**2.7J**	ug/L	5.0	1.1	10	03/24/08 09:45	04/01/08 22:30	7440-22-4	
Sodium	**2430J**	ug/L	5000	460	10	03/24/08 09:45	04/08/08 22:12	7440-23-5	
Thallium	ND	ug/L	10.0	0.30	10	03/24/08 09:45	04/01/08 22:30	7440-28-0	D3
Total Hardness	**1850**	mg/L	50.0	1.5	10	03/24/08 09:45	04/08/08 22:12		
Vanadium	**186**	ug/L	10.0	4.1	10	03/24/08 09:45	04/01/08 22:30	7440-62-2	
Zinc	**6520**	ug/L	100	21.0	10	03/24/08 09:45	04/01/08 22:30	7440-66-6	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WETA/1139 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

METHOD BLANK: 7655
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	ND	0.40	
Nitrite as N	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 7656

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.7	104	90-110	
Nitrite as N	mg/L	.8	0.80	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7657 7658

Parameter	Units	401753001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.15J	1.6	1.6	1.7	1.7	96	96	90-110	.6	20	
Nitrite as N	mg/L	ND	.8	.8	0.81	0.80	101	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7659 7660

Parameter	Units	401767001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.80	1.6	1.6	2.4	2.4	98	98	90-110	.4	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WETA/1140 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

METHOD BLANK: 7661
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 7662

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.5	103	90-110	
Fluoride	mg/L	2	2.1	106	90-110	
Sulfate	mg/L	16	16.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7663 7664

Parameter	Units	401753001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.5J	20	20	21.3	21.2	94	94	90-110	.6	20	
Fluoride	mg/L	0.45J	2	2	2.4	2.4	98	98	90-110	0	20	
Sulfate	mg/L	17.8	16	16	33.0	33.1	95	96	90-110	.5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7665 7666

Parameter	Units	401767001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.5	20	20	25.4	25.4	100	100	90-110	.2	20	
Fluoride	mg/L	<0.50	2	2	2.2	2.2	95	96	90-110	.9	20	
Sulfate	mg/L	15.2	16	16	31.7	31.9	103	104	90-110	.7	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WET/1132 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 401753001, 401753002, 401753003, 401753005, 401753008, 401753009

METHOD BLANK: 7736
Associated Lab Samples: 401753001, 401753002, 401753003, 401753005, 401753008, 401753009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 7737

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	45.6	41.6	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7738 7739

Parameter	Units	401698002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	ND	45.6	45.6	37.6	36.4	80	78	80-120	3	20	M0

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: MPRP/1077 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006

METHOD BLANK: 8220
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009, 401753010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	50.0	
Antimony	ug/L	ND	1.0	
Arsenic	ug/L	0.14J	1.0	
Barium	ug/L	ND	1.0	
Beryllium	ug/L	ND	1.0	
Boron	ug/L	ND	10.0	
Cadmium	ug/L	ND	1.0	
Calcium	ug/L	49.6J	500	
Chromium	ug/L	ND	1.0	
Cobalt	ug/L	ND	1.0	
Copper	ug/L	ND	1.0	
Iron	ug/L	3.2J	50.0	
Lead	ug/L	ND	1.0	
Lithium	ug/L	ND	1.0	
Magnesium	ug/L	ND	500	
Manganese	ug/L	0.10J	1.0	
Molybdenum	ug/L	ND	10.0	
Nickel	ug/L	ND	1.0	
Potassium	ug/L	ND	500	
Selenium	ug/L	0.59J	1.0	
Silver	ug/L	ND	0.50	
Sodium	ug/L	ND	500	
Thallium	ug/L	ND	1.0	
Vanadium	ug/L	ND	1.0	
Zinc	ug/L	4.8J	10.0	

LABORATORY CONTROL SAMPLE: 8221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	9430	94	75-125	
Antimony	ug/L	200	221	111	75-125	
Arsenic	ug/L	200	226	113	75-125	
Barium	ug/L	200	221	110	75-125	
Beryllium	ug/L	200	238	119	75-125	
Boron	ug/L	200	200	100	75-125	
Cadmium	ug/L	200	224	112	75-125	
Calcium	ug/L	10000	9790	98	75-125	
Chromium	ug/L	200	223	111	75-125	
Cobalt	ug/L	200	215	108	75-125	
Copper	ug/L	200	216	108	75-125	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

LABORATORY CONTROL SAMPLE: 8221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9920	99	75-125	
Lead	ug/L	200	219	109	75-125	
Lithium	ug/L	200	245	122	75-125	
Magnesium	ug/L	10000	9650	97	75-125	
Manganese	ug/L	200	221	110	75-125	
Molybdenum	ug/L	200	204	102	75-125	
Nickel	ug/L	200	215	108	75-125	
Potassium	ug/L	10000	9540	95	75-125	
Selenium	ug/L	200	224	112	75-125	
Silver	ug/L	100	97.6	98	75-125	
Sodium	ug/L	10000	9460	95	75-125	
Thallium	ug/L	200	212	106	75-125	
Vanadium	ug/L	200	224	112	75-125	
Zinc	ug/L	200	214	107	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8222 8223

Parameter	Units	401753001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	136	10000	10000	8860	8920	87	88	75-125	.6	20	
Antimony	ug/L	ND	200	200	216	206	108	103	75-125	5	20	
Arsenic	ug/L	3.8	200	200	228	221	112	109	75-125	3	20	
Barium	ug/L	17.4	200	200	231	222	107	102	75-125	4	20	
Beryllium	ug/L	ND	200	200	203	201	102	100	75-125	1	20	
Boron	ug/L	46.7	200	200	242	238	97	95	75-125	2	20	
Cadmium	ug/L	ND	200	200	217	209	108	104	75-125	4	20	
Calcium	ug/L	18200	10000	10000	27500	28500	92	103	75-125	4	20	
Chromium	ug/L	ND	200	200	218	208	109	104	75-125	5	20	
Cobalt	ug/L	3.1	200	200	211	203	104	100	75-125	4	20	
Copper	ug/L	2.1	200	200	214	204	106	101	75-125	5	20	
Iron	ug/L	5850	10000	10000	15800	15100	99	93	75-125	4	20	
Lead	ug/L	0.11J	200	200	213	206	106	103	75-125	3	20	
Lithium	ug/L	1.7	200	200	208	203	103	101	75-125	2	20	
Magnesium	ug/L	9970	10000	10000	18300	18900	84	89	75-125	3	20	
Manganese	ug/L	1550	200	200	1780	1710	116	79	75-125	4	20	
Molybdenum	ug/L	2.0J	200	200	201	193	99	96	75-125	4	20	
Nickel	ug/L	1.9	200	200	209	199	103	99	75-125	5	20	
Potassium	ug/L	2860	10000	10000	12500	13100	97	103	75-125	5	20	
Selenium	ug/L	0.54J	200	200	217	225	108	112	75-125	3	20	
Silver	ug/L	ND	100	100	94.2	90.6	94	91	75-125	4	20	
Sodium	ug/L	1220	10000	10000	9780	10000	86	88	75-125	2	20	
Thallium	ug/L	ND	200	200	210	203	105	101	75-125	4	20	
Vanadium	ug/L	0.70J	200	200	220	209	109	104	75-125	5	20	
Zinc	ug/L	4.4J	200	200	208	202	102	99	75-125	3	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WET/1156 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

METHOD BLANK: 9412
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 9413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9414 9415

Parameter	Units	401753001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	77.7	500	500	575	573	99	99	80-120	.4	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: CVFS/1028 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005

METHOD BLANK: 10604
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.345J	0.50	

METHOD BLANK: 10605
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.271J	0.50	

METHOD BLANK: 10606
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.178J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 10607 10608

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.45	5.11	109	102	79-121	6	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10609 10610

Parameter	Units	401936001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	3.64	10	10	14.9	15.9	113	123	75-125	7	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10611 10612

Parameter	Units	401936003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.65	10	10	14.4	12.2	117	96	75-125	16	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10613 10614

Parameter	Units	401987002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.53	10	10	13.7	14.2	111	116	75-125	4	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: CVFS/1030 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401753006, 401753007, 401753008, 401753009, 401753010

METHOD BLANK: 10692
Associated Lab Samples: 401753006, 401753007, 401753008, 401753009, 401753010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.372J	0.50	

METHOD BLANK: 10693
Associated Lab Samples: 401753006, 401753007, 401753008, 401753009, 401753010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.414J	0.50	

METHOD BLANK: 10694
Associated Lab Samples: 401753006, 401753007, 401753008, 401753009, 401753010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.476J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 10695 10696

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.39	5.09	108	102	79-121	6	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10984 10985

Parameter	Units	401753007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.14	5	5	6.58	6.71	109	111	75-125	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10986 10987

Parameter	Units	401753010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	114	200	200	343	331	114	108	75-125	4	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10988 10989

Parameter	Units	401773002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	36.4	100	100	152	150	116	114	75-125	1	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WETA/1209 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

METHOD BLANK: 10994
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007, 401753008, 401753009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 10995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.094	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10996 10997

Parameter	Units	401753008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.11	109	106	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10998 10999

Parameter	Units	401798004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.12	111	118	90-110	6	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WETA/1220 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007

METHOD BLANK: 11679
Associated Lab Samples: 401753001, 401753002, 401753003, 401753004, 401753005, 401753006, 401753007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 11680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11681 11682

Parameter	Units	401735001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<1.0	10	10	8.9	8.9	84	85	90-110	.8	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11683 11684

Parameter	Units	401753007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.50J	10	10	10.6	10.3	101	98	90-110	3	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

QC Batch: WETA/1221
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401753008, 401753009

METHOD BLANK: 11685
Associated Lab Samples: 401753008, 401753009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 11686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.6	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11687 11688

Parameter	Units	401798006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.2	10	10	11.3	11.0	100	97	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11689 11690

Parameter	Units	401950002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.1	10.3	99	101	90-110	2	20	

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nelac

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QUALIFIERS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: ICPM/1034

[1] Internal standard limits of 30-140% used. All QC within limits.

ANALYTE QUALIFIERS

1j Estimated concentration due to matrix interferences. During the metals analysis the serial dilution failed to meet the established control limits of 0-10%.

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M0 Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401753001	DUP-005	EPA 300.0	WETA/1139		
401753002	FBK-005	EPA 300.0	WETA/1139		
401753003	KMW-2	EPA 300.0	WETA/1139		
401753004	MW-601	EPA 300.0	WETA/1139		
401753005	PW-2	EPA 300.0	WETA/1139		
401753006	MW-606	EPA 300.0	WETA/1139		
401753007	KMW-4	EPA 300.0	WETA/1139		
401753008	KMW-10	EPA 300.0	WETA/1139		
401753009	MW-603	EPA 300.0	WETA/1139		
401753001	DUP-005	EPA 300.0	WETA/1140		
401753002	FBK-005	EPA 300.0	WETA/1140		
401753003	KMW-2	EPA 300.0	WETA/1140		
401753004	MW-601	EPA 300.0	WETA/1140		
401753005	PW-2	EPA 300.0	WETA/1140		
401753006	MW-606	EPA 300.0	WETA/1140		
401753007	KMW-4	EPA 300.0	WETA/1140		
401753008	KMW-10	EPA 300.0	WETA/1140		
401753009	MW-603	EPA 300.0	WETA/1140		
401753001	DUP-005	SM 4500-S F (2000)	WET/1132		
401753002	FBK-005	SM 4500-S F (2000)	WET/1132		
401753003	KMW-2	SM 4500-S F (2000)	WET/1132		
401753005	PW-2	SM 4500-S F (2000)	WET/1132		
401753008	KMW-10	SM 4500-S F (2000)	WET/1132		
401753009	MW-603	SM 4500-S F (2000)	WET/1132		
401753001	DUP-005	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753002	FBK-005	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753003	KMW-2	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753004	MW-601	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753005	PW-2	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753006	MW-606	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753007	KMW-4	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753008	KMW-10	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753009	MW-603	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753010	MW-102	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401753001	DUP-005	SM 2320B	WET/1156		
401753002	FBK-005	SM 2320B	WET/1156		
401753003	KMW-2	SM 2320B	WET/1156		
401753004	MW-601	SM 2320B	WET/1156		
401753005	PW-2	SM 2320B	WET/1156		
401753006	MW-606	SM 2320B	WET/1156		
401753007	KMW-4	SM 2320B	WET/1156		
401753008	KMW-10	SM 2320B	WET/1156		
401753009	MW-603	SM 2320B	WET/1156		
401753001	DUP-005	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401753002	FBK-005	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401753003	KMW-2	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401753

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401753004	**MW-601**	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401753005	**PW-2**	EPA 1631E	CVFS/1028	EPA 1631E	CVFS/1029
401753006	**MW-606**	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401753007	**KMW-4**	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401753008	**KMW-10**	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401753009	**MW-603**	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401753010	**MW-102**	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401753001	**DUP-005**	EPA 335.4	WETA/1209		
401753002	**FBK-005**	EPA 335.4	WETA/1209		
401753003	**KMW-2**	EPA 335.4	WETA/1209		
401753004	**MW-601**	EPA 335.4	WETA/1209		
401753005	**PW-2**	EPA 335.4	WETA/1209		
401753006	**MW-606**	EPA 335.4	WETA/1209		
401753007	**KMW-4**	EPA 335.4	WETA/1209		
401753008	**KMW-10**	EPA 335.4	WETA/1209		
401753009	**MW-603**	EPA 335.4	WETA/1209		
401753001	**DUP-005**	EPA 350.1	WETA/1220		
401753002	**FBK-005**	EPA 350.1	WETA/1220		
401753003	**KMW-2**	EPA 350.1	WETA/1220		
401753004	**MW-601**	EPA 350.1	WETA/1220		
401753005	**PW-2**	EPA 350.1	WETA/1220		
401753006	**MW-606**	EPA 350.1	WETA/1220		
401753007	**KMW-4**	EPA 350.1	WETA/1220		
401753008	**KMW-10**	EPA 350.1	WETA/1221		
401753009	**MW-603**	EPA 350.1	WETA/1221		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Project # 401753

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other poly bags

Thermometer Used JB Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 0.0+0.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 3-20-08 CJ

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Nitrat, Nitrite
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: GW		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed CJ / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: @ #008 500mlg A single bagged. CJ 3-20-08
Did not receive NAOH+ZN for #006 CJ 3-20-08

Project Manager Review: [signature] **Date:** 3/20/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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MN: 612-607-1700 WI: 920-469-2436

COC No. 20080319

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	NORTH JACKSON CO
Branch/Location:	MARQUETTE, MI
Project Contact:	SHARON FELIX
Phone:	
Project Number:	
Project Name:	HUMBOLDT MILL/GW
Project State:	MI
Sampled By (Print):	Chris Cantrum Richard Eagle
Sampled By (Sign):	Richard L Eagle
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	~~JANIS KEST~~ S. Felix
Mail To Company:	FOTH I & E
Mail To Address:	GREEN BAY, WI
Invoice To Contact:	SAME AS ABOVE
Invoice To Company:	SAME AS ABOVE
Invoice To Address:	SAME AS ABOVE
Invoice To Phone:	SAME AS ABOVE

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☑ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, Sl = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: Alk, Alk 2, Cl, F, SO4, Nitrate, Nitrite, LL Hg	Ammonia	Metals (Lithium)	Cyanide	Sulfide	BTEX			CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
FILTERED? (YES/NO)					N	N	N	N	N	N					
PRESERVATION (CODE)*					A	C	D	G	J	B					
001	DIP-005	3/19/08	—	GW	3	1	2	1	1						
002	FBK-005		0840	W	3	1	2	1	1						
003	KMW-2		1134	GW	3	1	2	1	1						
004	MW-601		0910	GW	3	1	2	1	0						
005	PW-2		1500	GW	3	1	2	1	1						
006	MW-606		1152	GW	3	1	2	1	1						
007	KMW-4		1545	GW	3	1	2	1	0						
008	KMW-10		1400	GW	3	1	2	1	1						
009	MW-603		1300	GW	3	1	2	1	1						
010	MW-102		0910/1430	GW	~~3~~ 1	0	2	0	0						

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Richard Eagle	3/19/08 1830		
FedEx	3-20-08 0945	Pace	3-20-08 0945

PACE Project No. 401753
Receipt Temp = 0.0 / 0.5 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/05

Batch No. 401798

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www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Phone: 920.469.2436
Fax: 920.469.8827

April 15, 2008

Janis Kesy
Foth & Van Dyke
2737 South Ridge Road
Green Bay, WI 54304

Dear Ms. Kesy:

Enclosed is a report for the analysis of 47 ground water samples and associated QC samples for the Humboldt Mill project (06W003). These samples were received from February 19 to March 4, 2008. The samples were assigned to batch numbers 401494, 401546, 401652, 401698, 401753, and 401798 for laboratory tracking purposes.

A table of the results has also been sent to you via e-mail.

If you have any questions regarding this data please call me at (608) 232-3300.

Sincerely,

for Tod N.

Tod Noltemeyer
Project Manager

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

April 14, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on March 21, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Lab ID	Sample ID	Matrix	Date Collected	Date Received
401798001	**FBK-006**	Water	03/20/08 15:30	03/21/08 08:15
401798002	**HW-1**	Water	03/20/08 15:00	03/21/08 08:15
401798003	**MW-5**	Water	03/20/08 13:52	03/21/08 08:15
401798004	**MW-103**	Water	03/20/08 13:35	03/21/08 08:15
401798005	**KMW-9P**	Water	03/20/08 12:34	03/21/08 08:15
401798006	**DUP-006**	Water	03/20/08 00:00	03/21/08 11:19

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
401798001	FBK-006	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401798002	HW-1	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401798003	MW-5	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		EPA 8021	SES	6	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401798004	MW-103	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401798005	KMW-9P	EPA 1631E	TLH	1	PASI-G
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
401798006	DUP-006	EPA 1631E	TLH	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	GLH	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	MES	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 8021**
Description: 8021 GCV Short List
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
1 sample was analyzed for EPA 8021. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3020 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

Internal standard limits of 30-140% used. All QC within limits.
- QC Batch: ICPM / 1034

Analyte Comments:

QC Batch: MPRP/1077

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- DUP-006 (Lab ID: 401798006)
  - Silver
  - Cadmium
  - Chromium
  - Copper

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

Analyte Comments:

QC Batch: MPRP/1077

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- DUP-006 (Lab ID: 401798006)
  - Nickel
  - Lead
  - Antimony
  - Thallium
  - Vanadium
  - Aluminum
  - Beryllium
- KMW-9P (Lab ID: 401798005)
  - Silver
  - Cadmium
  - Chromium
  - Nickel
  - Lead
  - Antimony
  - Thallium
  - Vanadium
  - Aluminum
  - Selenium
  - Beryllium

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1209

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 401753008,401798004

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 10998)
  - Cyanide
- MSD (Lab ID: 10999)
  - Cyanide

QC Batch: WETA/1210

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 402077029

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 11006)
  - Cyanide
- MSD (Lab ID: 11007)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: April 14, 2008

General Information:
6 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: FBK-006 **Lab ID: 401798001** Collected: 03/20/08 15:30 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.359J**	ng/L	0.50	0.16	1	03/29/08 12:00	03/31/08 16:37	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	50.0	4.4	1	03/24/08 09:45	04/01/08 21:00	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/01/08 21:00	7440-36-0	
Arsenic	**0.13J**	ug/L	1.0	0.093	1	03/24/08 09:45	04/01/08 21:00	7440-38-2	
Barium	**0.12J**	ug/L	1.0	0.072	1	03/24/08 09:45	04/01/08 21:00	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/01/08 21:00	7440-41-7	
Boron	**2.8J**	ug/L	10.0	1.1	1	03/24/08 09:45	04/01/08 21:00	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/01/08 21:00	7440-43-9	
Calcium	**106J**	ug/L	500	10.0	1	03/24/08 09:45	04/01/08 21:00	7440-70-2	
Chromium	ND	ug/L	1.0	0.43	1	03/24/08 09:45	04/01/08 21:00	7440-47-3	
Cobalt	ND	ug/L	1.0	0.059	1	03/24/08 09:45	04/01/08 21:00	7440-48-4	
Copper	**0.51J**	ug/L	1.0	0.12	1	03/24/08 09:45	04/01/08 21:00	7440-50-8	
Iron	**7.3J**	ug/L	50.0	2.9	1	03/24/08 09:45	04/01/08 21:00	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/24/08 09:45	04/01/08 21:00	7439-92-1	
Lithium	**0.12J**	ug/L	1.0	0.085	1	03/24/08 09:45	04/01/08 21:00	7439-93-2	
Magnesium	ND	ug/L	500	52.6	1	03/24/08 09:45	04/01/08 21:00	7439-95-4	
Manganese	**5.0**	ug/L	1.0	0.080	1	03/24/08 09:45	04/01/08 21:00	7439-96-5	
Molybdenum	ND	ug/L	10.0	0.11	1	03/24/08 09:45	04/01/08 21:00	7439-98-7	
Nickel	**0.080J**	ug/L	1.0	0.074	1	03/24/08 09:45	04/01/08 21:00	7440-02-0	
Potassium	**136J**	ug/L	500	6.2	1	03/24/08 09:45	04/01/08 21:00	7440-09-7	
Selenium	**0.55J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/01/08 21:00	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/01/08 21:00	7440-22-4	
Sodium	**1670**	ug/L	500	46.0	1	03/24/08 09:45	04/01/08 21:00	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/01/08 21:00	7440-28-0	
Total Hardness	**0.44J**	mg/L	5.0	0.15	1	03/24/08 09:45	04/01/08 21:00		
Vanadium	ND	ug/L	1.0	0.41	1	03/24/08 09:45	04/01/08 21:00	7440-62-2	
Zinc	**4.8J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/01/08 21:00	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		03/27/08 13:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:18		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		03/27/08 13:18		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/24/08 13:55		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.14J**	mg/L	0.40	0.085	1		03/21/08 21:55	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/21/08 15:33	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.1J**	mg/L	5.0	1.1	1		03/21/08 21:55	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/21/08 21:55	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: FBK-006 **Lab ID: 401798001** Collected: 03/20/08 15:30 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	ND	mg/L	4.0	0.51	1		03/21/08 21:55	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:37	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:37	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: HW-1 **Lab ID: 401798002** Collected: 03/20/08 15:00 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.758**	ng/L	0.50	0.16	1	03/29/08 12:00	03/31/08 16:02	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**15.1J**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:24	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:43	7440-36-0	
Arsenic	**1.5**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:43	7440-38-2	
Barium	**14.4**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:43	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:30	7440-41-7	
Boron	**92.0**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:30	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:43	7440-43-9	
Calcium	**55100**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:41	7440-70-2	
Chromium	**8.2**	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:43	7440-47-3	
Cobalt	**4.1**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:43	7440-48-4	
Copper	**4.0**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:43	7440-50-8	
Iron	**5240**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:36	7439-89-6	
Lead	ND	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:43	7439-92-1	
Lithium	**2.3**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:30	7439-93-2	
Magnesium	**20700**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:41	7439-95-4	
Manganese	**415**	ug/L	1.0	0.080	1	03/24/08 09:45	04/02/08 00:43	7439-96-5	
Molybdenum	**4.8J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:43	7439-98-7	
Nickel	**9.7**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:43	7440-02-0	
Potassium	**3380**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 18:06	7440-09-7	
Selenium	**0.32J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 18:06	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:43	7440-22-4	
Sodium	**12700**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:24	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:43	7440-28-0	
Total Hardness	**223**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:41		
Vanadium	ND	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:43	7440-62-2	
Zinc	**7.3J**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:43	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**122**	mg/L	10.0	3.2	1		03/27/08 13:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:19		
Alkalinity, Total as CaCO3	**122**	mg/L	10.0	3.2	1		03/27/08 13:19		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/24/08 13:55		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.71**	mg/L	0.40	0.085	1		03/21/08 22:10	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/21/08 15:47	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.2**	mg/L	5.0	1.1	1		03/21/08 22:10	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		03/21/08 22:10	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: HW-1 **Lab ID: 401798002** Collected: 03/20/08 15:00 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**125**	mg/L	40.0	5.1	10		03/24/08 15:28	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:38	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:38	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: MW-5 **Lab ID: 401798003** Collected: 03/20/08 13:52 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**2.62**	ng/L	1.0	0.33	2	03/31/08 09:30	04/03/08 10:15	7439-97-6	
8021 GCV Short List	Analytical Method: EPA 8021								
Benzene	**1.3**	ug/L	1.0	0.14	1		03/26/08 16:05	71-43-2	
Ethylbenzene	**21.3**	ug/L	1.0	0.40	1		03/26/08 16:05	100-41-4	
Toluene	**0.86J**	ug/L	1.0	0.36	1		03/26/08 16:05	108-88-3	
m&p-Xylene	**208**	ug/L	2.0	0.74	1		03/26/08 16:05	1330-20-7	
o-Xylene	**206**	ug/L	1.0	0.36	1		03/26/08 16:05	95-47-6	
a,a,a-Trifluorotoluene (S)	104	%	80-124		1		03/26/08 16:05	98-08-8	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**203**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:30	7429-90-5	
Antimony	**0.37J**	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:49	7440-36-0	
Arsenic	**16.4**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:49	7440-38-2	
Barium	**14.7**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:49	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:36	7440-41-7	
Boron	**8.6J**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:36	7440-42-8	
Cadmium	**0.48J**	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:49	7440-43-9	
Calcium	**1240**	ug/L	500	10.0	1	03/24/08 09:45	04/07/08 22:30	7440-70-2	
Chromium	**1.7**	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:49	7440-47-3	
Cobalt	**1.7**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:49	7440-48-4	
Copper	**4.7**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:49	7440-50-8	
Iron	**4500**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 22:42	7439-89-6	
Lead	**17.9**	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:49	7439-92-1	
Lithium	**0.30J**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:36	7439-93-2	
Magnesium	**235J**	ug/L	500	52.6	1	03/24/08 09:45	04/07/08 22:30	7439-95-4	
Manganese	**79.6**	ug/L	1.0	0.080	1	03/24/08 09:45	04/02/08 00:49	7439-96-5	
Molybdenum	**0.60J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:49	7439-98-7	
Nickel	**5.2**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:49	7440-02-0	
Potassium	**287J**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 18:12	7440-09-7	
Selenium	**0.17J**	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 18:12	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:49	7440-22-4	
Sodium	**752**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:30	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:49	7440-28-0	
Total Hardness	**4.1J**	mg/L	5.0	0.15	1	03/24/08 09:45	04/07/08 22:30		
Vanadium	**1.6**	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:49	7440-62-2	
Zinc	**594**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:49	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		03/27/08 13:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:19		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		03/27/08 13:19		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	ND	mg/L	5.0	2.3	1		03/24/08 13:55		

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: MW-5 **Lab ID: 401798003** Collected: 03/20/08 13:52 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.39J**	mg/L	0.40	0.085	1		03/21/08 22:52	14797-55-8	
Nitrite as N	**0.080J**	mg/L	0.10	0.036	1		03/21/08 16:29	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.2J**	mg/L	5.0	1.1	1		03/21/08 22:52	16887-00-6	
Fluoride	ND	mg/L	0.50	0.059	1		03/21/08 22:52	16984-48-8	
Sulfate	**2.7J**	mg/L	4.0	0.51	1		03/21/08 22:52	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:38	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	1.0	0.50	1		04/02/08 12:39	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: MW-103 **Lab ID: 401798004** Collected: 03/20/08 13:35 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.423J**	ng/L	0.50	0.16	1	03/31/08 09:30	04/03/08 10:20	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**35.6J**	ug/L	50.0	4.4	1	03/24/08 09:45	04/07/08 22:36	7429-90-5	
Antimony	ND	ug/L	1.0	0.10	1	03/24/08 09:45	04/02/08 00:55	7440-36-0	
Arsenic	**13.7**	ug/L	1.0	0.093	1	03/24/08 09:45	04/02/08 00:55	7440-38-2	
Barium	**89.8**	ug/L	1.0	0.072	1	03/24/08 09:45	04/02/08 00:55	7440-39-3	
Beryllium	ND	ug/L	1.0	0.070	1	03/24/08 09:45	04/08/08 21:54	7440-41-7	
Boron	**42.4**	ug/L	10.0	1.1	1	03/24/08 09:45	04/08/08 21:54	7440-42-8	
Cadmium	ND	ug/L	1.0	0.098	1	03/24/08 09:45	04/02/08 00:55	7440-43-9	
Calcium	**65300**	ug/L	5000	100	10	03/24/08 09:45	04/04/08 15:53	7440-70-2	
Chromium	**1.1**	ug/L	1.0	0.43	1	03/24/08 09:45	04/02/08 00:55	7440-47-3	
Cobalt	**0.70J**	ug/L	1.0	0.059	1	03/24/08 09:45	04/02/08 00:55	7440-48-4	
Copper	**1.4**	ug/L	1.0	0.12	1	03/24/08 09:45	04/02/08 00:55	7440-50-8	
Iron	**69000**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 23:00	7439-89-6	
Lead	**0.090J**	ug/L	1.0	0.044	1	03/24/08 09:45	04/02/08 00:55	7439-92-1	
Lithium	**0.91J**	ug/L	1.0	0.085	1	03/24/08 09:45	04/08/08 21:54	7439-93-2	
Magnesium	**22900**	ug/L	5000	526	10	03/24/08 09:45	04/04/08 15:53	7439-95-4	
Manganese	**5350**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 23:00	7439-96-5	
Molybdenum	**0.76J**	ug/L	10.0	0.11	1	03/24/08 09:45	04/02/08 00:55	7439-98-7	
Nickel	**1.3**	ug/L	1.0	0.074	1	03/24/08 09:45	04/02/08 00:55	7440-02-0	
Potassium	**3710**	ug/L	500	6.2	1	03/24/08 09:45	04/04/08 18:18	7440-09-7	
Selenium	ND	ug/L	1.0	0.15	1	03/24/08 09:45	04/04/08 18:18	7782-49-2	
Silver	ND	ug/L	0.50	0.11	1	03/24/08 09:45	04/02/08 00:55	7440-22-4	
Sodium	**4870**	ug/L	500	46.0	1	03/24/08 09:45	04/07/08 22:36	7440-23-5	
Thallium	ND	ug/L	1.0	0.030	1	03/24/08 09:45	04/02/08 00:55	7440-28-0	
Total Hardness	**257**	mg/L	50.0	1.5	10	03/24/08 09:45	04/04/08 15:53		
Vanadium	**2.4**	ug/L	1.0	0.41	1	03/24/08 09:45	04/02/08 00:55	7440-62-2	
Zinc	**10.5**	ug/L	10.0	2.1	1	03/24/08 09:45	04/02/08 00:55	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**86.6**	mg/L	10.0	3.2	1		03/27/08 13:20		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:20		
Alkalinity, Total as CaCO3	**86.6**	mg/L	10.0	3.2	1		03/27/08 13:20		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**4.8J**	mg/L	5.0	2.3	1		03/24/08 13:55		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.19J**	mg/L	0.40	0.085	1		03/21/08 23:06	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/21/08 16:43	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.7J**	mg/L	5.0	1.1	1		03/21/08 23:06	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		03/21/08 23:06	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: MW-103 **Lab ID: 401798004** Collected: 03/20/08 13:35 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**243**	mg/L	40.0	5.1	10		03/24/08 16:10	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:39	57-12-5	M0
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.1**	mg/L	1.0	0.50	1		04/02/08 12:39	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: KMW-9P **Lab ID: 401798005** Collected: 03/20/08 12:34 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.481J**	ng/L	0.50	0.16	1	03/31/08 09:30	04/03/08 10:24	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	500	44.3	10	03/24/08 09:45	04/04/08 16:11	7429-90-5	D3
Antimony	ND	ug/L	10.0	1.0	10	03/24/08 09:45	04/01/08 23:06	7440-36-0	D3
Arsenic	**6.0J**	ug/L	10.0	0.93	10	03/24/08 09:45	04/01/08 23:06	7440-38-2	
Barium	**42.7**	ug/L	10.0	0.72	10	03/24/08 09:45	04/01/08 23:06	7440-39-3	
Beryllium	ND	ug/L	10.0	0.70	10	03/24/08 09:45	04/08/08 22:18	7440-41-7	D3
Boron	**75.9J**	ug/L	100	11.1	10	03/24/08 09:45	04/08/08 22:18	7440-42-8	
Cadmium	ND	ug/L	10.0	0.98	10	03/24/08 09:45	04/01/08 23:06	7440-43-9	D3
Calcium	**185000**	ug/L	5000	100	10	03/24/08 09:45	04/08/08 22:18	7440-70-2	
Chromium	ND	ug/L	10.0	4.3	10	03/24/08 09:45	04/01/08 23:06	7440-47-3	D3
Cobalt	**20.4**	ug/L	10.0	0.59	10	03/24/08 09:45	04/01/08 23:06	7440-48-4	
Copper	**1.3J**	ug/L	10.0	1.2	10	03/24/08 09:45	04/01/08 23:06	7440-50-8	
Iron	**183000**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 23:06	7439-89-6	
Lead	ND	ug/L	10.0	0.44	10	03/24/08 09:45	04/01/08 23:06	7439-92-1	D3
Lithium	**4.0J**	ug/L	10.0	0.85	10	03/24/08 09:45	04/08/08 22:18	7439-93-2	
Magnesium	**72300**	ug/L	5000	526	10	03/24/08 09:45	04/08/08 22:18	7439-95-4	
Manganese	**28400**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 23:06	7439-96-5	
Molybdenum	**1.4J**	ug/L	100	1.1	10	03/24/08 09:45	04/01/08 23:06	7439-98-7	
Nickel	ND	ug/L	10.0	0.74	10	03/24/08 09:45	04/01/08 23:06	7440-02-0	D3
Potassium	**7560**	ug/L	5000	62.1	10	03/24/08 09:45	04/04/08 16:11	7440-09-7	
Selenium	ND	ug/L	10.0	1.5	10	03/24/08 09:45	04/04/08 16:11	7782-49-2	D3
Silver	ND	ug/L	5.0	1.1	10	03/24/08 09:45	04/01/08 23:06	7440-22-4	D3
Sodium	**6420**	ug/L	5000	460	10	03/24/08 09:45	04/08/08 22:18	7440-23-5	
Thallium	ND	ug/L	10.0	0.30	10	03/24/08 09:45	04/01/08 23:06	7440-28-0	D3
Total Hardness	**759**	mg/L	50.0	1.5	10	03/24/08 09:45	04/08/08 22:18		
Vanadium	ND	ug/L	10.0	4.1	10	03/24/08 09:45	04/01/08 23:06	7440-62-2	D3
Zinc	**44.2J**	ug/L	100	21.0	10	03/24/08 09:45	04/01/08 23:06	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**86.6**	mg/L	10.0	3.2	1		03/27/08 13:20		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:20		
Alkalinity, Total as CaCO3	**86.6**	mg/L	10.0	3.2	1		03/27/08 13:20		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**10.8**	mg/L	5.0	2.3	1		03/24/08 13:55		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 23:20	14797-55-8	
Nitrite as N	ND	mg/L	0.10	0.036	1		03/21/08 16:58	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.1J**	mg/L	5.0	1.1	1		03/21/08 23:20	16887-00-6	
Fluoride	**0.22J**	mg/L	0.50	0.059	1		03/21/08 23:20	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: KMW-9P **Lab ID: 401798005** Collected: 03/20/08 12:34 Received: 03/21/08 08:15 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**1020**	mg/L	400	51.0	100		03/24/08 16:25	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:43	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.3**	mg/L	1.0	0.50	1		04/02/08 12:40	7764-41-7	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: DUP-006 **Lab ID: 401798006** Collected: 03/20/08 00:00 Received: 03/21/08 11:19 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.339J**	ng/L	0.50	0.16	1	03/31/08 09:30	04/03/08 10:34	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	ND	ug/L	500	44.3	10	03/24/08 09:45	04/04/08 16:17	7429-90-5	D3
Antimony	ND	ug/L	10.0	1.0	10	03/24/08 09:45	04/01/08 23:12	7440-36-0	D3
Arsenic	**3.8J**	ug/L	10.0	0.93	10	03/24/08 09:45	04/01/08 23:12	7440-38-2	
Barium	**41.1**	ug/L	10.0	0.72	10	03/24/08 09:45	04/01/08 23:12	7440-39-3	
Beryllium	ND	ug/L	10.0	0.70	10	03/24/08 09:45	04/08/08 22:24	7440-41-7	D3
Boron	**94.4J**	ug/L	100	11.1	10	03/24/08 09:45	04/08/08 22:24	7440-42-8	
Cadmium	ND	ug/L	10.0	0.98	10	03/24/08 09:45	04/01/08 23:12	7440-43-9	D3
Calcium	**213000**	ug/L	5000	100	10	03/24/08 09:45	04/08/08 22:24	7440-70-2	
Chromium	ND	ug/L	10.0	4.3	10	03/24/08 09:45	04/01/08 23:12	7440-47-3	D3
Cobalt	**19.4**	ug/L	10.0	0.59	10	03/24/08 09:45	04/01/08 23:12	7440-48-4	
Copper	ND	ug/L	10.0	1.2	10	03/24/08 09:45	04/01/08 23:12	7440-50-8	D3
Iron	**173000**	ug/L	500	29.2	10	03/24/08 09:45	04/01/08 23:12	7439-89-6	
Lead	ND	ug/L	10.0	0.44	10	03/24/08 09:45	04/01/08 23:12	7439-92-1	D3
Lithium	**5.7J**	ug/L	10.0	0.85	10	03/24/08 09:45	04/08/08 22:24	7439-93-2	
Magnesium	**84300**	ug/L	5000	526	10	03/24/08 09:45	04/08/08 22:24	7439-95-4	
Manganese	**27100**	ug/L	10.0	0.80	10	03/24/08 09:45	04/01/08 23:12	7439-96-5	
Molybdenum	**1.3J**	ug/L	100	1.1	10	03/24/08 09:45	04/01/08 23:12	7439-98-7	
Nickel	ND	ug/L	10.0	0.74	10	03/24/08 09:45	04/01/08 23:12	7440-02-0	D3
Potassium	**7990**	ug/L	5000	62.1	10	03/24/08 09:45	04/04/08 16:17	7440-09-7	
Selenium	**3.1J**	ug/L	10.0	1.5	10	03/24/08 09:45	04/04/08 16:17	7782-49-2	
Silver	ND	ug/L	5.0	1.1	10	03/24/08 09:45	04/01/08 23:12	7440-22-4	D3
Sodium	**7910**	ug/L	5000	460	10	03/24/08 09:45	04/08/08 22:24	7440-23-5	
Thallium	ND	ug/L	10.0	0.30	10	03/24/08 09:45	04/01/08 23:12	7440-28-0	D3
Total Hardness	**879**	mg/L	50.0	1.5	10	03/24/08 09:45	04/08/08 22:24		
Vanadium	ND	ug/L	10.0	4.1	10	03/24/08 09:45	04/01/08 23:12	7440-62-2	D3
Zinc	**35.7J**	ug/L	100	21.0	10	03/24/08 09:45	04/01/08 23:12	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**84.4**	mg/L	10.0	3.2	1		03/27/08 13:21		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	10.0	3.2	1		03/27/08 13:21		
Alkalinity, Total as CaCO3	**84.4**	mg/L	10.0	3.2	1		03/27/08 13:21		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**19.8**	mg/L	5.0	2.3	1		03/24/08 13:55		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	ND	mg/L	0.40	0.085	1		03/21/08 23:35	14797-55-8	
Nitrite as N	**1.0**	mg/L	0.10	0.036	1		03/21/08 17:12	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.1J**	mg/L	5.0	1.1	1		03/21/08 23:35	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		03/21/08 23:35	16984-48-8	

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ANALYTICAL RESULTS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Sample: DUP-006 **Lab ID: 401798006** Collected: 03/20/08 00:00 Received: 03/21/08 11:19 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**1040**	mg/L	400	51.0	100		03/24/08 16:39	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	ND	mg/L	0.020	0.0060	1		04/01/08 13:44	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	1.0	0.50	1		04/02/08 12:42	7764-41-7	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WETA/1142 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 7931
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	ND	0.40	
Nitrite as N	mg/L	ND	0.10	

LABORATORY CONTROL SAMPLE: 7932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.7	104	90-110	
Nitrite as N	mg/L	.8	0.80	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 7933 7934

Parameter	Units	401817001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.40	1.6	1.6	1.7	1.7	104	104	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8144 8145

Parameter	Units	401798002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.71	1.6	1.6	2.3	2.3	98	98	90-110	.4	20	
Nitrite as N	mg/L	ND	.8	.8	0.78	0.80	98	100	90-110	3	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WETA/1144 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 8146
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	ND	5.0	
Fluoride	mg/L	ND	0.50	
Sulfate	mg/L	ND	4.0	

LABORATORY CONTROL SAMPLE: 8147

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.6	103	90-110	
Fluoride	mg/L	2	2.2	108	90-110	
Sulfate	mg/L	16	16.5	103	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8148 8149

Parameter	Units	401798002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.2	20	20	33.6	33.8	107	108	90-110	.4	20	
Fluoride	mg/L	0.26J	2	2	2.2	2.2	96	96	90-110	0	20	
Sulfate	mg/L	125	160	160	288	288	102	102	90-110	.07	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8150 8151

Parameter	Units	401817001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.1	20	20	31.8	31.6	108	107	90-110	.6	20	
Fluoride	mg/L	<0.50	2	2	2.2	2.2	98	97	90-110	.5	20	
Sulfate	mg/L	13.2	16	16	30.0	29.8	105	104	90-110	.4	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: MPRP/1077 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 8220
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	ND	50.0	
Antimony	ug/L	ND	1.0	
Arsenic	ug/L	0.14J	1.0	
Barium	ug/L	ND	1.0	
Beryllium	ug/L	ND	1.0	
Boron	ug/L	ND	10.0	
Cadmium	ug/L	ND	1.0	
Calcium	ug/L	49.6J	500	
Chromium	ug/L	ND	1.0	
Cobalt	ug/L	ND	1.0	
Copper	ug/L	ND	1.0	
Iron	ug/L	3.2J	50.0	
Lead	ug/L	ND	1.0	
Lithium	ug/L	ND	1.0	
Magnesium	ug/L	ND	500	
Manganese	ug/L	0.10J	1.0	
Molybdenum	ug/L	ND	10.0	
Nickel	ug/L	ND	1.0	
Potassium	ug/L	ND	500	
Selenium	ug/L	0.59J	1.0	
Silver	ug/L	ND	0.50	
Sodium	ug/L	ND	500	
Thallium	ug/L	ND	1.0	
Vanadium	ug/L	ND	1.0	
Zinc	ug/L	4.8J	10.0	

LABORATORY CONTROL SAMPLE: 8221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	10000	9430	94	75-125	
Antimony	ug/L	200	221	111	75-125	
Arsenic	ug/L	200	226	113	75-125	
Barium	ug/L	200	221	110	75-125	
Beryllium	ug/L	200	238	119	75-125	
Boron	ug/L	200	200	100	75-125	
Cadmium	ug/L	200	224	112	75-125	
Calcium	ug/L	10000	9790	98	75-125	
Chromium	ug/L	200	223	111	75-125	
Cobalt	ug/L	200	215	108	75-125	
Copper	ug/L	200	216	108	75-125	
Iron	ug/L	10000	9920	99	75-125	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

LABORATORY CONTROL SAMPLE: 8221

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	200	219	109	75-125	
Lithium	ug/L	200	245	122	75-125	
Magnesium	ug/L	10000	9650	97	75-125	
Manganese	ug/L	200	221	110	75-125	
Molybdenum	ug/L	200	204	102	75-125	
Nickel	ug/L	200	215	108	75-125	
Potassium	ug/L	10000	9540	95	75-125	
Selenium	ug/L	200	224	112	75-125	
Silver	ug/L	100	97.6	98	75-125	
Sodium	ug/L	10000	9460	95	75-125	
Thallium	ug/L	200	212	106	75-125	
Vanadium	ug/L	200	224	112	75-125	
Zinc	ug/L	200	214	107	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8222 8223

Parameter	Units	401753001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	136	10000	10000	8860	8920	87	88	75-125	.6	20	
Antimony	ug/L	ND	200	200	216	206	108	103	75-125	5	20	
Arsenic	ug/L	3.8	200	200	228	221	112	109	75-125	3	20	
Barium	ug/L	17.4	200	200	231	222	107	102	75-125	4	20	
Beryllium	ug/L	ND	200	200	203	201	102	100	75-125	1	20	
Boron	ug/L	46.7	200	200	242	238	97	95	75-125	2	20	
Cadmium	ug/L	ND	200	200	217	209	108	104	75-125	4	20	
Calcium	ug/L	18200	10000	10000	27500	28500	92	103	75-125	4	20	
Chromium	ug/L	ND	200	200	218	208	109	104	75-125	5	20	
Cobalt	ug/L	3.1	200	200	211	203	104	100	75-125	4	20	
Copper	ug/L	2.1	200	200	214	204	106	101	75-125	5	20	
Iron	ug/L	5850	10000	10000	15800	15100	99	93	75-125	4	20	
Lead	ug/L	0.11J	200	200	213	206	106	103	75-125	3	20	
Lithium	ug/L	1.7	200	200	208	203	103	101	75-125	2	20	
Magnesium	ug/L	9970	10000	10000	18300	18900	84	89	75-125	3	20	
Manganese	ug/L	1550	200	200	1780	1710	116	79	75-125	4	20	
Molybdenum	ug/L	2.0J	200	200	201	193	99	96	75-125	4	20	
Nickel	ug/L	1.9	200	200	209	199	103	99	75-125	5	20	
Potassium	ug/L	2860	10000	10000	12500	13100	97	103	75-125	5	20	
Selenium	ug/L	0.54J	200	200	217	225	108	112	75-125	3	20	
Silver	ug/L	ND	100	100	94.2	90.6	94	91	75-125	4	20	
Sodium	ug/L	1220	10000	10000	9780	10000	86	88	75-125	2	20	
Thallium	ug/L	ND	200	200	210	203	105	101	75-125	4	20	
Vanadium	ug/L	0.70J	200	200	220	209	109	104	75-125	5	20	
Zinc	ug/L	4.4J	200	200	208	202	102	99	75-125	3	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WET/1142 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 8327
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	ND	5.0	

LABORATORY CONTROL SAMPLE: 8328

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	42.8	37.6	88	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 8329 8330

Parameter	Units	1069945001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<5.0	42.8	42.8	40.0	39.6	91	90	80-120	1	20	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: GCV/1160 | Analysis Method: EPA 8021
QC Batch Method: EPA 8021 | Analysis Description: 8021 GCV BTEX
Associated Lab Samples: 401798003

METHOD BLANK: 8904
Associated Lab Samples: 401798003

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Benzene	ug/L	ND	1.0	
Ethylbenzene	ug/L	ND	1.0	
m&p-Xylene	ug/L	ND	2.0	
o-Xylene	ug/L	ND	1.0	
Toluene	ug/L	ND	1.0	
a,a,a-Trifluorotoluene (S)	%	101	80-124	

LABORATORY CONTROL SAMPLE & LCSD: 8905 8906

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	21.9	21.9	110	110	80-120	.05	20	
Ethylbenzene	ug/L	20	21.9	21.8	110	109	80-120	.4	20	
m&p-Xylene	ug/L	40	42.8	42.6	107	107	80-120	.4	20	
o-Xylene	ug/L	20	21.4	21.3	107	107	80-120	.5	20	
Toluene	ug/L	20	22.2	22.1	111	111	80-120	.2	20	
a,a,a-Trifluorotoluene (S)	%				102	101	80-124			

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WET/1156 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 9412
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	10.0	

LABORATORY CONTROL SAMPLE: 9413

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 9414 9415

Parameter	Units	401753001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	77.7	500	500	575	573	99	99	80-120	.4	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: CVFS/1030 | Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E | Analysis Description: 1631E Mercury
Associated Lab Samples: 401798001, 401798002

METHOD BLANK: 10692
Associated Lab Samples: 401798001, 401798002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.372J	0.50	

METHOD BLANK: 10693
Associated Lab Samples: 401798001, 401798002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.414J	0.50	

METHOD BLANK: 10694
Associated Lab Samples: 401798001, 401798002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.476J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 10695 10696

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.39	5.09	108	102	79-121	6	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10984 10985

Parameter	Units	401753007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.14	5	5	6.58	6.71	109	111	75-125	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10986 10987

Parameter	Units	401753010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	114	200	200	343	331	114	108	75-125	4	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10988 10989

Parameter	Units	401773002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	36.4	100	100	152	150	116	114	75-125	1	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: CVFS/1031 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 10971
Associated Lab Samples: 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.372J	0.50	

METHOD BLANK: 10972
Associated Lab Samples: 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.217J	0.50	

METHOD BLANK: 10973
Associated Lab Samples: 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.250J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 10974 10975

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.82	5.69	116	114	79-121	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 12491 12492

Parameter	Units	401798003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.62	10	10	13.7	13.5	111	109	75-125	1	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 12493 12494

Parameter	Units	401823002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	68.3	200	200	280	297	106	114	75-125	6	24	

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WETA/1209 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004

METHOD BLANK: 10994
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 10995

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.094	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10996 10997

Parameter	Units	401753008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.11	109	106	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 10998 10999

Parameter	Units	401798004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.1	.1	0.11	0.12	111	118	90-110	6	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WETA/1210 | Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 | Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 401798005, 401798006

METHOD BLANK: 11004
Associated Lab Samples: 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	ND	0.020	

LABORATORY CONTROL SAMPLE: 11005

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11006 11007

Parameter	Units	402077029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.12	0.11	118	114	90-110	3	20	M0

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QUALITY CONTROL DATA

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

QC Batch: WETA/1221 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

METHOD BLANK: 11685
Associated Lab Samples: 401798001, 401798002, 401798003, 401798004, 401798005, 401798006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	ND	1.0	

LABORATORY CONTROL SAMPLE: 11686

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.6	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11687 11688

Parameter	Units	401798006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.2	10	10	11.3	11.0	100	97	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 11689 11690

Parameter	Units	401950002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.1	10.3	99	101	90-110	2	20	

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QUALIFIERS

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: ICPM/1034

[1] Internal standard limits of 30-140% used. All QC within limits.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

M0 Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401798001	FBK-006	EPA 300.0	WETA/1142		
401798002	HW-1	EPA 300.0	WETA/1142		
401798003	MW-5	EPA 300.0	WETA/1142		
401798004	MW-103	EPA 300.0	WETA/1142		
401798005	KMW-9P	EPA 300.0	WETA/1142		
401798006	DUP-006	EPA 300.0	WETA/1142		
401798001	FBK-006	EPA 300.0	WETA/1144		
401798002	HW-1	EPA 300.0	WETA/1144		
401798003	MW-5	EPA 300.0	WETA/1144		
401798004	MW-103	EPA 300.0	WETA/1144		
401798005	KMW-9P	EPA 300.0	WETA/1144		
401798006	DUP-006	EPA 300.0	WETA/1144		
401798001	FBK-006	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401798002	HW-1	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401798003	MW-5	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401798004	MW-103	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401798005	KMW-9P	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401798006	DUP-006	EPA 3020	MPRP/1077	EPA 6020	ICPM/1034
401798001	FBK-006	SM 4500-S F (2000)	WET/1142		
401798002	HW-1	SM 4500-S F (2000)	WET/1142		
401798003	MW-5	SM 4500-S F (2000)	WET/1142		
401798004	MW-103	SM 4500-S F (2000)	WET/1142		
401798005	KMW-9P	SM 4500-S F (2000)	WET/1142		
401798006	DUP-006	SM 4500-S F (2000)	WET/1142		
401798003	MW-5	EPA 8021	GCV/1160		
401798001	FBK-006	SM 2320B	WET/1156		
401798002	HW-1	SM 2320B	WET/1156		
401798003	MW-5	SM 2320B	WET/1156		
401798004	MW-103	SM 2320B	WET/1156		
401798005	KMW-9P	SM 2320B	WET/1156		
401798006	DUP-006	SM 2320B	WET/1156		
401798001	FBK-006	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401798002	HW-1	EPA 1631E	CVFS/1030	EPA 1631E	CVFS/1032
401798003	MW-5	EPA 1631E	CVFS/1031	EPA 1631E	CVFS/1033
401798004	MW-103	EPA 1631E	CVFS/1031	EPA 1631E	CVFS/1033
401798005	KMW-9P	EPA 1631E	CVFS/1031	EPA 1631E	CVFS/1033
401798006	DUP-006	EPA 1631E	CVFS/1031	EPA 1631E	CVFS/1033
401798001	FBK-006	EPA 335.4	WETA/1209		
401798002	HW-1	EPA 335.4	WETA/1209		
401798003	MW-5	EPA 335.4	WETA/1209		
401798004	MW-103	EPA 335.4	WETA/1209		
401798005	KMW-9P	EPA 335.4	WETA/1210		
401798006	DUP-006	EPA 335.4	WETA/1210		
401798001	FBK-006	EPA 350.1	WETA/1221		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 06W003 HUMBOLDT GW
Pace Project No.: 401798

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
401798002	**HW-1**	EPA 350.1	WETA/1221		
401798003	**MW-5**	EPA 350.1	WETA/1221		
401798004	**MW-103**	EPA 350.1	WETA/1221		
401798005	**KMW-9P**	EPA 350.1	WETA/1221		
401798006	**DUP-006**	EPA 350.1	WETA/1221		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Co. Project # 407198

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

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

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used JB **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1.5°C **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: 3/21/08 AB

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☒Yes ☐No ☐N/A	6. NHrate
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.
Sufficient Volume:	☒Yes ☐No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No ☐N/A	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
Containers Intact:	☒Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☒Yes ☐No ☐N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed AB / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☒No ☐N/A	15.
Trip Blank Present:	☐Yes ☒No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: AH **Date:** 3/21/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

(Please Print Clearly)

Company Name:	North Jackson Co
Branch/Location:	Marquette, MI
Project Contact:	Sharon Felix
Phone:	
Project Number:	
Project Name:	Humboldt Mill
Project State:	MI
Sampled By (Print):	Richard Eagle / Andy Marcini
Sampled By (Sign):	Richard L Eagle
PO #:	Regulatory Program:

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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

20080320

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	S Felix
Mail To Company:	
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, St = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: Alk, Alk2, Cl, Fl, SO4, Nitrite, Nitrate	Ammonia	Metals (Cl, Thiura)	Cyanide	Sulfide	VOCs BTEX			CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
FILTERED? (YES/NO) Y/N					N	N	N	N	N	N					
PRESERVATION (CODE)* Pick Letter					A	C	D	G	J	B					
001	FBK-006	3/20/08	1530	W	3	1	2	1	1				HSOOLING 2-40ml, 5-250ml	HADG	
002	HW-1	↓	1500	GW	3	1	2	1	1		↓		↓		
003	MW-5	↓	1352	↓	3	1	2	1	1	2	↓		↓	2-40ml	
004	MW-103	↓	1335	↓	3	1	2	1	1		↓		↓		
005	KMW-9P	↓	1239	↓	3	1	2	1	1		↓		↓		
006	DUP-006	↓	—	↓	3	1	2	1	1		↓		↓		

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Richard Eagle	3/20/08 1800	FED EX	
FED EX	3/21/08 1015	[illegible]	3/21/08 1015

PACE Project No. 401798

Receipt Temp = 1.5 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

May 2008

Batch No. 404195

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www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Phone: 920.469.2436
Fax: 920.469.8827

July 16, 2008

Janis Kesy
Foth & Van Dyke
2737 South Ridge Road
Green Bay, WI 54304

Dear Ms. Kesy:

Enclosed is a report for the analysis of 28 ground water samples and associated QC samples for the Humboldt Mill project (06W003). These samples were received from May 22 to 28, 2008. The samples were assigned to batch numbers 404195, 404271 and 404340 for laboratory tracking purposes.

A table of the results has also been sent to you via e-mail.

If you have any questions regarding this data please call me at (608) 232-3300.

Sincerely,

for Tod N.

Tod Noltemeyer
Project Manager

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1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

July 17, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL
Pace Project No.: 404195

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on May 22, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Alee Her for
Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	Matrix	Date Collected	Date Received
404195001	MW-603	Water	05/21/08 11:05	05/22/08 10:05
404195002	MW-606	Water	05/21/08 09:35	05/22/08 10:05
404195003	KMW-10	Water	05/21/08 12:05	05/22/08 10:05
404195004	MW-12	Water	05/21/08 14:55	05/22/08 10:05
404195005	MW-11	Water	05/21/08 13:35	05/22/08 10:05
404195006	HW-5A	Water	05/21/08 14:36	05/22/08 10:05
404195007	HW-5	Water	05/21/08 14:36	05/22/08 10:05
404195008	HW-1A	Water	05/21/08 10:01	05/22/08 10:05
404195009	HW-1	Water	05/21/08 13:39	05/22/08 10:05
404195010	DUP-001	Water	05/21/08 00:00	05/22/08 10:05
404195011	HYG-1	Water	05/21/08 11:19	05/22/08 10:05
404195012	HW-2	Water	05/21/08 13:04	05/22/08 10:05
404195013	HW-3	Water	05/21/08 15:34	05/22/08 10:05
404195014	HW-6	Water	05/21/08 11:53	05/22/08 10:05
404195015	HW-6A	Water	05/21/08 12:23	05/22/08 10:05
404195016	FBK-001	Water	05/21/08 09:30	05/22/08 10:05
404195017	HW-4	Water	05/21/08 16:16	05/22/08 10:05
404195018	KMW-3	Water	05/21/08 15:45	05/22/08 10:05
404195019	KMW-4	Water	05/21/08 16:30	05/22/08 10:05

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
404195001	MW-603	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195002	MW-606	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404195003	KMW-10	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195004	MW-12	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404195005	MW-11	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195006	HW-5A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195007	HW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195008	HW-1A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195009	HW-1	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195010	DUP-001	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195011	HYG-1	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195012	HW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195013	HW-3	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195014	HW-6	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195015	HW-6A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195016	FBK-001	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404195017	HW-4	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404195018	KMW-3	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404195019	KMW-4	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
19 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
19 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
14 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

P4: Sample field preservation does not meet EPA or method recommendations for this analysis.
- MW-11 (Lab ID: 404195005)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1532

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
19 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- FBK-001 (Lab ID: 404195016)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
19 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1592

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 404195001,404195002

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 32464)
  - Chloride
- MSD (Lab ID: 32465)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
19 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1599

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 404195008,404305002

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 33051)
  - Cyanide
- MSD (Lab ID: 33052)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
19 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1681

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 404176011,404195004

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 36286)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: MW-603 **Lab ID: 404195001** Collected: 05/21/08 11:05 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.305J**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 07:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**32.8**	mg/L	10.0	3.2	1		05/23/08 15:19		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/23/08 15:19		
Alkalinity, Total as CaCO3	**32.8**	mg/L	10.0	3.2	1		05/23/08 15:19		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 00:14	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 06:48	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.7J**	mg/L	5.0	1.1	1		05/23/08 00:14	16887-00-6	M0
Fluoride	**0.54**	mg/L	0.50	0.059	1		05/23/08 00:14	16984-48-8	
Sulfate	**29.6**	mg/L	4.0	0.51	1		05/23/08 00:14	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		05/27/08 14:10	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:35	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: MW-606 **Lab ID: 404195002** Collected: 05/21/08 09:35 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.659**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 06:57	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**70.4**	mg/L	10.0	3.2	1		05/29/08 13:25		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:25		
Alkalinity, Total as CaCO3	**70.4**	mg/L	10.0	3.2	1		05/29/08 13:25		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 00:51	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 07:31	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		05/23/08 00:51	16887-00-6	
Fluoride	**0.41J**	mg/L	0.50	0.059	1		05/23/08 00:51	16984-48-8	
Sulfate	**29.0**	mg/L	4.0	0.51	1		05/23/08 00:51	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		05/27/08 14:10	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:35	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: KMW-10 **Lab ID: 404195003** Collected: 05/21/08 12:05 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.82**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 07:47	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**44.0**	mg/L	10.0	3.2	1		05/29/08 13:25		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:25		
Alkalinity, Total as CaCO3	**44.0**	mg/L	10.0	3.2	1		05/29/08 13:25		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 01:27	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 08:13	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		05/23/08 01:27	16887-00-6	
Fluoride	**0.37J**	mg/L	0.50	0.059	1		05/23/08 01:27	16984-48-8	
Sulfate	**16.2**	mg/L	4.0	0.51	1		05/23/08 01:27	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		05/27/08 14:11	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:36	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: MW-12 **Lab ID: 404195004** Collected: 05/21/08 14:55 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.318J**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 08:06	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**147**	mg/L	10.0	3.2	1		05/29/08 13:25		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:25		
Alkalinity, Total as CaCO3	**147**	mg/L	10.0	3.2	1		05/29/08 13:25		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 02:04	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 08:56	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.2J**	mg/L	5.0	1.1	1		05/23/08 02:04	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		05/23/08 02:04	16984-48-8	
Sulfate	**8.9**	mg/L	4.0	0.51	1		05/23/08 02:04	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0064J**	mg/L	0.020	0.0060	1		05/27/08 14:12	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.73J**	mg/L	1.0	0.50	1		06/06/08 13:37	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: MW-11 **Lab ID: 404195005** Collected: 05/21/08 13:35 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**3.24**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 08:15	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**504**	mg/L	10.0	3.2	1		05/29/08 13:26		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:26		
Alkalinity, Total as CaCO3	**504**	mg/L	10.0	3.2	1		05/29/08 13:26		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		P4
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.20J**	mg/L	0.40	0.085	1		05/23/08 02:16	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 09:10	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**26.6**	mg/L	5.0	1.1	1		05/23/08 02:16	16887-00-6	
Fluoride	**0.36J**	mg/L	0.50	0.059	1		05/23/08 02:16	16984-48-8	
Sulfate	**895**	mg/L	80.0	10.2	20		05/27/08 21:09	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0084J**	mg/L	0.020	0.0060	1		05/27/08 14:13	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**16.9**	mg/L	1.0	0.50	1		06/06/08 13:43	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-5A **Lab ID: 404195006** Collected: 05/21/08 14:36 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.621**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 08:26	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	10.0	3.2	1		05/29/08 13:26		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:26		
Alkalinity, Total as CaCO3	**110**	mg/L	10.0	3.2	1		05/29/08 13:26		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 02:28	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 09:24	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.4**	mg/L	5.0	1.1	1		05/23/08 02:28	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		05/23/08 02:28	16984-48-8	
Sulfate	**141**	mg/L	20.0	2.6	5		05/27/08 21:23	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0086J**	mg/L	0.020	0.0060	1		05/27/08 14:14	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:44	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-5 **Lab ID: 404195007** Collected: 05/21/08 14:36 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.506**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 08:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	10.0	3.2	1		05/29/08 13:27		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:27		
Alkalinity, Total as CaCO3	**125**	mg/L	10.0	3.2	1		05/29/08 13:27		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 02:40	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 09:38	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**13.0**	mg/L	5.0	1.1	1		05/23/08 02:40	16887-00-6	
Fluoride	**0.22J**	mg/L	0.50	0.059	1		05/23/08 02:40	16984-48-8	
Sulfate	**143**	mg/L	20.0	2.6	5		05/27/08 21:37	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0085J**	mg/L	0.020	0.0060	1		05/27/08 14:14	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:44	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-1A **Lab ID: 404195008** Collected: 05/21/08 10:01 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.581**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 08:56	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	10.0	3.2	1		05/29/08 13:27		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:27		
Alkalinity, Total as CaCO3	**110**	mg/L	10.0	3.2	1		05/29/08 13:27		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 02:52	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 09:52	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.5**	mg/L	5.0	1.1	1		05/23/08 02:52	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		05/23/08 02:52	16984-48-8	
Sulfate	**142**	mg/L	20.0	2.6	5		05/27/08 21:52	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.011J**	mg/L	0.020	0.0060	1		05/27/08 14:15	57-12-5	M0
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:45	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-1 **Lab ID: 404195009** Collected: 05/21/08 13:39 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.24**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 09:01	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	10.0	3.2	1		05/29/08 13:27		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:27		
Alkalinity, Total as CaCO3	**125**	mg/L	10.0	3.2	1		05/29/08 13:27		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 03:05	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 10:07	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.0**	mg/L	5.0	1.1	1		05/23/08 03:05	16887-00-6	
Fluoride	**0.22J**	mg/L	0.50	0.059	1		05/23/08 03:05	16984-48-8	
Sulfate	**123**	mg/L	20.0	2.6	5		05/27/08 22:06	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 13:55	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:46	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: DUP-001 **Lab ID: 404195010** Collected: 05/21/08 00:00 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.913**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 09:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	10.0	3.2	1		05/29/08 13:28		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:28		
Alkalinity, Total as CaCO3	**110**	mg/L	10.0	3.2	1		05/29/08 13:28		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 03:17	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 10:21	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.4**	mg/L	5.0	1.1	1		05/23/08 03:17	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		05/23/08 03:17	16984-48-8	
Sulfate	**145**	mg/L	20.0	2.6	5		05/27/08 22:20	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 13:56	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:46	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HYG-1 **Lab ID: 404195011** Collected: 05/21/08 11:19 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.996**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 09:10	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**108**	mg/L	10.0	3.2	1		05/29/08 13:28		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:28		
Alkalinity, Total as CaCO3	**108**	mg/L	10.0	3.2	1		05/29/08 13:28		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 03:29	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 10:35	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.6**	mg/L	5.0	1.1	1		05/23/08 03:29	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		05/23/08 03:29	16984-48-8	
Sulfate	**146**	mg/L	20.0	2.6	5		05/27/08 22:34	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 13:57	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:50	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-2 **Lab ID: 404195012** Collected: 05/21/08 13:04 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.30**	ng/L	0.50	0.16	1	05/27/08 10:30	06/04/08 09:16	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**119**	mg/L	10.0	3.2	1		05/29/08 13:28		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:28		
Alkalinity, Total as CaCO3	**119**	mg/L	10.0	3.2	1		05/29/08 13:28		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 03:41	14797-55-8	
Nitrite as N	**0.070J**	mg/L	0.10	0.036	1		05/23/08 10:49	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.3**	mg/L	5.0	1.1	1		05/23/08 03:41	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		05/23/08 03:41	16984-48-8	
Sulfate	**143**	mg/L	20.0	2.6	5		05/27/08 23:17	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 13:58	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:50	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-3 **Lab ID: 404195013** Collected: 05/21/08 15:34 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.438J**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 12:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**6.6J**	mg/L	10.0	3.2	1		05/29/08 13:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:29		
Alkalinity, Total as CaCO3	**6.6J**	mg/L	10.0	3.2	1		05/29/08 13:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 03:53	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 11:03	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**14.4**	mg/L	5.0	1.1	1		05/23/08 03:53	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		05/23/08 03:53	16984-48-8	
Sulfate	**30.8**	mg/L	4.0	0.51	1		05/23/08 03:53	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 13:58	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:51	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-6 **Lab ID: 404195014** Collected: 05/21/08 11:53 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.419J**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 10:44	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**147**	mg/L	10.0	3.2	1		05/29/08 13:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:29		
Alkalinity, Total as CaCO3	**147**	mg/L	10.0	3.2	1		05/29/08 13:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 04:30	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 11:46	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.6**	mg/L	5.0	1.1	1		05/23/08 04:30	16887-00-6	
Fluoride	**0.20J**	mg/L	0.50	0.059	1		05/23/08 04:30	16984-48-8	
Sulfate	**114**	mg/L	20.0	2.6	5		05/27/08 23:31	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 13:59	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:52	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-6A **Lab ID: 404195015** Collected: 05/21/08 12:23 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.45**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 11:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**108**	mg/L	10.0	3.2	1		05/29/08 13:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:29		
Alkalinity, Total as CaCO3	**108**	mg/L	10.0	3.2	1		05/29/08 13:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 04:42	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 12:00	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.6**	mg/L	5.0	1.1	1		05/23/08 04:42	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		05/23/08 04:42	16984-48-8	
Sulfate	**133**	mg/L	20.0	2.6	5		05/27/08 23:45	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:00	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:54	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: FBK-001 **Lab ID: 404195016** Collected: 05/21/08 09:30 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.326J**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 11:03	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		05/29/08 13:30		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:30		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		05/29/08 13:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 04:54	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 12:14	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		05/23/08 04:54	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		05/23/08 04:54	16984-48-8	
Sulfate	**<0.51**	mg/L	4.0	0.51	1		05/23/08 04:54	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:01	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 13:55	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: HW-4 **Lab ID: 404195017** Collected: 05/21/08 16:16 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.996**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 11:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**246**	mg/L	10.0	3.2	1		05/29/08 13:30		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:30		
Alkalinity, Total as CaCO3	**246**	mg/L	10.0	3.2	1		05/29/08 13:30		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/27/08 14:10		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 05:06	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 12:28	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.9**	mg/L	5.0	1.1	1		05/23/08 05:06	16887-00-6	
Fluoride	**0.20J**	mg/L	0.50	0.059	1		05/23/08 05:06	16984-48-8	
Sulfate	**7.8**	mg/L	4.0	0.51	1		05/23/08 05:06	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:05	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	1.0	0.50	1		06/06/08 13:55	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: KMW-3 **Lab ID: 404195018** Collected: 05/21/08 15:45 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.957**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 11:18	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**79.2**	mg/L	10.0	3.2	1		05/29/08 13:30		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:30		
Alkalinity, Total as CaCO3	**79.2**	mg/L	10.0	3.2	1		05/29/08 13:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 05:19	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 12:43	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.2J**	mg/L	5.0	1.1	1		05/23/08 05:19	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		05/23/08 05:19	16984-48-8	
Sulfate	**154**	mg/L	20.0	2.6	5		05/27/08 23:59	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:06	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.77J**	mg/L	1.0	0.50	1		06/06/08 13:56	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404195

Sample: KMW-4 **Lab ID: 404195019** Collected: 05/21/08 16:30 Received: 05/22/08 10:05 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.577**	ng/L	0.50	0.16	1	05/27/08 14:30	06/04/08 11:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	10.0	3.2	1		05/29/08 13:31		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:31		
Alkalinity, Total as CaCO3	**88.0**	mg/L	10.0	3.2	1		05/29/08 13:31		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 05:31	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 12:57	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.1J**	mg/L	5.0	1.1	1		05/23/08 05:31	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		05/23/08 05:31	16984-48-8	
Sulfate	**85.6**	mg/L	20.0	2.6	5		05/28/08 00:13	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:08	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.51J**	mg/L	1.0	0.50	1		06/06/08 13:59	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WETA/1591 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013

METHOD BLANK: 32455

Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	
Nitrite as N	mg/L	<0.036	0.10	

LABORATORY CONTROL SAMPLE: 32456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	103	90-110	
Nitrite as N	mg/L	.8	0.81	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32457 32458

Parameter	Units	404195002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.7	1.7	106	106	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.79	0.78	99	98	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32459 32460

Parameter	Units	404195001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.7	1.7	104	104	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.76	0.76	95	95	90-110	0	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WETA/1592 | Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 | Analysis Description: 300.0 IC Anions
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015

METHOD BLANK: 32462

Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	<1.1	5.0	
Fluoride	mg/L	<0.059	0.50	
Sulfate	mg/L	<0.51	4.0	

LABORATORY CONTROL SAMPLE: 32463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	21.4	107	90-110	
Fluoride	mg/L	2	2.0	99	90-110	
Sulfate	mg/L	16	16.2	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32464 32465

Parameter	Units	404195001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.7J	20	20	20.5	20.4	89	89	90-110	.3	20	M0
Fluoride	mg/L	0.54	2	2	2.5	2.5	98	97	90-110	.4	20	
Sulfate	mg/L	29.6	16	16	47.0	46.8	109	107	90-110	.6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32466 32467

Parameter	Units	404195002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6J	20	20	20.5	20.7	90	90	90-110	.8	20	
Fluoride	mg/L	0.41J	2	2	2.4	2.4	98	98	90-110	.4	20	
Sulfate	mg/L	29.0	16	16	46.4	46.3	109	108	90-110	.2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WET/1520
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Associated Lab Samples: 404195001

METHOD BLANK: 32678
Associated Lab Samples: 404195001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 32679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32680 32681

Parameter	Units	404114017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	280	500	500	764	771	97	98	80-120	.9	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WETA/1599 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008

METHOD BLANK: 33049
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 33050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33051 33052

Parameter	Units	404305002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.078J	.6	.6	0.39	0.40	52	54	90-110	4	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33053 33054

Parameter	Units	404195008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.011J	.1	.1	0.11	0.11	102	103	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WET/1532 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 404195001, 404195003, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195017

METHOD BLANK: 33173
Associated Lab Samples: 404195001, 404195003, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195017

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	<2.3	5.0	

LABORATORY CONTROL SAMPLE & LCSD: 33174 33175

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Sulfide	mg/L	44.8	37.6	38.4	84	86	80-120	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WET/1547 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

METHOD BLANK: 34017

Associated Lab Samples: 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 34018

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 34019 34020

Parameter	Units	404176019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	532	500	500	1040	1030	102	100	80-120	.6	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WETA/1669 | Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 | Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

METHOD BLANK: 35853
Associated Lab Samples: 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 35854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35855 35856

Parameter	Units	404195018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	104	104	90-110	.09	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35857 35858

Parameter	Units	404271006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	103	104	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: CVFS/1096 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012

METHOD BLANK: 35945

Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 35946

Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.195J	0.50	

METHOD BLANK: 35947

Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.229J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 35948 35949

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.59	5.23	112	105	79-121	7	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35950 35951

Parameter	Units	1073606019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.14	10	10	12.6	13.5	104	113	75-125	7	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35952 35953

Parameter	Units	404154002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	103	400	400	548	549	111	112	75-125	.3	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: CVFS/1098 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

METHOD BLANK: 36138
Associated Lab Samples: 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 36139
Associated Lab Samples: 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 36140
Associated Lab Samples: 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 36141 36142

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.75	5.14	115	103	79-121	11	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36143 36144

Parameter	Units	404213001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	7.28	20	20	27.2	27.6	100	102	75-125	1	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36145 36146

Parameter	Units	404214001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.22	5	5	7.17	6.24	119	100	75-125	14	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WETA/1681 — Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 — Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004

METHOD BLANK: 36283
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 36284

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.4	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36285 36286

Parameter	Units	404176011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.0 U	10	10	10.2	8.4	101	82	90-110	20	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36287 36288

Parameter	Units	404195004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.73J	10	10	11.5	11.3	107	106	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404195

QC Batch: WETA/1682 — Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 — Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

METHOD BLANK: 36289
Associated Lab Samples: 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 36290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36291 36292

Parameter	Units	404195014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.9	10.8	107	107	90-110	.7	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36293 36294

Parameter	Units	404592001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.80J	10	10	11.5	11.5	107	107	90-110	.2	20	

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QUALIFIERS

Project: HUMBOLDT MILL
Pace Project No.: 404195

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G Pace Analytical Services - Green Bay

BATCH QUALIFIERS

Batch: WET/1532

[1] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

H1 Analysis conducted outside the recognized method holding time.

M0 Matrix spike recovery was outside laboratory control limits.

P4 Sample field preservation does not meet EPA or method recommendations for this analysis.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404195001	MW-603	EPA 300.0	WETA/1591		
404195002	MW-606	EPA 300.0	WETA/1591		
404195003	KMW-10	EPA 300.0	WETA/1591		
404195004	MW-12	EPA 300.0	WETA/1591		
404195005	MW-11	EPA 300.0	WETA/1591		
404195006	HW-5A	EPA 300.0	WETA/1591		
404195007	HW-5	EPA 300.0	WETA/1591		
404195008	HW-1A	EPA 300.0	WETA/1591		
404195009	HW-1	EPA 300.0	WETA/1591		
404195010	DUP-001	EPA 300.0	WETA/1591		
404195011	HYG-1	EPA 300.0	WETA/1591		
404195012	HW-2	EPA 300.0	WETA/1591		
404195013	HW-3	EPA 300.0	WETA/1591		
404195014	HW-6	EPA 300.0	WETA/1591		
404195015	HW-6A	EPA 300.0	WETA/1591		
404195016	FBK-001	EPA 300.0	WETA/1591		
404195017	HW-4	EPA 300.0	WETA/1591		
404195018	KMW-3	EPA 300.0	WETA/1591		
404195019	KMW-4	EPA 300.0	WETA/1591		
404195001	MW-603	EPA 300.0	WETA/1592		
404195002	MW-606	EPA 300.0	WETA/1592		
404195003	KMW-10	EPA 300.0	WETA/1592		
404195004	MW-12	EPA 300.0	WETA/1592		
404195005	MW-11	EPA 300.0	WETA/1592		
404195006	HW-5A	EPA 300.0	WETA/1592		
404195007	HW-5	EPA 300.0	WETA/1592		
404195008	HW-1A	EPA 300.0	WETA/1592		
404195009	HW-1	EPA 300.0	WETA/1592		
404195010	DUP-001	EPA 300.0	WETA/1592		
404195011	HYG-1	EPA 300.0	WETA/1592		
404195012	HW-2	EPA 300.0	WETA/1592		
404195013	HW-3	EPA 300.0	WETA/1592		
404195014	HW-6	EPA 300.0	WETA/1592		
404195015	HW-6A	EPA 300.0	WETA/1592		
404195016	FBK-001	EPA 300.0	WETA/1592		
404195017	HW-4	EPA 300.0	WETA/1592		
404195018	KMW-3	EPA 300.0	WETA/1592		
404195019	KMW-4	EPA 300.0	WETA/1592		
404195001	MW-603	SM 2320B	WET/1520		
404195001	MW-603	EPA 335.4	WETA/1599		
404195002	MW-606	EPA 335.4	WETA/1599		
404195003	KMW-10	EPA 335.4	WETA/1599		
404195004	MW-12	EPA 335.4	WETA/1599		
404195005	MW-11	EPA 335.4	WETA/1599		
404195006	HW-5A	EPA 335.4	WETA/1599		
404195007	HW-5	EPA 335.4	WETA/1599		
404195008	HW-1A	EPA 335.4	WETA/1599		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404195001	MW-603	SM 4500-S F (2000)	WET/1532		
404195003	KMW-10	SM 4500-S F (2000)	WET/1532		
404195005	MW-11	SM 4500-S F (2000)	WET/1532		
404195006	HW-5A	SM 4500-S F (2000)	WET/1532		
404195007	HW-5	SM 4500-S F (2000)	WET/1532		
404195008	HW-1A	SM 4500-S F (2000)	WET/1532		
404195009	HW-1	SM 4500-S F (2000)	WET/1532		
404195010	DUP-001	SM 4500-S F (2000)	WET/1532		
404195011	HYG-1	SM 4500-S F (2000)	WET/1532		
404195012	HW-2	SM 4500-S F (2000)	WET/1532		
404195013	HW-3	SM 4500-S F (2000)	WET/1532		
404195014	HW-6	SM 4500-S F (2000)	WET/1532		
404195015	HW-6A	SM 4500-S F (2000)	WET/1532		
404195017	HW-4	SM 4500-S F (2000)	WET/1532		
404195002	MW-606	SM 2320B	WET/1547		
404195003	KMW-10	SM 2320B	WET/1547		
404195004	MW-12	SM 2320B	WET/1547		
404195005	MW-11	SM 2320B	WET/1547		
404195006	HW-5A	SM 2320B	WET/1547		
404195007	HW-5	SM 2320B	WET/1547		
404195008	HW-1A	SM 2320B	WET/1547		
404195009	HW-1	SM 2320B	WET/1547		
404195010	DUP-001	SM 2320B	WET/1547		
404195011	HYG-1	SM 2320B	WET/1547		
404195012	HW-2	SM 2320B	WET/1547		
404195013	HW-3	SM 2320B	WET/1547		
404195014	HW-6	SM 2320B	WET/1547		
404195015	HW-6A	SM 2320B	WET/1547		
404195016	FBK-001	SM 2320B	WET/1547		
404195017	HW-4	SM 2320B	WET/1547		
404195018	KMW-3	SM 2320B	WET/1547		
404195019	KMW-4	SM 2320B	WET/1547		
404195009	HW-1	EPA 335.4	WETA/1669		
404195010	DUP-001	EPA 335.4	WETA/1669		
404195011	HYG-1	EPA 335.4	WETA/1669		
404195012	HW-2	EPA 335.4	WETA/1669		
404195013	HW-3	EPA 335.4	WETA/1669		
404195014	HW-6	EPA 335.4	WETA/1669		
404195015	HW-6A	EPA 335.4	WETA/1669		
404195016	FBK-001	EPA 335.4	WETA/1669		
404195017	HW-4	EPA 335.4	WETA/1669		
404195018	KMW-3	EPA 335.4	WETA/1669		
404195019	KMW-4	EPA 335.4	WETA/1669		
404195001	MW-603	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195002	MW-606	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195003	KMW-10	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195004	MW-12	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 404195

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404195005	MW-11	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195006	HW-5A	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195007	HW-5	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195008	HW-1A	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195009	HW-1	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195010	DUP-001	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195011	HYG-1	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195012	HW-2	EPA 1631E	CVFS/1096	EPA 1631E	CVFS/1097
404195013	HW-3	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195014	HW-6	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195015	HW-6A	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195016	FBK-001	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195017	HW-4	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195018	KMW-3	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195019	KMW-4	EPA 1631E	CVFS/1098	EPA 1631E	CVFS/1099
404195001	MW-603	EPA 350.1	WETA/1681		
404195002	MW-606	EPA 350.1	WETA/1681		
404195003	KMW-10	EPA 350.1	WETA/1681		
404195004	MW-12	EPA 350.1	WETA/1681		
404195005	MW-11	EPA 350.1	WETA/1682		
404195006	HW-5A	EPA 350.1	WETA/1682		
404195007	HW-5	EPA 350.1	WETA/1682		
404195008	HW-1A	EPA 350.1	WETA/1682		
404195009	HW-1	EPA 350.1	WETA/1682		
404195010	DUP-001	EPA 350.1	WETA/1682		
404195011	HYG-1	EPA 350.1	WETA/1682		
404195012	HW-2	EPA 350.1	WETA/1682		
404195013	HW-3	EPA 350.1	WETA/1682		
404195014	HW-6	EPA 350.1	WETA/1682		
404195015	HW-6A	EPA 350.1	WETA/1682		
404195016	FBK-001	EPA 350.1	WETA/1682		
404195017	HW-4	EPA 350.1	WETA/1682		
404195018	KMW-3	EPA 350.1	WETA/1682		
404195019	KMW-4	EPA 350.1	WETA/1682		

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(612)607-1700

July 16, 2008

Client Services
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

RE: Project: 404195 FOTH
Pace Project No.: 1075064

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on May 21, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: MW-603 **Lab ID: 404195001** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**30.6**	ug/L	20.0	5	06/30/08 10:21	07/15/08 13:50	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7440-36-0	
Arsenic	**2.6**	ug/L	1.0	5	06/30/08 10:21	07/15/08 13:50	7440-38-2	
Barium	**12.3**	ug/L	1.5	5	06/30/08 10:21	07/15/08 13:50	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/15/08 13:50	7440-41-7	
Boron	**34.6**	ug/L	10.0	5	06/30/08 10:21	07/15/08 13:50	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7440-43-9	
Calcium	**8660**	ug/L	100	5	06/30/08 10:21	07/15/08 13:50	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/15/08 13:50	7440-47-3	
Cobalt	**11.7**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/15/08 13:50	7440-50-8	
Iron	**2930**	ug/L	250	5	06/30/08 10:21	07/15/08 13:50	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7439-92-1	
Lithium	**8.4**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7439-93-2	
Magnesium	**7280**	ug/L	25.0	5	06/30/08 10:21	07/15/08 13:50	7439-95-4	
Manganese	**2000**	ug/L	2.5	5	06/30/08 10:21	07/15/08 13:50	7439-96-5	
Molybdenum	**2.0**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7439-98-7	
Nickel	**99.0**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7440-02-0	
Potassium	**2480**	ug/L	100	5	06/30/08 10:21	07/15/08 13:50	7440-09-7	
Selenium	**2.1J**	ug/L	2.5	5	06/30/08 10:21	07/15/08 13:50	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/15/08 13:50	7440-22-4	
Sodium	**326**	ug/L	250	5	06/30/08 10:21	07/15/08 13:50	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7440-28-0	
Total Hardness by 2340B	**51600**	ug/L	125	5	06/30/08 10:21	07/15/08 13:50		
Vanadium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/15/08 13:50	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/15/08 13:50	7440-66-6	

Sample: MW-606 **Lab ID: 404195002** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**27.3**	ug/L	20.0	5	06/30/08 10:21	07/01/08 12:06	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:06	7440-38-2	
Barium	**10.9**	ug/L	1.5	5	06/30/08 10:21	07/01/08 12:06	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:06	7440-41-7	
Boron	**33.2**	ug/L	10.0	5	06/30/08 10:21	07/01/08 12:06	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7440-43-9	
Calcium	**16900**	ug/L	100	5	06/30/08 10:21	07/01/08 12:06	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:06	7440-47-3	
Cobalt	**0.51**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7440-48-4	
Copper	**1.2**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:06	7440-50-8	
Iron	**1300**	ug/L	250	5	06/30/08 10:21	07/01/08 12:06	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7439-92-1	
Lithium	**4.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7439-93-2	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: MW-606 **Lab ID: 404195002** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**11300**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:06	7439-95-4	
Manganese	**569**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:06	7439-96-5	
Molybdenum	**6.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7439-98-7	
Nickel	**3.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7440-02-0	
Potassium	**2930**	ug/L	100	5	06/30/08 10:21	07/01/08 12:06	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:06	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:06	7440-22-4	
Sodium	**335**	ug/L	250	5	06/30/08 10:21	07/01/08 12:06	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7440-28-0	
Total Hardness by 2340B	**88600**	ug/L	125	5	06/30/08 10:21	07/01/08 12:06		
Vanadium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:06	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:06	7440-66-6	

Sample: KMW-10 **Lab ID: 404195003** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**239**	ug/L	20.0	5	06/30/08 10:21	07/01/08 12:10	7429-90-5	M0
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7440-36-0	
Arsenic	**3.0**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:10	7440-38-2	
Barium	**12.1**	ug/L	1.5	5	06/30/08 10:21	07/01/08 12:10	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:10	7440-41-7	
Boron	**40.8**	ug/L	10.0	5	06/30/08 10:21	07/01/08 12:10	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7440-43-9	
Calcium	**10200**	ug/L	100	5	06/30/08 10:21	07/01/08 12:10	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:10	7440-47-3	
Cobalt	**2.3**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7440-48-4	
Copper	**2.2**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:10	7440-50-8	
Iron	**3510**	ug/L	250	5	06/30/08 10:21	07/01/08 12:10	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7439-92-1	
Lithium	**1.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7439-93-2	
Magnesium	**5350**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:10	7439-95-4	
Manganese	**855**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:10	7439-96-5	
Molybdenum	**3.1**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7439-98-7	
Nickel	**1.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7440-02-0	
Potassium	**2040**	ug/L	100	5	06/30/08 10:21	07/01/08 12:10	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:10	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:10	7440-22-4	M0
Sodium	**2050**	ug/L	250	5	06/30/08 10:21	07/01/08 12:10	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7440-28-0	
Total Hardness by 2340B	**47600**	ug/L	125	5	06/30/08 10:21	07/01/08 12:10		
Vanadium	**0.61**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:10	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:10	7440-66-6	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: MW-12 **Lab ID: 404195004** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**19.4J**	ug/L	20.0	5	06/30/08 10:21	07/01/08 12:19	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7440-36-0	
Arsenic	**8.9**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:19	7440-38-2	
Barium	**32.9**	ug/L	1.5	5	06/30/08 10:21	07/01/08 12:19	7440-39-3	
Beryllium	**0.94J**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:19	7440-41-7	
Boron	**34.7**	ug/L	10.0	5	06/30/08 10:21	07/01/08 12:19	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7440-43-9	
Calcium	**33400**	ug/L	100	5	06/30/08 10:21	07/01/08 12:19	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:19	7440-47-3	
Cobalt	**0.42J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7440-48-4	
Copper	**1680**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:19	7440-50-8	
Iron	**9950**	ug/L	250	5	06/30/08 10:21	07/01/08 12:19	7439-89-6	B
Lead	**80.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7439-92-1	
Lithium	**1.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7439-93-2	
Magnesium	**12500**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:19	7439-95-4	
Manganese	**979**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:19	7439-96-5	
Molybdenum	**62.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7439-98-7	
Nickel	**0.43J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7440-02-0	
Potassium	**1730**	ug/L	100	5	06/30/08 10:21	07/01/08 12:19	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:19	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:19	7440-22-4	
Sodium	**3540**	ug/L	250	5	06/30/08 10:21	07/01/08 12:19	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7440-28-0	
Total Hardness by 2340B	**135000**	ug/L	125	5	06/30/08 10:21	07/01/08 12:19		
Vanadium	**0.54**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:19	7440-62-2	
Zinc	**168**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:19	7440-66-6	

Sample: MW-11 **Lab ID: 404195005** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**833**	ug/L	20.0	5	06/30/08 10:21	07/01/08 12:23	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7440-36-0	
Arsenic	**10.3**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:23	7440-38-2	
Barium	**413**	ug/L	1.5	5	06/30/08 10:21	07/01/08 12:23	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:23	7440-41-7	
Boron	**19.7**	ug/L	10.0	5	06/30/08 10:21	07/01/08 12:23	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7440-43-9	
Calcium	**204000**	ug/L	1000	50	06/30/08 10:21	07/01/08 12:28	7440-70-2	
Chromium	**8.9**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:23	7440-47-3	
Cobalt	**9.8**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7440-48-4	
Copper	**10.6**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:23	7440-50-8	
Iron	**256000**	ug/L	2500	50	06/30/08 10:21	07/01/08 12:28	7439-89-6	B
Lead	**0.62**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7439-92-1	
Lithium	**1.7**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7439-93-2	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: MW-11 **Lab ID: 404195005** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**95300**	ug/L	250	50	06/30/08 10:21	07/01/08 12:28	7439-95-4	
Manganese	**19600**	ug/L	25.0	50	06/30/08 10:21	07/01/08 12:28	7439-96-5	
Molybdenum	**0.67**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7439-98-7	
Nickel	**10.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7440-02-0	
Potassium	**11800**	ug/L	100	5	06/30/08 10:21	07/01/08 12:23	7440-09-7	
Selenium	**1.4J**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:23	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:23	7440-22-4	
Sodium	**46700**	ug/L	250	5	06/30/08 10:21	07/01/08 12:23	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7440-28-0	
Total Hardness by 2340B	**902000**	ug/L	1250	50	06/30/08 10:21	07/01/08 12:28		
Vanadium	**15.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:23	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:23	7440-66-6	

Sample: HW-5A **Lab ID: 404195006** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 12:32	7429-90-5	
Antimony	**9.3**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:32	7440-38-2	
Barium	**48.1**	ug/L	1.5	5	06/30/08 10:21	07/01/08 12:32	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:32	7440-41-7	
Boron	**72.4**	ug/L	10.0	5	06/30/08 10:21	07/01/08 12:32	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7440-43-9	
Calcium	**48800**	ug/L	100	5	06/30/08 10:21	07/01/08 12:32	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:32	7440-47-3	
Cobalt	**3.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7440-48-4	
Copper	**0.97J**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:32	7440-50-8	
Iron	**3750**	ug/L	250	5	06/30/08 10:21	07/01/08 12:32	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7439-92-1	
Lithium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7439-93-2	
Magnesium	**23700**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:32	7439-95-4	
Manganese	**20.6**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:32	7439-96-5	
Molybdenum	**9.3**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7439-98-7	
Nickel	**26.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7440-02-0	
Potassium	**8030**	ug/L	100	5	06/30/08 10:21	07/01/08 12:32	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 12:32	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 12:32	7440-22-4	
Sodium	**13100**	ug/L	250	5	06/30/08 10:21	07/01/08 12:32	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7440-28-0	
Total Hardness by 2340B	**219000**	ug/L	125	5	06/30/08 10:21	07/01/08 12:32		
Vanadium	**0.46J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 12:32	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 12:32	7440-66-6	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: HW-5 **Lab ID: 404195007** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 13:03	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7440-36-0	
Arsenic	**5.9**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:03	7440-38-2	
Barium	**99.4**	ug/L	1.5	5	06/30/08 10:21	07/01/08 13:03	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:03	7440-41-7	
Boron	**91.8**	ug/L	10.0	5	06/30/08 10:21	07/01/08 13:03	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7440-43-9	
Calcium	**55000**	ug/L	1000	50	06/30/08 10:21	07/01/08 13:08	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:03	7440-47-3	
Cobalt	**0.51**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:03	7440-50-8	
Iron	**5830**	ug/L	250	5	06/30/08 10:21	07/01/08 13:03	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7439-92-1	
Lithium	**3.0**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7439-93-2	
Magnesium	**22200**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:03	7439-95-4	
Manganese	**431**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:03	7439-96-5	
Molybdenum	**12.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7439-98-7	
Nickel	**0.59**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7440-02-0	
Potassium	**6750**	ug/L	100	5	06/30/08 10:21	07/01/08 13:03	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:03	7782-49-2	
Silver	**0.60J**	ug/L	1.0	5	06/30/08 10:21	07/02/08 00:03	7440-22-4	
Sodium	**14100**	ug/L	250	5	06/30/08 10:21	07/01/08 13:03	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7440-28-0	
Total Hardness by 2340B	**229000**	ug/L	1020	50	06/30/08 10:21	07/01/08 13:08		
Vanadium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:03	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:03	7440-66-6	

Sample: HW-1A **Lab ID: 404195008** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 13:12	7429-90-5	
Antimony	**6.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:12	7440-38-2	
Barium	**52.4**	ug/L	1.5	5	06/30/08 10:21	07/01/08 13:12	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:12	7440-41-7	
Boron	**60.6**	ug/L	10.0	5	06/30/08 10:21	07/01/08 13:12	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7440-43-9	
Calcium	**49300**	ug/L	100	5	06/30/08 10:21	07/01/08 13:12	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:12	7440-47-3	
Cobalt	**3.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7440-48-4	
Copper	**1.1**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:12	7440-50-8	
Iron	**2360**	ug/L	250	5	06/30/08 10:21	07/01/08 13:12	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7439-92-1	
Lithium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7439-93-2	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: HW-1A **Lab ID: 404195008** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**24800**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:12	7439-95-4	
Manganese	**35.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:12	7439-96-5	
Molybdenum	**9.9**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7439-98-7	
Nickel	**0.56**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7440-02-0	
Potassium	**6230**	ug/L	100	5	06/30/08 10:21	07/01/08 13:12	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:12	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 00:11	7440-22-4	
Sodium	**13600**	ug/L	250	5	06/30/08 10:21	07/01/08 13:12	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7440-28-0	
Total Hardness by 2340B	**225000**	ug/L	125	5	06/30/08 10:21	07/01/08 13:12		
Vanadium	**0.62**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:12	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:12	7440-66-6	

Sample: HW-1 **Lab ID: 404195009** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**356**	ug/L	20.0	5	06/30/08 10:21	07/01/08 13:21	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7440-36-0	
Arsenic	**1.0**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:21	7440-38-2	
Barium	**17.1**	ug/L	1.5	5	06/30/08 10:21	07/01/08 13:21	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:21	7440-41-7	
Boron	**87.3**	ug/L	10.0	5	06/30/08 10:21	07/01/08 13:21	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7440-43-9	
Calcium	**52300**	ug/L	1000	50	06/30/08 10:21	07/01/08 13:25	7440-70-2	
Chromium	**1.5J**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:21	7440-47-3	
Cobalt	**2.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7440-48-4	
Copper	**1.7**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:21	7440-50-8	
Iron	**4700**	ug/L	250	5	06/30/08 10:21	07/01/08 13:21	7439-89-6	B
Lead	**0.26J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7439-92-1	
Lithium	**2.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7439-93-2	
Magnesium	**20500**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:21	7439-95-4	
Manganese	**365**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:21	7439-96-5	
Molybdenum	**5.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7439-98-7	
Nickel	**4.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7440-02-0	
Potassium	**3390**	ug/L	100	5	06/30/08 10:21	07/01/08 13:21	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:21	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 00:20	7440-22-4	
Sodium	**14200**	ug/L	250	5	06/30/08 10:21	07/01/08 13:21	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7440-28-0	
Total Hardness by 2340B	**215000**	ug/L	1020	50	06/30/08 10:21	07/01/08 13:25		
Vanadium	**1.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:21	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:21	7440-66-6	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: DUP-001 **Lab ID: 404195010** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 13:30	7429-90-5	
Antimony	**6.1**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:30	7440-38-2	
Barium	**50.9**	ug/L	1.5	5	06/30/08 10:21	07/01/08 13:30	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:30	7440-41-7	
Boron	**57.0**	ug/L	10.0	5	06/30/08 10:21	07/01/08 13:30	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7440-43-9	
Calcium	**47200**	ug/L	100	5	06/30/08 10:21	07/01/08 13:30	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:30	7440-47-3	
Cobalt	**3.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7440-48-4	
Copper	**0.91J**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:30	7440-50-8	
Iron	**2080**	ug/L	250	5	06/30/08 10:21	07/01/08 13:30	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7439-92-1	
Lithium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7439-93-2	
Magnesium	**22800**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:30	7439-95-4	
Manganese	**13.6**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:30	7439-96-5	
Molybdenum	**9.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7439-98-7	
Nickel	**0.37J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7440-02-0	
Potassium	**5880**	ug/L	100	5	06/30/08 10:21	07/01/08 13:30	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:30	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 00:29	7440-22-4	
Sodium	**12600**	ug/L	250	5	06/30/08 10:21	07/01/08 13:30	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7440-28-0	
Total Hardness by 2340B	**212000**	ug/L	125	5	06/30/08 10:21	07/01/08 13:30		
Vanadium	**0.52**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:30	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:30	7440-66-6	

Sample: HYG-1 **Lab ID: 404195011** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 13:39	7429-90-5	
Antimony	**8.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:39	7440-38-2	
Barium	**52.6**	ug/L	1.5	5	06/30/08 10:21	07/01/08 13:39	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:39	7440-41-7	
Boron	**44.7**	ug/L	10.0	5	06/30/08 10:21	07/01/08 13:39	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7440-43-9	
Calcium	**53200**	ug/L	1000	50	06/30/08 10:21	07/01/08 13:56	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:39	7440-47-3	
Cobalt	**3.3**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7440-48-4	
Copper	**1.0**	ug/L	1.0	5	06/30/08 10:21	07/01/08 13:39	7440-50-8	
Iron	**<125**	ug/L	250	5	06/30/08 10:21	07/01/08 13:39	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7439-92-1	
Lithium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7439-93-2	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: HYG-1 **Lab ID: 404195011** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**23700**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:39	7439-95-4	
Manganese	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:39	7439-96-5	
Molybdenum	**9.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7439-98-7	
Nickel	**0.41J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7440-02-0	
Potassium	**8150**	ug/L	100	5	06/30/08 10:21	07/01/08 13:39	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 13:39	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 00:38	7440-22-4	
Sodium	**12400**	ug/L	250	5	06/30/08 10:21	07/01/08 13:39	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7440-28-0	
Total Hardness by 2340B	**231000**	ug/L	1020	50	06/30/08 10:21	07/01/08 13:56		
Vanadium	**0.54**	ug/L	0.50	5	06/30/08 10:21	07/01/08 13:39	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 13:39	7440-66-6	

Sample: HW-2 **Lab ID: 404195012** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 14:01	7429-90-5	
Antimony	**6.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:01	7440-38-2	
Barium	**16.3**	ug/L	1.5	5	06/30/08 10:21	07/01/08 14:01	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:01	7440-41-7	
Boron	**65.8**	ug/L	10.0	5	06/30/08 10:21	07/01/08 14:01	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7440-43-9	
Calcium	**55000**	ug/L	1000	50	06/30/08 10:21	07/01/08 14:05	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:01	7440-47-3	
Cobalt	**2.5**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7440-48-4	
Copper	**0.66J**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:01	7440-50-8	
Iron	**2700**	ug/L	250	5	06/30/08 10:21	07/01/08 14:01	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7439-92-1	
Lithium	**0.66**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7439-93-2	
Magnesium	**21700**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:01	7439-95-4	
Manganese	**328**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:01	7439-96-5	
Molybdenum	**7.2**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7439-98-7	
Nickel	**0.95**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7440-02-0	
Potassium	**6220**	ug/L	100	5	06/30/08 10:21	07/02/08 11:03	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:01	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:00	7440-22-4	
Sodium	**12300**	ug/L	250	5	06/30/08 10:21	07/01/08 14:01	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7440-28-0	
Total Hardness by 2340B	**227000**	ug/L	1020	50	06/30/08 10:21	07/01/08 14:05		
Vanadium	**0.27J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:01	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:01	7440-66-6	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: HW-3 **Lab ID: 404195013** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**142**	ug/L	20.0	5	06/30/08 10:21	07/01/08 14:10	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7440-36-0	
Arsenic	**0.58J**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:10	7440-38-2	
Barium	**8.9**	ug/L	1.5	5	06/30/08 10:21	07/01/08 14:10	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:10	7440-41-7	
Boron	**9.1J**	ug/L	10.0	5	06/30/08 10:21	07/01/08 14:10	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7440-43-9	
Calcium	**3650**	ug/L	100	5	06/30/08 10:21	07/01/08 14:10	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:10	7440-47-3	
Cobalt	**6.0**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7440-48-4	
Copper	**9.3**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:10	7440-50-8	
Iron	**1930**	ug/L	250	5	06/30/08 10:21	07/01/08 14:10	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7439-92-1	
Lithium	**1.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7439-93-2	
Magnesium	**1740**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:10	7439-95-4	
Manganese	**31.9**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:10	7439-96-5	
Molybdenum	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7439-98-7	
Nickel	**22.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7440-02-0	
Potassium	**1320**	ug/L	100	5	06/30/08 10:21	07/02/08 11:07	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:10	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:09	7440-22-4	
Sodium	**15900**	ug/L	250	5	06/30/08 10:21	07/01/08 14:10	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7440-28-0	
Total Hardness by 2340B	**16300**	ug/L	125	5	06/30/08 10:21	07/01/08 14:10		
Vanadium	**0.90**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:10	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:10	7440-66-6	

Sample: HW-6 **Lab ID: 404195014** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 14:14	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7440-36-0	
Arsenic	**3.7**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:14	7440-38-2	
Barium	**33.8**	ug/L	1.5	5	06/30/08 10:21	07/01/08 14:14	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:14	7440-41-7	
Boron	**66.3**	ug/L	10.0	5	06/30/08 10:21	07/01/08 14:14	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7440-43-9	
Calcium	**57700**	ug/L	1000	50	06/30/08 10:21	07/01/08 14:19	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:14	7440-47-3	
Cobalt	**0.43J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:14	7440-50-8	
Iron	**2220**	ug/L	250	5	06/30/08 10:21	07/01/08 14:14	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7439-92-1	
Lithium	**4.1**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7439-93-2	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: HW-6 **Lab ID: 404195014** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**18100**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:14	7439-95-4	
Manganese	**300**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:14	7439-96-5	
Molybdenum	**3.3**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7439-98-7	
Nickel	**0.41J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7440-02-0	
Potassium	**3340**	ug/L	100	5	06/30/08 10:21	07/02/08 11:12	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:14	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:13	7440-22-4	
Sodium	**14100**	ug/L	250	5	06/30/08 10:21	07/01/08 14:14	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7440-28-0	
Total Hardness by 2340B	**219000**	ug/L	1020	50	06/30/08 10:21	07/01/08 14:19		
Vanadium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:14	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:14	7440-66-6	

Sample: HW-6A **Lab ID: 404195015** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 14:23	7429-90-5	
Antimony	**9.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:23	7440-38-2	
Barium	**52.2**	ug/L	1.5	5	06/30/08 10:21	07/01/08 14:23	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:23	7440-41-7	
Boron	**111**	ug/L	10.0	5	06/30/08 10:21	07/01/08 14:23	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7440-43-9	
Calcium	**47400**	ug/L	100	5	06/30/08 10:21	07/01/08 14:23	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:23	7440-47-3	
Cobalt	**1.8**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7440-48-4	
Copper	**2.5**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:23	7440-50-8	
Iron	**1950**	ug/L	250	5	06/30/08 10:21	07/01/08 14:23	7439-89-6	B
Lead	**0.44J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7439-92-1	
Lithium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7439-93-2	
Magnesium	**21800**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:23	7439-95-4	
Manganese	**41.8**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:23	7439-96-5	
Molybdenum	**10.9**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7439-98-7	
Nickel	**0.55**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7440-02-0	
Potassium	**8720**	ug/L	100	5	06/30/08 10:21	07/02/08 11:16	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:23	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:22	7440-22-4	
Sodium	**12800**	ug/L	250	5	06/30/08 10:21	07/01/08 14:23	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7440-28-0	
Total Hardness by 2340B	**208000**	ug/L	125	5	06/30/08 10:21	07/01/08 14:23		
Vanadium	**0.34J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:23	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:23	7440-66-6	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: FKB-001 **Lab ID: 404195016** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 14:32	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:32	7440-38-2	
Barium	**<0.75**	ug/L	1.5	5	06/30/08 10:21	07/01/08 14:32	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:32	7440-41-7	
Boron	**<5.0**	ug/L	10.0	5	06/30/08 10:21	07/01/08 14:32	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7440-43-9	
Calcium	**<50.0**	ug/L	100	5	06/30/08 10:21	07/01/08 14:32	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:32	7440-47-3	
Cobalt	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7440-48-4	
Copper	**0.70J**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:32	7440-50-8	
Iron	**<125**	ug/L	250	5	06/30/08 10:21	07/01/08 14:32	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7439-92-1	
Lithium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7439-93-2	
Magnesium	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:32	7439-95-4	
Manganese	**3.3**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:32	7439-96-5	
Molybdenum	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7439-98-7	
Nickel	**0.32J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7440-02-0	
Potassium	**189**	ug/L	100	5	06/30/08 10:21	07/02/08 11:21	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:32	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:31	7440-22-4	
Sodium	**334**	ug/L	250	5	06/30/08 10:21	07/01/08 14:32	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7440-28-0	
Total Hardness by 2340B	**159**	ug/L	125	5	06/30/08 10:21	07/01/08 14:32		
Vanadium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:32	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:32	7440-66-6	

Sample: HW-4 **Lab ID: 404195017** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 14:36	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7440-36-0	
Arsenic	**3.4**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:36	7440-38-2	
Barium	**136**	ug/L	1.5	5	06/30/08 10:21	07/01/08 14:36	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:36	7440-41-7	
Boron	**64.4**	ug/L	10.0	5	06/30/08 10:21	07/01/08 14:36	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7440-43-9	
Calcium	**46600**	ug/L	100	5	06/30/08 10:21	07/01/08 14:36	7440-70-2	M0
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:36	7440-47-3	
Cobalt	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 14:36	7440-50-8	
Iron	**26700**	ug/L	250	5	06/30/08 10:21	07/01/08 14:36	7439-89-6	B,M0
Lead	**5.9**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7439-92-1	
Lithium	**3.4**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7439-93-2	

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(612)607-1700

ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: HW-4 **Lab ID: 404195017** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**21800**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:36	7439-95-4	M0
Manganese	**794**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:36	7439-96-5	M0
Molybdenum	**0.56**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7439-98-7	
Nickel	**0.35J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7440-02-0	
Potassium	**5270**	ug/L	100	5	06/30/08 10:21	07/02/08 11:25	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 14:36	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:36	7440-22-4	
Sodium	**4430**	ug/L	250	5	06/30/08 10:21	07/01/08 14:36	7440-23-5	M0
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7440-28-0	
Total Hardness by 2340B	**206000**	ug/L	125	5	06/30/08 10:21	07/01/08 14:36		
Vanadium	**0.86**	ug/L	0.50	5	06/30/08 10:21	07/01/08 14:36	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 14:36	7440-66-6	

Sample: KMW-3 **Lab ID: 404195018** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/30/08 10:21	07/01/08 15:07	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7440-36-0	
Arsenic	**15.3**	ug/L	1.0	5	06/30/08 10:21	07/01/08 15:07	7440-38-2	
Barium	**76.1**	ug/L	1.5	5	06/30/08 10:21	07/01/08 15:07	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 15:07	7440-41-7	
Boron	**43.5**	ug/L	10.0	5	06/30/08 10:21	07/01/08 15:07	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7440-43-9	
Calcium	**38500**	ug/L	100	5	06/30/08 10:21	07/01/08 15:07	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 15:07	7440-47-3	
Cobalt	**3.1**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 15:07	7440-50-8	
Iron	**23900**	ug/L	250	5	06/30/08 10:21	07/01/08 15:07	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7439-92-1	
Lithium	**1.7**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7439-93-2	
Magnesium	**17800**	ug/L	25.0	5	06/30/08 10:21	07/01/08 15:07	7439-95-4	
Manganese	**5220**	ug/L	25.0	50	06/30/08 10:21	07/01/08 15:12	7439-96-5	
Molybdenum	**0.93**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7439-98-7	
Nickel	**0.66**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7440-02-0	
Potassium	**2540**	ug/L	100	5	06/30/08 10:21	07/02/08 11:30	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 15:07	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 01:58	7440-22-4	
Sodium	**3310**	ug/L	250	5	06/30/08 10:21	07/01/08 15:07	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7440-28-0	
Total Hardness by 2340B	**169000**	ug/L	125	5	06/30/08 10:21	07/01/08 15:07		
Vanadium	**0.39J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:07	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 15:07	7440-66-6	

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ANALYTICAL RESULTS

Project: 404195 FOTH
Pace Project No.: 1075064

Sample: KMW-4 **Lab ID: 404195019** Collected: 05/21/08 00:00 Received: 05/21/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**12.0J**	ug/L	20.0	5	06/30/08 10:21	07/01/08 15:16	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7440-36-0	
Arsenic	**1.4**	ug/L	1.0	5	06/30/08 10:21	07/01/08 15:16	7440-38-2	
Barium	**37.1**	ug/L	1.5	5	06/30/08 10:21	07/01/08 15:16	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/01/08 15:16	7440-41-7	
Boron	**66.2**	ug/L	10.0	5	06/30/08 10:21	07/01/08 15:16	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7440-43-9	
Calcium	**34000**	ug/L	100	5	06/30/08 10:21	07/01/08 15:16	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 15:16	7440-47-3	
Cobalt	**2.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7440-48-4	
Copper	**1.5**	ug/L	1.0	5	06/30/08 10:21	07/01/08 15:16	7440-50-8	
Iron	**3620**	ug/L	250	5	06/30/08 10:21	07/01/08 15:16	7439-89-6	B
Lead	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7439-92-1	
Lithium	**0.49J**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7439-93-2	
Magnesium	**12800**	ug/L	25.0	5	06/30/08 10:21	07/01/08 15:16	7439-95-4	
Manganese	**3980**	ug/L	25.0	50	06/30/08 10:21	07/01/08 15:21	7439-96-5	
Molybdenum	**0.79**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7439-98-7	
Nickel	**4.6**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7440-02-0	
Potassium	**2900**	ug/L	100	5	06/30/08 10:21	07/02/08 11:34	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/30/08 10:21	07/01/08 15:16	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/30/08 10:21	07/02/08 02:07	7440-22-4	
Sodium	**3410**	ug/L	250	5	06/30/08 10:21	07/01/08 15:16	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7440-28-0	
Total Hardness by 2340B	**138000**	ug/L	125	5	06/30/08 10:21	07/01/08 15:16		
Vanadium	**<0.25**	ug/L	0.50	5	06/30/08 10:21	07/01/08 15:16	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/30/08 10:21	07/01/08 15:16	7440-66-6	

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QUALITY CONTROL DATA

Project: 404195 FOTH
Pace Project No.: 1075064

QC Batch: MPRP/12539 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012

METHOD BLANK: 495358

Associated Lab Samples: 404195001, 404195002, 404195003, 404195004, 404195005, 404195006, 404195007, 404195008, 404195009, 404195010, 404195011, 404195012, 404195013, 404195014, 404195015, 404195016, 404195017, 404195018, 404195019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	<2.0	4.0	
Antimony	ug/L	<0.050	0.10	
Arsenic	ug/L	<0.10	0.20	
Barium	ug/L	<0.15	0.30	
Beryllium	ug/L	<0.10	0.20	
Boron	ug/L	<1.0	2.0	
Cadmium	ug/L	<0.050	0.10	
Calcium	ug/L	<10.0	20.0	
Chromium	ug/L	<0.25	0.50	
Cobalt	ug/L	<0.050	0.10	
Copper	ug/L	<0.10	0.20	
Iron	ug/L	58.8	50.0	B
Lead	ug/L	<0.050	0.10	
Lithium	ug/L	<0.050	0.10	
Magnesium	ug/L	<2.5	5.0	
Manganese	ug/L	<0.25	0.50	
Molybdenum	ug/L	<0.050	0.10	
Nickel	ug/L	<0.050	0.10	
Potassium	ug/L	<10.0	20.0	
Selenium	ug/L	<0.25	0.50	
Silver	ug/L	0.16J	0.20	
Sodium	ug/L	<25.0	50.0	
Thallium	ug/L	<0.050	0.10	
Total Hardness by 2340B	ug/L	23.1J	25.0	
Vanadium	ug/L	<0.050	0.10	
Zinc	ug/L	<2.5	5.0	

LABORATORY CONTROL SAMPLE: 495359

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	80.2	100	85-115	
Antimony	ug/L	80	76.2	95	85-115	
Arsenic	ug/L	80	74.7	93	85-115	
Barium	ug/L	80	77.5	97	85-115	
Beryllium	ug/L	80	77.0	96	85-115	
Boron	ug/L	80	80.3	100	85-115	
Cadmium	ug/L	80	73.6	92	85-115	
Calcium	ug/L	1000	962	96	85-115	
Chromium	ug/L	80	77.1	96	85-115	

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QUALITY CONTROL DATA

Project: 404195 FOTH
Pace Project No.: 1075064

LABORATORY CONTROL SAMPLE: 495359

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	80	77.7	97	85-115	
Copper	ug/L	80	78.5	98	85-115	
Iron	ug/L	1000	989	99	85-115	
Lead	ug/L	80	74.5	93	85-115	
Lithium	ug/L	80	78.9	99	85-115	
Magnesium	ug/L	1000	960	96	85-115	
Manganese	ug/L	80	77.4	97	85-115	
Molybdenum	ug/L	80	75.9	95	85-115	
Nickel	ug/L	80	77.4	97	85-115	
Potassium	ug/L	1000	949	95	85-115	
Selenium	ug/L	160	149	93	85-115	
Silver	ug/L	80	104	130	85-115	L1
Sodium	ug/L	1000	961	96	85-115	
Thallium	ug/L	80	73.7	92	85-115	
Total Hardness by 2340B	ug/L		6350			
Vanadium	ug/L	80	77.4	97	85-115	
Zinc	ug/L	80	75.6	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 495360 495361

Parameter	Units	404195003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Aluminum	ug/L	239	80	80	434	461	244	278	70-130	6	M0
Antimony	ug/L	<0.25	80	80	80.3	80.3	100	100	70-130	.03	
Arsenic	ug/L	3.0	80	80	83.1	81.1	100	98	70-130	2	
Barium	ug/L	12.1	80	80	93.1	93.4	101	102	70-130	.3	
Beryllium	ug/L	<0.50	80	80	81.5	84.9	102	106	70-130	4	
Boron	ug/L	40.8	80	80	126	130	106	111	70-130	3	
Cadmium	ug/L	<0.25	80	80	80.3	81.0	100	101	70-130	.8	
Calcium	ug/L	10200	1000	1000	11300	11400	109	116	70-130	.7	
Chromium	ug/L	<1.2	80	80	81.0	81.7	101	101	70-130	.8	
Cobalt	ug/L	2.3	80	80	84.3	81.4	103	99	70-130	4	
Copper	ug/L	2.2	80	80	81.4	81.6	99	99	70-130	.3	
Iron	ug/L	3510	1000	1000	4570	4690	107	119	70-130	3	
Lead	ug/L	<0.25	80	80	79.2	78.7	99	98	70-130	.6	
Lithium	ug/L	1.4	80	80	81.1	84.8	100	104	70-130	4	
Magnesium	ug/L	5350	1000	1000	6430	6450	108	110	70-130	.3	
Manganese	ug/L	855	80	80	958	966	129	139	70-130	.8	M0
Molybdenum	ug/L	3.1	80	80	81.4	82.1	98	99	70-130	.9	
Nickel	ug/L	1.5	80	80	81.1	78.9	100	97	70-130	3	
Potassium	ug/L	2040	1000	1000	3090	3120	104	108	70-130	1	
Selenium	ug/L	<1.2	160	160	161	158	101	98	70-130	2	
Silver	ug/L	<0.50	80	80	101	110	126	137	70-130	9	M0
Sodium	ug/L	2050	1000	1000	3100	3120	104	107	70-130	.8	
Thallium	ug/L	<0.25	80	80	80.6	80.6	101	101	70-130	.01	
Total Hardness by 2340B	ug/L	47600			54800	55000				.5	
Vanadium	ug/L	0.61	80	80	82.2	79.9	102	99	70-130	3	

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QUALITY CONTROL DATA

Project: 404195 FOTH
Pace Project No.: 1075064

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 495360 495361

Parameter	Units	404195003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Zinc	ug/L	<12.5	80	80	79.7	80.4	98	99	70-130	.9	

MATRIX SPIKE SAMPLE: 495362

Parameter	Units	404195017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<10.0	80	81.6	94	70-130	
Antimony	ug/L	<0.25	80	77.6	97	70-130	
Arsenic	ug/L	3.4	80	80.4	96	70-130	
Barium	ug/L	136	80	211	94	70-130	
Beryllium	ug/L	<0.50	80	80.3	100	70-130	
Boron	ug/L	64.4	80	152	110	70-130	
Cadmium	ug/L	<0.25	80	75.8	95	70-130	
Calcium	ug/L	46600	1000	49300	273	70-130	M0
Chromium	ug/L	<1.2	80	80.3	100	70-130	
Cobalt	ug/L	<0.25	80	78.4	98	70-130	
Copper	ug/L	<0.50	80	76.6	96	70-130	
Iron	ug/L	26700	1000	29500	276	70-130	M0
Lead	ug/L	5.9	80	84.1	98	70-130	
Lithium	ug/L	3.4	80	83.0	100	70-130	
Magnesium	ug/L	21800	1000	24400	267	70-130	M0
Manganese	ug/L	794	80	920	157	70-130	M0
Molybdenum	ug/L	0.56	80	77.5	96	70-130	
Nickel	ug/L	0.35J	80	77.8	97	70-130	
Potassium	ug/L	5270	1000	6220	95	70-130	
Selenium	ug/L	<1.2	160	155	96	70-130	
Silver	ug/L	<0.50	80	100	125	70-130	
Sodium	ug/L	4430	1000	5770	134	70-130	M0
Thallium	ug/L	<0.25	80	79.3	99	70-130	
Total Hardness by 2340B	ug/L	206000		224000			
Vanadium	ug/L	0.86	80	80.9	100	70-130	
Zinc	ug/L	<12.5	80	77.0	95	70-130	

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Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 404195 FOTH
Pace Project No.: 1075064

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M0	Matrix spike recovery was outside laboratory control limits.

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 404195 FOTH
Pace Project No.: 1075064

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404195001	MW-603	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195002	MW-606	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195003	KMW-10	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195004	MW-12	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195005	MW-11	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195006	HW-5A	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195007	HW-5	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195008	HW-1A	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195009	HW-1	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195010	DUP-001	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195011	HYG-1	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195012	HW-2	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195013	HW-3	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195014	HW-6	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195015	HW-6A	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195016	FKB-001	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195017	HW-4	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195018	KMW-3	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922
404195019	KMW-4	EPA 3020	MPRP/12539	EPA 6020	ICPM/4922

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CHAIN-OF-CUSTODY / Analytical Request Document

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

COC# 20080521 1/2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: North Jackson & Foth I & E	Report To: Sharon Felix - Foth I & E	Attention: Janis Kesy
Address: 2737 South Ridge Road	Copy To:	Company Name: Foth I & E
Green Bay, WI 54304		Address: 2737 South Ridge Rd, Green Bay, WI
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone:920-497-2500 Fax:	Project Name: Humboldt Mill	Pace Project Manager: Tod Noltemeyer
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ MN ☐ WI ☐ IL ☐ IN ☐ OH ☐ SC ☐ FL ☐ OTHER____

Section D Required Client Information

SAMPLE ID: One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis: Alk Alkalinity	Ammonia	Cyanide	Cl, Hardness	Metals	Nitrate/Nitrite	Sulfate	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	MW-603 001	WT	G	5-21-08	1105		1-250mLpgtZN	8.1	8	3	1	2		1			1	X	X	X	X	X	X	X	X	2-250mLpCrg 2-250mLpA
2	MW-606 002				0935		~~1-250mLpCrg~~	7.2	7	3	1	2		1				X	X	X	X	X	X	X		
3	KMW-10 003				1205		1-250mLpgtZN	6.8	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
4	MW-12 004				1455			9.4	7	3	1	2		1				X	X	X	X	X	X	X		
5	MW-11 005				1335			7.3	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
6	HW-5A 006				1436			4.9	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
7	HW-5 007				1436			8.2	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
8	HW-1A 008				1001			5.1	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
9	HW-1 009				1339			8.8	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
10	DUP-001 010				—			5.1	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
11	HYG-1 011				1219			6.2	8	3	1	2		1			1	X	X	X	X	X	X	X	X	
12	HW-2 012				1304			5.8	8	3	1	2		1			1	X	X	X	X	X	X	X	X	

Filtered (Y/N)

Additional Comments:

Federal Express
7927 0345 9527
7993 2790 4570
7900 1910 3144
7919 0476 9142
7989 4620 5491

Temps: 0.0, 0.0, 0.0, 0.0, 0.0, 0.5

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Richard Eagle / NSC	5/21/08	1830			
FedEX	5-22-08	1005	C. Pace	5-22-08	1005

SAMPLE CONDITIONS: Temp in °C; Received on Ice (Y/N); Custody Sealed Cooler (Y/N); Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Chris Curtis Curtis Strauss Richard R Eagle
SIGNATURE of SAMPLER: Richard R Eagle — DATE Signed (MM / DD / YY): 5/21/08

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CHAIN-OF-CUSTODY / Analytical Request Document

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

COC# 20080521 2/2

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: North Jackson & Foth I & E	Report To: Sharon Felix - Foth I & E	Attention: Janis Kesy
Address: 2737 South Ridge Road	Copy To:	Company Name: Foth I & E
Green Bay, WI 54304		Address: 2737 South Ridge Rd, Green Bay, WI
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone:920-497-2500 Fax:	Project Name: Humboldt Mill	Pace Project Manager: Tod Noltemeyer
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ MI ☐ ☐ ☐ ☐ ☐ ☐ OH ☐ SC ☐ ☐ ☐ OTHER____

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL WP
WIPE	AR
AIR	OT
OTHER	TS
TISSUE		

SAMPLE ID
One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	HW-3 013 1-500mLpA 1-500mLpD 1-250mLpD	WT	G	5-21-08	1534	1-250mLpgHZN		8.0	8	3	1	2		1			1			2-250mLp CFG 2-250mLpA
2	HW-6 014				1153			9.1	8	3	1	2		1			1			
3	HW-6A 015				1223			7.9	8	3	1	2		1			1			
4	FBK-001 016				0930			—	8	3	1	2		1			1			
5	HW-4 017				1616			6.8	8	3	1	2		1			1			
6	KMW-3 018				1545			8.19	7	3	1	2		1						
7	KMW-4 019				1630			6.96	7	3	1	2		1						
8																				
9																				
10																				
11																				
12																				

Requested Analysis: MBAS, Cl, FI, SO4, Ammonia, Cyanide, Chromium, Lithium 6316, Metals / Hardness, Nitrate, Nitrite, Sulfate, Residual Chlorine (Y/N)

404195

Additional Comments:

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Richard Eagle / NJC	5/21/08	1830			
FedEx	5-22-08	1005	C. Pace	5-22-08	1005

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y/N	Y/N	Y/N
	N	N	N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

Temps: 0.0, 0.0, 0.0, 0.0, 0.5

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Cartman Cert Sampled Richard R Eagle

SIGNATURE of SAMPLER: Richard R Eagle DATE Signed (MM / DD / YY): 5/21/08

Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson + Fothite Project # 404195

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

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other poly bags

Thermometer Used JB **Type of Ice:** (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 0.0, 0.0, 0.0, 0.0, 0.0, 0.5 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 5-22-08 cy

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Nitrate/Nitrite
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed cy / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: AH **Date:** 5/22/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Batch No. 404271

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

July 17, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL
Pace Project No.: 404271

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on May 23, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Alee Her for
Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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(920)469-2436

SAMPLE SUMMARY

Project: HUMBOLDT MILL
Pace Project No.: 404271

Lab ID	Sample ID	Matrix	Date Collected	Date Received
404271001	**FBK-002**	Water	05/22/08 09:10	05/23/08 10:20
404271002	**DUP-002**	Water	05/22/08 00:00	05/23/08 10:20
404271003	**P-604**	Water	05/22/08 09:41	05/23/08 10:20
404271004	**KMW-2**	Water	05/22/08 14:05	05/23/08 10:20
404271005	**PW-2**	Water	05/22/08 12:15	05/23/08 10:20
404271006	**KMW-9**	Water	05/22/08 10:10	05/23/08 10:20
404271007	**KMW-9P**	Water	05/22/08 09:20	05/23/08 10:20
404271008	**MW-103**	Water	05/22/08 13:51	05/23/08 10:20
404271009	**MW-101**	Water	05/22/08 13:16	05/23/08 10:20
404271010	**P-602**	Water	05/22/08 12:14	05/23/08 10:20
404271011	**P-605**	Water	05/22/08 11:06	05/23/08 10:20
404271012	**MW-604**	Water	05/22/08 10:20	05/23/08 10:20

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404271

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
404271001	FBK-002	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404271002	DUP-002	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404271003	P-604	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404271004	KMW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271005	PW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271006	KMW-9	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271007	KMW-9P	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404271

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271008	**MW-103**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271009	**MW-101**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271010	**P-602**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271011	**P-605**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404271012	**MW-604**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G

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Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
12 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
12 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
8 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
12 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
12 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1597

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 404271002,404271003

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 33029)
  - Chloride
- MS (Lab ID: 33031)
  - Chloride
- MSD (Lab ID: 33030)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
12 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1670

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 404340001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 35869)
  - Cyanide
- MSD (Lab ID: 35870)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
12 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: FBK-002 **Lab ID: 404271001** Collected: 05/22/08 09:10 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.214J**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 06:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:31		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:31		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		05/29/08 13:31		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 17:01	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 18:07	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**<1.1**	mg/L	5.0	1.1	1		05/23/08 17:01	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		05/23/08 17:01	16984-48-8	
Sulfate	**<0.51**	mg/L	4.0	0.51	1		05/23/08 17:01	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:11	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:04	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: DUP-002 **Lab ID: 404271002** Collected: 05/22/08 00:00 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.680**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 06:28	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	10.0	3.2	1		05/30/08 14:57		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:57		
Alkalinity, Total as CaCO3	**88.0**	mg/L	10.0	3.2	1		05/30/08 14:57		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 17:13	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 18:21	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		05/23/08 17:13	16887-00-6	M0
Fluoride	**0.22J**	mg/L	0.50	0.059	1		05/23/08 17:13	16984-48-8	
Sulfate	**11.0**	mg/L	4.0	0.51	1		05/23/08 17:13	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:12	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/06/08 14:01	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: P-604 **Lab ID: 404271003** Collected: 05/22/08 09:41 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.700**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 06:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	10.0	3.2	1		05/30/08 14:58		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:58		
Alkalinity, Total as CaCO3	**88.0**	mg/L	10.0	3.2	1		05/30/08 14:58		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 17:50	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 19:03	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		05/23/08 17:50	16887-00-6	M0
Fluoride	**0.22J**	mg/L	0.50	0.059	1		05/23/08 17:50	16984-48-8	
Sulfate	**11.0**	mg/L	4.0	0.51	1		05/23/08 17:50	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:16	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:05	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: KMW-2 **Lab ID: 404271004** Collected: 05/22/08 14:05 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**2.57**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 06:42	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**96.8**	mg/L	10.0	3.2	1		05/30/08 14:58		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:58		
Alkalinity, Total as CaCO3	**96.8**	mg/L	10.0	3.2	1		05/30/08 14:58		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 18:26	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 19:46	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.8J**	mg/L	5.0	1.1	1		05/23/08 18:26	16887-00-6	
Fluoride	**0.20J**	mg/L	0.50	0.059	1		05/23/08 18:26	16984-48-8	
Sulfate	**520**	mg/L	40.0	5.1	10		05/28/08 00:28	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:17	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.92J**	mg/L	1.0	0.50	1		06/09/08 14:05	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: PW-2 **Lab ID: 404271005** Collected: 05/22/08 12:15 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.33**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 06:48	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**152**	mg/L	10.0	3.2	1		05/30/08 14:58		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:58		
Alkalinity, Total as CaCO3	**152**	mg/L	10.0	3.2	1		05/30/08 14:58		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 19:03	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 20:28	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.3J**	mg/L	5.0	1.1	1		05/23/08 19:03	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		05/23/08 19:03	16984-48-8	
Sulfate	**181**	mg/L	20.0	2.6	5		05/28/08 00:42	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:06	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: KMW-9 **Lab ID: 404271006** Collected: 05/22/08 10:10 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.404J**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 07:08	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**66.0**	mg/L	10.0	3.2	1		05/30/08 14:59		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:59		
Alkalinity, Total as CaCO3	**66.0**	mg/L	10.0	3.2	1		05/30/08 14:59		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**4.2J**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 19:15	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 20:43	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.3J**	mg/L	5.0	1.1	1		05/23/08 19:15	16887-00-6	
Fluoride	**0.19J**	mg/L	0.50	0.059	1		05/23/08 19:15	16984-48-8	
Sulfate	**253**	mg/L	20.0	2.6	5		05/28/08 00:56	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:07	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: KMW-9P **Lab ID: 404271007** Collected: 05/22/08 09:20 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.328J**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 07:14	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	10.0	3.2	1		05/30/08 14:59		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:59		
Alkalinity, Total as CaCO3	**88.0**	mg/L	10.0	3.2	1		05/30/08 14:59		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**2.4J**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 19:27	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 20:57	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.6J**	mg/L	5.0	1.1	1		05/23/08 19:27	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		05/23/08 19:27	16984-48-8	
Sulfate	**1100**	mg/L	80.0	10.2	20		05/28/08 01:10	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:22	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	1.0	0.50	1		06/09/08 14:07	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: MW-103 **Lab ID: 404271008** Collected: 05/22/08 13:51 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.421J**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 07:19	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**83.6**	mg/L	10.0	3.2	1		05/30/08 14:59		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 14:59		
Alkalinity, Total as CaCO3	**83.6**	mg/L	10.0	3.2	1		05/30/08 14:59		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**3.6J**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 19:39	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 21:11	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.2J**	mg/L	5.0	1.1	1		05/23/08 19:39	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		05/23/08 19:39	16984-48-8	
Sulfate	**273**	mg/L	40.0	5.1	10		05/28/08 01:24	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:23	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.1**	mg/L	1.0	0.50	1		06/09/08 14:11	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: MW-101 **Lab ID: 404271009** Collected: 05/22/08 13:16 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.946**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 07:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**172**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Total as CaCO3	**172**	mg/L	10.0	3.2	1		05/30/08 15:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**3.4J**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 19:51	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 21:25	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.3J**	mg/L	5.0	1.1	1		05/23/08 19:51	16887-00-6	
Fluoride	**0.42J**	mg/L	0.50	0.059	1		05/23/08 19:51	16984-48-8	
Sulfate	**<0.51**	mg/L	4.0	0.51	1		05/23/08 19:51	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0066J**	mg/L	0.020	0.0060	1		06/04/08 14:27	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.7**	mg/L	1.0	0.50	1		06/09/08 14:11	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: P-602 **Lab ID: 404271010** Collected: 05/22/08 12:14 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.671**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 09:00	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**68.2**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Total as CaCO3	**68.2**	mg/L	10.0	3.2	1		05/30/08 15:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 20:04	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 21:39	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		05/23/08 20:04	16887-00-6	
Fluoride	**0.28J**	mg/L	0.50	0.059	1		05/23/08 20:04	16984-48-8	
Sulfate	**2.1J**	mg/L	4.0	0.51	1		05/23/08 20:04	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0064J**	mg/L	0.020	0.0060	1		06/04/08 14:28	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:13	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: P-605 **Lab ID: 404271011** Collected: 05/22/08 11:06 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.201J**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 08:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**132**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Total as CaCO3	**132**	mg/L	10.0	3.2	1		05/30/08 15:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/28/08 13:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 20:16	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 21:53	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		05/23/08 20:16	16887-00-6	
Fluoride	**0.41J**	mg/L	0.50	0.059	1		05/23/08 20:16	16984-48-8	
Sulfate	**4.3**	mg/L	4.0	0.51	1		05/23/08 20:16	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:29	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:14	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404271

Sample: MW-604 **Lab ID: 404271012** Collected: 05/22/08 10:20 Received: 05/23/08 10:20 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.26**	ng/L	0.50	0.16	1	05/28/08 07:00	06/05/08 08:11	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**83.6**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:00		
Alkalinity, Total as CaCO3	**83.6**	mg/L	10.0	3.2	1		05/30/08 15:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/23/08 20:28	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/23/08 22:08	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		05/23/08 20:28	16887-00-6	
Fluoride	**0.32J**	mg/L	0.50	0.059	1		05/23/08 20:28	16984-48-8	
Sulfate	**11.1**	mg/L	4.0	0.51	1		05/23/08 20:28	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/04/08 14:29	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:15	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WETA/1596 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 33021
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	
Nitrite as N	mg/L	<0.036	0.10	

LABORATORY CONTROL SAMPLE: 33022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.7	104	90-110	
Nitrite as N	mg/L	.8	0.80	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33023 33024

Parameter	Units	404271002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.7	1.7	105	106	90-110	.6	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.78	0.77	98	96	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33025 33026

Parameter	Units	404271003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.7	1.7	106	107	90-110	.6	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.77	0.76	96	95	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WETA/1597 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 33027
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	<1.1	5.0	
Fluoride	mg/L	<0.059	0.50	
Sulfate	mg/L	<0.51	4.0	

LABORATORY CONTROL SAMPLE: 33028

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	19.8	99	90-110	
Fluoride	mg/L	2	2.0	98	90-110	
Sulfate	mg/L	16	16.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33029 33030

Parameter	Units	404271002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9J	20	20	20.5	20.6	88	88	90-110	.4	20	M0
Fluoride	mg/L	0.22J	2	2	2.0	2.1	92	92	90-110	.5	20	
Sulfate	mg/L	11.0	16	16	26.6	26.6	97	98	90-110	.04	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33031 33032

Parameter	Units	404271003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9J	20	20	20.7	20.8	89	90	90-110	.5	20	M0
Fluoride	mg/L	0.22J	2	2	2.1	2.1	92	93	90-110	.5	20	
Sulfate	mg/L	11.0	16	16	26.7	26.9	98	99	90-110	.6	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WET/1538 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011

METHOD BLANK: 33585
Associated Lab Samples: 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	<2.3	5.0	

LABORATORY CONTROL SAMPLE: 33586

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	44.8	42.0	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 33587 33588

Parameter	Units	404176019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	5.0 U	44.8	44.8	41.2	41.2	90	90	80-120	0	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WET/1547 | Analysis Method: SM 2320B
QC Batch Method: SM 2320B | Analysis Description: 2320B Alkalinity
Associated Lab Samples: 404271001

METHOD BLANK: 34017
Associated Lab Samples: 404271001

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 34018

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	502	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 34019 34020

Parameter	Units	404176019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	532	500	500	1040	1030	102	100	80-120	.6	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WET/1563 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 34614
Associated Lab Samples: 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 34615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	491	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 34616 34617

Parameter	Units	404271002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	88.0	500	500	587	587	100	100	80-120	0	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WETA/1669 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006

METHOD BLANK: 35853
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 35854

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35855 35856

Parameter	Units	404195018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	104	104	90-110	.09	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35857 35858

Parameter	Units	404271006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	103	104	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WETA/1670 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 35867
Associated Lab Samples: 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 35868

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	105	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 35869 35870

Parameter	Units	404340001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.0069J	.1	.1	0.12	0.12	114	113	90-110	.7	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WETA/1682
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 404271002

METHOD BLANK: 36289
Associated Lab Samples: 404271002

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 36290

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36291 36292

Parameter	Units	404195014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.9	10.8	107	107	90-110	.7	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36293 36294

Parameter	Units	404592001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.80J	10	10	11.5	11.5	107	107	90-110	.2	20	

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(920)469-2436

QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: CVFS/1100 — Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E — Analysis Description: 1631E Mercury
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 36750
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.310J	0.50	

METHOD BLANK: 36751
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.223J	0.50	

METHOD BLANK: 36752
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.218J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 36753 36754

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.40	5.20	108	104	79-121	4	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36755 36756

Parameter	Units	404271004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.57	10	10	13.6	13.3	110	108	75-125	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36757 36758

Parameter	Units	404271005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.33	5	5	6.50	6.27	103	99	75-125	4	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 404271

QC Batch: WETA/1702 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 404271001, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 37824
Associated Lab Samples: 404271001, 404271003, 404271004, 404271005, 404271006, 404271007, 404271008, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 37825

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.0	90	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37826 37827

Parameter	Units	404271009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.7	10	10	11.7	11.3	101	96	90-110	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37828 37829

Parameter	Units	404340004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.3	9.7	103	97	90-110	6	20	

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QUALIFIERS

Project: HUMBOLDT MILL
Pace Project No.: 404271

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404271001	FBK-002	EPA 300.0	WETA/1596		
404271002	DUP-002	EPA 300.0	WETA/1596		
404271003	P-604	EPA 300.0	WETA/1596		
404271004	KMW-2	EPA 300.0	WETA/1596		
404271005	PW-2	EPA 300.0	WETA/1596		
404271006	KMW-9	EPA 300.0	WETA/1596		
404271007	KMW-9P	EPA 300.0	WETA/1596		
404271008	MW-103	EPA 300.0	WETA/1596		
404271009	MW-101	EPA 300.0	WETA/1596		
404271010	P-602	EPA 300.0	WETA/1596		
404271011	P-605	EPA 300.0	WETA/1596		
404271012	MW-604	EPA 300.0	WETA/1596		
404271001	FBK-002	EPA 300.0	WETA/1597		
404271002	DUP-002	EPA 300.0	WETA/1597		
404271003	P-604	EPA 300.0	WETA/1597		
404271004	KMW-2	EPA 300.0	WETA/1597		
404271005	PW-2	EPA 300.0	WETA/1597		
404271006	KMW-9	EPA 300.0	WETA/1597		
404271007	KMW-9P	EPA 300.0	WETA/1597		
404271008	MW-103	EPA 300.0	WETA/1597		
404271009	MW-101	EPA 300.0	WETA/1597		
404271010	P-602	EPA 300.0	WETA/1597		
404271011	P-605	EPA 300.0	WETA/1597		
404271012	MW-604	EPA 300.0	WETA/1597		
404271004	KMW-2	SM 4500-S F (2000)	WET/1538		
404271005	PW-2	SM 4500-S F (2000)	WET/1538		
404271006	KMW-9	SM 4500-S F (2000)	WET/1538		
404271007	KMW-9P	SM 4500-S F (2000)	WET/1538		
404271008	MW-103	SM 4500-S F (2000)	WET/1538		
404271009	MW-101	SM 4500-S F (2000)	WET/1538		
404271010	P-602	SM 4500-S F (2000)	WET/1538		
404271011	P-605	SM 4500-S F (2000)	WET/1538		
404271001	FBK-002	SM 2320B	WET/1547		
404271002	DUP-002	SM 2320B	WET/1563		
404271003	P-604	SM 2320B	WET/1563		
404271004	KMW-2	SM 2320B	WET/1563		
404271005	PW-2	SM 2320B	WET/1563		
404271006	KMW-9	SM 2320B	WET/1563		
404271007	KMW-9P	SM 2320B	WET/1563		
404271008	MW-103	SM 2320B	WET/1563		
404271009	MW-101	SM 2320B	WET/1563		
404271010	P-602	SM 2320B	WET/1563		
404271011	P-605	SM 2320B	WET/1563		
404271012	MW-604	SM 2320B	WET/1563		
404271001	FBK-002	EPA 335.4	WETA/1669		
404271002	DUP-002	EPA 335.4	WETA/1669		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 404271

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
404271003	P-604	EPA 335.4	WETA/1669		
404271004	KMW-2	EPA 335.4	WETA/1669		
404271005	PW-2	EPA 335.4	WETA/1669		
404271006	KMW-9	EPA 335.4	WETA/1669		
404271007	KMW-9P	EPA 335.4	WETA/1670		
404271008	MW-103	EPA 335.4	WETA/1670		
404271009	MW-101	EPA 335.4	WETA/1670		
404271010	P-602	EPA 335.4	WETA/1670		
404271011	P-605	EPA 335.4	WETA/1670		
404271012	MW-604	EPA 335.4	WETA/1670		
404271002	DUP-002	EPA 350.1	WETA/1682		
404271001	FBK-002	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271002	DUP-002	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271003	P-604	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271004	KMW-2	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271005	PW-2	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271006	KMW-9	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271007	KMW-9P	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271008	MW-103	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271009	MW-101	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271010	P-602	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271011	P-605	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271012	MW-604	EPA 1631E	CVFS/1100	EPA 1631E	CVFS/1101
404271001	FBK-002	EPA 350.1	WETA/1702		
404271003	P-604	EPA 350.1	WETA/1702		
404271004	KMW-2	EPA 350.1	WETA/1702		
404271005	PW-2	EPA 350.1	WETA/1702		
404271006	KMW-9	EPA 350.1	WETA/1702		
404271007	KMW-9P	EPA 350.1	WETA/1702		
404271008	MW-103	EPA 350.1	WETA/1702		
404271009	MW-101	EPA 350.1	WETA/1702		
404271010	P-602	EPA 350.1	WETA/1702		
404271011	P-605	EPA 350.1	WETA/1702		
404271012	MW-604	EPA 350.1	WETA/1702		

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

July 11, 2008

Client Services
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

RE: Project: 404271 FOTH
Pace Project No.: 1075071

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on May 23, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: FKB-002 **Lab ID: 404271001** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**24.9**	ug/L	4.0	1	06/19/08 10:12	06/24/08 15:40	7429-90-5	
Antimony	**0.068J**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7440-36-0	
Arsenic	**<0.10**	ug/L	0.20	1	06/19/08 10:12	06/24/08 15:40	7440-38-2	
Barium	**0.45**	ug/L	0.30	1	06/19/08 10:12	06/24/08 15:40	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	1	06/19/08 10:12	06/24/08 15:40	7440-41-7	
Boron	**6.1**	ug/L	2.0	1	06/19/08 10:12	06/24/08 15:40	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7440-43-9	
Calcium	**37.9**	ug/L	20.0	1	06/19/08 10:12	06/24/08 15:40	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	1	06/19/08 10:12	06/24/08 15:40	7440-47-3	
Cobalt	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7440-48-4	
Copper	**0.93**	ug/L	0.20	1	06/19/08 10:12	06/24/08 15:40	7440-50-8	
Iron	**29.7J**	ug/L	50.0	1	06/19/08 10:12	06/24/08 15:40	7439-89-6	
Lead	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7439-92-1	
Lithium	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7439-93-2	
Magnesium	**7.6**	ug/L	5.0	1	06/19/08 10:12	06/24/08 15:40	7439-95-4	
Manganese	**1.8**	ug/L	0.50	1	06/19/08 10:12	06/24/08 15:40	7439-96-5	
Molybdenum	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7439-98-7	
Nickel	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7440-02-0	
Potassium	**14.5J**	ug/L	20.0	1	06/19/08 10:12	06/24/08 15:40	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	1	06/19/08 10:12	06/24/08 15:40	7782-49-2	
Silver	**<0.10**	ug/L	0.20	1	06/19/08 10:12	06/24/08 15:40	7440-22-4	
Sodium	**310**	ug/L	50.0	1	06/19/08 10:12	06/24/08 15:40	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7440-28-0	
Total Hardness by 2340B	**126**	ug/L	25.0	1	06/19/08 10:12	06/24/08 15:40		
Vanadium	**0.22**	ug/L	0.10	1	06/19/08 10:12	06/24/08 15:40	7440-62-2	
Zinc	**7.7**	ug/L	5.0	1	06/19/08 10:12	06/24/08 15:40	7440-66-6	

Sample: DUP-002 **Lab ID: 404271002** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**65.9**	ug/L	20.0	5	06/19/08 10:12	06/24/08 15:48	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:48	7440-38-2	
Barium	**10**	ug/L	1.5	5	06/19/08 10:12	06/24/08 15:48	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:48	7440-41-7	
Boron	**18.2**	ug/L	10.0	5	06/19/08 10:12	06/24/08 15:48	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7440-43-9	
Calcium	**21200**	ug/L	100	5	06/19/08 10:12	06/24/08 15:48	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 15:48	7440-47-3	
Cobalt	**0.90**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7440-48-4	
Copper	**1.4**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:48	7440-50-8	
Iron	**340**	ug/L	250	5	06/19/08 10:12	06/24/08 15:48	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7439-92-1	
Lithium	**0.45J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7439-93-2	

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(612)607-1700

ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: DUP-002 **Lab ID: 404271002** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**8010**	ug/L	25.0	5	06/19/08 10:12	06/24/08 15:48	7439-95-4	
Manganese	**17.7**	ug/L	2.5	5	06/19/08 10:12	06/24/08 15:48	7439-96-5	
Molybdenum	**2.2**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7439-98-7	
Nickel	**1.2**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7440-02-0	
Potassium	**1780**	ug/L	100	5	06/19/08 10:12	06/24/08 15:48	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 15:48	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:48	7440-22-4	
Sodium	**1800**	ug/L	250	5	06/19/08 10:12	06/24/08 15:48	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7440-28-0	
Total Hardness by 2340B	**86000**	ug/L	125	5	06/19/08 10:12	06/24/08 15:48		
Vanadium	**0.72**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:48	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 15:48	7440-66-6	

Sample: P-604 **Lab ID: 404271003** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**59.2**	ug/L	20.0	5	06/19/08 10:12	06/24/08 15:57	7429-90-5	
Antimony	**0.27J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7440-36-0	
Arsenic	**0.51J**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:57	7440-38-2	
Barium	**10.1**	ug/L	1.5	5	06/19/08 10:12	06/24/08 15:57	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:57	7440-41-7	
Boron	**19.1**	ug/L	10.0	5	06/19/08 10:12	06/24/08 15:57	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7440-43-9	
Calcium	**21300**	ug/L	100	5	06/19/08 10:12	06/24/08 15:57	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 15:57	7440-47-3	
Cobalt	**0.90**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7440-48-4	
Copper	**2.0**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:57	7440-50-8	
Iron	**351**	ug/L	250	5	06/19/08 10:12	06/24/08 15:57	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7439-92-1	
Lithium	**0.40J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7439-93-2	
Magnesium	**7850**	ug/L	25.0	5	06/19/08 10:12	06/24/08 15:57	7439-95-4	
Manganese	**18.0**	ug/L	2.5	5	06/19/08 10:12	06/24/08 15:57	7439-96-5	
Molybdenum	**2.2**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7439-98-7	
Nickel	**0.97**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7440-02-0	
Potassium	**1780**	ug/L	100	5	06/19/08 10:12	06/24/08 15:57	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 15:57	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 15:57	7440-22-4	
Sodium	**1920**	ug/L	250	5	06/19/08 10:12	06/24/08 15:57	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7440-28-0	
Total Hardness by 2340B	**85600**	ug/L	125	5	06/19/08 10:12	06/24/08 15:57		
Vanadium	**0.70**	ug/L	0.50	5	06/19/08 10:12	06/24/08 15:57	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 15:57	7440-66-6	

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: KMW-2 **Lab ID: 404271004** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**60.9**	ug/L	20.0	5	06/19/08 10:12	06/24/08 16:37	7429-90-5	
Antimony	**0.74**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7440-36-0	
Arsenic	**22.3**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:37	7440-38-2	
Barium	**426**	ug/L	1.5	5	06/19/08 10:12	06/24/08 16:37	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:37	7440-41-7	
Boron	**84.0**	ug/L	10.0	5	06/19/08 10:12	06/24/08 16:37	7440-42-8	
Cadmium	**0.55**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7440-43-9	
Calcium	**99900**	ug/L	1000	50	06/19/08 10:12	06/24/08 16:41	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:37	7440-47-3	
Cobalt	**101**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7440-48-4	
Copper	**2.4**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:37	7440-50-8	
Iron	**76800**	ug/L	2500	50	06/19/08 10:12	06/24/08 16:41	7439-89-6	
Lead	**0.26J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7439-92-1	
Lithium	**1.7**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7439-93-2	
Magnesium	**38800**	ug/L	25.0	5	06/19/08 10:12	06/24/08 16:37	7439-95-4	
Manganese	**12400**	ug/L	25.0	50	06/19/08 10:12	06/24/08 16:41	7439-96-5	
Molybdenum	**1.7**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7439-98-7	
Nickel	**259**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7440-02-0	
Potassium	**4680**	ug/L	100	5	06/19/08 10:12	06/24/08 16:37	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:37	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:37	7440-22-4	
Sodium	**7720**	ug/L	250	5	06/19/08 10:12	06/24/08 16:37	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7440-28-0	
Total Hardness by 2340B	**409000**	ug/L	1020	50	06/19/08 10:12	06/24/08 16:41		
Vanadium	**0.45J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:37	7440-62-2	
Zinc	**76.0**	ug/L	25.0	5	06/19/08 10:12	06/24/08 16:37	7440-66-6	

Sample: PW-2 **Lab ID: 404271005** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**12.1J**	ug/L	20.0	5	06/19/08 10:12	06/24/08 16:45	7429-90-5	
Antimony	**0.53**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:45	7440-38-2	
Barium	**23.8**	ug/L	1.5	5	06/19/08 10:12	06/24/08 16:45	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:45	7440-41-7	
Boron	**77.7**	ug/L	10.0	5	06/19/08 10:12	06/24/08 16:45	7440-42-8	
Cadmium	**2.8**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7440-43-9	
Calcium	**66600**	ug/L	1000	50	06/19/08 10:12	06/24/08 16:49	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:45	7440-47-3	
Cobalt	**18.5**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7440-48-4	
Copper	**2.8**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:45	7440-50-8	
Iron	**<125**	ug/L	250	5	06/19/08 10:12	06/24/08 16:45	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7439-92-1	
Lithium	**7.4**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7439-93-2	

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: PW-2 **Lab ID: 404271005** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**27700**	ug/L	25.0	5	06/19/08 10:12	06/24/08 16:45	7439-95-4	
Manganese	**2060**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:45	7439-96-5	
Molybdenum	**0.42J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7439-98-7	
Nickel	**73.4**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7440-02-0	
Potassium	**3050**	ug/L	100	5	06/19/08 10:12	06/24/08 16:45	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:45	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:45	7440-22-4	
Sodium	**4460**	ug/L	250	5	06/19/08 10:12	06/24/08 16:45	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7440-28-0	
Total Hardness by 2340B	**280000**	ug/L	1020	50	06/19/08 10:12	06/24/08 16:49		
Vanadium	**0.36J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:45	7440-62-2	
Zinc	**47.4**	ug/L	25.0	5	06/19/08 10:12	06/24/08 16:45	7440-66-6	

Sample: KMW-9 **Lab ID: 404271006** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**11.1J**	ug/L	20.0	5	06/19/08 10:12	06/24/08 16:53	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7440-36-0	
Arsenic	**3.7**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:53	7440-38-2	
Barium	**80.3**	ug/L	1.5	5	06/19/08 10:12	06/24/08 16:53	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:53	7440-41-7	
Boron	**64.5**	ug/L	10.0	5	06/19/08 10:12	06/24/08 16:53	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7440-43-9	
Calcium	**57600**	ug/L	1000	50	06/19/08 10:12	06/24/08 16:58	7440-70-2	
Chromium	**1.3J**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:53	7440-47-3	
Cobalt	**10.6**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:53	7440-50-8	
Iron	**8750**	ug/L	250	5	06/19/08 10:12	06/24/08 16:53	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7439-92-1	
Lithium	**0.44J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7439-93-2	
Magnesium	**26300**	ug/L	25.0	5	06/19/08 10:12	06/24/08 16:53	7439-95-4	
Manganese	**12100**	ug/L	25.0	50	06/19/08 10:12	06/24/08 16:58	7439-96-5	
Molybdenum	**0.71**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7439-98-7	
Nickel	**17.3**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7440-02-0	
Potassium	**3320**	ug/L	100	5	06/19/08 10:12	06/24/08 16:53	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 16:53	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 16:53	7440-22-4	
Sodium	**4040**	ug/L	250	5	06/19/08 10:12	06/24/08 16:53	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7440-28-0	
Total Hardness by 2340B	**252000**	ug/L	1020	50	06/19/08 10:12	06/24/08 16:58		
Vanadium	**1.9**	ug/L	0.50	5	06/19/08 10:12	06/24/08 16:53	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 16:53	7440-66-6	

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: KMW-9P **Lab ID: 404271007** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**<10.0**	ug/L	20.0	5	06/19/08 10:12	06/24/08 17:02	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7440-36-0	
Arsenic	**3.9**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:02	7440-38-2	
Barium	**47.7**	ug/L	1.5	5	06/19/08 10:12	06/24/08 17:02	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:02	7440-41-7	
Boron	**95.8**	ug/L	10.0	5	06/19/08 10:12	06/24/08 17:02	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7440-43-9	
Calcium	**185000**	ug/L	1000	50	06/19/08 10:12	06/24/08 17:06	7440-70-2	
Chromium	**1.2J**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:02	7440-47-3	
Cobalt	**14.9**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7440-48-4	
Copper	**1.5**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:02	7440-50-8	
Iron	**199000**	ug/L	2500	50	06/19/08 10:12	06/24/08 17:06	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7439-92-1	
Lithium	**5.1**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7439-93-2	
Magnesium	**77300**	ug/L	250	50	06/19/08 10:12	06/24/08 17:06	7439-95-4	
Manganese	**28300**	ug/L	50.0	100	06/19/08 10:12	06/25/08 14:17	7439-96-5	
Molybdenum	**0.76**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7439-98-7	
Nickel	**1.0**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7440-02-0	
Potassium	**7200**	ug/L	100	5	06/19/08 10:12	06/24/08 17:02	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:02	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:02	7440-22-4	
Sodium	**6820**	ug/L	250	5	06/19/08 10:12	06/24/08 17:02	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7440-28-0	
Total Hardness by 2340B	**781000**	ug/L	1250	50	06/19/08 10:12	06/24/08 17:06		
Vanadium	**1.1**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:02	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:02	7440-66-6	

Sample: MW-103 **Lab ID: 1075071008** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**13.0J**	ug/L	20.0	5	06/19/08 10:09	06/25/08 16:59	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7440-36-0	
Arsenic	**12.9**	ug/L	1.0	5	06/19/08 10:09	06/25/08 16:59	7440-38-2	
Barium	**102**	ug/L	1.5	5	06/19/08 10:09	06/25/08 16:59	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:09	06/25/08 16:59	7440-41-7	
Boron	**49.4**	ug/L	10.0	5	06/19/08 10:09	06/25/08 16:59	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7440-43-9	
Calcium	**64400**	ug/L	1000	50	06/19/08 10:09	06/25/08 17:03	7440-70-2	M0
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:09	06/25/08 16:59	7440-47-3	
Cobalt	**0.37J**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7440-48-4	
Copper	**0.65J**	ug/L	1.0	5	06/19/08 10:09	06/25/08 16:59	7440-50-8	
Iron	**71400**	ug/L	2500	50	06/19/08 10:09	06/25/08 17:03	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7439-92-1	
Lithium	**1.2**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7439-93-2	

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: MW-103 **Lab ID: 1075071008** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**24300**	ug/L	25.0	5	06/19/08 10:09	06/25/08 16:59	7439-95-4	M0
Manganese	**5870**	ug/L	25.0	50	06/19/08 10:09	06/25/08 17:03	7439-96-5	
Molybdenum	**0.72**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7439-98-7	
Nickel	**1.6**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7440-02-0	
Potassium	**4110**	ug/L	100	5	06/19/08 10:09	06/25/08 16:59	7440-09-7	
Selenium	**1.2J**	ug/L	2.5	5	06/19/08 10:09	06/25/08 16:59	7782-49-2	
Silver	**0.57J**	ug/L	1.0	5	06/19/08 10:09	06/27/08 12:15	7440-22-4	
Sodium	**6140**	ug/L	250	5	06/19/08 10:09	06/25/08 16:59	7440-23-5	M0
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7440-28-0	
Total Hardness by 2340B	**261000**	ug/L	1020	50	06/19/08 10:09	06/25/08 17:03		
Vanadium	**0.94**	ug/L	0.50	5	06/19/08 10:09	06/25/08 16:59	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:09	06/25/08 16:59	7440-66-6	

Sample: MW-101 **Lab ID: 404271009** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**66.7**	ug/L	20.0	5	06/19/08 10:12	06/24/08 17:10	7429-90-5	
Antimony	**0.56**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7440-36-0	
Arsenic	**20.1**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:10	7440-38-2	
Barium	**84.8**	ug/L	1.5	5	06/19/08 10:12	06/24/08 17:10	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:10	7440-41-7	
Boron	**111**	ug/L	10.0	5	06/19/08 10:12	06/24/08 17:10	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7440-43-9	
Calcium	**32900**	ug/L	100	5	06/19/08 10:12	06/24/08 17:10	7440-70-2	
Chromium	**1.2J**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:10	7440-47-3	
Cobalt	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:10	7440-50-8	
Iron	**42900**	ug/L	250	5	06/19/08 10:12	06/24/08 17:10	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7439-92-1	
Lithium	**0.61**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7439-93-2	
Magnesium	**8950**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:10	7439-95-4	
Manganese	**7120**	ug/L	25.0	50	06/19/08 10:12	06/24/08 17:14	7439-96-5	
Molybdenum	**1.2**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7439-98-7	
Nickel	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7440-02-0	
Potassium	**3610**	ug/L	100	5	06/19/08 10:12	06/24/08 17:10	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:10	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:10	7440-22-4	
Sodium	**8330**	ug/L	250	5	06/19/08 10:12	06/24/08 17:10	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7440-28-0	
Total Hardness by 2340B	**119000**	ug/L	125	5	06/19/08 10:12	06/24/08 17:10		
Vanadium	**3.0**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:10	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:10	7440-66-6	

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: P-602 **Lab ID: 404271010** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**125**	ug/L	20.0	5	06/19/08 10:12	06/24/08 17:31	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7440-36-0	
Arsenic	**6.6**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:31	7440-38-2	
Barium	**20.6**	ug/L	1.5	5	06/19/08 10:12	06/24/08 17:31	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:31	7440-41-7	
Boron	**37.9**	ug/L	10.0	5	06/19/08 10:12	06/24/08 17:31	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7440-43-9	
Calcium	**11700**	ug/L	100	5	06/19/08 10:12	06/24/08 17:31	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:31	7440-47-3	
Cobalt	**0.37J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7440-48-4	
Copper	**1.3**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:31	7440-50-8	
Iron	**2560**	ug/L	250	5	06/19/08 10:12	06/24/08 17:31	7439-89-6	
Lead	**0.31J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7439-92-1	
Lithium	**4.4**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7439-93-2	
Magnesium	**6410**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:31	7439-95-4	
Manganese	**1770**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:31	7439-96-5	
Molybdenum	**6.8**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7439-98-7	
Nickel	**0.51**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7440-02-0	
Potassium	**2490**	ug/L	100	5	06/19/08 10:12	06/24/08 17:31	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:31	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:31	7440-22-4	
Sodium	**709**	ug/L	250	5	06/19/08 10:12	06/24/08 17:31	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7440-28-0	
Total Hardness by 2340B	**55600**	ug/L	125	5	06/19/08 10:12	06/24/08 17:31		
Vanadium	**0.41J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:31	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:31	7440-66-6	

Sample: P-605 **Lab ID: 404271011** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**10J**	ug/L	20.0	5	06/19/08 10:12	06/24/08 17:40	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7440-36-0	
Arsenic	**9.9**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:40	7440-38-2	
Barium	**32.0**	ug/L	1.5	5	06/19/08 10:12	06/24/08 17:40	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:40	7440-41-7	
Boron	**41.5**	ug/L	10.0	5	06/19/08 10:12	06/24/08 17:40	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7440-43-9	
Calcium	**22800**	ug/L	100	5	06/19/08 10:12	06/24/08 17:40	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:40	7440-47-3	
Cobalt	**1.8**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7440-48-4	
Copper	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:40	7440-50-8	
Iron	**5870**	ug/L	250	5	06/19/08 10:12	06/24/08 17:40	7439-89-6	
Lead	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7439-92-1	
Lithium	**1.9**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7439-93-2	

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ANALYTICAL RESULTS

Project: 404271 FOTH
Pace Project No.: 1075071

Sample: P-605 **Lab ID: 404271011** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Magnesium	**11800**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:40	7439-95-4	
Manganese	**3680**	ug/L	25.0	50	06/19/08 10:12	06/24/08 17:44	7439-96-5	
Molybdenum	**5.7**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7439-98-7	
Nickel	**0.30J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7440-02-0	
Potassium	**4400**	ug/L	100	5	06/19/08 10:12	06/24/08 17:40	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:40	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:40	7440-22-4	
Sodium	**1600**	ug/L	250	5	06/19/08 10:12	06/24/08 17:40	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7440-28-0	
Total Hardness by 2340B	**106000**	ug/L	125	5	06/19/08 10:12	06/24/08 17:40		
Vanadium	**0.52**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:40	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:40	7440-66-6	

Sample: MW-604 **Lab ID: 404271012** Collected: 05/22/08 00:00 Received: 05/23/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020							
Aluminum	**321**	ug/L	20.0	5	06/19/08 10:12	06/24/08 17:48	7429-90-5	
Antimony	**0.55**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7440-36-0	
Arsenic	**1.9**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:48	7440-38-2	
Barium	**26.5**	ug/L	1.5	5	06/19/08 10:12	06/24/08 17:48	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:48	7440-41-7	
Boron	**31.8**	ug/L	10.0	5	06/19/08 10:12	06/24/08 17:48	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7440-43-9	
Calcium	**17100**	ug/L	100	5	06/19/08 10:12	06/24/08 17:48	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:48	7440-47-3	
Cobalt	**0.56**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7440-48-4	
Copper	**2.3**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:48	7440-50-8	
Iron	**12100**	ug/L	250	5	06/19/08 10:12	06/24/08 17:48	7439-89-6	
Lead	**0.62**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7439-92-1	
Lithium	**2.4**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7439-93-2	
Magnesium	**7470**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:48	7439-95-4	
Manganese	**1150**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:48	7439-96-5	
Molybdenum	**2.4**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7439-98-7	
Nickel	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7440-02-0	
Potassium	**2090**	ug/L	100	5	06/19/08 10:12	06/24/08 17:48	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	5	06/19/08 10:12	06/24/08 17:48	7782-49-2	
Silver	**<0.50**	ug/L	1.0	5	06/19/08 10:12	06/24/08 17:48	7440-22-4	
Sodium	**5210**	ug/L	250	5	06/19/08 10:12	06/24/08 17:48	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7440-28-0	
Total Hardness by 2340B	**73400**	ug/L	125	5	06/19/08 10:12	06/24/08 17:48		
Vanadium	**0.48J**	ug/L	0.50	5	06/19/08 10:12	06/24/08 17:48	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	5	06/19/08 10:12	06/24/08 17:48	7440-66-6	

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QUALITY CONTROL DATA

Project: 404271 FOTH
Pace Project No.: 1075071

QC Batch: MPRP/12426
QC Batch Method: EPA 3020
Analysis Method: EPA 6020
Analysis Description: 6020 MET
Associated Lab Samples: 1075071008

METHOD BLANK: 490574
Associated Lab Samples: 1075071008

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	<2.0	4.0	
Antimony	ug/L	0.39	0.10	B
Arsenic	ug/L	<0.10	0.20	
Barium	ug/L	0.22J	0.30	
Beryllium	ug/L	<0.10	0.20	
Boron	ug/L	<1.0	2.0	
Cadmium	ug/L	<0.050	0.10	
Calcium	ug/L	13.0J	20.0	
Chromium	ug/L	<0.25	0.50	
Cobalt	ug/L	<0.050	0.10	
Copper	ug/L	<0.10	0.20	
Iron	ug/L	<25.0	50.0	
Lead	ug/L	<0.050	0.10	
Lithium	ug/L	<0.050	0.10	
Magnesium	ug/L	<2.5	5.0	
Manganese	ug/L	<0.25	0.50	
Molybdenum	ug/L	<0.050	0.10	
Nickel	ug/L	0.073J	0.10	
Potassium	ug/L	<10.0	20.0	
Selenium	ug/L	<0.25	0.50	
Silver	ug/L	0.21	0.20	B
Sodium	ug/L	<25.0	50.0	
Thallium	ug/L	<0.050	0.10	
Total Hardness by 2340B	ug/L	36.8	20.5	
Vanadium	ug/L	<0.050	0.10	
Zinc	ug/L	<2.5	5.0	

LABORATORY CONTROL SAMPLE: 490575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	76.2	95	85-115	
Antimony	ug/L	80	78.0	97	85-115	
Arsenic	ug/L	80	75.7	95	85-115	
Barium	ug/L	80	77.6	97	85-115	
Beryllium	ug/L	80	75.0	94	85-115	
Boron	ug/L	80	76.5	96	85-115	
Cadmium	ug/L	80	76.0	95	85-115	
Calcium	ug/L	1000	961	96	85-115	
Chromium	ug/L	80	76.3	95	85-115	
Cobalt	ug/L	80	76.1	95	85-115	
Copper	ug/L	80	76.8	96	85-115	

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QUALITY CONTROL DATA

Project: 404271 FOTH
Pace Project No.: 1075071

LABORATORY CONTROL SAMPLE: 490575

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	1000	969	97	85-115	
Lead	ug/L	80	75.5	94	85-115	
Lithium	ug/L	80	75.9	95	85-115	
Magnesium	ug/L	1000	917	92	85-115	
Manganese	ug/L	80	74.4	93	85-115	
Molybdenum	ug/L	80	79.0	99	85-115	
Nickel	ug/L	80	76.0	95	85-115	
Potassium	ug/L	1000	956	96	85-115	
Selenium	ug/L	160	149	93	85-115	
Silver	ug/L	80	70.1	88	85-115	L2
Sodium	ug/L	1000	951	95	85-115	
Thallium	ug/L	80	74.6	93	85-115	
Total Hardness by 2340B	ug/L		6170			
Vanadium	ug/L	80	75.9	95	85-115	
Zinc	ug/L	80	76.1	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 490576 490577

Parameter	Units	1075071008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Aluminum	ug/L	13.0J	80	80	88.8	86.4	95	92	70-130	3	
Antimony	ug/L	<0.25	80	80	78.2	78.2	97	97	70-130	.009	
Arsenic	ug/L	12.9	80	80	90.2	90.5	97	97	70-130	.4	
Barium	ug/L	102	80	80	173	171	88	85	70-130	1	
Beryllium	ug/L	<0.50	80	80	80.6	78.8	101	98	70-130	2	
Boron	ug/L	49.4	80	80	126	126	95	96	70-130	.7	
Cadmium	ug/L	<0.25	80	80	75.5	76.5	94	96	70-130	1	
Calcium	ug/L	64400	1000	1000	61500	60800	-294	-366	70-130	1	M0
Chromium	ug/L	<1.2	80	80	77.2	75.9	96	95	70-130	2	
Cobalt	ug/L	0.37J	80	80	77.0	76.3	96	95	70-130	.9	
Copper	ug/L	0.65J	80	80	74.1	75.9	92	94	70-130	2	
Iron	ug/L	71400	1000	1000	72200	72400	82	94	70-130	.2	
Lead	ug/L	<0.25	80	80	77.4	78.8	97	98	70-130	2	
Lithium	ug/L	1.2	80	80	79.5	76.4	98	94	70-130	4	
Magnesium	ug/L	24300	1000	1000	24500	24300	16	-7	70-130	.9	M0
Manganese	ug/L	5870	80	80	5950	5950	95	99	70-130	.05	
Molybdenum	ug/L	0.72	80	80	77.3	77.5	96	96	70-130	.2	
Nickel	ug/L	1.6	80	80	74.2	78.4	91	96	70-130	5	
Potassium	ug/L	4110	1000	1000	4810	4810	70	70	70-130	.03	
Selenium	ug/L	1.2J	160	160	152	154	94	95	70-130	1	
Silver	ug/L	0.57J	80	80	86.6	82.4	108	102	70-130	5	
Sodium	ug/L	6140	1000	1000	6780	6830	64	69	70-130	.6	M0
Thallium	ug/L	<0.25	80	80	78.0	78.6	97	98	70-130	.7	
Total Hardness by 2340B	ug/L	261000			254000	252000				1	
Vanadium	ug/L	0.94	80	80	79.0	78.7	98	97	70-130	.4	
Zinc	ug/L	<12.5	80	80	76.2	76.7	94	94	70-130	.7	

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QUALITY CONTROL DATA

Project: 404271 FOTH
Pace Project No.: 1075071

QC Batch: MPRP/12427 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271009, 404271010, 404271011, 404271012

METHOD BLANK: 490579

Associated Lab Samples: 404271001, 404271002, 404271003, 404271004, 404271005, 404271006, 404271007, 404271009, 404271010, 404271011, 404271012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	<2.0	4.0	
Antimony	ug/L	0.86	0.10	B
Arsenic	ug/L	<0.10	0.20	
Barium	ug/L	0.82	0.30	B
Beryllium	ug/L	<0.10	0.20	
Boron	ug/L	<1.0	2.0	
Cadmium	ug/L	<0.050	0.10	
Calcium	ug/L	<10.0	20.0	
Chromium	ug/L	<0.25	0.50	
Cobalt	ug/L	0.13	0.10	B
Copper	ug/L	<0.10	0.20	
Iron	ug/L	<25.0	50.0	
Lead	ug/L	<0.050	0.10	
Lithium	ug/L	<0.050	0.10	
Magnesium	ug/L	<2.5	5.0	
Manganese	ug/L	<0.25	0.50	
Molybdenum	ug/L	<0.050	0.10	
Nickel	ug/L	0.20	0.10	B
Potassium	ug/L	<10.0	20.0	
Selenium	ug/L	<0.25	0.50	
Silver	ug/L	<0.10	0.20	
Sodium	ug/L	<25.0	50.0	
Thallium	ug/L	<0.050	0.10	
Total Hardness by 2340B	ug/L	25.5	25.0	
Vanadium	ug/L	<0.050	0.10	
Zinc	ug/L	<2.5	5.0	

LABORATORY CONTROL SAMPLE: 490580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	85.1	106	85-115	
Antimony	ug/L	80	82.3	103	85-115	
Arsenic	ug/L	80	79.0	99	85-115	
Barium	ug/L	80	82.9	104	85-115	
Beryllium	ug/L	80	82.0	103	85-115	
Boron	ug/L	80	79.2	99	85-115	
Cadmium	ug/L	80	77.8	97	85-115	
Calcium	ug/L	1000	990	99	85-115	
Chromium	ug/L	80	84.3	105	85-115	
Cobalt	ug/L	80	80.1	100	85-115	

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 404271 FOTH
Pace Project No.: 1075071

LABORATORY CONTROL SAMPLE: 490580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	80	80.8	101	85-115	
Iron	ug/L	1000	1130	113	85-115	
Lead	ug/L	80	83.3	104	85-115	
Lithium	ug/L	80	78.0	98	85-115	
Magnesium	ug/L	1000	928	93	85-115	
Manganese	ug/L	80	82.6	103	85-115	
Molybdenum	ug/L	80	83.2	104	85-115	
Nickel	ug/L	80	80.9	101	85-115	
Potassium	ug/L	1000	935	93	85-115	
Selenium	ug/L	160	151	94	85-115	
Silver	ug/L	80	91.6	115	85-115	
Sodium	ug/L	1000	911	91	85-115	
Thallium	ug/L	80	82.3	103	85-115	
Total Hardness by 2340B	ug/L		6290			
Vanadium	ug/L	80	84.0	105	85-115	
Zinc	ug/L	80	75.9	95	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 490581 490582

Parameter	Units	404271001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Aluminum	ug/L	24.9	80	80	98.3	97.9	92	91	70-130	.4	
Antimony	ug/L	0.068J	80	80	82.3	82.8	103	103	70-130	.6	
Arsenic	ug/L	<0.10	80	80	79.4	81.1	99	101	70-130	2	
Barium	ug/L	0.45	80	80	83.1	82.9	103	103	70-130	.2	
Beryllium	ug/L	<0.10	80	80	82.6	82.0	103	103	70-130	.7	
Boron	ug/L	6.1	80	80	85.6	85.2	99	99	70-130	.5	
Cadmium	ug/L	<0.050	80	80	78.4	80.1	98	100	70-130	2	
Calcium	ug/L	37.9	1000	1000	1020	1020	98	98	70-130	.5	
Chromium	ug/L	<0.25	80	80	83.1	84.0	104	105	70-130	1	
Cobalt	ug/L	<0.050	80	80	80.1	81.7	100	102	70-130	2	
Copper	ug/L	0.93	80	80	80.7	81.5	100	101	70-130	1	
Iron	ug/L	29.7J	1000	1000	1060	1130	103	110	70-130	6	
Lead	ug/L	<0.050	80	80	84.0	84.1	105	105	70-130	.1	
Lithium	ug/L	<0.050	80	80	79.9	78.7	100	98	70-130	2	
Magnesium	ug/L	7.6	1000	1000	931	927	92	92	70-130	.5	
Manganese	ug/L	1.8	80	80	83.9	84.2	103	103	70-130	.5	
Molybdenum	ug/L	<0.050	80	80	81.7	83.5	102	104	70-130	2	
Nickel	ug/L	<0.050	80	80	78.2	81.1	98	101	70-130	4	
Potassium	ug/L	14.5J	1000	1000	937	975	92	96	70-130	4	
Selenium	ug/L	<0.25	160	160	152	158	95	99	70-130	4	
Silver	ug/L	<0.10	80	80	81.2	88.7	102	111	70-130	9	
Sodium	ug/L	310	1000	1000	1270	1290	96	98	70-130	2	
Thallium	ug/L	<0.050	80	80	83.2	83.9	104	105	70-130	.8	
Total Hardness by 2340B	ug/L	126			6370	6360				.1	
Vanadium	ug/L	0.22	80	80	84.0	84.4	105	105	70-130	.5	
Zinc	ug/L	7.7	80	80	84.0	84.4	95	96	70-130	.5	

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(612)607-1700

QUALITY CONTROL DATA

Project: 404271 FOTH
Pace Project No.: 1075071

MATRIX SPIKE SAMPLE: 490583

Parameter	Units	404340001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	ND	80	77.4	95	70-130	
Antimony	ug/L	ND	80	83.9	105	70-130	
Arsenic	ug/L	ND	80	84.3	105	70-130	
Barium	ug/L	0.63	80	85.7	106	70-130	
Beryllium	ug/L	ND	80	88.8	111	70-130	
Boron	ug/L	6.6	80	93.2	108	70-130	
Cadmium	ug/L	ND	80	81.8	102	70-130	
Calcium	ug/L	45.1	1000	1070	102	70-130	
Chromium	ug/L	ND	80	88.1	110	70-130	
Cobalt	ug/L	ND	80	82.8	103	70-130	
Copper	ug/L	1.3	80	83.5	103	70-130	
Iron	ug/L	ND	1000	1110	110	70-130	
Lead	ug/L	ND	80	85.2	106	70-130	
Lithium	ug/L	ND	80	82.5	103	70-130	
Magnesium	ug/L	11.8	1000	966	95	70-130	
Manganese	ug/L	3.4	80	88.5	106	70-130	
Molybdenum	ug/L	ND	80	82.1	103	70-130	
Nickel	ug/L	ND	80	81.5	102	70-130	
Potassium	ug/L	46.2	1000	1050	100	70-130	
Selenium	ug/L	ND	160	161	101	70-130	
Silver	ug/L	ND	80	81.4	102	70-130	
Sodium	ug/L	761	1000	1800	104	70-130	
Thallium	ug/L	ND	80	85.2	106	70-130	
Total Hardness by 2340B	ug/L	161		6640			
Vanadium	ug/L	ND	80	87.1	109	70-130	
Zinc	ug/L	6.5	80	87.5	101	70-130	

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QUALIFIERS

Project: 404271 FOTH
Pace Project No.: 1075071

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery was outside laboratory control limits.

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(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 404271 FOTH
Pace Project No.: 1075071

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1075071008	**MW-103**	EPA 3020	MPRP/12426	EPA 6020	ICPM/4888
404271001	**FKB-002**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271002	**DUP-002**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271003	**P-604**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271004	**KMW-2**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271005	**PW-2**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271006	**KMW-9**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271007	**KMW-9P**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271009	**MW-101**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271010	**P-602**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271011	**P-605**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886
404271012	**MW-604**	EPA 3020	MPRP/12427	EPA 6020	ICPM/4886

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CHAIN-OF-CUSTODY / Analytical Request Document

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

COC# 20080522

Page: 1 of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: North Jackson & Foth I & E	Report To: Sharon Felix - Foth I & E	Attention: Janis Kesy
Address: 2737 South Ridge Road	Copy To:	Company Name: Foth I & E
Green Bay, WI 54304		Address: 2737 South Ridge Rd, Green Bay, WI
Email To:	Purchase Order No.:	Pace Quote Reference:
Phone:920-497-2500 Fax:	Project Name: Humboldt Mill	Pace Project Manager: Tod Noltemeyer
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ MN ☐ ☐ ☐ ☐ ☐ ☐ OH ☐ SC ☐ IL ☐ OTHER____

Section D Required Client Information

Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other: Na2S2O3 ZnAc	Alk Alk 2 HCl 504	Ammonia	Cyanide	Lithium	Hg 1631E	Metals Hardness	Nitrate Nitrite	Sulfate	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
001	1 FBK-002 1-500mLgA 1-500mLPD 1-250mLpD 1-250mLpC 2-250mLpA	WT	G	5/22/08	0910	5/22/08	0910	—	7	3	1	2		1				X	X	X	X	X	X	X		N	1-250mLpg
002	2 DUP-002						—	—	7	3	1	2		1				X	X	X	X	X	X	X			
003	3 P-604						0941	6.90	7	3	1	2		1				X	X	X	X	X	X	X			
004	4 KMW-2						1405	9.41	8	3	1	2		1			1	X	X	X	X	X	X	X	X		1-250mLpg+ZN
005	5 PW-2						1215	9.10	8	3	1	2		1			1	X	X	X	X	X	X	X	X		1-250mLpg+ZN 1-250mLpg
006	6 KMW-9						1010	7.84	8	3	1	2		1			1	X	X	X	X	X	X	X	X		
007	7 KMW-9P						0920	8.31	8	3	1	2		1			1	X	X	X	X	X	X	X	X		
008	8 MW-103						1351	7.67	8	3	1	2		1			1	X	X	X	X	X	X	X	X		
009	9 MW-101						1316	7.22	8	3	1	2		1			1	X	X	X	X	X	X	X	X		
010	10 P-602						1214	10.59	8	3	1	2		1			1	X	X	X	X	X	X	X	X		
011	11 P-605						1106	8.06	8	3	1	2		1			1	X	X	X	X	X	X	X	X		
012	12 MW-604						1020	5.77	7	3	1	2		1				X	X	X	X	X	X	X			1-250mLpg

Pace Project Number Lab I.D.: 104271

Additional Comments:

Fed Ex
7927 0440 2009
7919 0569 3530
7993 2883 2231

Temps: 0.0, 0.0, 0.0, 0.5 gf

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Richard Eagle / NJC	5/22/08	1730			
FedEx	5/23/08	1020	Pace	5/23/08	1020

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Cartway Richard Eagle

SIGNATURE of SAMPLER: Richard R Eagle DATE Signed (MM / DD / YY): 05/22/08

Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson + Fath IVE Project # 402271

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

Tracking #: _____

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

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other _____

Thermometer Used JB Type of Ice: (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 0.0, 0.0, 1.5 Biological Tissue is Frozen: Yes No

Date and Initials of person examining contents: 5/23/08 cf

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Nitrate / Nitrite
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☒No	Initial when completed cf / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: 1-250ml p G rec'd labeled but empty for #004. No volume for CN but it is requested on COC. cf 5-23-08.

Project Manager Review: [signature] **Date:** 5/23/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Batch No. 404340

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

July 17, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL
Pace Project No.: 404340

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on May 28, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Alee Her for
Tod Noltemeyer
tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
California Certification #: 06246CA
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
California Certification #: 06247CA
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: HUMBOLDT MILL
Pace Project No.: 404340

Lab ID	Sample ID	Matrix	Date Collected	Date Received
404340001	FBK-003	Water	05/27/08 10:00	05/28/08 10:04
404340002	DUP-003	Water	05/27/08 00:00	05/28/08 10:04
404340003	MW-605	Water	05/27/08 11:01	05/28/08 10:04
404340004	MW-602	Water	05/27/08 11:15	05/28/08 10:04
404340005	KMW-7	Water	05/27/08 11:47	05/28/08 10:04
404340006	MW-102	Water	05/27/08 13:20	05/28/08 10:04
404340007	MW-5	Water	05/27/08 13:45	05/28/08 10:04
404340008	MW-601	Water	05/27/08 14:35	05/28/08 10:04
404340009	KMW-5	Water	05/27/08 14:10	05/28/08 10:04

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404340

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
404340001	FBK-003	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404340002	DUP-003	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404340003	MW-605	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404340004	MW-602	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404340005	KMW-7	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404340006	MW-102	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404340007	MW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 404340

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	DAW	1	PASI-G
		EPA 8260	JJS	37	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
404340008	**MW-601**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
404340009	**KMW-5**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
9 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **EPA 8260**
Description: 8260 MSV
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
6 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

P4: Sample field preservation does not meet EPA or method recommendations for this analysis.
- MW-102 (Lab ID: 404340006)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1546

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
9 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1670

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 404340001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 35869)
  - Cyanide
- MSD (Lab ID: 35870)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/1717

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-102 (Lab ID: 404340006)
  - Cyanide

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 404340

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 17, 2008

General Information:
9 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: FBK-003 **Lab ID: 404340001** Collected: 05/27/08 10:00 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**<0.16**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 09:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.4J**	mg/L	10.0	3.2	1		05/30/08 15:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:01		
Alkalinity, Total as CaCO3	**4.4J**	mg/L	10.0	3.2	1		05/30/08 15:01		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/29/08 12:14		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		05/28/08 21:16	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/29/08 03:11	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1.9J**	mg/L	5.0	1.1	1		05/28/08 21:16	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		05/28/08 21:16	16984-48-8	
Sulfate	**<0.51**	mg/L	4.0	0.51	1		05/28/08 21:16	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0069J**	mg/L	0.020	0.0060	1		06/04/08 14:33	57-12-5	M0
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:20	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: DUP-003 **Lab ID: 404340002** Collected: 05/27/08 00:00 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.851**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 10:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**99.0**	mg/L	10.0	3.2	1		05/30/08 15:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:01		
Alkalinity, Total as CaCO3	**99.0**	mg/L	10.0	3.2	1		05/30/08 15:01		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.25J**	mg/L	0.40	0.085	1		05/28/08 21:30	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/29/08 03:25	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		05/28/08 21:30	16887-00-6	
Fluoride	**0.40J**	mg/L	0.50	0.059	1		05/28/08 21:30	16984-48-8	
Sulfate	**11.4**	mg/L	4.0	0.51	1		05/28/08 21:30	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/10/08 13:19	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:21	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: MW-605 **Lab ID: 404340003** Collected: 05/27/08 11:01 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.950**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 10:08	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**96.8**	mg/L	10.0	3.2	1		05/30/08 15:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:02		
Alkalinity, Total as CaCO3	**96.8**	mg/L	10.0	3.2	1		05/30/08 15:02		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.26J**	mg/L	0.40	0.085	1		05/28/08 22:13	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/29/08 04:07	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		05/28/08 22:13	16887-00-6	
Fluoride	**0.40J**	mg/L	0.50	0.059	1		05/28/08 22:13	16984-48-8	
Sulfate	**11.4**	mg/L	4.0	0.51	1		05/28/08 22:13	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/10/08 13:20	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:21	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: MW-602 **Lab ID: 404340004** Collected: 05/27/08 11:15 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.208J**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 10:26	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**46.2**	mg/L	10.0	3.2	1		05/30/08 15:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:02		
Alkalinity, Total as CaCO3	**46.2**	mg/L	10.0	3.2	1		05/30/08 15:02		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/29/08 12:14		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/28/08 22:55	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/29/08 04:50	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.1J**	mg/L	5.0	1.1	1		05/28/08 22:55	16887-00-6	
Fluoride	**0.48J**	mg/L	0.50	0.059	1		05/28/08 22:55	16984-48-8	
Sulfate	**49.2**	mg/L	4.0	0.51	1		05/28/08 22:55	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/10/08 13:20	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:22	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: KMW-7 **Lab ID: 404340005** Collected: 05/27/08 11:47 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.703**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 10:33	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**39.6**	mg/L	10.0	3.2	1		05/30/08 15:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:02		
Alkalinity, Total as CaCO3	**39.6**	mg/L	10.0	3.2	1		05/30/08 15:02		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/29/08 12:14		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/28/08 23:10	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/29/08 05:04	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.8J**	mg/L	5.0	1.1	1		05/28/08 23:10	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		05/28/08 23:10	16984-48-8	
Sulfate	**646**	mg/L	200	25.5	50		05/29/08 17:59	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		06/10/08 13:21	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.4**	mg/L	1.0	0.50	1		06/09/08 14:26	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: MW-102 **Lab ID: 404340006** Collected: 05/27/08 13:20 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**37.7**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 10:36	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:05		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:05		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:05		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/29/08 12:14		P4
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.63**	mg/L	0.40	0.085	1		05/28/08 23:24	14797-55-8	
Nitrite as N	**0.79**	mg/L	0.10	0.036	1		05/29/08 05:18	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.3**	mg/L	5.0	1.1	1		05/28/08 23:24	16887-00-6	
Fluoride	**0.62**	mg/L	0.50	0.059	1		05/28/08 23:24	16984-48-8	
Sulfate	**14800**	mg/L	2000	255	500		05/30/08 19:29	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.036**	mg/L	0.12	0.036	1		06/10/08 13:22	57-12-5	D3
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		06/09/08 14:26	7664-41-7	

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ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: MW-5 **Lab ID: 404340007** Collected: 05/27/08 13:45 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**5.04**	ng/L	0.50	0.16	1	06/03/08 12:30	06/05/08 10:54	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.90**	ug/L	1.0	0.90	1		06/02/08 08:57	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.20**	ug/L	1.0	0.20	1		06/02/08 08:57	79-34-5	
1,1,2-Trichloroethane	**<0.42**	ug/L	1.0	0.42	1		06/02/08 08:57	79-00-5	
1,1-Dichloroethane	**<0.75**	ug/L	1.0	0.75	1		06/02/08 08:57	75-34-3	
1,1-Dichloroethene	**<0.57**	ug/L	1.0	0.57	1		06/02/08 08:57	75-35-4	
1,2-Dichloroethane	**<0.36**	ug/L	1.0	0.36	1		06/02/08 08:57	107-06-2	
1,2-Dichloroethene (Total)	**3.5**	ug/L	2.0	1.4	1		06/02/08 08:57	540-59-0	
1,2-Dichloropropane	**<0.46**	ug/L	1.0	0.46	1		06/02/08 08:57	78-87-5	
2-Butanone (MEK)	**<4.3**	ug/L	5.0	4.3	1		06/02/08 08:57	78-93-3	
2-Hexanone	**<1.1**	ug/L	5.0	1.1	1		06/02/08 08:57	591-78-6	
4-Methyl-2-pentanone (MIBK)	**<1.2**	ug/L	5.0	1.2	1		06/02/08 08:57	108-10-1	
Acetone	**<2.3**	ug/L	5.0	2.3	1		06/02/08 08:57	67-64-1	R1
Benzene	**3.4**	ug/L	1.0	0.41	1		06/02/08 08:57	71-43-2	
Bromodichloromethane	**<0.56**	ug/L	1.0	0.56	1		06/02/08 08:57	75-27-4	
Bromoform	**<0.94**	ug/L	1.0	0.94	1		06/02/08 08:57	75-25-2	
Bromomethane	**<0.91**	ug/L	1.0	0.91	1		06/02/08 08:57	74-83-9	
Carbon disulfide	**<0.66**	ug/L	1.0	0.66	1		06/02/08 08:57	75-15-0	
Carbon tetrachloride	**<0.49**	ug/L	1.0	0.49	1		06/02/08 08:57	56-23-5	
Chlorobenzene	**<0.41**	ug/L	1.0	0.41	1		06/02/08 08:57	108-90-7	
Chloroethane	**<0.97**	ug/L	1.0	0.97	1		06/02/08 08:57	75-00-3	
Chloroform	**<0.37**	ug/L	5.0	0.37	1		06/02/08 08:57	67-66-3	
Chloromethane	**<0.24**	ug/L	1.0	0.24	1		06/02/08 08:57	74-87-3	
Dibromochloromethane	**<0.81**	ug/L	1.0	0.81	1		06/02/08 08:57	124-48-1	
Ethylbenzene	**45.7**	ug/L	1.0	0.54	1		06/02/08 08:57	100-41-4	
Methylene Chloride	**<0.43**	ug/L	1.0	0.43	1		06/02/08 08:57	75-09-2	
Naphthalene	**17.0**	ug/L	5.0	0.74	1		06/02/08 08:57	91-20-3	
Styrene	**<0.86**	ug/L	1.0	0.86	1		06/02/08 08:57	100-42-5	
Tetrachloroethene	**<0.45**	ug/L	1.0	0.45	1		06/02/08 08:57	127-18-4	
Toluene	**1.1**	ug/L	1.0	0.67	1		06/02/08 08:57	108-88-3	
Trichloroethene	**<0.48**	ug/L	1.0	0.48	1		06/02/08 08:57	79-01-6	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		06/02/08 08:57	75-01-4	
Xylene (Total)	**595**	ug/L	3.0	2.6	1		06/02/08 08:57	1330-20-7	
cis-1,3-Dichloropropene	**<0.19**	ug/L	1.0	0.19	1		06/02/08 08:57	10061-01-5	
trans-1,3-Dichloropropene	**<0.19**	ug/L	1.0	0.19	1		06/02/08 08:57	10061-02-6	
4-Bromofluorobenzene (S)	99	%	64-132		1		06/02/08 08:57	460-00-4	
Dibromofluoromethane (S)	107	%	68-122		1		06/02/08 08:57	1868-53-7	
Toluene-d8 (S)	109	%	73-127		1		06/02/08 08:57	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**273**	mg/L	10.0	3.2	1		05/30/08 15:08		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:08		
Alkalinity, Total as CaCO3	**273**	mg/L	10.0	3.2	1		05/30/08 15:08		

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: MW-5 **Lab ID: 404340007** Collected: 05/27/08 13:45 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		05/29/08 12:14		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		05/28/08 23:38	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		05/29/08 05:32	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		05/28/08 23:38	16887-00-6	
Fluoride	**0.28J**	mg/L	0.50	0.059	1		05/28/08 23:38	16984-48-8	
Sulfate	**26.9**	mg/L	4.0	0.51	1		05/28/08 23:38	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0070J**	mg/L	0.020	0.0060	1		06/10/08 13:23	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**9.4**	mg/L	1.0	0.50	1		06/09/08 14:29	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 404340

Sample: MW-601 **Lab ID: 404340008** Collected: 05/27/08 14:35 Received: 05/28/08 10:04 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**18.0**	ng/L	0.50	0.16	1	06/03/08 12:30	06/06/08 15:20	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**444**	mg/L	10.0	3.2	1		05/30/08 15:09		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		05/30/08 15:09		
Alkalinity, Total as CaCO3	**444**	mg/L	10.0	3.2	1		05/30/08 15:09		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.18J**	mg/L	0.40	0.085	1		05/28/08 23:52	14797-55-8	
Nitrite as N	**0.95**	mg/L	0.10	0.036	1		05/29/08 05:47	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**5.6**	mg/L	5.0	1.1	1		05/28/08 23:52	16887-00-6	
Fluoride	**0.37J**	mg/L	0.50	0.059	1		05/28/08 23:52	16984-48-8	
Sulfate	**7.8**	mg/L	4.0	0.51	1		05/28/08 23:52	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0071J**	mg/L	0.020	0.0060	1		06/10/08 13:24	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**7.4**	mg/L	1.0	0.50	1		06/09/08 14:30	7664-41-7	

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CHAIN-OF-CUSTODY / Analytical Request Document

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

COC# 20080527

Page: 1 of 1

Section A Required Client Information:

Company: North Jackson & Foth I & E	
Address: 2737 South Ridge Road	
Green Bay, WI 54304	
Email To:	
Phone:920-497-2500	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To: Sharon Felix - Foth I & E
Copy To:
Purchase Order No.:
Project Name: Humboldt Mill
Project Number:

Section C Invoice Information:

Attention: Janis Kesy
Company Name: Foth I & E
Address: 2737 South Ridge Rd. Green Bay, WI
Pace Quote Reference:
Pace Project Manager: Tod Noltemeyer
Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER_____

SITE LOCATION: ☐ MI ☐ ☐ ☐ ☐ ☐ OH ☐ SC ☐ IL ☐ OTHER____

Section D Required Client Information

SAMPLE ID
One Character per box.
(A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL WP
WIPE	WI
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	CODE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Methanol	VOC	Alk Mn Fe Cl Cl SO4	Ammonia	Cyanide	Lithium	LL Hg 1631E	Metals Hardness	Mercury 7470	Sulfide	Residual Chlorine (Y/N)	Pace Project Number Lab I.D.
1	FBk-003	001	WT	G			5/27/08	1000	—	8	3	1	2		1			1		X	X	X	X	X	X	X	X	N	
2	DUP-003	002						—	—	7	3	1	2		1					X	X	X	X	X	X	X		N	
3	MW-605	003						1101	7.2	7	3	1	2		1					X	X	X	X	X	X	X		N	
4	MW-602	004						1115	7.5	8	3	1	2		1			1		X	X	X	X	X	X	X	X	N	
5	KMW-7	005						1147	8.666	8	3	1	2		1			1		X	X	X	X	X	X	X	X	N	
6	MW-102	006						1320	—	8	3	1	2		1			1		X	X	X	X	X	X	X	X	N	
7	MW-5	007						1345	—	10	3	1	2		1	2		1	X	X	X	X	X	X	X	X	X	N	
8	MW-601	008						1435	—	7	3	1	2		1					X	X	X	X	X	X	X		N	
9	KMW-5	009						1410	—	8	3	1	2		1			1		X	X	X	X	X	X	X	X	N	
10																													
11																													
12																													

Additional Comments:

Fed Ex TRK #:

7919 0709 0056

7993 3023 3724

* Collected only 2 VOC Bottles @ MW-5

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Richard Eagle, NJC	5/27/08	1700			
Fed Ex	5/28/08	1025	C Pace	5/28/08	1025

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N	Y/N
1.0 0.5	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Cantway Richard Eagle

SIGNATURE of SAMPLER: Richard Eagle — DATE Signed (MM / DD / YY): 5/27/08

Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson + Fath IVE Project # _____

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

Tracking #: _____

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

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☑ Other poly bags

Thermometer Used JB **Type of Ice:** (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature 1.0 + 0.5 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 5-28-08 CJ

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Nitrate/Nitrite
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: WT		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13. @#COLO NAOH + NAOH+ZN pH2 LOW. (5pH) (4ph) CJ 5/28/08
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed CJ Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☐N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: AH **Date:** 5/28/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

July 2008

Batch No. 406432

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Pace Analytical Services, Inc.
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Green Bay, WI 54302
Phone: 920.469.2436
Fax: 920.469.8827

August 4, 2008

Janis Kesy
Foth & Van Dyke
2737 South Ridge Road
Green Bay, WI 54304

Dear Ms. Kesy:

Enclosed is a report for the analysis of 40 ground water samples and associated QC samples for the Humboldt Mill project (06W003). These samples were received from July 16 to July 17, 2008. The samples were assigned to batch numbers 406432, 406501 and 406569 for laboratory tracking purposes.

A table of the results has also been sent to you via e-mail.

If you have any questions regarding this data please call me at (608) 232-3300.

Sincerely,

for Tod N.

Tod Noltemeyer
Project Manager

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

July 31, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL
Pace Project No.: 406432

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on July 16, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: HUMBOLDT MILL
Pace Project No.: 406432

Lab ID	Sample ID	Matrix	Date Collected	Date Received
406432001	**MW-605**	Water	07/15/08 14:24	07/16/08 10:00
406432002	**P-605**	Water	07/15/08 14:57	07/16/08 10:00
406432003	**KMW-9**	Water	07/15/08 09:20	07/16/08 10:00
406432004	**FBK-001**	Water	07/15/08 08:45	07/16/08 10:00
406432005	**DUP-001**	Water	07/15/08 00:00	07/16/08 10:00
406432006	**KMW-9P**	Water	07/15/08 10:00	07/16/08 10:00
406432007	**KMW-4**	Water	07/15/08 11:17	07/16/08 10:00
406432008	**MW-604**	Water	07/15/08 13:03	07/16/08 10:00
406432009	**P-604**	Water	07/15/08 13:41	07/16/08 10:00
406432010	**KMW-7**	Water	07/15/08 10:45	07/16/08 10:00

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406432

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
406432001	MW-605	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406432002	P-605	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406432003	KMW-9	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406432004	FBK-001	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406432005	DUP-001	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406432006	KMW-9P	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406432007	KMW-4	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406432

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406432008	**MW-604**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406432009	**P-604**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406432010	**KMW-7**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: EPA 1631E
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
10 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
10 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
7 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
10 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-001 (Lab ID: 406432005)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1964

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406432001,406454001

M0: Matrix spike recovery was outside laboratory control limits.
- MS (Lab ID: 53085)
  - Nitrite as N
- MS (Lab ID: 53087)
  - Nitrate as N
- MSD (Lab ID: 53086)
  - Nitrite as N
- MSD (Lab ID: 53088)
  - Nitrate as N
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
10 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1965

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406432001,406454001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 53110)
  - Chloride
- MSD (Lab ID: 53111)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
10 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1988

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406428005,406432009

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 54447)
  - Cyanide
- MSD (Lab ID: 54448)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: July 31, 2008

General Information:
10 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: MW-605 **Lab ID: 406432001** Collected: 07/15/08 14:24 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.918**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 09:25	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**83.6**	mg/L	10.0	3.2	1		07/17/08 13:48		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:48		
Alkalinity, Total as CaCO3	**83.6**	mg/L	10.0	3.2	1		07/17/08 13:48		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.17J**	mg/L	0.40	0.085	1		07/16/08 21:51	14797-55-8	M0
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 05:24	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		07/16/08 21:51	16887-00-6	M0
Fluoride	**0.39J**	mg/L	0.50	0.059	1		07/16/08 21:51	16984-48-8	
Sulfate	**8.4**	mg/L	4.0	0.51	1		07/16/08 21:51	14808-79-8	B
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0063J**	mg/L	0.020	0.0060	1		07/22/08 15:13	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/23/08 14:07	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: P-605 **Lab ID: 406432002** Collected: 07/15/08 14:57 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.555**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 09:30	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**123**	mg/L	10.0	3.2	1		07/17/08 13:48		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:48		
Alkalinity, Total as CaCO3	**123**	mg/L	10.0	3.2	1		07/17/08 13:48		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 22:33	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 06:07	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.7J**	mg/L	5.0	1.1	1		07/16/08 22:33	16887-00-6	
Fluoride	**0.46J**	mg/L	0.50	0.059	1		07/16/08 22:33	16984-48-8	
Sulfate	**5.0**	mg/L	4.0	0.51	1		07/16/08 22:33	14808-79-8	B
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/22/08 15:13	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/23/08 14:07	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: KMW-9 **Lab ID: 406432003** Collected: 07/15/08 09:20 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.12**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 09:45	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**72.6**	mg/L	10.0	3.2	1		07/17/08 13:48		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:48		
Alkalinity, Total as CaCO3	**72.6**	mg/L	10.0	3.2	1		07/17/08 13:48		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**2.6J**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 22:47	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 06:21	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.5J**	mg/L	5.0	1.1	1		07/16/08 22:47	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		07/16/08 22:47	16984-48-8	
Sulfate	**264**	mg/L	40.0	5.1	10		07/17/08 17:56	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/22/08 15:14	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.56J**	mg/L	1.0	0.50	1		07/23/08 14:08	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: FBK-001 **Lab ID: 406432004** Collected: 07/15/08 08:45 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.183J**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 12:03	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:49		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:49		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:49		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 23:02	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 06:35	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**<1.1**	mg/L	5.0	1.1	1		07/16/08 23:02	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		07/16/08 23:02	16984-48-8	
Sulfate	**1.9J**	mg/L	4.0	0.51	1		07/16/08 23:02	14808-79-8	B
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/22/08 15:15	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/23/08 14:09	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: DUP-001 **Lab ID: 406432005** Collected: 07/15/08 00:00 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.404J**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 11:23	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**74.8**	mg/L	10.0	3.2	1		07/17/08 13:49		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:49		
Alkalinity, Total as CaCO3	**74.8**	mg/L	10.0	3.2	1		07/17/08 13:49		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**3.2J**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 23:16	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 06:49	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.5J**	mg/L	5.0	1.1	1		07/16/08 23:16	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		07/16/08 23:16	16984-48-8	
Sulfate	**266**	mg/L	40.0	5.1	10		07/17/08 18:10	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0069J**	mg/L	0.020	0.0060	1		07/22/08 15:16	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.53J**	mg/L	1.0	0.50	1		07/23/08 14:10	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: KMW-9P **Lab ID: 406432006** Collected: 07/15/08 10:00 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.636**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 11:32	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	10.0	3.2	1		07/17/08 13:49		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:49		
Alkalinity, Total as CaCO3	**125**	mg/L	10.0	3.2	1		07/17/08 13:49		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 23:30	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 07:32	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.8J**	mg/L	5.0	1.1	1		07/16/08 23:30	16887-00-6	
Fluoride	**0.20J**	mg/L	0.50	0.059	1		07/16/08 23:30	16984-48-8	
Sulfate	**977**	mg/L	200	25.5	50		07/17/08 18:25	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/22/08 15:17	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.5**	mg/L	1.0	0.50	1		07/23/08 14:10	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: KMW-4 **Lab ID: 406432007** Collected: 07/15/08 11:17 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.09**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 11:32	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	10.0	3.2	1		07/17/08 13:50		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:50		
Alkalinity, Total as CaCO3	**88.0**	mg/L	10.0	3.2	1		07/17/08 13:50		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 23:44	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 07:46	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.1J**	mg/L	5.0	1.1	1		07/16/08 23:44	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		07/16/08 23:44	16984-48-8	
Sulfate	**80.4**	mg/L	20.0	2.6	5		07/17/08 18:39	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/22/08 15:17	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:21	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: MW-604 **Lab ID: 406432008** Collected: 07/15/08 13:03 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.05**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 11:17	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**114**	mg/L	10.0	3.2	1		07/17/08 13:50		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:50		
Alkalinity, Total as CaCO3	**114**	mg/L	10.0	3.2	1		07/17/08 13:50		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/16/08 23:58	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 08:00	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		07/16/08 23:58	16887-00-6	
Fluoride	**0.39J**	mg/L	0.50	0.059	1		07/16/08 23:58	16984-48-8	
Sulfate	**7.4**	mg/L	4.0	0.51	1		07/16/08 23:58	14808-79-8	B
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0066J**	mg/L	0.020	0.0060	1		07/22/08 15:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:22	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: P-604 **Lab ID: 406432009** Collected: 07/15/08 13:41 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.16**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 11:43	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**81.4**	mg/L	10.0	3.2	1		07/17/08 13:50		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:50		
Alkalinity, Total as CaCO3	**81.4**	mg/L	10.0	3.2	1		07/17/08 13:50		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		07/17/08 00:41	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 08:15	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		07/17/08 00:41	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		07/17/08 00:41	16984-48-8	
Sulfate	**10.7**	mg/L	4.0	0.51	1		07/17/08 00:41	14808-79-8	B
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**0.0074J**	mg/L	0.020	0.0060	1		07/22/08 15:19	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:23	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406432

Sample: KMW-7 **Lab ID: 406432010** Collected: 07/15/08 10:45 Received: 07/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.992**	ng/L	0.50	0.16	1	07/21/08 08:45	07/28/08 12:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**68.2**	mg/L	10.0	3.2	1		07/17/08 13:51		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/17/08 13:51		
Alkalinity, Total as CaCO3	**68.2**	mg/L	10.0	3.2	1		07/17/08 13:51		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 00:55	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 08:29	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.9J**	mg/L	5.0	1.1	1		07/17/08 00:55	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		07/17/08 00:55	16984-48-8	
Sulfate	**679**	mg/L	200	25.5	50		07/17/08 18:53	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:19	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.4**	mg/L	1.0	0.50	1		07/25/08 14:23	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WETA/1964 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

METHOD BLANK: 53083
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	
Nitrite as N	mg/L	<0.036	0.10	

LABORATORY CONTROL SAMPLE: 53084

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.5	96	90-110	
Nitrite as N	mg/L	.8	0.80	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53085 53086

Parameter	Units	406454001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	1.5	1.6	1.6	3.1	3.1	98	97	90-110	.3	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.65	0.62	81	78	90-110	5	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53087 53088

Parameter	Units	406432001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.17J	1.6	1.6	1.6	1.6	88	88	90-110	.6	20	M0
Nitrite as N	mg/L	<0.036	.8	.8	0.73	0.71	91	89	90-110	3	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WET/1856 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

METHOD BLANK: 53092
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 53093

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	499	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53094 53095

Parameter	Units	406200002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	74.8	500	500	574	576	100	100	80-120	.4	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WETA/1965 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

METHOD BLANK: 53108
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	<1.1	5.0	
Fluoride	mg/L	<0.059	0.50	
Sulfate	mg/L	2.1J	4.0	

LABORATORY CONTROL SAMPLE: 53109

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.8	94	90-110	
Fluoride	mg/L	2	1.9	96	90-110	
Sulfate	mg/L	16	15.3	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53110 53111

Parameter	Units	406432001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.5J	20	20	19.1	19.2	83	84	90-110	.7	20	M0
Fluoride	mg/L	0.39J	2	2	2.2	2.3	92	94	90-110	1	20	
Sulfate	mg/L	8.4	16	16	23.2	23.3	92	93	90-110	.3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53112 53113

Parameter	Units	406454001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.0	20	20	28.4	28.0	97	95	90-110	1	20	
Fluoride	mg/L	0.24J	2	2	2.1	2.1	92	94	90-110	1	20	
Sulfate	mg/L	21.1	16	16	37.3	37.0	101	99	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WET/1861 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 406432002, 406432003, 406432004, 406432005, 406432006, 406432009, 406432010

METHOD BLANK: 53645
Associated Lab Samples: 406432002, 406432003, 406432004, 406432005, 406432006, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	<2.3	5.0	

LABORATORY CONTROL SAMPLE: 53646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	48.8	50.4	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53647 53648

Parameter	Units	406432002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	48.8	48.8	47.6	46.8	96	94	80-120	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WETA/1988 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009

METHOD BLANK: 54445
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	0.0061J	0.020	

LABORATORY CONTROL SAMPLE: 54446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.099	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54447 54448

Parameter	Units	406428005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.036	.6	.6	0.036J	0.037J	.6	.7	90-110		20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54449 54450

Parameter	Units	406432009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.0074J	.1	.1	0.10	0.10	95	94	90-110	.8	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WETA/1997 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006

METHOD BLANK: 54854
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 54855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54856 54857

Parameter	Units	406399001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	363	240	240	585	584	92	92	90-110	.2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54858 54859

Parameter	Units	406432006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.5	10	10	11.2	11.1	97	96	90-110	.8	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WETA/2018 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 406432007, 406432008, 406432009, 406432010

METHOD BLANK: 56150
Associated Lab Samples: 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 56151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.8	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56152 56153

Parameter	Units	406471002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.6	10.2	105	100	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56154 56155

Parameter	Units	406501009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.4	10.1	103	100	90-110	3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: CVFS/1156 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

METHOD BLANK: 57092
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.359J	0.50	

METHOD BLANK: 57093
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.321J	0.50	

METHOD BLANK: 57094
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 57095 57096

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.86	5.72	117	114	79-121	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57097 57098

Parameter	Units	406330001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	4.49	20	20	27.8	26.3	116	109	75-125	5	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57099 57100

Parameter	Units	406407002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	3.88	15	15	21.4	21.1	117	115	75-125	1	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406432

QC Batch: WETA/2035
QC Batch Method: EPA 335.4
Associated Lab Samples: 406432010

Analysis Method: EPA 335.4
Analysis Description: 335.4 Cyanide, Total

METHOD BLANK: 57114
Associated Lab Samples: 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 57115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.093	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57116 57117

Parameter	Units	406501009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	104	102	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57118 57119

Parameter	Units	406501019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	101	103	90-110	2	20	

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QUALIFIERS

Project: HUMBOLDT MILL
Pace Project No.: 406432

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406432001	MW-605	EPA 300.0	WETA/1964		
406432002	P-605	EPA 300.0	WETA/1964		
406432003	KMW-9	EPA 300.0	WETA/1964		
406432004	FBK-001	EPA 300.0	WETA/1964		
406432005	DUP-001	EPA 300.0	WETA/1964		
406432006	KMW-9P	EPA 300.0	WETA/1964		
406432007	KMW-4	EPA 300.0	WETA/1964		
406432008	MW-604	EPA 300.0	WETA/1964		
406432009	P-604	EPA 300.0	WETA/1964		
406432010	KMW-7	EPA 300.0	WETA/1964		
406432001	MW-605	SM 2320B	WET/1856		
406432002	P-605	SM 2320B	WET/1856		
406432003	KMW-9	SM 2320B	WET/1856		
406432004	FBK-001	SM 2320B	WET/1856		
406432005	DUP-001	SM 2320B	WET/1856		
406432006	KMW-9P	SM 2320B	WET/1856		
406432007	KMW-4	SM 2320B	WET/1856		
406432008	MW-604	SM 2320B	WET/1856		
406432009	P-604	SM 2320B	WET/1856		
406432010	KMW-7	SM 2320B	WET/1856		
406432001	MW-605	EPA 300.0	WETA/1965		
406432002	P-605	EPA 300.0	WETA/1965		
406432003	KMW-9	EPA 300.0	WETA/1965		
406432004	FBK-001	EPA 300.0	WETA/1965		
406432005	DUP-001	EPA 300.0	WETA/1965		
406432006	KMW-9P	EPA 300.0	WETA/1965		
406432007	KMW-4	EPA 300.0	WETA/1965		
406432008	MW-604	EPA 300.0	WETA/1965		
406432009	P-604	EPA 300.0	WETA/1965		
406432010	KMW-7	EPA 300.0	WETA/1965		
406432002	P-605	SM 4500-S F (2000)	WET/1861		
406432003	KMW-9	SM 4500-S F (2000)	WET/1861		
406432004	FBK-001	SM 4500-S F (2000)	WET/1861		
406432005	DUP-001	SM 4500-S F (2000)	WET/1861		
406432006	KMW-9P	SM 4500-S F (2000)	WET/1861		
406432009	P-604	SM 4500-S F (2000)	WET/1861		
406432010	KMW-7	SM 4500-S F (2000)	WET/1861		
406432001	MW-605	EPA 335.4	WETA/1988		
406432002	P-605	EPA 335.4	WETA/1988		
406432003	KMW-9	EPA 335.4	WETA/1988		
406432004	FBK-001	EPA 335.4	WETA/1988		
406432005	DUP-001	EPA 335.4	WETA/1988		
406432006	KMW-9P	EPA 335.4	WETA/1988		
406432007	KMW-4	EPA 335.4	WETA/1988		
406432008	MW-604	EPA 335.4	WETA/1988		
406432009	P-604	EPA 335.4	WETA/1988		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406432

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406432001	MW-605	EPA 350.1	WETA/1997		
406432002	P-605	EPA 350.1	WETA/1997		
406432003	KMW-9	EPA 350.1	WETA/1997		
406432004	FBK-001	EPA 350.1	WETA/1997		
406432005	DUP-001	EPA 350.1	WETA/1997		
406432006	KMW-9P	EPA 350.1	WETA/1997		
406432007	KMW-4	EPA 350.1	WETA/2018		
406432008	MW-604	EPA 350.1	WETA/2018		
406432009	P-604	EPA 350.1	WETA/2018		
406432010	KMW-7	EPA 350.1	WETA/2018		
406432001	MW-605	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432002	P-605	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432003	KMW-9	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432004	FBK-001	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432005	DUP-001	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432006	KMW-9P	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432007	KMW-4	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432008	MW-604	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432009	P-604	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432010	KMW-7	EPA 1631E	CVFS/1156	EPA 1631E	CVFS/1157
406432010	KMW-7	EPA 335.4	WETA/2035		

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

July 31, 2008

Client Services
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

RE: Project: 406432 FOTH
Pace Project No.: 1077285

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on July 16, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

Enclosures

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SAMPLE SUMMARY

Project: 406432 FOTH
Pace Project No.: 1077285

Lab ID	Sample ID	Matrix	Date Collected	Date Received
406432001	MW-605	Water	07/15/08 00:00	07/16/08 00:00
406432002	P-605	Water	07/15/08 00:00	07/16/08 00:00
406432003	KMW-9	Water	07/15/08 00:00	07/16/08 00:00
406432004	FBK-001	Water	07/15/08 00:00	07/16/08 00:00
406432005	DUP-001	Water	07/15/08 00:00	07/16/08 00:00
406432006	KMW-9P	Water	07/15/08 00:00	07/16/08 00:00
406432007	KMW-4	Water	07/15/08 00:00	07/16/08 00:00
406432008	MW-604	Water	07/15/08 00:00	07/16/08 00:00
406432009	P-604	Water	07/15/08 00:00	07/16/08 00:00
406432010	KMW-7	Water	07/15/08 00:00	07/16/08 00:00

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SAMPLE ANALYTE COUNT

Project: 406432 FOTH
Pace Project No.: 1077285

Lab ID	Sample ID	Method	Analysts	Analytes Reported
406432001	MW-605	EPA 6020	RJS	26
406432002	P-605	EPA 6020	RJS	26
406432003	KMW-9	EPA 6020	RJS	26
406432004	FBK-001	EPA 6020	RJS	26
406432005	DUP-001	EPA 6020	RJS	26
406432006	KMW-9P	EPA 6020	RJS	26
406432007	KMW-4	EPA 6020	RJS	26
406432008	MW-604	EPA 6020	RJS	26
406432009	P-604	EPA 6020	RJS	26
406432010	KMW-7	EPA 6020	RJS	26

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: MW-605 **Lab ID: 406432001** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**<10.0**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 14:27	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:27	7440-38-2	
Barium	**16.0**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 14:27	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:27	7440-41-7	
Boron	**36.7**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 14:27	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7440-43-9	
Calcium	**20100**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:27	7440-70-2	P6
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:27	7440-47-3	
Cobalt	**0.76**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7440-48-4	
Copper	**1.1**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:27	7440-50-8	
Iron	**<125**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:27	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7439-92-1	
Lithium	**2.2**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7439-93-2	
Magnesium	**9060**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:27	7439-95-4	
Manganese	**1050**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:27	7439-96-5	
Molybdenum	**1.8**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7439-98-7	
Nickel	**2.1**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7440-02-0	
Potassium	**3020**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:27	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:27	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:27	7440-22-4	
Sodium	**796**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:27	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7440-28-0	
Total Hardness by 2340B	**87400**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 14:27		
Vanadium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:27	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:27	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: P-605 **Lab ID: 406432002** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**30.2**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 13:15	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7440-36-0	
Arsenic	**10.2**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:15	7440-38-2	
Barium	**30.9**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 13:15	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:15	7440-41-7	
Boron	**43.6**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 13:15	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7440-43-9	
Calcium	**24500**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:15	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:15	7440-47-3	
Cobalt	**1.6**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:15	7440-50-8	
Iron	**5680**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:15	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7439-92-1	
Lithium	**2.1**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7439-93-2	
Magnesium	**13200**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:15	7439-95-4	
Manganese	**3080**	ug/L	12.5	6.2	25	07/28/08 17:05	07/30/08 11:29	7439-96-5	
Molybdenum	**5.3**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7439-98-7	
Nickel	**0.48J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7440-02-0	
Potassium	**4700**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:15	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:15	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:15	7440-22-4	
Sodium	**1490**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:15	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7440-28-0	
Total Hardness by 2340B	**115000**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 13:15		
Vanadium	**0.50**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:15	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:15	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: KMW-9 **Lab ID: 406432003** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**14.4J**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 13:20	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7440-36-0	
Arsenic	**4.1**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:20	7440-38-2	
Barium	**87.8**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 13:20	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:20	7440-41-7	
Boron	**58.4**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 13:20	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7440-43-9	
Calcium	**68700**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:20	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:20	7440-47-3	
Cobalt	**11.0**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:20	7440-50-8	
Iron	**10700**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:20	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7439-92-1	
Lithium	**0.35J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7439-93-2	
Magnesium	**32800**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:20	7439-95-4	
Manganese	**12100**	ug/L	25.0	12.5	50	07/28/08 17:05	07/30/08 11:33	7439-96-5	
Molybdenum	**0.48J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7439-98-7	
Nickel	**17.9**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7440-02-0	
Potassium	**3770**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:20	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:20	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:20	7440-22-4	
Sodium	**4200**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:20	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7440-28-0	
Total Hardness by 2340B	**306000**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 13:20		
Vanadium	**1.8**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:20	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:20	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: FBK-001 **Lab ID: 406432004** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**3.9J**	ug/L	4.0	2.0	1	07/28/08 17:05	07/29/08 13:11	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7440-36-0	
Arsenic	**<0.10**	ug/L	0.20	0.10	1	07/28/08 17:05	07/29/08 13:11	7440-38-2	
Barium	**<0.15**	ug/L	0.30	0.15	1	07/28/08 17:05	07/29/08 13:11	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/28/08 17:05	07/29/08 13:11	7440-41-7	
Boron	**<1.0**	ug/L	2.0	1.0	1	07/28/08 17:05	07/29/08 13:11	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7440-43-9	
Calcium	**<10.0**	ug/L	20.0	10.0	1	07/28/08 17:05	07/29/08 13:11	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/28/08 17:05	07/29/08 13:11	7440-47-3	
Cobalt	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/28/08 17:05	07/29/08 13:11	7440-50-8	
Iron	**<25.0**	ug/L	50.0	25.0	1	07/28/08 17:05	07/29/08 13:11	7439-89-6	
Lead	**0.073J**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7439-92-1	
Lithium	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7439-93-2	
Magnesium	**<2.5**	ug/L	5.0	2.5	1	07/28/08 17:05	07/29/08 13:11	7439-95-4	
Manganese	**<0.25**	ug/L	0.50	0.25	1	07/28/08 17:05	07/29/08 13:11	7439-96-5	
Molybdenum	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7439-98-7	
Nickel	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7440-02-0	
Potassium	**<10.0**	ug/L	20.0	10.0	1	07/28/08 17:05	07/29/08 13:11	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/28/08 17:05	07/29/08 13:11	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/28/08 17:05	07/29/08 13:11	7440-22-4	
Sodium	**<25.0**	ug/L	50.0	25.0	1	07/28/08 17:05	07/29/08 13:11	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7440-28-0	
Total Hardness by 2340B	**26.4**	ug/L	25.0	12.5	1	07/28/08 17:05	07/29/08 13:11		
Vanadium	**<0.050**	ug/L	0.10	0.050	1	07/28/08 17:05	07/29/08 13:11	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/28/08 17:05	07/29/08 13:11	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: DUP-001 **Lab ID: 406432005** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**13.8J**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 13:25	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7440-36-0	
Arsenic	**4.2**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:25	7440-38-2	
Barium	**89.3**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 13:25	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:25	7440-41-7	
Boron	**55.9**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 13:25	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7440-43-9	
Calcium	**70600**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:25	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:25	7440-47-3	
Cobalt	**11.3**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:25	7440-50-8	
Iron	**10900**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:25	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7439-92-1	
Lithium	**0.38J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7439-93-2	
Magnesium	**33500**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:25	7439-95-4	
Manganese	**12100**	ug/L	25.0	12.5	50	07/28/08 17:05	07/30/08 11:38	7439-96-5	
Molybdenum	**0.40J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7439-98-7	
Nickel	**17.6**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7440-02-0	
Potassium	**3880**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:25	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:25	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:25	7440-22-4	
Sodium	**4350**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:25	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7440-28-0	
Total Hardness by 2340B	**314000**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 13:25		
Vanadium	**1.8**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:25	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:25	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: KMW-9P **Lab ID: 406432006** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**10.7J**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 13:29	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7440-36-0	
Arsenic	**3.7**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:29	7440-38-2	
Barium	**45.8**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 13:29	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:29	7440-41-7	
Boron	**89.7**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 13:29	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7440-43-9	
Calcium	**194000**	ug/L	1000	500	50	07/28/08 17:05	07/29/08 13:33	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:29	7440-47-3	
Cobalt	**22.3**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:29	7440-50-8	
Iron	**186000**	ug/L	2500	1250	50	07/28/08 17:05	07/29/08 13:33	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7439-92-1	
Lithium	**5.1**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7439-93-2	
Magnesium	**82000**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:29	7439-95-4	
Manganese	**30800**	ug/L	125	62.5	250	07/28/08 17:05	07/29/08 13:38	7439-96-5	
Molybdenum	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7439-98-7	
Nickel	**0.32J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7440-02-0	
Potassium	**7920**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 13:29	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 13:29	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 13:29	7440-22-4	
Sodium	**7160**	ug/L	250	125	5	07/28/08 17:05	07/29/08 13:29	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7440-28-0	
Total Hardness by 2340B	**823000**	ug/L	1020	512	50	07/28/08 17:05	07/29/08 13:33		
Vanadium	**1.3**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 13:29	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 13:29	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: KMW-4 **Lab ID: 406432007** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**13.0J**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 14:01	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7440-36-0	
Arsenic	**1.5**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:01	7440-38-2	
Barium	**37.5**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 14:01	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:01	7440-41-7	
Boron	**58.4**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 14:01	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7440-43-9	
Calcium	**37400**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:01	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:01	7440-47-3	
Cobalt	**3.2**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:01	7440-50-8	
Iron	**3690**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:01	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7439-92-1	
Lithium	**0.63**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7439-93-2	
Magnesium	**14000**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:01	7439-95-4	
Manganese	**4020**	ug/L	12.5	6.2	25	07/28/08 17:05	07/29/08 14:05	7439-96-5	
Molybdenum	**0.88**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7439-98-7	
Nickel	**4.9**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7440-02-0	
Potassium	**3080**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:01	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:01	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:01	7440-22-4	
Sodium	**3650**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:01	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7440-28-0	
Total Hardness by 2340B	**151000**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 14:01		
Vanadium	**0.31J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:01	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:01	7440-66-6	

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ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: MW-604 **Lab ID: 406432008** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**53.8**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 14:10	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7440-36-0	
Arsenic	**4.6**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:10	7440-38-2	
Barium	**36.1**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 14:10	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:10	7440-41-7	
Boron	**47.2**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 14:10	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7440-43-9	
Calcium	**24700**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:10	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:10	7440-47-3	
Cobalt	**0.90**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7440-48-4	
Copper	**2.2**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:10	7440-50-8	
Iron	**14800**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:10	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7439-92-1	
Lithium	**3.8**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7439-93-2	
Magnesium	**11000**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:10	7439-95-4	
Manganese	**1500**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:10	7439-96-5	
Molybdenum	**2.3**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7439-98-7	
Nickel	**0.42J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7440-02-0	
Potassium	**3080**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:10	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:10	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:10	7440-22-4	
Sodium	**3420**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:10	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7440-28-0	
Total Hardness by 2340B	**107000**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 14:10		
Vanadium	**0.50**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:10	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:10	7440-66-6	

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Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: P-604 **Lab ID: 406432009** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**46.4**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 14:14	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7440-36-0	
Arsenic	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:14	7440-38-2	
Barium	**8.2**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 14:14	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:14	7440-41-7	
Boron	**17.1**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 14:14	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7440-43-9	
Calcium	**21300**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:14	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:14	7440-47-3	
Cobalt	**0.64**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7440-48-4	
Copper	**0.88J**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:14	7440-50-8	
Iron	**173J**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:14	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7439-92-1	
Lithium	**0.28J**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7439-93-2	
Magnesium	**8360**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:14	7439-95-4	
Manganese	**8.0**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:14	7439-96-5	
Molybdenum	**3.1**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7439-98-7	
Nickel	**1.1**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7440-02-0	
Potassium	**1860**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:14	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:14	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:14	7440-22-4	
Sodium	**1710**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:14	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7440-28-0	
Total Hardness by 2340B	**87700**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 14:14		
Vanadium	**0.65**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:14	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:14	7440-66-6	

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(612)607-1700

ANALYTICAL RESULTS

Project: 406432 FOTH
Pace Project No.: 1077285

Sample: KMW-7 **Lab ID: 406432010** Collected: 07/15/08 00:00 Received: 07/16/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**24.5**	ug/L	20.0	10.0	5	07/28/08 17:05	07/29/08 14:19	7429-90-5	
Antimony	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7440-36-0	
Arsenic	**4.6**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:19	7440-38-2	
Barium	**46.2**	ug/L	1.5	0.75	5	07/28/08 17:05	07/29/08 14:19	7440-39-3	
Beryllium	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:19	7440-41-7	
Boron	**70.5**	ug/L	10.0	5.0	5	07/28/08 17:05	07/29/08 14:19	7440-42-8	
Cadmium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7440-43-9	
Calcium	**110000**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:19	7440-70-2	
Chromium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:19	7440-47-3	
Cobalt	**123**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:19	7440-50-8	
Iron	**152000**	ug/L	2500	1250	50	07/28/08 17:05	07/29/08 14:23	7439-89-6	
Lead	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7439-92-1	
Lithium	**3.6**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7439-93-2	
Magnesium	**55800**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:19	7439-95-4	
Manganese	**17400**	ug/L	25.0	12.5	50	07/28/08 17:05	07/29/08 14:23	7439-96-5	
Molybdenum	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7439-98-7	
Nickel	**108**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7440-02-0	
Potassium	**6560**	ug/L	100	50.0	5	07/28/08 17:05	07/29/08 14:19	7440-09-7	
Selenium	**<1.2**	ug/L	2.5	1.2	5	07/28/08 17:05	07/29/08 14:19	7782-49-2	
Silver	**<0.50**	ug/L	1.0	0.50	5	07/28/08 17:05	07/29/08 14:19	7440-22-4	
Sodium	**5560**	ug/L	250	125	5	07/28/08 17:05	07/29/08 14:19	7440-23-5	
Thallium	**<0.25**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7440-28-0	
Total Hardness by 2340B	**503000**	ug/L	125	62.5	5	07/28/08 17:05	07/29/08 14:19		
Vanadium	**4.0**	ug/L	0.50	0.25	5	07/28/08 17:05	07/29/08 14:19	7440-62-2	
Zinc	**<12.5**	ug/L	25.0	12.5	5	07/28/08 17:05	07/29/08 14:19	7440-66-6	

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QUALITY CONTROL DATA

Project: 406432 FOTH
Pace Project No.: 1077285

QC Batch: MPRP/12748 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

METHOD BLANK: 504158
Associated Lab Samples: 406432001, 406432002, 406432003, 406432004, 406432005, 406432006, 406432007, 406432008, 406432009, 406432010

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	<2.0	4.0	
Antimony	ug/L	<0.050	0.10	
Arsenic	ug/L	<0.10	0.20	
Barium	ug/L	<0.15	0.30	
Beryllium	ug/L	<0.10	0.20	
Boron	ug/L	<1.0	2.0	
Cadmium	ug/L	<0.050	0.10	
Calcium	ug/L	<10.0	20.0	
Chromium	ug/L	<0.25	0.50	
Cobalt	ug/L	<0.050	0.10	B
Copper	ug/L	<0.10	0.20	
Iron	ug/L	<25.0	50.0	
Lead	ug/L	0.050J	0.10	P8
Lithium	ug/L	<0.050	0.10	
Magnesium	ug/L	<2.5	5.0	
Manganese	ug/L	<0.25	0.50	B
Molybdenum	ug/L	<0.050	0.10	B
Nickel	ug/L	<0.050	0.10	
Potassium	ug/L	<10.0	20.0	
Selenium	ug/L	<0.25	0.50	
Silver	ug/L	<0.10	0.20	
Sodium	ug/L	<25.0	50.0	
Thallium	ug/L	<0.050	0.10	
Total Hardness by 2340B	ug/L	<12.5	25.0	
Vanadium	ug/L	<0.050	0.10	
Zinc	ug/L	<2.5	5.0	

LABORATORY CONTROL SAMPLE: 504159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	81.0	101	85-115	
Antimony	ug/L	80	81.8	102	85-115	
Arsenic	ug/L	80	82.7	103	85-115	
Barium	ug/L	80	81.3	102	85-115	
Beryllium	ug/L	80	76.8	96	85-115	
Boron	ug/L	80	80.0	100	85-115	
Cadmium	ug/L	80	83.5	104	85-115	
Calcium	ug/L	1000	933	93	85-115	
Chromium	ug/L	80	84.4	105	85-115	
Cobalt	ug/L	80	82.6	103	85-115	

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QUALITY CONTROL DATA

Project: 406432 FOTH
Pace Project No.: 1077285

LABORATORY CONTROL SAMPLE: 504159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	80	78.3	98	85-115	
Iron	ug/L	1000	1060	106	85-115	
Lead	ug/L	80	80.3	100	85-115	
Lithium	ug/L	80	77.9	97	85-115	
Magnesium	ug/L	1000	1070	107	85-115	
Manganese	ug/L	80	80.1	100	85-115	
Molybdenum	ug/L	80	82.8	104	85-115	
Nickel	ug/L	80	83.6	104	85-115	
Potassium	ug/L	1000	1070	107	85-115	
Selenium	ug/L	160	162	101	85-115	
Silver	ug/L	80	82.8	104	85-115	
Sodium	ug/L	1000	1040	104	85-115	
Thallium	ug/L	80	80.2	100	85-115	
Total Hardness by 2340B	ug/L		6750			
Vanadium	ug/L	80	81.1	101	85-115	
Zinc	ug/L	80	79.4	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 504160 504161

Parameter	Units	406432001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	<10.0	80	80	87.8	96.8	98	109	70-130	10	20	
Antimony	ug/L	<0.25	80	80	80.9	82.0	101	102	70-130	1	20	
Arsenic	ug/L	<0.50	80	80	84.0	86.4	105	108	70-130	3	20	
Barium	ug/L	16.0	80	80	94.0	97.2	98	101	70-130	3	20	
Beryllium	ug/L	<0.50	80	80	72.1	76.6	90	96	70-130	6	20	
Boron	ug/L	36.7	80	80	113	114	95	97	70-130	1	20	
Cadmium	ug/L	<0.25	80	80	81.2	83.2	101	104	70-130	3	20	
Calcium	ug/L	20100	1000	1000	20600	20600	54	52	70-130	.07	20	P6
Chromium	ug/L	<1.2	80	80	82.4	85.2	103	106	70-130	3	20	
Cobalt	ug/L	0.76	80	80	83.6	84.9	104	105	70-130	1	20	
Copper	ug/L	1.1	80	80	78.4	79.6	97	98	70-130	1	20	
Iron	ug/L	<125	1000	1000	1090	1110	100	102	70-130	2	20	
Lead	ug/L	<0.25	80	80	81.8	83.0	102	104	70-130	2	20	
Lithium	ug/L	2.2	80	80	77.9	80.8	95	98	70-130	4	20	
Magnesium	ug/L	9060	1000	1000	10100	10000	102	100	70-130	.3	20	
Manganese	ug/L	1050	80	80	1100	1120	73	98	70-130	2	20	
Molybdenum	ug/L	1.8	80	80	85.4	87.4	105	107	70-130	2	20	
Nickel	ug/L	2.1	80	80	86.5	88.1	106	108	70-130	2	20	
Potassium	ug/L	3020	1000	1000	4070	4120	106	111	70-130	1	20	
Selenium	ug/L	<1.2	160	160	164	167	102	104	70-130	2	20	
Silver	ug/L	<0.50	80	80	63.6	75.0	80	94	70-130	17	20	
Sodium	ug/L	796	1000	1000	1820	1820	103	103	70-130	.03	20	
Thallium	ug/L	<0.25	80	80	81.6	83.4	102	104	70-130	2	20	
Total Hardness by 2340B	ug/L	87400			92900	92800				.2	20	
Vanadium	ug/L	<0.25	80	80	79.8	82.3	100	103	70-130	3	20	
Zinc	ug/L	<12.5	80	80	74.7	77.7	93	97	70-130	4	20	

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QUALITY CONTROL DATA

Project: 406432 FOTH
Pace Project No.: 1077285

MATRIX SPIKE SAMPLE: 504162

Parameter	Units	406425001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<10.0	80	90.6	105	70-130	
Antimony	ug/L	3.5	80	95.2	115	70-130	
Arsenic	ug/L	<0.50	80	97.2	121	70-130	
Barium	ug/L	17.3	80	107	112	70-130	
Beryllium	ug/L	<0.50	80	77.4	97	70-130	
Boron	ug/L	358	80	428	88	70-130	
Cadmium	ug/L	<0.25	80	90.6	113	70-130	
Calcium	ug/L	98000	1000	97400	-60	70-130	P6
Chromium	ug/L	<1.2	80	93.8	117	70-130	
Cobalt	ug/L	13.1	80	104	114	70-130	
Copper	ug/L	2.8	80	88.6	107	70-130	
Iron	ug/L	<125	1000	1190	117	70-130	
Lead	ug/L	<0.25	80	87.9	110	70-130	
Lithium	ug/L	7.6	80	84.4	96	70-130	
Magnesium	ug/L	61600	1000	62700	110	70-130	
Manganese	ug/L	99.8	80	185	106	70-130	
Molybdenum	ug/L	52.4	80	146	117	70-130	
Nickel	ug/L	752	80	826	93	70-130	
Potassium	ug/L	27700	1000	28600	93	70-130	
Selenium	ug/L	<1.2	160	184	114	70-130	
Silver	ug/L	<0.50	80	72.0	90	70-130	
Sodium	ug/L	57700	1000	57900	20	70-130	P6
Thallium	ug/L	<0.25	80	87.6	109	70-130	
Total Hardness by 2340B	ug/L	498000		501000			
Vanadium	ug/L	0.34J	80	91.0	113	70-130	
Zinc	ug/L	<12.5	80	85.8	107	70-130	

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QUALIFIERS

Project: 406432 FOTH
Pace Project No.: 1077285

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
P8	Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 406432 FOTH
Pace Project No.: 1077285

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406432001	**MW-605**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432002	**P-605**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432003	**KMW-9**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432004	**FBK-001**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432005	**DUP-001**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432006	**KMW-9P**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432007	**KMW-4**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432008	**MW-604**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432009	**P-604**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406432010	**KMW-7**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Project # 404432

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

Thermometer Used 2B **Type of Ice:** Wet Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 10 **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 7/14/08 JKS

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes	☑No	☐N/A	6. 47/16/08 NO_2, NO_3, Turbidity
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC:	☑Yes	☐No	☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W				
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes	☐No		Initial when completed JKS / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☐No	☑N/A	15.
Trip Blank Present:	☐Yes	☐No	☑N/A	16.
Trip Blank Custody Seals Present	☐Yes	☐No	☑N/A	
Pace Trip Blank Lot # (if purchased): _____				

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 7/14/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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

20080715

Page: 1 of 1

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	Complete data package due to Foth by 7/31/08

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N): N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other ZnAc	Analysis Test Y/N	Alk2, Cl, Fl, SO4, TDS, Turbidity	NITRITE, NITRATE SEPARATELY	TSS	CYANIDE	METALS, GROSS ALPHA/BETA	LLHG	SULFIDE	DOC	AMMONIA, COD, TOC	Lithium	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 406432
1	MW-605 001	WT	G			7/15/08	1424	12	7	3	1	2		0			1		1	1		1	1	1	0		1	1	N	SCC post it for bottles
2	P-605 002	↓	↓			↓	1457	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1	↓	
3	KMW-9 003						0920	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1		
4	FBK-001 004					7/15/08	0845	—	8	3	1	2		1			1		1	1		1	1	1	1		1	1	N	
5	DUP-001 005						—	—	8	3	1	2		1			1		1	1		1	1	1	1		1	1		
6	KMW-9P 006						1000	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1		
7	KMW-4 007						1117	7	7	3	1	2		0			1		1	1		1	1	1	0		1	1		
8	MW-604 008						1303	13	7	3	1	2		0			1		1	1		1	1	1	0		1	1		
9	P-604 009						1341	9	8	3	1	2		1			1		1	1		1	1	1	1		1	1	↓	
10	KMW-7 010	↓	↓			↓	1045	9	8	3	1	2		1			1		1	1		1	1	1	1		1	1		
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Fed Ex Tracking	Richard Eagle / NJC	7/15/08	1800	Fed Ex		
792728596399	Fed Ex	7/16/08	1000	Jennifer Schust	7/16/08	1000
7900 5280 4517						
7927 2859 7042						

SAMPLE CONDITIONS: Temp in °C | Received on ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Cantway Richard Eagle

SIGNATURE of SAMPLER: Richard Eagle — DATE Signed (MM/DD/YY): 7/15/08

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

Batch No. 406501

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Phone: 920.469.2436
Fax: 920.469.8827

August 4, 2008

Janis Kesy
Foth & Van Dyke
2737 South Ridge Road
Green Bay, WI 54304

Dear Ms. Kesy:

Enclosed is a report for the analysis of 40 ground water samples and associated QC samples for the Humboldt Mill project (06W003). These samples were received from July 16 to July 17, 2008. The samples were assigned to batch numbers 406432, 406501 and 406569 for laboratory tracking purposes.

A table of the results has also been sent to you via e-mail.

If you have any questions regarding this data please call me at (608) 232-3300.

Sincerely,

for Tod N.

Tod Noltemeyer
Project Manager

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

August 05, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL
Pace Project No.: 406501

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Green Bay Certification IDs
Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs
Florida (NELAP) Certification #: E87951
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	Matrix	Date Collected	Date Received
406501001	HYG-1	Water	07/16/08 11:10	07/17/08 10:00
406501002	HW-1A	Water	07/16/08 10:39	07/17/08 10:00
406501003	HW-5A	Water	07/16/08 09:33	07/17/08 10:00
406501004	HW-6A	Water	07/16/08 11:23	07/17/08 10:00
406501005	HW-6	Water	07/16/08 10:27	07/17/08 10:00
406501006	HW-3	Water	07/16/08 12:12	07/17/08 10:00
406501007	HW-4	Water	07/16/08 13:14	07/17/08 10:00
406501008	HW-5	Water	07/16/08 09:18	07/17/08 10:00
406501009	HW-2	Water	07/16/08 12:07	07/17/08 10:00
406501010	KMW-3	Water	07/16/08 09:20	07/17/08 10:00
406501011	KMW-10	Water	07/16/08 14:05	07/17/08 10:00
406501012	MW-602	Water	07/16/08 13:10	07/17/08 10:00
406501013	MW-603	Water	07/16/08 12:25	07/17/08 10:00
406501014	MW-606	Water	07/16/08 11:20	07/17/08 10:00
406501015	P-602	Water	07/16/08 12:35	07/17/08 10:00
406501016	MW-12	Water	07/16/08 15:15	07/17/08 10:00
406501017	PW-2	Water	07/16/08 14:11	07/17/08 10:00
406501018	MW-103	Water	07/16/08 15:18	07/17/08 10:00
406501019	DUP-002	Water	07/16/08 00:00	07/17/08 10:00
406501020	FBK-002	Water	07/16/08 09:50	07/17/08 10:00
406501021	KMW-2	Water	07/16/08 16:07	07/17/08 10:00

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
406501001	HYG-1	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501002	HW-1A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501003	HW-5A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501004	HW-6A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501005	HW-6	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501006	HW-3	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501007	HW-4	EPA 1631E	GMW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501008	HW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501009	HW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501010	KMW-3	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406501011	KMW-10	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501012	MW-602	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501013	MW-603	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501014	MW-606	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406501015	P-602	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501016	MW-12	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406501017	PW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501018	MW-103	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501019	DUP-002	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
406501020	**FBK-002**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406501021	**KMW-2**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
21 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
21 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1889

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406501021

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 55171)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 55172)
  - Alkalinity, Total as CaCO3

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
18 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
21 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1966

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406451001,406501001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 53475)
  - Nitrite as N
- MS (Lab ID: 53477)
  - Nitrite as N
- MSD (Lab ID: 53476)
  - Nitrite as N
- MSD (Lab ID: 53478)
  - Nitrite as N

QC Batch: WETA/1968

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406501017

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 53496)
  - Nitrate as N
  - Nitrite as N
- MSD (Lab ID: 53497)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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Green Bay, WI 54302
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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

Additional Comments:

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Green Bay, WI 54302
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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
21 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1967

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406451001,406501001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 53487)
  - Fluoride
- MS (Lab ID: 53489)
  - Fluoride
- MSD (Lab ID: 53488)
  - Fluoride
- MSD (Lab ID: 53490)
  - Fluoride

QC Batch: WETA/1969

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406501017

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 53500)
  - Chloride
  - Fluoride
- MSD (Lab ID: 53501)
  - Chloride
  - Fluoride

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
21 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 05, 2008

General Information:
21 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2019

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406501019,406569007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 56160)
  - Nitrogen, Ammonia
- MSD (Lab ID: 56161)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HYG-1 **Lab ID: 406501001** Collected: 07/16/08 11:10 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.49**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 07:29	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	10.0	3.2	1		07/22/08 15:57		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:57		
Alkalinity, Total as CaCO3	**110**	mg/L	10.0	3.2	1		07/22/08 15:57		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**2.1**	mg/L	0.40	0.085	1		07/17/08 18:56	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/17/08 22:54	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.7**	mg/L	5.0	1.1	1		07/17/08 18:56	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		07/17/08 18:56	16984-48-8	M0
Sulfate	**140**	mg/L	20.0	2.6	5		07/18/08 19:37	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:32	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:31	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-1A **Lab ID: 406501002** Collected: 07/16/08 10:39 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.46**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 07:34	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**83.6**	mg/L	10.0	3.2	1		07/22/08 15:57		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:57		
Alkalinity, Total as CaCO3	**83.6**	mg/L	10.0	3.2	1		07/22/08 15:57		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.7**	mg/L	0.40	0.085	1		07/17/08 19:57	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 00:05	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.0**	mg/L	5.0	1.1	1		07/17/08 19:57	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		07/17/08 19:57	16984-48-8	
Sulfate	**117**	mg/L	20.0	2.6	5		07/18/08 20:19	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:33	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:31	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-5A **Lab ID: 406501003** Collected: 07/16/08 09:33 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.49**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 07:39	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**112**	mg/L	10.0	3.2	1		07/22/08 15:57		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:57		
Alkalinity, Total as CaCO3	**112**	mg/L	10.0	3.2	1		07/22/08 15:57		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**2.0**	mg/L	0.40	0.085	1		07/17/08 20:09	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 00:19	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.2**	mg/L	5.0	1.1	1		07/17/08 20:09	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		07/17/08 20:09	16984-48-8	
Sulfate	**137**	mg/L	20.0	2.6	5		07/18/08 20:33	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:34	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:32	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-6A **Lab ID: 406501004** Collected: 07/16/08 11:23 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.907**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 07:49	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**106**	mg/L	10.0	3.2	1		07/22/08 15:58		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:58		
Alkalinity, Total as CaCO3	**106**	mg/L	10.0	3.2	1		07/22/08 15:58		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.1**	mg/L	0.40	0.085	1		07/17/08 20:21	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 00:33	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.5**	mg/L	5.0	1.1	1		07/17/08 20:21	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		07/17/08 20:21	16984-48-8	
Sulfate	**131**	mg/L	20.0	2.6	5		07/18/08 20:48	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:35	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:33	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-6 **Lab ID: 406501005** Collected: 07/16/08 10:27 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.690**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 08:13	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**147**	mg/L	10.0	3.2	1		07/22/08 15:58		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:58		
Alkalinity, Total as CaCO3	**147**	mg/L	10.0	3.2	1		07/22/08 15:58		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 20:33	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 00:47	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.4**	mg/L	5.0	1.1	1		07/17/08 20:33	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		07/17/08 20:33	16984-48-8	
Sulfate	**106**	mg/L	20.0	2.6	5		07/18/08 21:02	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:36	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:33	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-3 **Lab ID: 406501006** Collected: 07/16/08 12:12 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.320J**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 08:22	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**6.6J**	mg/L	10.0	3.2	1		07/22/08 15:58		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:58		
Alkalinity, Total as CaCO3	**6.6J**	mg/L	10.0	3.2	1		07/22/08 15:58		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.75**	mg/L	0.40	0.085	1		07/17/08 20:46	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 01:02	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.2**	mg/L	5.0	1.1	1		07/17/08 20:46	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		07/17/08 20:46	16984-48-8	
Sulfate	**43.6**	mg/L	4.0	0.51	1		07/17/08 20:46	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:36	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:37	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-4 **Lab ID: 406501007** Collected: 07/16/08 13:14 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.35**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 08:56	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**249**	mg/L	10.0	3.2	1		07/22/08 15:59		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:59		
Alkalinity, Total as CaCO3	**249**	mg/L	10.0	3.2	1		07/22/08 15:59		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 20:58	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 01:16	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**7.1**	mg/L	5.0	1.1	1		07/17/08 20:58	16887-00-6	
Fluoride	**0.31J**	mg/L	0.50	0.059	1		07/17/08 20:58	16984-48-8	
Sulfate	**6.6**	mg/L	4.0	0.51	1		07/17/08 20:58	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:37	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.98J**	mg/L	1.0	0.50	1		07/25/08 14:37	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-5 **Lab ID: 406501008** Collected: 07/16/08 09:18 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**3.67**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 08:56	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	10.0	3.2	1		07/22/08 15:59		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:59		
Alkalinity, Total as CaCO3	**125**	mg/L	10.0	3.2	1		07/22/08 15:59		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 21:10	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 01:30	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.7**	mg/L	5.0	1.[illegible]	1		07/17/08 21:10	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		07/17/08 21:10	16984-48-8	
Sulfate	**139**	mg/L	20.0	2.6	5		07/18/08 21:16	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:41	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:38	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: HW-2 **Lab ID: 406501009** Collected: 07/16/08 12:07 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.58**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:06	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**121**	mg/L	10.0	3.2	1		07/22/08 15:59		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 15:59		
Alkalinity, Total as CaCO3	**121**	mg/L	10.0	3.2	1		07/22/08 15:59		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.3**	mg/L	0.40	0.085	1		07/17/08 21:22	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 01:44	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.7**	mg/L	5.0	1.1	1		07/17/08 21:22	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		07/17/08 21:22	16984-48-8	
Sulfate	**132**	mg/L	20.0	2.6	5		07/18/08 21:30	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:42	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:39	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: KMW-3 **Lab ID: 406501010** Collected: 07/16/08 09:20 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.15**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:15	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.0**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Total as CaCO3	**88.0**	mg/L	10.0	3.2	1		07/22/08 16:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 21:34	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 01:58	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.2J**	mg/L	5.0	1.1	1		07/17/08 21:34	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		07/17/08 21:34	16984-48-8	
Sulfate	**109**	mg/L	20.0	2.6	5		07/18/08 22:13	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:44	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.60J**	mg/L	1.0	0.50	1		07/25/08 14:42	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: KMW-10 **Lab ID: 406501011** Collected: 07/16/08 14:05 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.740**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:16	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**70.4**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Total as CaCO3	**70.4**	mg/L	10.0	3.2	1		07/22/08 16:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 22:11	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 02:41	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.7J**	mg/L	5.0	1.1	1		07/17/08 22:11	16887-00-6	
Fluoride	**0.34J**	mg/L	0.50	0.059	1		07/17/08 22:11	16984-48-8	
Sulfate	**14.1**	mg/L	4.0	0.51	1		07/17/08 22:11	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:45	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:43	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: MW-602 **Lab ID: 406501012** Collected: 07/16/08 13:10 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.19**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:26	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**26.4**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Total as CaCO3	**26.4**	mg/L	10.0	3.2	1		07/22/08 16:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 22:23	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 02:55	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		07/17/08 22:23	16887-00-6	
Fluoride	**0.46J**	mg/L	0.50	0.059	1		07/17/08 22:23	16984-48-8	
Sulfate	**37.2**	mg/L	4.0	0.51	1		07/17/08 22:23	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:46	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:46	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: MW-603 **Lab ID: 406501013** Collected: 07/16/08 12:25 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.317J**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:45	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**30.8**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:00		
Alkalinity, Total as CaCO3	**30.8**	mg/L	10.0	3.2	1		07/22/08 16:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/18/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 22:35	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 03:09	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		07/17/08 22:35	16887-00-6	
Fluoride	**0.53**	mg/L	0.50	0.059	1		07/17/08 22:35	16984-48-8	
Sulfate	**23.2**	mg/L	4.0	0.51	1		07/17/08 22:35	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:47	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:47	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: MW-606 **Lab ID: 406501014** Collected: 07/16/08 11:20 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.653**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**35.2**	mg/L	10.0	3.2	1		07/22/08 16:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:01		
Alkalinity, Total as CaCO3	**35.2**	mg/L	10.0	3.2	1		07/22/08 16:01		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.39J**	mg/L	0.40	0.085	1		07/17/08 22:47	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 03:23	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		07/17/08 22:47	16887-00-6	
Fluoride	**0.33J**	mg/L	0.50	0.059	1		07/17/08 22:47	16984-48-8	
Sulfate	**27.3**	mg/L	4.0	0.51	1		07/17/08 22:47	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:48	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:47	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: P-602 **Lab ID: 406501015** Collected: 07/16/08 12:35 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.22**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**63.8**	mg/L	10.0	3.2	1		07/22/08 16:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:01		
Alkalinity, Total as CaCO3	**63.8**	mg/L	10.0	3.2	1		07/22/08 16:01		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 23:00	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 03:38	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		07/17/08 23:00	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		07/17/08 23:00	16984-48-8	
Sulfate	**2.2J**	mg/L	4.0	0.51	1		07/17/08 23:00	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:48	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:48	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: MW-12 **Lab ID: 406501016** Collected: 07/16/08 15:15 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.41**	ng/L	0.50	0.16	1	07/21/08 13:30	07/31/08 09:59	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**156**	mg/L	10.0	3.2	1		07/22/08 16:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:01		
Alkalinity, Total as CaCO3	**156**	mg/L	10.0	3.2	1		07/22/08 16:01		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/17/08 23:12	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 03:52	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.7J**	mg/L	5.0	1.1	1		07/17/08 23:12	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		07/17/08 23:12	16984-48-8	
Sulfate	**9.5**	mg/L	4.0	0.51	1		07/17/08 23:12	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:52	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.63J**	mg/L	1.0	0.50	1		07/25/08 14:49	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: PW-2 **Lab ID: 406501017** Collected: 07/16/08 14:11 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.02**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 10:50	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**134**	mg/L	10.0	3.2	1		07/22/08 16:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:02		
Alkalinity, Total as CaCO3	**134**	mg/L	10.0	3.2	1		07/22/08 16:02		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.48**	mg/L	0.40	0.085	1		07/17/08 23:48	14797-55-8	M0
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 04:34	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.9J**	mg/L	5.0	1.1	1		07/17/08 23:48	16887-00-6	M0
Fluoride	**0.34J**	mg/L	0.50	0.059	1		07/17/08 23:48	16984-48-8	M0
Sulfate	**177**	mg/L	40.0	5.1	10		07/18/08 22:27	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:53	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:50	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: MW-103 **Lab ID: 406501018** Collected: 07/16/08 15:18 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.389J**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 11:01	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**94.6**	mg/L	10.0	3.2	1		07/22/08 16:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:02		
Alkalinity, Total as CaCO3	**94.6**	mg/L	10.0	3.2	1		07/22/08 16:02		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 00:49	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 05:45	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.7J**	mg/L	5.0	1.1	1		07/18/08 00:49	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		07/18/08 00:49	16984-48-8	
Sulfate	**287**	mg/L	40.0	5.1	10		07/18/08 23:09	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:54	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.0**	mg/L	1.0	0.50	1		07/25/08 14:50	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: DUP-002 **Lab ID: 406501019** Collected: 07/16/08 00:00 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.604**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 11:02	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**128**	mg/L	10.0	3.2	1		07/22/08 16:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:02		
Alkalinity, Total as CaCO3	**128**	mg/L	10.0	3.2	1		07/22/08 16:02		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 01:01	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 05:59	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.8**	mg/L	5.0	1.1	1		07/18/08 01:01	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		07/18/08 01:01	16984-48-8	
Sulfate	**137**	mg/L	20.0	2.6	5		07/18/08 23:24	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:55	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:51	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: FBK-002 **Lab ID: 406501020** Collected: 07/16/08 09:50 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.554**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 11:55	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:03		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:03		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		07/22/08 16:03		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 01:13	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 06:14	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		07/18/08 01:13	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		07/18/08 01:13	16984-48-8	
Sulfate	**<0.51**	mg/L	4.0	0.51	1		07/18/08 01:13	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 14:59	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:56	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406501

Sample: KMW-2 **Lab ID: 406501021** Collected: 07/16/08 16:07 Received: 07/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.81**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 11:09	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**59.4**	mg/L	10.0	3.2	1		07/23/08 14:15		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:15		
Alkalinity, Total as CaCO3	**59.4**	mg/L	10.0	3.2	1		07/23/08 14:15		M0
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 01:26	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/18/08 06:28	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.3J**	mg/L	5.0	1.1	1		07/18/08 01:26	16887-00-6	
Fluoride	**0.31J**	mg/L	0.50	0.059	1		07/18/08 01:26	16984-48-8	
Sulfate	**562**	mg/L	80.0	10.2	20		07/18/08 23:38	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:00	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	1.0	0.50	1		07/25/08 14:56	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/1966 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013

METHOD BLANK: 53473
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	
Nitrite as N	mg/L	<0.036	0.10	

LABORATORY CONTROL SAMPLE: 53474

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.5	96	90-110	
Nitrite as N	mg/L	.8	0.74	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53475 53476

Parameter	Units	406451001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.5	1.5	96	96	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.60	0.58	75	72	90-110	3	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53477 53478

Parameter	Units	406501001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	2.1	1.6	1.6	3.6	3.6	96	98	90-110	.8	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.62	0.60	78	75	90-110	3	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/1967 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

METHOD BLANK: 53485
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	<1.1	5.0	
Fluoride	mg/L	<0.059	0.50	
Sulfate	mg/L	<0.51	4.0	

LABORATORY CONTROL SAMPLE: 53486

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.6	93	90-110	
Fluoride	mg/L	2	1.8	90	90-110	
Sulfate	mg/L	16	15.2	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53487 53488

Parameter	Units	406451001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	15.4	20	20	34.8	34.8	97	97	90-110	.09	20	
Fluoride	mg/L	0.33J	2	2	1.9	1.9	80	80	90-110	.5	20	M0
Sulfate	mg/L	34.3	16	16	50.7	50.7	102	102	90-110	.02	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53489 53490

Parameter	Units	406501001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	12.7	20	20	31.8	32.1	95	97	90-110	1	20	
Fluoride	mg/L	0.26J	2	2	2.0	2.0	86	88	90-110	2	20	M0
Sulfate	mg/L	140	80	80	221	221	102	101	90-110	.3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/1968 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

METHOD BLANK: 53494
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	
Nitrite as N	mg/L	<0.036	0.10	

LABORATORY CONTROL SAMPLE: 53495

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	97	90-110	
Nitrite as N	mg/L	.8	0.75	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53496 53497

Parameter	Units	406501017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.48	1.6	1.6	1.9	1.9	89	91	90-110	2	20	M0
Nitrite as N	mg/L	<0.036	.8	.8	0.67	0.66	84	82	90-110	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/1969 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

METHOD BLANK: 53498
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	<1.1	5.0	
Fluoride	mg/L	<0.059	0.50	
Sulfate	mg/L	<0.51	4.0	

LABORATORY CONTROL SAMPLE: 53499

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.8	94	90-110	
Fluoride	mg/L	2	1.8	92	90-110	
Sulfate	mg/L	16	15.3	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53500 53501

Parameter	Units	406501017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.9J	20	20	21.1	21.3	86	87	90-110	1	20	M0
Fluoride	mg/L	0.34J	2	2	2.0	2.1	84	86	90-110	1	20	M0
Sulfate	mg/L	177	160	160	331	327	96	94	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WET/1861 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501011, 406501012, 406501013

METHOD BLANK: 53645
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501011, 406501012, 406501013

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	<2.3	5.0	

LABORATORY CONTROL SAMPLE: 53646

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	48.8	50.4	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 53647 53648

Parameter	Units	406432002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	48.8	48.8	47.6	46.8	96	94	80-120	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WET/1874 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 406501015, 406501017, 406501018, 406501019, 406501020, 406501021

METHOD BLANK: 54311
Associated Lab Samples: 406501015, 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	<2.3	5.0	

LABORATORY CONTROL SAMPLE: 54312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	48.4	46.0	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54313 54314

Parameter	Units	406501015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	48.4	48.4	49.2	50.0	101	102	80-120	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WET/1884 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019, 406501020

METHOD BLANK: 54794
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019, 406501020

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 54795

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	499	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54796 54797

Parameter	Units	406501001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	110	500	500	609	616	100	101	80-120	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WET/1889
QC Batch Method: SM 2320B
Associated Lab Samples: 406501021

Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity

METHOD BLANK: 55169
Associated Lab Samples: 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 55170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	504	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 55171 55172

Parameter	Units	406501021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	59.4	500	500	453	431	79	74	80-120	5	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/2018 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009

METHOD BLANK: 56150
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 56151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.8	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56152 56153

Parameter	Units	406471002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.6	10.2	105	100	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56154 56155

Parameter	Units	406501009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.4	10.1	103	100	90-110	3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/2019 — Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 — Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019, 406501020, 406501021

METHOD BLANK: 56156
Associated Lab Samples: 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 56157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56158 56159

Parameter	Units	406501019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.6	10.1	105	100	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56160 56161

Parameter	Units	406569007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	9.1	10	10	17.5	17.9	84	88	90-110	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/2035 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019

METHOD BLANK: 57114
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 57115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.093	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57116 57117

Parameter	Units	406501009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	104	102	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57118 57119

Parameter	Units	406501019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	101	103	90-110	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: WETA/2036
QC Batch Method: EPA 335.4
Analysis Method: EPA 335.4
Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 406501020, 406501021

METHOD BLANK: 57124
Associated Lab Samples: 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 57125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57126 57127

Parameter	Units	406569007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	102	102	90-110	.1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57128 57129

Parameter	Units	406762002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.0061J	.1	.1	0.11	0.11	101	102	90-110	.3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: CVFS/1164 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

METHOD BLANK: 58796
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 58797
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.171J	0.50	

METHOD BLANK: 58798
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.270J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 58799 58800

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.70	5.46	114	109	79-121	4	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58801 58802

Parameter	Units	406497001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.95	10	10	14.0	13.7	111	108	75-125	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58803 58804

Parameter	Units	406498001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	2.21	10	10	14.7	13.3	125	111	75-125	10	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406501

QC Batch: CVFS/1166 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

METHOD BLANK: 58868
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 58869
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 58870
Associated Lab Samples: 406501017, 406501018, 406501019, 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.297J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 58871 58872

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.49	5.64	110	113	79-121	3	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58873 58874

Parameter	Units	406501017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.02	5	5	6.49	6.15	109	103	75-125	5	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58875 58876

Parameter	Units	406521002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	5.85	20	20	27.7	27.2	110	107	75-125	2	24	

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QUALIFIERS

Project: HUMBOLDT MILL
Pace Project No.: 406501

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0 Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406501001	HYG-1	EPA 300.0	WETA/1966		
406501002	HW-1A	EPA 300.0	WETA/1966		
406501003	HW-5A	EPA 300.0	WETA/1966		
406501004	HW-6A	EPA 300.0	WETA/1966		
406501005	HW-6	EPA 300.0	WETA/1966		
406501006	HW-3	EPA 300.0	WETA/1966		
406501007	HW-4	EPA 300.0	WETA/1966		
406501008	HW-5	EPA 300.0	WETA/1966		
406501009	HW-2	EPA 300.0	WETA/1966		
406501010	KMW-3	EPA 300.0	WETA/1966		
406501011	KMW-10	EPA 300.0	WETA/1966		
406501012	MW-602	EPA 300.0	WETA/1966		
406501013	MW-603	EPA 300.0	WETA/1966		
406501014	MW-606	EPA 300.0	WETA/1966		
406501015	P-602	EPA 300.0	WETA/1966		
406501016	MW-12	EPA 300.0	WETA/1966		
406501001	HYG-1	EPA 300.0	WETA/1967		
406501002	HW-1A	EPA 300.0	WETA/1967		
406501003	HW-5A	EPA 300.0	WETA/1967		
406501004	HW-6A	EPA 300.0	WETA/1967		
406501005	HW-6	EPA 300.0	WETA/1967		
406501006	HW-3	EPA 300.0	WETA/1967		
406501007	HW-4	EPA 300.0	WETA/1967		
406501008	HW-5	EPA 300.0	WETA/1967		
406501009	HW-2	EPA 300.0	WETA/1967		
406501010	KMW-3	EPA 300.0	WETA/1967		
406501011	KMW-10	EPA 300.0	WETA/1967		
406501012	MW-602	EPA 300.0	WETA/1967		
406501013	MW-603	EPA 300.0	WETA/1967		
406501014	MW-606	EPA 300.0	WETA/1967		
406501015	P-602	EPA 300.0	WETA/1967		
406501016	MW-12	EPA 300.0	WETA/1967		
406501017	PW-2	EPA 300.0	WETA/1968		
406501018	MW-103	EPA 300.0	WETA/1968		
406501019	DUP-002	EPA 300.0	WETA/1968		
406501020	FBK-002	EPA 300.0	WETA/1968		
406501021	KMW-2	EPA 300.0	WETA/1968		
406501017	PW-2	EPA 300.0	WETA/1969		
406501018	MW-103	EPA 300.0	WETA/1969		
406501019	DUP-002	EPA 300.0	WETA/1969		
406501020	FBK-002	EPA 300.0	WETA/1969		
406501021	KMW-2	EPA 300.0	WETA/1969		
406501001	HYG-1	SM 4500-S F (2000)	WET/1861		
406501002	HW-1A	SM 4500-S F (2000)	WET/1861		
406501003	HW-5A	SM 4500-S F (2000)	WET/1861		
406501004	HW-6A	SM 4500-S F (2000)	WET/1861		
406501005	HW-6	SM 4500-S F (2000)	WET/1861		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406501006	HW-3	SM 4500-S F (2000)	WET/1861		
406501007	HW-4	SM 4500-S F (2000)	WET/1861		
406501008	HW-5	SM 4500-S F (2000)	WET/1861		
406501009	HW-2	SM 4500-S F (2000)	WET/1861		
406501011	KMW-10	SM 4500-S F (2000)	WET/1861		
406501012	MW-602	SM 4500-S F (2000)	WET/1861		
406501013	MW-603	SM 4500-S F (2000)	WET/1861		
406501015	P-602	SM 4500-S F (2000)	WET/1874		
406501017	PW-2	SM 4500-S F (2000)	WET/1874		
406501018	MW-103	SM 4500-S F (2000)	WET/1874		
406501019	DUP-002	SM 4500-S F (2000)	WET/1874		
406501020	FBK-002	SM 4500-S F (2000)	WET/1874		
406501021	KMW-2	SM 4500-S F (2000)	WET/1874		
406501001	HYG-1	SM 2320B	WET/1884		
406501002	HW-1A	SM 2320B	WET/1884		
406501003	HW-5A	SM 2320B	WET/1884		
406501004	HW-6A	SM 2320B	WET/1884		
406501005	HW-6	SM 2320B	WET/1884		
406501006	HW-3	SM 2320B	WET/1884		
406501007	HW-4	SM 2320B	WET/1884		
406501008	HW-5	SM 2320B	WET/1884		
406501009	HW-2	SM 2320B	WET/1884		
406501010	KMW-3	SM 2320B	WET/1884		
406501011	KMW-10	SM 2320B	WET/1884		
406501012	MW-602	SM 2320B	WET/1884		
406501013	MW-603	SM 2320B	WET/1884		
406501014	MW-606	SM 2320B	WET/1884		
406501015	P-602	SM 2320B	WET/1884		
406501016	MW-12	SM 2320B	WET/1884		
406501017	PW-2	SM 2320B	WET/1884		
406501018	MW-103	SM 2320B	WET/1884		
406501019	DUP-002	SM 2320B	WET/1884		
406501020	FBK-002	SM 2320B	WET/1884		
406501021	KMW-2	SM 2320B	WET/1889		
406501001	HYG-1	EPA 350.1	WETA/2018		
406501002	HW-1A	EPA 350.1	WETA/2018		
406501003	HW-5A	EPA 350.1	WETA/2018		
406501004	HW-6A	EPA 350.1	WETA/2018		
406501005	HW-6	EPA 350.1	WETA/2018		
406501006	HW-3	EPA 350.1	WETA/2018		
406501007	HW-4	EPA 350.1	WETA/2018		
406501008	HW-5	EPA 350.1	WETA/2018		
406501009	HW-2	EPA 350.1	WETA/2018		
406501010	KMW-3	EPA 350.1	WETA/2019		
406501011	KMW-10	EPA 350.1	WETA/2019		
406501012	MW-602	EPA 350.1	WETA/2019		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406501013	MW-603	EPA 350.1	WETA/2019		
406501014	MW-606	EPA 350.1	WETA/2019		
406501015	P-602	EPA 350.1	WETA/2019		
406501016	MW-12	EPA 350.1	WETA/2019		
406501017	PW-2	EPA 350.1	WETA/2019		
406501018	MW-103	EPA 350.1	WETA/2019		
406501019	DUP-002	EPA 350.1	WETA/2019		
406501020	FBK-002	EPA 350.1	WETA/2019		
406501021	KMW-2	EPA 350.1	WETA/2019		
406501001	HYG-1	EPA 335.4	WETA/2035		
406501002	HW-1A	EPA 335.4	WETA/2035		
406501003	HW-5A	EPA 335.4	WETA/2035		
406501004	HW-6A	EPA 335.4	WETA/2035		
406501005	HW-6	EPA 335.4	WETA/2035		
406501006	HW-3	EPA 335.4	WETA/2035		
406501007	HW-4	EPA 335.4	WETA/2035		
406501008	HW-5	EPA 335.4	WETA/2035		
406501009	HW-2	EPA 335.4	WETA/2035		
406501010	KMW-3	EPA 335.4	WETA/2035		
406501011	KMW-10	EPA 335.4	WETA/2035		
406501012	MW-602	EPA 335.4	WETA/2035		
406501013	MW-603	EPA 335.4	WETA/2035		
406501014	MW-606	EPA 335.4	WETA/2035		
406501015	P-602	EPA 335.4	WETA/2035		
406501016	MW-12	EPA 335.4	WETA/2035		
406501017	PW-2	EPA 335.4	WETA/2035		
406501018	MW-103	EPA 335.4	WETA/2035		
406501019	DUP-002	EPA 335.4	WETA/2035		
406501020	FBK-002	EPA 335.4	WETA/2036		
406501021	KMW-2	EPA 335.4	WETA/2036		
406501001	HYG-1	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501002	HW-1A	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501003	HW-5A	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501004	HW-6A	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501005	HW-6	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501006	HW-3	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501007	HW-4	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501008	HW-5	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501009	HW-2	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501010	KMW-3	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501011	KMW-10	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501012	MW-602	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501013	MW-603	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501014	MW-606	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501015	P-602	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501016	MW-12	EPA 1631E	CVFS/1164	EPA 1631E	CVFS/1165
406501017	PW-2	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406501

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406501018	**MW-103**	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406501019	**DUP-002**	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406501020	**FBK-002**	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406501021	**KMW-2**	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167

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Pace Analytical Services, Inc.
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

August 04, 2008

Client Services
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

RE: Project: 406501 FOTH
Pace Project No.: 1077460

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on July 17, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 406501 FOTH
Pace Project No.: 1077460

Lab ID	Sample ID	Matrix	Date Collected	Date Received
406501001	HYG-1	Water	07/16/08 00:00	07/17/08 00:00
406501002	HW-1A	Water	07/16/08 00:00	07/17/08 00:00
406501003	HW-5A	Water	07/16/08 00:00	07/17/08 00:00
406501004	HW-6A	Water	07/16/08 00:00	07/17/08 00:00
406501005	HW-6	Water	07/16/08 00:00	07/17/08 00:00
406501006	HW-3	Water	07/16/08 00:00	07/17/08 00:00
406501007	HW-4	Water	07/16/08 00:00	07/17/08 00:00
406501008	HW-5	Water	07/16/08 00:00	07/17/08 00:00
406501009	HW-2	Water	07/16/08 00:00	07/17/08 00:00
406501010	KMW-3	Water	07/16/08 00:00	07/17/08 00:00
406501011	KMW-10	Water	07/16/08 00:00	07/17/08 00:00
406501012	MW-602	Water	07/16/08 00:00	07/17/08 00:00
406501013	MW-603	Water	07/16/08 00:00	07/17/08 00:00
406501014	MW-606	Water	07/16/08 00:00	07/17/08 00:00
406501015	P-602	Water	07/16/08 00:00	07/17/08 00:00
406501016	MW-12	Water	07/16/08 00:00	07/17/08 00:00
406501017	PW-2	Water	07/16/08 00:00	07/17/08 00:00
406501018	MW-103	Water	07/16/08 00:00	07/17/08 00:00
406501019	DUP-002	Water	07/16/08 00:00	07/17/08 00:00
406501020	FBK-002	Water	07/16/08 00:00	07/17/08 00:00
406501021	KMW-2	Water	07/16/08 00:00	07/17/08 00:00

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SAMPLE ANALYTE COUNT

Project: 406501 FOTH
Pace Project No.: 1077460

Lab ID	Sample ID	Method	Analysts	Analytes Reported
406501001	HYG-1	EPA 6020	RJS	26
406501002	HW-1A	EPA 6020	RJS	26
406501003	HW-5A	EPA 6020	RJS	26
406501004	HW-6A	EPA 6020	RJS	26
406501005	HW-6	EPA 6020	RJS	26
406501006	HW-3	EPA 6020	RJS	26
406501007	HW-4	EPA 6020	RJS	26
406501008	HW-5	EPA 6020	RJS	26
406501009	HW-2	EPA 6020	RJS	26
406501010	KMW-3	EPA 6020	RJS	26
406501011	KMW-10	EPA 6020	RJS	26
406501012	MW-602	EPA 6020	RJS	26
406501013	MW-603	EPA 6020	RJS	26
406501014	MW-606	EPA 6020	RJS	26
406501015	P-602	EPA 6020	RJS	26
406501016	MW-12	EPA 6020	RJS	26
406501017	PW-2	EPA 6020	RJS	26
406501018	MW-103	EPA 6020	RJS	26
406501019	DUP-002	EPA 6020	RJS	26
406501020	FBK-002	EPA 6020	RJS	26
406501021	KMW-2	EPA 6020	RJS	26

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HYG-1 **Lab ID: 406501001** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**5.7**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 18:57	7429-90-5	
Antimony	**7.8**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7440-36-0	
Arsenic	**0.23**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 18:57	7440-38-2	
Barium	**44.5**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 18:57	7440-39-3	M0
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 18:57	7440-41-7	
Boron	**61.2**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 18:57	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7440-43-9	
Calcium	**56400**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 19:02	7440-70-2	P6
Chromium	**0.33J**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 18:57	7440-47-3	
Cobalt	**3.4**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7440-48-4	
Copper	**1.1**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 18:57	7440-50-8	M0
Iron	**<25.0**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 18:57	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7439-92-1	
Lithium	**0.10**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7439-93-2	1M
Magnesium	**27200**	ug/L	25.0	12.5	5	07/29/08 17:32	07/30/08 19:02	7439-95-4	P6
Manganese	**7.2**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 18:57	7439-96-5	
Molybdenum	**9.9**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7439-98-7	
Nickel	**0.30**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7440-02-0	
Potassium	**7140**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 18:57	7440-09-7	P6
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 18:57	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 18:57	7440-22-4	
Sodium	**12700**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 18:57	7440-23-5	P6
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7440-28-0	
Total Hardness by 2340B	**253000**	ug/L	107	33.4	5	07/29/08 17:32	07/30/08 19:02		
Vanadium	**0.54**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 18:57	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 18:57	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-1A **Lab ID: 406501002** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**2.9J**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:15	7429-90-5	
Antimony	**6.2**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7440-36-0	
Arsenic	**0.25**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:15	7440-38-2	
Barium	**38.4**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:15	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:15	7440-41-7	
Boron	**70.0**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:15	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7440-43-9	
Calcium	**44800**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:03	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:15	7440-47-3	
Cobalt	**3.1**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7440-48-4	
Copper	**1.0**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:15	7440-50-8	
Iron	**438**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:15	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7439-92-1	
Lithium	**0.093J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7439-93-2	
Magnesium	**22400**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:15	7439-95-4	
Manganese	**8.0**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:15	7439-96-5	
Molybdenum	**11.4**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7439-98-7	
Nickel	**0.55**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7440-02-0	
Potassium	**5140**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:15	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:15	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:15	7440-22-4	B
Sodium	**11800**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:15	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7440-28-0	
Total Hardness by 2340B	**204000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 17:03		
Vanadium	**0.52**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:15	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:15	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-5A **Lab ID: 406501003** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**3.4J**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:20	7429-90-5	
Antimony	**10**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7440-36-0	
Arsenic	**0.23**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:20	7440-38-2	
Barium	**47.8**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:20	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:20	7440-41-7	
Boron	**78.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:20	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7440-43-9	
Calcium	**63400**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:07	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:20	7440-47-3	
Cobalt	**3.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7440-48-4	
Copper	**0.99**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:20	7440-50-8	
Iron	**1970**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:20	7439-89-6	
Lead	**0.12**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7439-92-1	
Lithium	**0.084J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7439-93-2	
Magnesium	**31000**	ug/L	25.0	12.5	5	07/29/08 17:32	07/30/08 17:07	7439-95-4	
Manganese	**12.8**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:20	7439-96-5	
Molybdenum	**8.8**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7439-98-7	
Nickel	**29.5**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7440-02-0	
Potassium	**7550**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:20	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:20	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:20	7440-22-4	
Sodium	**13300**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:20	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7440-28-0	
Total Hardness by 2340B	**286000**	ug/L	107	33.4	5	07/29/08 17:32	07/30/08 17:07		
Vanadium	**0.57**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:20	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:20	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-6A **Lab ID: 406501004** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**2.1J**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:25	7429-90-5	
Antimony	**11.3**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7440-36-0	
Arsenic	**0.18J**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:25	7440-38-2	
Barium	**61.7**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:25	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:25	7440-41-7	
Boron	**82.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:25	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7440-43-9	
Calcium	**61200**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:11	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:25	7440-47-3	
Cobalt	**2.2**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7440-48-4	
Copper	**1.3**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:25	7440-50-8	
Iron	**1220**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:25	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7439-92-1	
Lithium	**0.089J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7439-93-2	
Magnesium	**23700**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:25	7439-95-4	
Manganese	**39.6**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:25	7439-96-5	
Molybdenum	**12.4**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7439-98-7	
Nickel	**0.30**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7440-02-0	
Potassium	**10100**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:25	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:25	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:25	7440-22-4	
Sodium	**11800**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:25	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7440-28-0	
Total Hardness by 2340B	**250000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 17:11		
Vanadium	**0.36**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:25	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:25	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-6 **Lab ID: 406501005** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**<2.0**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:29	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7440-36-0	B
Arsenic	**4.3**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:29	7440-38-2	
Barium	**36.7**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:29	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:29	7440-41-7	
Boron	**67.4**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:29	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7440-43-9	
Calcium	**76100**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:16	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:29	7440-47-3	
Cobalt	**0.42**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:29	7440-50-8	
Iron	**2050**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:29	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7439-92-1	
Lithium	**4.2**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7439-93-2	
Magnesium	**20200**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:29	7439-95-4	
Manganese	**324**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:29	7439-96-5	
Molybdenum	**3.6**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7439-98-7	
Nickel	**0.22**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7440-02-0	
Potassium	**3440**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:29	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:29	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:29	7440-22-4	
Sodium	**14400**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:29	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7440-28-0	
Total Hardness by 2340B	**273000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 17:16		
Vanadium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:29	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:29	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-3 **Lab ID: 406501006** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**411**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:34	7429-90-5	
Antimony	**0.14**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7440-36-0	B
Arsenic	**0.91**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:34	7440-38-2	
Barium	**17.6**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:34	7440-39-3	
Beryllium	**0.28**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:34	7440-41-7	B
Boron	**11.0**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:34	7440-42-8	
Cadmium	**0.30**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7440-43-9	
Calcium	**6900**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:34	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:34	7440-47-3	
Cobalt	**12.5**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7440-48-4	
Copper	**63.6**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:34	7440-50-8	
Iron	**1400**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:34	7439-89-6	
Lead	**0.14**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7439-92-1	
Lithium	**1.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7439-93-2	
Magnesium	**3670**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:34	7439-95-4	
Manganese	**46.9**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:34	7439-96-5	
Molybdenum	**0.063J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7439-98-7	
Nickel	**49.1**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7440-02-0	
Potassium	**1490**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:34	7440-09-7	
Selenium	**0.87**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:34	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:34	7440-22-4	
Sodium	**13800**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:34	7440-23-5	
Thallium	**0.086J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7440-28-0	
Total Hardness by 2340B	**32300**	ug/L	21.3	6.7	1	07/29/08 17:32	07/30/08 20:34		
Vanadium	**0.57**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:34	7440-62-2	
Zinc	**21.4**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:34	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-4 **Lab ID: 406501007** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**3.1J**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:39	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7440-36-0	B
Arsenic	**3.7**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:39	7440-38-2	
Barium	**145**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:39	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:39	7440-41-7	
Boron	**69.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:39	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7440-43-9	
Calcium	**53800**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:25	7440-70-2	
Chromium	**0.50**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:39	7440-47-3	
Cobalt	**0.11**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:39	7440-50-8	
Iron	**38300**	ug/L	250	125	5	07/29/08 17:32	07/30/08 17:25	7439-89-6	
Lead	**38.1**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7439-92-1	
Lithium	**2.9**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7439-93-2	
Magnesium	**25600**	ug/L	25.0	12.5	5	07/29/08 17:32	07/30/08 17:25	7439-95-4	
Manganese	**922**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 17:25	7439-96-5	
Molybdenum	**0.30**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7439-98-7	
Nickel	**0.065J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7440-02-0	
Potassium	**5580**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:39	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:39	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:39	7440-22-4	
Sodium	**4760**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:39	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7440-28-0	
Total Hardness by 2340B	**240000**	ug/L	107	33.4	5	07/29/08 17:32	07/30/08 17:25		
Vanadium	**0.95**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:39	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:39	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-5 **Lab ID: 406501008** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**<2.0**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:43	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7440-36-0	B
Arsenic	**6.7**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:43	7440-38-2	
Barium	**106**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:43	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:43	7440-41-7	
Boron	**89.4**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:43	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7440-43-9	
Calcium	**59400**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:29	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:43	7440-47-3	
Cobalt	**0.42**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:43	7440-50-8	
Iron	**1480**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:43	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7439-92-1	
Lithium	**2.9**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7439-93-2	
Magnesium	**24000**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:43	7439-95-4	
Manganese	**460**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:43	7439-96-5	
Molybdenum	**13.8**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7439-98-7	
Nickel	**0.27**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7440-02-0	
Potassium	**7150**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:43	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:43	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:43	7440-22-4	
Sodium	**13900**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:43	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7440-28-0	
Total Hardness by 2340B	**247000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 17:29		
Vanadium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:43	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:43	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: HW-2 **Lab ID: 406501009** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**2.2J**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:48	7429-90-5	
Antimony	**7.3**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7440-36-0	
Arsenic	**0.33**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:48	7440-38-2	
Barium	**17.4**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:48	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:48	7440-41-7	
Boron	**79.1**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:48	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7440-43-9	
Calcium	**58100**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 17:34	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:48	7440-47-3	
Cobalt	**2.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7440-48-4	
Copper	**0.43**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:48	7440-50-8	2M
Iron	**591**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:48	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7439-92-1	
Lithium	**0.85**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7439-93-2	
Magnesium	**23500**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:48	7439-95-4	
Manganese	**363**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:48	7439-96-5	
Molybdenum	**8.4**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7439-98-7	
Nickel	**0.67**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7440-02-0	
Potassium	**6460**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:48	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:48	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:48	7440-22-4	
Sodium	**12900**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:48	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7440-28-0	
Total Hardness by 2340B	**242000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 17:34		
Vanadium	**0.24**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:48	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:48	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: KMW-3 **Lab ID: 406501010** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**54.0**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 20:53	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7440-36-0	
Arsenic	**18.0**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:53	7440-38-2	
Barium	**73.2**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 20:53	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:53	7440-41-7	
Boron	**40.9**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 20:53	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7440-43-9	
Calcium	**38500**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 18:26	7440-70-2	
Chromium	**0.49J**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:53	7440-47-3	
Cobalt	**2.9**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7440-48-4	
Copper	**0.33**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:53	7440-50-8	2M
Iron	**24700**	ug/L	250	125	5	07/29/08 17:32	07/30/08 18:26	7439-89-6	
Lead	**0.093J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7439-92-1	
Lithium	**1.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7439-93-2	
Magnesium	**17100**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:53	7439-95-4	
Manganese	**5180**	ug/L	25.0	12.5	50	07/29/08 17:32	07/31/08 11:50	7439-96-5	
Molybdenum	**1.1**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7439-98-7	
Nickel	**0.44**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7440-02-0	
Potassium	**2530**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 20:53	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 20:53	7782-49-2	B
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 20:53	7440-22-4	
Sodium	**3120**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 20:53	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7440-28-0	
Total Hardness by 2340B	**166000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 18:26		
Vanadium	**0.69**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 20:53	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 20:53	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: KMW-10 **Lab ID: 406501011** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**13.4**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:29	7429-90-5	M0
Antimony	**0.066J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7440-36-0	B
Arsenic	**3.8**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:29	7440-38-2	
Barium	**18.5**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:29	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:29	7440-41-7	B
Boron	**49.0**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:29	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7440-43-9	
Calcium	**17000**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:29	7440-70-2	P6
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:29	7440-47-3	
Cobalt	**2.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7440-48-4	
Copper	**1.0**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:29	7440-50-8	
Iron	**5020**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:29	7439-89-6	P6
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7439-92-1	
Lithium	**1.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7439-93-2	
Magnesium	**8510**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:29	7439-95-4	P6
Manganese	**1600**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:30	7439-96-5	P6
Molybdenum	**2.3**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7439-98-7	
Nickel	**1.3**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7440-02-0	
Potassium	**3030**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:29	7440-09-7	M0
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:29	7782-49-2	
Silver	**0.13J**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:29	7440-22-4	B
Sodium	**1400**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:29	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7440-28-0	
Total Hardness by 2340B	**77400**	ug/L	21.3	6.7	1	07/29/08 17:32	07/31/08 13:29		
Vanadium	**0.54**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:29	7440-62-2	
Zinc	**2.5J**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:29	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: MW-602 **Lab ID: 406501012** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**8.9**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:33	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7440-36-0	B
Arsenic	**0.42**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:33	7440-38-2	
Barium	**13.2**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:33	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:33	7440-41-7	
Boron	**26.4**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:33	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7440-43-9	
Calcium	**9490**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:33	7440-70-2	
Chromium	**0.45J**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:33	7440-47-3	
Cobalt	**0.44**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7440-48-4	
Copper	**0.50**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:33	7440-50-8	
Iron	**4680**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:33	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7439-92-1	
Lithium	**6.2**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7439-93-2	
Magnesium	**6980**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:33	7439-95-4	
Manganese	**2920**	ug/L	12.5	6.2	25	07/29/08 17:32	07/31/08 11:54	7439-96-5	
Molybdenum	**3.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7439-98-7	
Nickel	**12.3**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7440-02-0	
Potassium	**1900**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:33	7440-09-7	
Selenium	**1.7**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:33	7782-49-2	
Silver	**0.12J**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:33	7440-22-4	B
Sodium	**370**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:33	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7440-28-0	
Total Hardness by 2340B	**52400**	ug/L	21.3	6.7	1	07/29/08 17:32	07/31/08 13:33		
Vanadium	**0.081J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:33	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:33	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: MW-603 **Lab ID: 406501013** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**19.1**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:37	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7440-36-0	B
Arsenic	**1.5**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:37	7440-38-2	
Barium	**11.9**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:37	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:37	7440-41-7	B
Boron	**33.4**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:37	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7440-43-9	
Calcium	**8160**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:37	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:37	7440-47-3	
Cobalt	**9.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7440-48-4	
Copper	**0.35**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:37	7440-50-8	
Iron	**1700**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:37	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7439-92-1	
Lithium	**7.6**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7439-93-2	
Magnesium	**7050**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:37	7439-95-4	
Manganese	**1470**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:01	7439-96-5	
Molybdenum	**2.1**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7439-98-7	
Nickel	**103**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7440-02-0	
Potassium	**2140**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:37	7440-09-7	
Selenium	**2.0**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:37	7782-49-2	
Silver	**0.11J**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:37	7440-22-4	B
Sodium	**418**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:37	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7440-28-0	
Total Hardness by 2340B	**49400**	ug/L	21.3	6.7	1	07/29/08 17:32	07/31/08 13:37		
Vanadium	**0.10**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:37	7440-62-2	
Zinc	**2.9J**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:37	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: MW-606 **Lab ID: 406501014** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**33.9**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:41	7429-90-5	
Antimony	**0.095J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7440-36-0	B
Arsenic	**0.21**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:41	7440-38-2	
Barium	**14.4**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:41	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:41	7440-41-7	B
Boron	**27.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:41	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7440-43-9	
Calcium	**11200**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:41	7440-70-2	
Chromium	**0.32J**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:41	7440-47-3	
Cobalt	**0.48**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7440-48-4	
Copper	**1.5**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:41	7440-50-8	
Iron	**501**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:41	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7439-92-1	
Lithium	**3.8**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7439-93-2	
Magnesium	**8850**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:41	7439-95-4	
Manganese	**612**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:05	7439-96-5	
Molybdenum	**7.9**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7439-98-7	
Nickel	**5.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7440-02-0	
Potassium	**2730**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:41	7440-09-7	
Selenium	**13.5**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:41	7782-49-2	
Silver	**0.10J**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:41	7440-22-4	B
Sodium	**349**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:41	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7440-28-0	
Total Hardness by 2340B	**64400**	ug/L	21.3	6.7	1	07/29/08 17:32	07/31/08 13:41		
Vanadium	**0.23**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:41	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:41	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: P-602 **Lab ID: 406501015** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**189**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:45	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7440-36-0	B
Arsenic	**8.1**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:45	7440-38-2	
Barium	**18.6**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:45	7440-39-3	
Beryllium	**0.10J**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:45	7440-41-7	
Boron	**34.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:45	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7440-43-9	
Calcium	**11900**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:45	7440-70-2	
Chromium	**0.85**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:45	7440-47-3	
Cobalt	**0.65**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7440-48-4	
Copper	**2.0**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:45	7440-50-8	
Iron	**3120**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:45	7439-89-6	
Lead	**0.32**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7439-92-1	
Lithium	**5.0**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7439-93-2	
Magnesium	**6490**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:45	7439-95-4	
Manganese	**1880**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:09	7439-96-5	
Molybdenum	**4.0**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7439-98-7	
Nickel	**1.2**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7440-02-0	
Potassium	**2570**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:45	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:45	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:45	7440-22-4	B
Sodium	**706**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:45	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7440-28-0	
Total Hardness by 2340B	**56500**	ug/L	21.3	6.7	1	07/29/08 17:32	07/31/08 13:45		
Vanadium	**0.51**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:45	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:45	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: MW-12 **Lab ID: 406501016** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**9.0**	ug/L	4.0	2.0	1	07/29/08 17:32	07/30/08 21:32	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7440-36-0	B
Arsenic	**9.4**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 21:32	7440-38-2	
Barium	**33.0**	ug/L	0.30	0.15	1	07/29/08 17:32	07/30/08 21:32	7440-39-3	
Beryllium	**7.2**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 21:32	7440-41-7	
Boron	**32.0**	ug/L	2.0	1.0	1	07/29/08 17:32	07/30/08 21:32	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7440-43-9	
Calcium	**41400**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 18:13	7440-70-2	
Chromium	**0.28J**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 21:32	7440-47-3	
Cobalt	**1.7**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7440-48-4	
Copper	**7270**	ug/L	10.0	5.0	50	07/29/08 17:32	07/31/08 11:58	7440-50-8	
Iron	**10500**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 21:32	7439-89-6	
Lead	**146**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7439-92-1	
Lithium	**1.4**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7439-93-2	
Magnesium	**13000**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 21:32	7439-95-4	
Manganese	**1210**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:13	7439-96-5	
Molybdenum	**99.3**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7439-98-7	
Nickel	**0.67**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7440-02-0	
Potassium	**1800**	ug/L	20.0	10.0	1	07/29/08 17:32	07/30/08 21:32	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/30/08 21:32	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/30/08 21:32	7440-22-4	
Sodium	**3470**	ug/L	50.0	25.0	1	07/29/08 17:32	07/30/08 21:32	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7440-28-0	
Total Hardness by 2340B	**157000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 18:13		
Vanadium	**0.52**	ug/L	0.10	0.050	1	07/29/08 17:32	07/30/08 21:32	7440-62-2	
Zinc	**146**	ug/L	5.0	2.5	1	07/29/08 17:32	07/30/08 21:32	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: PW-2 **Lab ID: 406501017** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**18.6**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:50	7429-90-5	
Antimony	**0.092J**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7440-36-0	B
Arsenic	**0.20**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:50	7440-38-2	
Barium	**22.4**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:50	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:50	7440-41-7	B
Boron	**83.3**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:50	7440-42-8	
Cadmium	**1.5**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7440-43-9	
Calcium	**67000**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 18:18	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:50	7440-47-3	
Cobalt	**16.6**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7440-48-4	
Copper	**1.6**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:50	7440-50-8	
Iron	**70.1**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:50	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7439-92-1	
Lithium	**7.8**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7439-93-2	
Magnesium	**35500**	ug/L	25.0	12.5	5	07/29/08 17:32	07/30/08 18:18	7439-95-4	
Manganese	**490**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:18	7439-96-5	
Molybdenum	**0.26**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7439-98-7	
Nickel	**71.0**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7440-02-0	
Potassium	**3880**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:50	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:50	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:50	7440-22-4	B
Sodium	**3550**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:50	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7440-28-0	
Total Hardness by 2340B	**314000**	ug/L	107	33.4	5	07/29/08 17:32	07/30/08 18:18		
Vanadium	**0.16**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:50	7440-62-2	
Zinc	**37.7**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:50	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: MW-103 **Lab ID: 406501018** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**8.8**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:54	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7440-36-0	B
Arsenic	**12.8**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:54	7440-38-2	
Barium	**112**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:54	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:54	7440-41-7	B
Boron	**41.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:54	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7440-43-9	
Calcium	**73200**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 18:22	7440-70-2	
Chromium	**0.83**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:54	7440-47-3	
Cobalt	**0.51**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:54	7440-50-8	
Iron	**81600**	ug/L	250	125	5	07/29/08 17:32	07/30/08 18:22	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7439-92-1	
Lithium	**0.94**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7439-93-2	
Magnesium	**26100**	ug/L	25.0	12.5	5	07/29/08 17:32	07/30/08 18:22	7439-95-4	
Manganese	**6440**	ug/L	25.0	12.5	50	07/29/08 17:32	07/31/08 12:03	7439-96-5	
Molybdenum	**0.45**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7439-98-7	
Nickel	**0.10**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7440-02-0	
Potassium	**4040**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:54	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:54	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:54	7440-22-4	B
Sodium	**6010**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:54	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7440-28-0	
Total Hardness by 2340B	**290000**	ug/L	107	33.4	5	07/29/08 17:32	07/30/08 18:22		
Vanadium	**2.2**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:54	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:54	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: DUP-002 **Lab ID: 406501019** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**3.1J**	ug/L	4.0	2.0	1	07/29/08 17:32	07/31/08 13:58	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7440-36-0	B
Arsenic	**7.0**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:58	7440-38-2	
Barium	**106**	ug/L	0.30	0.15	1	07/29/08 17:32	07/31/08 13:58	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:58	7440-41-7	
Boron	**92.8**	ug/L	2.0	1.0	1	07/29/08 17:32	07/31/08 13:58	7440-42-8	
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7440-43-9	
Calcium	**58600**	ug/L	100	50.0	5	07/29/08 17:32	07/30/08 18:53	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:58	7440-47-3	
Cobalt	**0.47**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:58	7440-50-8	
Iron	**1490**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:58	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7439-92-1	
Lithium	**3.1**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7439-93-2	
Magnesium	**24100**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:58	7439-95-4	
Manganese	**457**	ug/L	2.5	1.2	5	07/29/08 17:32	07/30/08 18:53	7439-96-5	
Molybdenum	**14.0**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7439-98-7	
Nickel	**0.26**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7440-02-0	
Potassium	**7190**	ug/L	20.0	10.0	1	07/29/08 17:32	07/31/08 13:58	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:32	07/31/08 13:58	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:32	07/31/08 13:58	7440-22-4	B
Sodium	**13800**	ug/L	50.0	25.0	1	07/29/08 17:32	07/31/08 13:58	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7440-28-0	
Total Hardness by 2340B	**245000**	ug/L	105	32.3	5	07/29/08 17:32	07/30/08 18:53		
Vanadium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:32	07/31/08 13:58	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:32	07/31/08 13:58	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: FBK-002 **Lab ID: 406501020** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**<2.0**	ug/L	4.0	2.0	1	07/29/08 17:33	07/30/08 19:34	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7440-36-0	
Arsenic	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:34	7440-38-2	
Barium	**<0.15**	ug/L	0.30	0.15	1	07/29/08 17:33	07/30/08 19:34	7440-39-3	
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:34	7440-41-7	
Boron	**<1.0**	ug/L	2.0	1.0	1	07/29/08 17:33	07/30/08 19:34	7440-42-8	B
Cadmium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7440-43-9	
Calcium	**21.2**	ug/L	20.0	10.0	1	07/29/08 17:33	07/30/08 19:34	7440-70-2	
Chromium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:33	07/30/08 19:34	7440-47-3	
Cobalt	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7440-48-4	
Copper	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:34	7440-50-8	
Iron	**<25.0**	ug/L	50.0	25.0	1	07/29/08 17:33	07/30/08 19:34	7439-89-6	
Lead	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7439-92-1	
Lithium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7439-93-2	
Magnesium	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:33	07/30/08 19:34	7439-95-4	
Manganese	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:33	07/30/08 19:34	7439-96-5	
Molybdenum	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7439-98-7	
Nickel	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7440-02-0	
Potassium	**<10.0**	ug/L	20.0	10.0	1	07/29/08 17:33	07/30/08 19:34	7440-09-7	
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:33	07/30/08 19:34	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:34	7440-22-4	
Sodium	**<25.0**	ug/L	50.0	25.0	1	07/29/08 17:33	07/30/08 19:34	7440-23-5	
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7440-28-0	
Total Hardness by 2340B	**52.9**	ug/L	21.3	6.7	1	07/29/08 17:33	07/30/08 19:34		
Vanadium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:34	7440-62-2	
Zinc	**<2.5**	ug/L	5.0	2.5	1	07/29/08 17:33	07/30/08 19:34	7440-66-6	

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ANALYTICAL RESULTS

Project: 406501 FOTH
Pace Project No.: 1077460

Sample: KMW-2 **Lab ID: 406501021** Collected: 07/16/08 00:00 Received: 07/17/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**44.4**	ug/L	4.0	2.0	1	07/29/08 17:33	07/30/08 19:38	7429-90-5	
Antimony	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7440-36-0	
Arsenic	**40.1**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:38	7440-38-2	M0
Barium	**407**	ug/L	0.30	0.15	1	07/29/08 17:33	07/30/08 19:38	7440-39-3	P6
Beryllium	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:38	7440-41-7	
Boron	**72.6**	ug/L	2.0	1.0	1	07/29/08 17:33	07/30/08 19:38	7440-42-8	
Cadmium	**0.41**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7440-43-9	
Calcium	**110000**	ug/L	100	50.0	5	07/29/08 17:33	07/30/08 19:43	7440-70-2	P6
Chromium	**0.73**	ug/L	0.50	0.25	1	07/29/08 17:33	07/30/08 19:38	7440-47-3	
Cobalt	**81.3**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7440-48-4	M0
Copper	**0.48**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:38	7440-50-8	2M,B
Iron	**122000**	ug/L	2500	1250	50	07/29/08 17:33	07/31/08 11:28	7439-89-6	P6
Lead	**0.068J**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7439-92-1	
Lithium	**2.3**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7439-93-2	
Magnesium	**43900**	ug/L	25.0	12.5	5	07/29/08 17:33	07/30/08 19:43	7439-95-4	P6
Manganese	**13500**	ug/L	25.0	12.5	50	07/29/08 17:33	07/31/08 11:28	7439-96-5	P6
Molybdenum	**1.1**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7439-98-7	
Nickel	**181**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7440-02-0	M0
Potassium	**5940**	ug/L	20.0	10.0	1	07/29/08 17:33	07/30/08 19:38	7440-09-7	P6
Selenium	**<0.25**	ug/L	0.50	0.25	1	07/29/08 17:33	07/30/08 19:38	7782-49-2	
Silver	**<0.10**	ug/L	0.20	0.10	1	07/29/08 17:33	07/30/08 19:38	7440-22-4	
Sodium	**7280**	ug/L	50.0	25.0	1	07/29/08 17:33	07/30/08 19:38	7440-23-5	P6
Thallium	**<0.050**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7440-28-0	
Total Hardness by 2340B	**456000**	ug/L	107	33.4	5	07/29/08 17:33	07/30/08 19:43		
Vanadium	**0.58**	ug/L	0.10	0.050	1	07/29/08 17:33	07/30/08 19:38	7440-62-2	
Zinc	**70.0**	ug/L	5.0	2.5	1	07/29/08 17:33	07/30/08 19:38	7440-66-6	M0

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QUALITY CONTROL DATA

Project: 406501 FOTH
Pace Project No.: 1077460

QC Batch: MPRP/12787 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013

METHOD BLANK: 505781

Associated Lab Samples: 406501001, 406501002, 406501003, 406501004, 406501005, 406501006, 406501007, 406501008, 406501009, 406501010, 406501011, 406501012, 406501013, 406501014, 406501015, 406501016, 406501017, 406501018, 406501019

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	3.9J	4.0	
Antimony	ug/L	<0.050	0.10	
Arsenic	ug/L	<0.10	0.20	
Barium	ug/L	<0.15	0.30	
Beryllium	ug/L	<0.10	0.20	
Boron	ug/L	<1.0	2.0	
Cadmium	ug/L	<0.050	0.10	
Calcium	ug/L	<10.0	20.0	
Chromium	ug/L	<0.25	0.50	
Cobalt	ug/L	<0.050	0.10	
Copper	ug/L	<0.10	0.20	
Iron	ug/L	<25.0	50.0	
Lead	ug/L	<0.050	0.10	
Lithium	ug/L	0.055J	0.10	
Magnesium	ug/L	4.0J	5.0	
Manganese	ug/L	0.26J	0.50	
Molybdenum	ug/L	0.090J	0.10	
Nickel	ug/L	<0.050	0.10	
Potassium	ug/L	<10.0	20.0	
Selenium	ug/L	<0.25	0.50	
Silver	ug/L	<0.10	0.20	
Sodium	ug/L	<25.0	50.0	
Thallium	ug/L	<0.050	0.10	
Total Hardness by 2340B	ug/L	16.9J	21.3	
Vanadium	ug/L	<0.050	0.10	
Zinc	ug/L	<2.5	5.0	

LABORATORY CONTROL SAMPLE: 505782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	84.4	105	85-115	
Antimony	ug/L	80	83.5	104	85-115	
Arsenic	ug/L	80	79.4	99	85-115	
Barium	ug/L	80	79.6	99	85-115	
Beryllium	ug/L	80	78.9	99	85-115	
Boron	ug/L	80	77.7	97	85-115	
Cadmium	ug/L	80	80.9	101	85-115	
Calcium	ug/L	1000	986	99	85-115	
Chromium	ug/L	80	81.0	101	85-115	

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QUALITY CONTROL DATA

Project: 406501 FOTH
Pace Project No.: 1077460

LABORATORY CONTROL SAMPLE: 505782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cobalt	ug/L	80	80.1	100	85-115	
Copper	ug/L	80	84.6	106	85-115	
Iron	ug/L	1000	1030	103	85-115	
Lead	ug/L	80	81.0	101	85-115	
Lithium	ug/L	80	80.9	101	85-115	
Magnesium	ug/L	1000	1020	102	85-115	
Manganese	ug/L	80	80.5	101	85-115	
Molybdenum	ug/L	80	79.6	99	85-115	
Nickel	ug/L	80	82.1	103	85-115	
Potassium	ug/L	1000	989	99	85-115	
Selenium	ug/L	160	159	100	85-115	
Silver	ug/L	80	87.5	109	85-115	
Sodium	ug/L	1000	915	92	85-115	
Thallium	ug/L	80	78.6	98	85-115	
Total Hardness by 2340B	ug/L		6670			
Vanadium	ug/L	80	80.0	100	85-115	
Zinc	ug/L	80	78.4	98	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 505783 505784

Parameter	Units	406501001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	5.7	80	80	92.2	104	108	123	70-130	12	20	
Antimony	ug/L	7.8	80	80	94.8	111	109	129	70-130	16	20	
Arsenic	ug/L	0.23	80	80	86.6	103	108	128	70-130	17	20	
Barium	ug/L	44.5	80	80	128	154	104	137	70-130	18	20	M0
Beryllium	ug/L	<0.10	80	80	81.0	87.8	101	110	70-130	8	20	
Boron	ug/L	61.2	80	80	150	160	111	123	70-130	6	20	
Cadmium	ug/L	<0.050	80	80	82.7	98.8	103	124	70-130	18	20	
Calcium	ug/L	56400	1000	1000	57500	67600	115	1120	70-130	16	20	P6
Chromium	ug/L	0.33J	80	80	84.9	99.7	106	124	70-130	16	20	
Cobalt	ug/L	3.4	80	80	88.9	104	107	126	70-130	16	20	
Copper	ug/L	1.1	80	80	91.0	107	112	133	70-130	16	20	M0
Iron	ug/L	<25.0	1000	1000	1090	1290	107	127	70-130	17	20	
Lead	ug/L	<0.050	80	80	82.2	98.2	103	123	70-130	18	20	
Lithium	ug/L	0.10	80	80	83.8	88.6	105	111	70-130	5	20	
Magnesium	ug/L	27200	1000	1000	28200	33200	98	601	70-130	16	20	P6
Manganese	ug/L	7.2	80	80	91.3	106	105	124	70-130	15	20	
Molybdenum	ug/L	9.9	80	80	95.8	112	107	127	70-130	15	20	
Nickel	ug/L	0.30	80	80	87.4	102	109	127	70-130	16	20	
Potassium	ug/L	7140	1000	1000	8360	9580	122	245	70-130	14	20	P6
Selenium	ug/L	<0.25	160	160	174	200	108	125	70-130	14	20	
Silver	ug/L	<0.10	80	80	82.0	100	102	126	70-130	20	20	
Sodium	ug/L	12700	1000	1000	14200	16300	152	360	70-130	14	20	P6
Thallium	ug/L	<0.050	80	80	81.2	94.5	101	118	70-130	15	20	
Total Hardness by 2340B	ug/L	253000			260000	306000				16	20	
Vanadium	ug/L	0.54	80	80	84.8	100	105	125	70-130	17	20	

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QUALITY CONTROL DATA

Project: 406501 FOTH
Pace Project No.: 1077460

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 505783 505784

Parameter	Units	406501001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Zinc	ug/L	<2.5	80	80	81.2	96.8	102	121	70-130	17	20	

MATRIX SPIKE SAMPLE: 505785

Parameter	Units	406501011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	13.4	80	193	225	70-130	M0
Antimony	ug/L	0.066J	80	99.0	124	70-130	
Arsenic	ug/L	3.8	80	102	122	70-130	
Barium	ug/L	18.5	80	115	121	70-130	
Beryllium	ug/L	<0.10	80	82.6	103	70-130	
Boron	ug/L	49.0	80	132	103	70-130	
Cadmium	ug/L	<0.050	80	96.4	120	70-130	
Calcium	ug/L	17000	1000	19700	272	70-130	P6
Chromium	ug/L	<0.25	80	97.8	122	70-130	
Cobalt	ug/L	2.7	80	100	122	70-130	
Copper	ug/L	1.0	80	105	130	70-130	
Iron	ug/L	5020	1000	6720	170	70-130	P6
Lead	ug/L	<0.050	80	97.6	122	70-130	
Lithium	ug/L	1.7	80	85.8	105	70-130	
Magnesium	ug/L	8510	1000	10700	216	70-130	P6
Manganese	ug/L	1600	80	1710	141	70-130	P6
Molybdenum	ug/L	2.3	80	97.8	119	70-130	
Nickel	ug/L	1.3	80	99.8	123	70-130	
Potassium	ug/L	3030	1000	4420	139	70-130	M0
Selenium	ug/L	<0.25	160	195	122	70-130	
Silver	ug/L	0.13J	80	93.6	117	70-130	
Sodium	ug/L	1400	1000	2470	107	70-130	
Thallium	ug/L	<0.050	80	93.7	117	70-130	
Total Hardness by 2340B	ug/L	77400		93100			
Vanadium	ug/L	0.54	80	96.4	120	70-130	
Zinc	ug/L	2.5J	80	95.0	116	70-130	

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QUALITY CONTROL DATA

Project: 406501 FOTH
Pace Project No.: 1077460

QC Batch: MPRP/12788 | Analysis Method: EPA 6020
QC Batch Method: EPA 3020 | Analysis Description: 6020 MET
Associated Lab Samples: 406501020, 406501021

METHOD BLANK: 505786
Associated Lab Samples: 406501020, 406501021

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	<2.0	4.0	
Antimony	ug/L	<0.050	0.10	
Arsenic	ug/L	<0.10	0.20	
Barium	ug/L	<0.15	0.30	
Beryllium	ug/L	<0.10	0.20	
Boron	ug/L	<1.0	2.0	
Cadmium	ug/L	<0.050	0.10	
Calcium	ug/L	<10.0	20.0	
Chromium	ug/L	<0.25	0.50	
Cobalt	ug/L	<0.050	0.10	
Copper	ug/L	0.30	0.20	2M,B
Iron	ug/L	<25.0	50.0	
Lead	ug/L	<0.050	0.10	
Lithium	ug/L	0.059J	0.10	
Magnesium	ug/L	<2.5	5.0	
Manganese	ug/L	<0.25	0.50	
Molybdenum	ug/L	<0.050	0.10	
Nickel	ug/L	<0.050	0.10	
Potassium	ug/L	<10.0	20.0	
Selenium	ug/L	<0.25	0.50	
Silver	ug/L	<0.10	0.20	
Sodium	ug/L	<25.0	50.0	
Thallium	ug/L	<0.050	0.10	
Total Hardness by 2340B	ug/L	<6.7	21.3	
Vanadium	ug/L	<0.050	0.10	
Zinc	ug/L	<2.5	5.0	

LABORATORY CONTROL SAMPLE: 505787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	83.2	104	85-115	
Antimony	ug/L	80	86.4	108	85-115	
Arsenic	ug/L	80	82.5	103	85-115	
Barium	ug/L	80	82.2	103	85-115	
Beryllium	ug/L	80	75.3	94	85-115	
Boron	ug/L	80	77.2	96	85-115	
Cadmium	ug/L	80	83.9	105	85-115	
Calcium	ug/L	1000	1150	115	85-115	
Chromium	ug/L	80	84.2	105	85-115	
Cobalt	ug/L	80	83.8	105	85-115	
Copper	ug/L	80	88.4	110	85-115	

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QUALITY CONTROL DATA

Project: 406501 FOTH
Pace Project No.: 1077460

LABORATORY CONTROL SAMPLE: 505787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	1000	1100	110	85-115	
Lead	ug/L	80	83.9	105	85-115	
Lithium	ug/L	80	76.9	96	85-115	
Magnesium	ug/L	1000	1070	107	85-115	
Manganese	ug/L	80	87.6	109	85-115	
Molybdenum	ug/L	80	82.6	103	85-115	
Nickel	ug/L	80	86.4	108	85-115	
Potassium	ug/L	1000	1040	104	85-115	
Selenium	ug/L	160	162	101	85-115	
Silver	ug/L	80	90.9	114	85-115	
Sodium	ug/L	1000	962	96	85-115	
Thallium	ug/L	80	82.0	103	85-115	
Total Hardness by 2340B	ug/L		7300			
Vanadium	ug/L	80	82.3	103	85-115	
Zinc	ug/L	80	81.9	102	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 505788 505789

Parameter	Units	406501021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	44.4	80	80	140	146	119	126	70-130	4	20	
Antimony	ug/L	<0.050	80	80	98.4	99.4	123	124	70-130	1	20	
Arsenic	ug/L	40.1	80	80	146	146	132	132	70-130	.2	20	M0
Barium	ug/L	407	80	80	545	554	172	183	70-130	2	20	P6
Beryllium	ug/L	<0.10	80	80	71.0	76.6	89	96	70-130	8	20	
Boron	ug/L	72.6	80	80	157	162	106	112	70-130	3	20	
Cadmium	ug/L	0.41	80	80	95.0	97.0	118	121	70-130	2	20	
Calcium	ug/L	110000	1000	1000	124000	125000	1340	1500	70-130	1	20	P6
Chromium	ug/L	0.73	80	80	95.4	96.4	118	120	70-130	.9	20	
Cobalt	ug/L	81.3	80	80	193	196	139	143	70-130	2	20	M0
Copper	ug/L	0.48	80	80	98.6	100	123	125	70-130	2	20	
Iron	ug/L	122000	1000	1000	136000	140000	1470	1820	70-130	3	20	P6
Lead	ug/L	0.068J	80	80	93.0	93.6	116	117	70-130	.5	20	
Lithium	ug/L	2.3	80	80	76.0	80.6	92	98	70-130	6	20	
Magnesium	ug/L	43900	1000	1000	50200	51600	640	770	70-130	3	20	P6
Manganese	ug/L	13500	80	80	15400	15700	2320	2720	70-130	2	20	P6
Molybdenum	ug/L	1.1	80	80	97.4	97.2	120	120	70-130	.2	20	
Nickel	ug/L	181	80	80	324	329	178	184	70-130	1	20	M0
Potassium	ug/L	5940	1000	1000	7580	7760	164	182	70-130	2	20	P6
Selenium	ug/L	<0.25	160	160	185	185	116	116	70-130	.1	20	
Silver	ug/L	<0.10	80	80	92.6	96.3	116	120	70-130	4	20	
Sodium	ug/L	7280	1000	1000	9180	9400	191	212	70-130	2	20	P6
Thallium	ug/L	<0.050	80	80	91.7	92.5	115	116	70-130	.9	20	
Total Hardness by 2340B	ug/L	456000			516000	525000				2	20	
Vanadium	ug/L	0.58	80	80	93.9	94.2	117	117	70-130	.4	20	
Zinc	ug/L	70.0	80	80	183	184	142	143	70-130	.5	20	M0

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QUALIFIERS

Project: 406501 FOTH
Pace Project No.: 1077460

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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ANALYTE QUALIFIERS

1M	Analyte failed reported detection limit criteria, any hit reported between .1 and .5 ug/L should be considered an estimate.
2M	Analyte failed reported detection limit criteria, any hit reported between .2 and .5 ug/L should be considered an estimate.
B	Analyte was detected in the associated method blank.
M0	Matrix spike recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 406501 FOTH
Pace Project No.: 1077460

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406501001	HYG-1	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501002	HW-1A	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501003	HW-5A	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501004	HW-6A	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501005	HW-6	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501006	HW-3	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501007	HW-4	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501008	HW-5	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501009	HW-2	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501010	KMW-3	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501011	KMW-10	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501012	MW-602	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501013	MW-603	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501014	MW-606	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501015	P-602	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501016	MW-12	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501017	PW-2	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501018	MW-103	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501019	DUP-002	EPA 3020	MPRP/12787	EPA 6020	ICPM/5029
406501020	FBK-002	EPA 3020	MPRP/12788	EPA 6020	ICPM/5030
406501021	KMW-2	EPA 3020	MPRP/12788	EPA 6020	ICPM/5030

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Project # 406501

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☒ Other Poly

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

Cooler Temperature 2° **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: GN 7/17/08

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. NO_2, NO_3, Turbidity
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed GN / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Split 1-125 ml A from 1-500 ml D for 001-021
7/21/08 AB

Project Manager Review: AT **Date:** 7/17/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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

2008 07 16

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	All data FOTH by 7/31/08.

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH ZnAc	Analysis Test (Y/N)	Alk2, Cl, Fl, SO4, TDS, Turbidity	NITRITE, NITRATE SEPARATELY	TSS	CYANIDE	METALS, GROSS ALPHA/BETA	LLHG	SULFIDE	DOC	AMMONIA, COD, TOC	LITHIUM		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 406501
1	HWG-1 001	WT	G			7/16/08	1110	7	8	3	1	2		1			1		1	1	0	1	1	1	1	0	1	1		N	2-500ml DI, 5-250ml HNO3
2	HW-1A 002	WT	G			7/16/08	1039	4	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
3	HW-5A 003	WT	G			7/16/08	933	6	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
4	HW-6A 004	WT	G			7/16/08	1123	9	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
5	HW-6 005	WT	G			7/16/08	1027	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
6	HW-3 006	WT	G			7/16/08	1212	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
7	HW-4 007	WT	G			7/16/08	1314	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
8	HW-5 008	WT	G			7/16/08	0918	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
9	HW2 009	WT	G			7/16/08	1207	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
10	KMW-3 010	WT	G			7/16/08	0920	8	7	3	1	2		1			0		1	1		1	1	1	0		1	1			1-500ml D
11	KMW-10 011	WT	G			7/16/08	1405	10	8	3	1	2		1			1		1	1		1	1	1	1		1	1			2-500ml DI
12	MW-602 012	WT	G			7/16/08	1310	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
7993 5345 3630	Curt Sheffield / NJC	07/16/08	1800	FED EX						
7984 8073 3946	FED EX	7/17/08	1000	Dudley Busby	7/17/08	1000	2°C	Y	Y	Y
7927 2921 4353										
7993 5345 5060										

7919 3031 3764
7993 5345 7809
7984 8073 9289
FED EX #

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	Curt Sheffield Chris Cantwell Richard Eagle
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY): 07/16/08

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

20080716

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	All data FOTH by 7/31/08.

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D Required Client Information

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

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH ZnAc	Analysis Test Y/N	Alk2, Cl, Fl, SO4, TDS, Turbidity	NITRITE, NITRATE SEPARATELY	TSS	CYANIDE	METALS, GROSS ALPHA/BETA	LLHG	SULFIDE	DOC	AMMONIA, COD, TOC	LITHIUM		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 406501
1	MW603 013	WT	G	~~07/16/08~~		7/16/08	1225	9	8	3	1	2		1			1		1	1	0	1	1	1	1	0	1	1	1500ml	N	2-500ml DJ, 5-250ml AHC
2	MW-606 014	WT	G			7/16/08	1120	10	7	3	1	2		1			0		1	1		1	1	1	0		1	1			
3	P-602 015	WT	G			7/16/08	1235	10	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
4	MW12 016	WT	G			7/16/08	1515	12	7	3	1	2		1			0		1	1		1	1	1	0		1	1			1-500ml D
5	PW-2 017	WT	G			7/16/08	1411	9	8	3	1	2		1			1		1	1		1	1	1	1		1	1			2-500ml DJ
6	MW-103 018	WT	G			7/16/08	1518	8	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
7	DUP-002 019	WT	G			7/16/08	—	—	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
8	FBK-002 020	WT	G			7/16/08	0950		8	3	1	2		1			1		1	1		1	1	1	1		1	1			
9	KMW-2 021	WT	G			7/16/08	1607	16	8	3	1	2		1			1		1	1		1	1	1	1		1	1			
10																															
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS		
	Curt Sheffield / NTC	07/16/08	1800	FED EX					
	FED EX	7/17/08	1000	Whitney Brusky	7/17/08	1000	2°C	Y	Y	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Curt Sheffield Chris Cantway Richard Eagle

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 07/16/08

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

Batch No. 406569

Pace Analytical®
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Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Phone: 920.469.2436
Fax: 920.469.8827

August 4, 2008

Janis Kesy
Foth & Van Dyke
2737 South Ridge Road
Green Bay, WI 54304

Dear Ms. Kesy:

Enclosed is a report for the analysis of 40 ground water samples and associated QC samples for the Humboldt Mill project (06W003). These samples were received from July 16 to July 17, 2008. The samples were assigned to batch numbers 406432, 406501 and 406569 for laboratory tracking purposes.

A table of the results has also been sent to you via e-mail.

If you have any questions regarding this data please call me at (608) 232-3300.

Sincerely,

for Tod N.

Tod Noltemeyer
Project Manager

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Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

August 01, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL
Pace Project No.: 406569

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on July 18, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Tod Noltemeyer

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Green Bay Certification IDs

Florida (NELAP) Certification #: E87948
Illinois Certification #: 200050
New York Certification #: 11888
North Dakota Certification #: R-150
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 82
Louisiana Certification #: 04168

Green Bay Volatiles Certification IDs

Florida (NELAP) Certification #: E87951
Illinois Certification #: 200051
New York Certification #: 11887
North Dakota Certification #: R-200
North Carolina Certification #: 503
Minnesota Certification #: 055-999-334
South Carolina Certification #: 83006001
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
Kentucky Certification #: 83
Louisiana Certification #: 04169

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SAMPLE SUMMARY

Project: HUMBOLDT MILL
Pace Project No.: 406569

Lab ID	Sample ID	Matrix	Date Collected	Date Received
406569001	**MW-101**	Water	07/17/08 13:40	07/18/08 10:10
406569002	**KMW-5**	Water	07/17/08 13:25	07/18/08 10:10
406569003	**MW-11**	Water	07/17/08 11:47	07/18/08 10:10
406569004	**HW-1**	Water	07/17/08 12:00	07/18/08 10:10
406569005	**MW-102**	Water	07/17/08 10:10	07/18/08 10:10
406569006	**MW-601**	Water	07/17/08 09:40	07/18/08 10:10
406569007	**DUP-003**	Water	07/17/08 00:00	07/18/08 10:10
406569008	**FBK-003**	Water	07/17/08 08:50	07/18/08 10:10
406569009	**MW-5**	Water	07/17/08 10:40	07/18/08 10:10

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406569

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
406569001	MW-101	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406569002	KMW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406569003	MW-11	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406569004	HW-1	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406569005	MW-102	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406569006	MW-601	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406569007	DUP-003	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G

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1241 Bellevue Street
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(920)469-2436

SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL
Pace Project No.: 406569

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
406569008	**FBK-003**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
406569009	**MW-5**	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 8260	SMT	37	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
9 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **EPA 8260**
Description: 8260 MSV
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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ACCREDITED IN ACCORDANCE WITH nelac

Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/1889

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406501021

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 55171)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 55172)
  - Alkalinity, Total as CaCO3

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
7 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-003 (Lab ID: 406569007)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1980

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406569004,406593001

M0: Matrix spike recovery was outside laboratory control limits.
- MS (Lab ID: 54153)
  - Nitrite as N
- MS (Lab ID: 54155)
  - Nitrite as N
- MSD (Lab ID: 54154)
  - Nitrite as N
- MSD (Lab ID: 54156)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/1981

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406569004,406593001

M0: Matrix spike recovery was outside laboratory control limits.

- MSD (Lab ID: 54162)
  - Sulfate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/1981

1j: Parent sample was within the acceptable range of the curve. Spiking resulted in MS/MSD to go over range.

- MS (Lab ID: 54161)
  - Sulfate
- MSD (Lab ID: 54162)
  - Sulfate

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
9 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: August 01, 2008

General Information:
9 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2019

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 406501019,406569007

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 56160)
  - Nitrogen, Ammonia
- MSD (Lab ID: 56161)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: MW-101 **Lab ID: 406569001** Collected: 07/17/08 13:40 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.49**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 11:36	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**158**	mg/L	10.0	3.2	1		07/23/08 14:16		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:16		
Alkalinity, Total as CaCO3	**158**	mg/L	10.0	3.2	1		07/23/08 14:16		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 18:55	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 01:17	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.4J**	mg/L	5.0	1.1	1		07/18/08 18:55	16887-00-6	
Fluoride	**0.38J**	mg/L	0.50	0.059	1		07/21/08 18:15	16984-48-8	
Sulfate	**2.2J**	mg/L	4.0	0.51	1		07/18/08 18:55	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:04	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**2.1**	mg/L	1.0	0.50	1		07/25/08 14:58	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: KMW-5 **Lab ID: 406569002** Collected: 07/17/08 13:25 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**2.11**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 12:30	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**68.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Total as CaCO3	**68.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.7**	mg/L	0.40	0.085	1		07/18/08 19:07	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 01:31	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		07/18/08 19:07	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		07/21/08 18:29	16984-48-8	
Sulfate	**102**	mg/L	20.0	2.6	5		07/21/08 18:43	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:04	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 14:58	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: MW-11 **Lab ID: 406569003** Collected: 07/17/08 11:47 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**26.3**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 12:13	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**495**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Total as CaCO3	**495**	mg/L	10.0	3.2	1		07/23/08 14:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 19:19	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 01:45	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**38.7**	mg/L	5.0	1.1	1		07/18/08 19:19	16887-00-6	
Fluoride	**0.26J**	mg/L	0.50	0.059	1		07/21/08 18:58	16984-48-8	
Sulfate	**886**	mg/L	200	25.5	50		07/21/08 19:12	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:05	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**17.5**	mg/L	1.0	0.50	1		07/25/08 14:59	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: HW-1 **Lab ID: 406569004** Collected: 07/17/08 12:00 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.896**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 12:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**121**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Total as CaCO3	**121**	mg/L	10.0	3.2	1		07/23/08 14:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.61**	mg/L	0.40	0.085	1		07/18/08 19:31	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 02:00	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.8**	mg/L	5.0	1.1	1		07/18/08 19:31	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		07/21/08 19:26	16984-48-8	
Sulfate	**119**	mg/L	20.0	2.6	5		07/21/08 20:37	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:06	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 15:00	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: MW-102 **Lab ID: 406569005** Collected: 07/17/08 10:10 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**95.4**	ng/L	5.0	1.6	10	07/21/08 14:30	07/31/08 13:35	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:17		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 20:08	14797-55-8	
Nitrite as N	**0.46**	mg/L	0.10	0.036	1		07/19/08 02:42	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.6**	mg/L	5.0	1.1	1		07/21/08 21:19	16887-00-6	
Fluoride	**8.7**	mg/L	0.50	0.059	1		07/21/08 21:19	16984-48-8	
Sulfate	**17400**	mg/L	8000	1020	2000		07/22/08 17:43	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:07	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 15:01	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: MW-601 **Lab ID: 406569006** Collected: 07/17/08 09:40 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**7.40**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 12:46	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**429**	mg/L	10.0	3.2	1		07/23/08 14:18		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:18		
Alkalinity, Total as CaCO3	**429**	mg/L	10.0	3.2	1		07/23/08 14:18		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 20:20	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 02:56	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**5.5**	mg/L	5.0	1.1	1		07/18/08 20:20	16887-00-6	
Fluoride	**0.46J**	mg/L	0.50	0.059	1		07/21/08 21:48	16984-48-8	
Sulfate	**17.8**	mg/L	4.0	0.51	1		07/18/08 20:20	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:08	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**9.5**	mg/L	1.0	0.50	1		07/25/08 15:01	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: DUP-003 **Lab ID: 406569007** Collected: 07/17/08 00:00 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**7.49**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 13:05	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**427**	mg/L	10.0	3.2	1		07/23/08 14:18		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:18		
Alkalinity, Total as CaCO3	**427**	mg/L	10.0	3.2	1		07/23/08 14:18		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 20:56	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 03:39	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**5.4**	mg/L	5.0	1.1	1		07/18/08 20:56	16887-00-6	
Fluoride	**0.47J**	mg/L	0.50	0.059	1		07/21/08 22:02	16984-48-8	
Sulfate	**5.2**	mg/L	4.0	0.51	1		07/18/08 20:56	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:08	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**9.1**	mg/L	1.0	0.50	1		07/25/08 15:02	7664-41-7	M0

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: FBK-003 **Lab ID: 406569008** Collected: 07/17/08 08:50 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.497J**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 11:41	7439-97-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:18		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:18		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:18		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 21:09	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 03:53	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**<1.1**	mg/L	5.0	1.1	1		07/18/08 21:09	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		07/21/08 22:16	16984-48-8	
Sulfate	**1.9J**	mg/L	4.0	0.51	1		07/18/08 21:09	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:11	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		07/25/08 15:08	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: MW-5 **Lab ID: 406569009** Collected: 07/17/08 10:40 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**5.72**	ng/L	0.50	0.16	1	07/21/08 14:30	07/31/08 13:31	7439-97-6	
8260 MSV	Analytical Method: EPA 8260								
1,1,1-Trichloroethane	**<0.90**	ug/L	1.0	0.90	1		07/21/08 19:37	71-55-6	
1,1,2,2-Tetrachloroethane	**<0.20**	ug/L	1.0	0.20	1		07/21/08 19:37	79-34-5	
1,1,2-Trichloroethane	**<0.42**	ug/L	1.0	0.42	1		07/21/08 19:37	79-00-5	
1,1-Dichloroethane	**<0.75**	ug/L	1.0	0.75	1		07/21/08 19:37	75-34-3	
1,1-Dichloroethene	**<0.57**	ug/L	1.0	0.57	1		07/21/08 19:37	75-35-4	
1,2-Dichloroethane	**<0.36**	ug/L	1.0	0.36	1		07/21/08 19:37	107-06-2	
1,2-Dichloroethene (Total)	**5.4**	ug/L	2.0	1.4	1		07/21/08 19:37	540-59-0	
1,2-Dichloropropane	**<0.46**	ug/L	1.0	0.46	1		07/21/08 19:37	78-87-5	
2-Butanone (MEK)	**<4.3**	ug/L	5.0	4.3	1		07/21/08 19:37	78-93-3	L3
2-Hexanone	**<1.1**	ug/L	5.0	1.1	1		07/21/08 19:37	591-78-6	L3
4-Methyl-2-pentanone (MIBK)	**<1.2**	ug/L	5.0	1.2	1		07/21/08 19:37	108-10-1	
Acetone	**3.4J**	ug/L	5.0	2.3	1		07/21/08 19:37	67-64-1	L1
Benzene	**4.2**	ug/L	1.0	0.41	1		07/21/08 19:37	71-43-2	
Bromodichloromethane	**<0.56**	ug/L	1.0	0.56	1		07/21/08 19:37	75-27-4	
Bromoform	**<0.94**	ug/L	1.0	0.94	1		07/21/08 19:37	75-25-2	
Bromomethane	**<0.91**	ug/L	1.0	0.91	1		07/21/08 19:37	74-83-9	
Carbon disulfide	**1.6**	ug/L	1.0	0.66	1		07/21/08 19:37	75-15-0	
Carbon tetrachloride	**<0.49**	ug/L	1.0	0.49	1		07/21/08 19:37	56-23-5	
Chlorobenzene	**<0.41**	ug/L	1.0	0.41	1		07/21/08 19:37	108-90-7	
Chloroethane	**<0.97**	ug/L	1.0	0.97	1		07/21/08 19:37	75-00-3	
Chloroform	**<0.37**	ug/L	5.0	0.37	1		07/21/08 19:37	67-66-3	
Chloromethane	**<0.24**	ug/L	1.0	0.24	1		07/21/08 19:37	74-87-3	
Dibromochloromethane	**<0.81**	ug/L	1.0	0.81	1		07/21/08 19:37	124-48-1	
Ethylbenzene	**54.3**	ug/L	1.0	0.54	1		07/21/08 19:37	100-41-4	
Methylene Chloride	**<0.43**	ug/L	1.0	0.43	1		07/21/08 19:37	75-09-2	
Naphthalene	**18.7**	ug/L	5.0	0.74	1		07/21/08 19:37	91-20-3	
Styrene	**<0.86**	ug/L	1.0	0.86	1		07/21/08 19:37	100-42-5	
Tetrachloroethene	**<0.45**	ug/L	1.0	0.45	1		07/21/08 19:37	127-18-4	
Toluene	**1.1**	ug/L	1.0	0.67	1		07/21/08 19:37	108-88-3	
Trichloroethene	**<0.48**	ug/L	1.0	0.48	1		07/21/08 19:37	79-01-6	
Vinyl chloride	**<0.18**	ug/L	1.0	0.18	1		07/21/08 19:37	75-01-4	
Xylene (Total)	**506**	ug/L	3.0	2.6	1		07/21/08 19:37	1330-20-7	
cis-1,3-Dichloropropene	**<0.19**	ug/L	1.0	0.19	1		07/21/08 19:37	10061-01-5	
trans-1,3-Dichloropropene	**<0.19**	ug/L	1.0	0.19	1		07/21/08 19:37	10061-02-6	
4-Bromofluorobenzene (S)	108	%	64-132		1		07/21/08 19:37	460-00-4	
Dibromofluoromethane (S)	109	%	68-122		1		07/21/08 19:37	1868-53-7	
Toluene-d8 (S)	109	%	73-127		1		07/21/08 19:37	2037-26-5	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**284**	mg/L	10.0	3.2	1		07/23/08 14:19		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		07/23/08 14:19		
Alkalinity, Total as CaCO3	**284**	mg/L	10.0	3.2	1		07/23/08 14:19		

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL
Pace Project No.: 406569

Sample: MW-5 **Lab ID: 406569009** Collected: 07/17/08 10:40 Received: 07/18/08 10:10 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		07/21/08 10:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		07/18/08 21:21	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		07/19/08 04:07	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**5.5**	mg/L	5.0	1.1	1		07/18/08 21:21	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		07/21/08 22:30	16984-48-8	
Sulfate	**2.4J**	mg/L	4.0	0.51	1		07/18/08 21:21	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		07/29/08 15:15	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**10.6**	mg/L	1.0	0.50	1		07/25/08 15:09	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: MSV/2194
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 406569009

METHOD BLANK: 54032
Associated Lab Samples: 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
1,1,1-Trichloroethane	ug/L	<0.90	1.0	
1,1,2,2-Tetrachloroethane	ug/L	<0.20	1.0	
1,1,2-Trichloroethane	ug/L	<0.42	1.0	
1,1-Dichloroethane	ug/L	<0.75	1.0	
1,1-Dichloroethene	ug/L	<0.57	1.0	
1,2-Dichloroethane	ug/L	<0.36	1.0	
1,2-Dichloroethene (Total)	ug/L	<1.4	2.0	
1,2-Dichloropropane	ug/L	<0.46	1.0	
2-Butanone (MEK)	ug/L	<4.3	5.0	
2-Hexanone	ug/L	<1.1	5.0	
4-Methyl-2-pentanone (MIBK)	ug/L	<1.2	5.0	
Acetone	ug/L	<2.3	5.0	
Benzene	ug/L	<0.41	1.0	
Bromodichloromethane	ug/L	<0.56	1.0	
Bromoform	ug/L	<0.94	1.0	
Bromomethane	ug/L	<0.91	1.0	
Carbon disulfide	ug/L	<0.66	1.0	
Carbon tetrachloride	ug/L	<0.49	1.0	
Chlorobenzene	ug/L	<0.41	1.0	
Chloroethane	ug/L	<0.97	1.0	
Chloroform	ug/L	<0.37	5.0	
Chloromethane	ug/L	<0.24	1.0	
cis-1,3-Dichloropropene	ug/L	<0.19	1.0	
Dibromochloromethane	ug/L	<0.81	1.0	
Ethylbenzene	ug/L	<0.54	1.0	
Methylene Chloride	ug/L	<0.43	1.0	
Naphthalene	ug/L	<0.74	5.0	
Styrene	ug/L	<0.86	1.0	
Tetrachloroethene	ug/L	<0.45	1.0	
Toluene	ug/L	<0.67	1.0	
trans-1,3-Dichloropropene	ug/L	<0.19	1.0	
Trichloroethene	ug/L	<0.48	1.0	
Vinyl chloride	ug/L	<0.18	1.0	
Xylene (Total)	ug/L	<2.6	3.0	
4-Bromofluorobenzene (S)	%	103	64-132	
Dibromofluoromethane (S)	%	105	68-122	
Toluene-d8 (S)	%	106	73-127	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

LABORATORY CONTROL SAMPLE & LCSD: 54033 54034

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/L	50	49.3	50.3	99	101	75-128	2	20	
1,1,2,2-Tetrachloroethane	ug/L	50	48.6	50.1	97	100	67-125	3	20	
1,1,2-Trichloroethane	ug/L	50	49.0	51.2	98	102	75-125	4	20	
1,1-Dichloroethane	ug/L	50	47.4	47.8	95	96	71-130	.9	20	
1,1-Dichloroethene	ug/L	50	52.9	52.0	106	104	75-125	2	20	
1,2-Dichloroethane	ug/L	50	50.0	49.9	100	100	71-132	.2	20	
1,2-Dichloroethene (Total)	ug/L	100	98.5	98.3	98	98	75-125	.2	20	
1,2-Dichloropropane	ug/L	50	47.4	49.1	95	98	73-125	4	20	
2-Butanone (MEK)	ug/L	50	63.5	65.6	127	131	59-130	3	20	
2-Hexanone	ug/L	50	72.0	73.4	144	147	51-125	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	50	47.7	51.8	95	104	59-125	8	20	
Acetone	ug/L	50	92.9	99.1	186	198	31-150	7	20	
Benzene	ug/L	50	46.2	47.6	92	95	75-125	3	20	
Bromodichloromethane	ug/L	50	50.4	49.5	101	99	75-125	2	20	
Bromoform	ug/L	50	48.2	49.0	96	98	75-125	1	20	
Bromomethane	ug/L	50	41.1	41.4	82	83	66-125	.9	20	
Carbon disulfide	ug/L	50	50.1	50.7	100	101	71-128	1	20	
Carbon tetrachloride	ug/L	50	52.4	52.6	105	105	75-125	.3	20	
Chlorobenzene	ug/L	50	51.4	52.1	103	104	75-125	1	20	
Chloroethane	ug/L	50	49.8	51.0	100	102	72-126	2	20	
Chloroform	ug/L	50	47.5	48.6	95	97	75-125	2	20	
Chloromethane	ug/L	50	41.3	42.3	83	85	46-143	2	20	
cis-1,3-Dichloropropene	ug/L	50	48.4	48.8	97	98	75-125	1	20	
Dibromochloromethane	ug/L	50	51.5	52.4	103	105	75-125	2	20	
Ethylbenzene	ug/L	50	51.4	53.0	103	106	75-125	3	20	
Methylene Chloride	ug/L	50	49.9	51.6	100	103	75-125	3	20	
Styrene	ug/L	50	48.6	50.4	97	101	75-125	4	20	
Tetrachloroethene	ug/L	50	53.4	54.6	107	109	75-130	2	20	
Toluene	ug/L	50	51.0	52.7	102	105	75-125	3	20	
trans-1,3-Dichloropropene	ug/L	50	49.0	50.1	98	100	75-125	2	20	
Trichloroethene	ug/L	50	52.9	53.7	106	107	75-125	2	20	
Vinyl chloride	ug/L	50	46.9	47.0	94	94	65-130	.09	20	
Xylene (Total)	ug/L	150	155	159	104	106	75-125	3	20	
4-Bromofluorobenzene (S)	%				104	106	64-132			
Dibromofluoromethane (S)	%				101	101	68-122			
Toluene-d8 (S)	%				108	110	73-127			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54035 54036

Parameter	Units	406579002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	50	50	52.5	53.3	105	107	70-130	1	30	
1,1,2,2-Tetrachloroethane	ug/L	ND	50	50	49.7	49.9	99	100	70-130	.3	30	
1,1,2-Trichloroethane	ug/L	ND	50	50	48.8	51.0	98	102	70-130	4	30	
1,1-Dichloroethane	ug/L	ND	50	50	48.8	50.3	98	101	70-130	3	30	
1,1-Dichloroethene	ug/L	ND	50	50	52.9	55.5	106	111	70-135	5	30	
1,2-Dichloroethane	ug/L	ND	50	50	51.6	52.4	103	105	70-130	2	30	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54035 54036

Parameter	Units	406579002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethene (Total)	ug/L	ND	100	100	100	104	100	104	70-130	3	30	
1,2-Dichloropropane	ug/L	ND	50	50	47.8	48.2	96	96	70-130	.8	30	
2-Butanone (MEK)	ug/L	ND	50	50	42.3	44.0	85	88	51-130	4	30	
2-Hexanone	ug/L	ND	50	50	47.0	48.2	94	96	53-130	3	30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	50	50	45.7	49.0	91	98	62-132	7	30	
Acetone	ug/L	ND	50	50	42.1	43.4	84	87	42-132	3	30	
Benzene	ug/L	ND	50	50	48.3	49.5	97	99	70-130	2	30	
Bromodichloromethane	ug/L	ND	50	50	48.9	51.1	98	102	70-130	4	30	
Bromoform	ug/L	ND	50	50	47.5	49.5	95	99	70-130	4	30	
Bromomethane	ug/L	ND	50	50	44.9	47.8	90	96	63-147	6	30	
Carbon disulfide	ug/L	ND	50	50	50.5	52.0	101	104	56-142	3	30	
Carbon tetrachloride	ug/L	ND	50	50	53.7	55.9	107	112	70-131	4	30	
Chlorobenzene	ug/L	ND	50	50	50.9	52.1	102	104	70-130	2	30	
Chloroethane	ug/L	ND	50	50	51.7	51.8	103	104	67-138	.08	30	
Chloroform	ug/L	ND	50	50	48.6	50.7	97	101	70-130	4	30	
Chloromethane	ug/L	ND	50	50	41.9	43.1	84	86	43-150	3	30	
cis-1,3-Dichloropropene	ug/L	ND	50	50	49.0	49.7	98	99	70-130	1	30	
Dibromochloromethane	ug/L	ND	50	50	51.9	52.1	104	104	70-130	.3	30	
Ethylbenzene	ug/L	ND	50	50	51.7	52.4	103	105	70-136	1	30	
Methylene Chloride	ug/L	ND	50	50	51.6	52.9	103	106	70-130	2	30	
Styrene	ug/L	ND	50	50	48.5	49.1	97	98	70-130	1	30	
Tetrachloroethene	ug/L	ND	50	50	54.6	54.1	109	108	70-130	1	30	
Toluene	ug/L	ND	50	50	51.9	52.6	104	105	70-130	1	30	
trans-1,3-Dichloropropene	ug/L	ND	50	50	49.4	50.4	99	101	70-130	2	30	
Trichloroethene	ug/L	ND	50	50	52.3	53.0	105	106	70-130	1	30	
Vinyl chloride	ug/L	ND	50	50	46.9	47.3	94	95	62-138	.7	30	
Xylene (Total)	ug/L	ND	150	150	156	158	104	105	70-130	1	30	
4-Bromofluorobenzene (S)	%						106	108	64-132			
Dibromofluoromethane (S)	%						106	106	68-122			
Toluene-d8 (S)	%						109	109	73-127			

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WETA/1980 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

METHOD BLANK: 54151
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	
Nitrite as N	mg/L	<0.036	0.10	

LABORATORY CONTROL SAMPLE: 54152

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	97	90-110	
Nitrite as N	mg/L	.8	0.75	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54153 54154

Parameter	Units	406569004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.61	1.6	1.6	2.0	2.0	90	90	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.62	0.62	78	78	90-110	0	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54155 54156

Parameter	Units	406593001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	2.9	1.6	1.6	4.5	4.5	98	98	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.62	0.60	78	75	90-110	3	20	M0

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Pace Analytical Services, Inc.
1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WETA/1981 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

METHOD BLANK: 54157
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Chloride	mg/L	<1.1	5.0	
Fluoride	mg/L	<0.059	0.50	
Sulfate	mg/L	<0.51	4.0	

LABORATORY CONTROL SAMPLE: 54158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.9	94	90-110	
Fluoride	mg/L	2	1.9	93	90-110	
Sulfate	mg/L	16	15.4	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54159 54160

Parameter	Units	406569004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11.8	20	20	31.0	31.0	96	96	90-110	.03	20	
Fluoride	mg/L	0.23J	2	2	2.1	2.1	92	92	90-110	0	20	
Sulfate	mg/L	119	80	80	198	197	98	98	90-110	.3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54161 54162

Parameter	Units	406593001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.2	20	20	43.4	43.4	96	96	90-110	.05	20	
Fluoride	mg/L	<0.059	2	2	2.0	2.0	98	99	90-110	.5	20	
Sulfate	mg/L	75.7	16	16	93.3	93.4	110	111	90-110	.1	20	1j,M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WET/1874 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569008, 406569009

METHOD BLANK: 54311
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Sulfide	mg/L	<2.3	5.0	

LABORATORY CONTROL SAMPLE: 54312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	48.4	46.0	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 54313 54314

Parameter	Units	406501015 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	48.4	48.4	49.2	50.0	101	102	80-120	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WET/1889 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

METHOD BLANK: 55169
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	

LABORATORY CONTROL SAMPLE: 55170

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	504	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 55171 55172

Parameter	Units	406501021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	59.4	500	500	453	431	79	74	80-120	5	20	M0

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WETA/2019 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007

METHOD BLANK: 56156
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 56157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.7	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56158 56159

Parameter	Units	406501019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.6	10.1	105	100	90-110	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56160 56161

Parameter	Units	406569007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	9.1	10	10	17.5	17.9	84	88	90-110	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WETA/2020
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 406569008, 406569009

METHOD BLANK: 56162
Associated Lab Samples: 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	

LABORATORY CONTROL SAMPLE: 56163

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	9.8	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56164 56165

Parameter	Units	406570004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.3	10.0	102	99	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 56166 56167

Parameter	Units	406844001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.6	10.9	105	108	90-110	3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: WETA/2036 | Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 | Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

METHOD BLANK: 57124
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Cyanide	mg/L	<0.0060	0.020	

LABORATORY CONTROL SAMPLE: 57125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57126 57127

Parameter	Units	406569007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	102	102	90-110	.1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 57128 57129

Parameter	Units	406762002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.0061J	.1	.1	0.11	0.11	101	102	90-110	.3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL
Pace Project No.: 406569

QC Batch: CVFS/1166 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

METHOD BLANK: 58868
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 58869
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	<0.16	0.50	

METHOD BLANK: 58870
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Mercury	ng/L	0.297J	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 58871 58872

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.49	5.64	110	113	79-121	3	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58873 58874

Parameter	Units	406501017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.02	5	5	6.49	6.15	109	103	75-125	5	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 58875 58876

Parameter	Units	406521002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	5.85	20	20	27.7	27.2	110	107	75-125	2	24	

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QUALIFIERS

Project: HUMBOLDT MILL
Pace Project No.: 406569

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

1j	Parent sample was within the acceptable range of the curve. Spiking resulted in MS/MSD to go over range.
H1	Analysis conducted outside the recognized method holding time.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results may be biased high.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406569009	MW-5	EPA 8260	MSV/2194		
406569001	MW-101	EPA 300.0	WETA/1980		
406569002	KMW-5	EPA 300.0	WETA/1980		
406569003	MW-11	EPA 300.0	WETA/1980		
406569004	HW-1	EPA 300.0	WETA/1980		
406569005	MW-102	EPA 300.0	WETA/1980		
406569006	MW-601	EPA 300.0	WETA/1980		
406569007	DUP-003	EPA 300.0	WETA/1980		
406569008	FBK-003	EPA 300.0	WETA/1980		
406569009	MW-5	EPA 300.0	WETA/1980		
406569001	MW-101	EPA 300.0	WETA/1981		
406569002	KMW-5	EPA 300.0	WETA/1981		
406569003	MW-11	EPA 300.0	WETA/1981		
406569004	HW-1	EPA 300.0	WETA/1981		
406569005	MW-102	EPA 300.0	WETA/1981		
406569006	MW-601	EPA 300.0	WETA/1981		
406569007	DUP-003	EPA 300.0	WETA/1981		
406569008	FBK-003	EPA 300.0	WETA/1981		
406569009	MW-5	EPA 300.0	WETA/1981		
406569001	MW-101	SM 4500-S F (2000)	WET/1874		
406569002	KMW-5	SM 4500-S F (2000)	WET/1874		
406569003	MW-11	SM 4500-S F (2000)	WET/1874		
406569004	HW-1	SM 4500-S F (2000)	WET/1874		
406569005	MW-102	SM 4500-S F (2000)	WET/1874		
406569008	FBK-003	SM 4500-S F (2000)	WET/1874		
406569009	MW-5	SM 4500-S F (2000)	WET/1874		
406569001	MW-101	SM 2320B	WET/1889		
406569002	KMW-5	SM 2320B	WET/1889		
406569003	MW-11	SM 2320B	WET/1889		
406569004	HW-1	SM 2320B	WET/1889		
406569005	MW-102	SM 2320B	WET/1889		
406569006	MW-601	SM 2320B	WET/1889		
406569007	DUP-003	SM 2320B	WET/1889		
406569008	FBK-003	SM 2320B	WET/1889		
406569009	MW-5	SM 2320B	WET/1889		
406569001	MW-101	EPA 350.1	WETA/2019		
406569002	KMW-5	EPA 350.1	WETA/2019		
406569003	MW-11	EPA 350.1	WETA/2019		
406569004	HW-1	EPA 350.1	WETA/2019		
406569005	MW-102	EPA 350.1	WETA/2019		
406569006	MW-601	EPA 350.1	WETA/2019		
406569007	DUP-003	EPA 350.1	WETA/2019		
406569008	FBK-003	EPA 350.1	WETA/2020		
406569009	MW-5	EPA 350.1	WETA/2020		
406569001	MW-101	EPA 335.4	WETA/2036		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL
Pace Project No.: 406569

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406569002	KMW-5	EPA 335.4	WETA/2036		
406569003	MW-11	EPA 335.4	WETA/2036		
406569004	HW-1	EPA 335.4	WETA/2036		
406569005	MW-102	EPA 335.4	WETA/2036		
406569006	MW-601	EPA 335.4	WETA/2036		
406569007	DUP-003	EPA 335.4	WETA/2036		
406569008	FBK-003	EPA 335.4	WETA/2036		
406569009	MW-5	EPA 335.4	WETA/2036		
406569001	MW-101	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569002	KMW-5	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569003	MW-11	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569004	HW-1	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569005	MW-102	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569006	MW-601	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569007	DUP-003	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569008	FBK-003	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167
406569009	MW-5	EPA 1631E	CVFS/1166	EPA 1631E	CVFS/1167

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1700 Elm Street
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(612)607-1700

July 31, 2008

Client Services
Pace Analytical Green Bay
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

RE: Project: 406569 FOTH
Pace Project No.: 1077433

Dear Client Services:
Enclosed are the analytical results for sample(s) received by the laboratory on July 18, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Sylvia Hunter

Sylvia Hunter

sylvia.hunter@pacelabs.com
Project Manager

Florida (Nelap) Certification #: E87605
Illinois Certification #: 200011
Iowa Certification #: 368
Minnesota Certification #: 027-053-137
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: 406569 FOTH
Pace Project No.: 1077433

Lab ID	Sample ID	Matrix	Date Collected	Date Received
406569001	MW-101	Water	07/17/08 00:00	07/18/08 00:00
406569002	KMW-5	Water	07/17/08 00:00	07/18/08 00:00
406569003	MW-11	Water	07/17/08 00:00	07/18/08 00:00
406569004	HW-1	Water	07/17/08 00:00	07/18/08 00:00
406569005	MW-102	Water	07/17/08 00:00	07/18/08 00:00
406569006	MW-601	Water	07/17/08 00:00	07/18/08 00:00
406569007	DUP-003	Water	07/17/08 00:00	07/18/08 00:00
406569008	FBK-003	Water	07/17/08 00:00	07/18/08 00:00
406569009	MW-5	Water	07/17/08 00:00	07/18/08 00:00

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SAMPLE ANALYTE COUNT

Project: 406569 FOTH
Pace Project No.: 1077433

Lab ID	Sample ID	Method	Analysts	Analytes Reported
406569001	MW-101	EPA 6020	RJS	26
406569002	KMW-5	EPA 6020	RJS	26
406569003	MW-11	EPA 6020	RJS	26
406569004	HW-1	EPA 6020	RJS	26
406569005	MW-102	EPA 6020	RJS	26
406569006	MW-601	EPA 6020	RJS	26
406569007	DUP-003	EPA 6020	RJS	26
406569008	FBK-003	EPA 6020	RJS	26
406569009	MW-5	EPA 6020	RJS	26

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: MW-101 **Lab ID: 406569001** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**462**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 15:04	7429-90-5	
Antimony	**0.10J**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 15:04	7440-36-0	
Arsenic	**23.2**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 15:04	7440-38-2	
Barium	**77.2**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 15:04	7440-39-3	
Beryllium	**0.085J**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 15:04	7440-41-7	
Boron	**84.2**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 15:04	7440-42-8	
Cadmium	**<0.048**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 15:04	7440-43-9	
Calcium	**33700**	ug/L	105	32.0	5	07/28/08 17:05	07/29/08 15:04	7440-70-2	
Chromium	**2.1**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 15:04	7440-47-3	
Cobalt	**0.64**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 15:04	7440-48-4	
Copper	**1.4**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 15:04	7440-50-8	
Iron	**38800**	ug/L	75.0	23.0	5	07/28/08 17:05	07/29/08 15:04	7439-89-6	
Lead	**0.28J**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 15:04	7439-92-1	
Lithium	**0.86**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 15:04	7439-93-2	
Magnesium	**9420**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 15:04	7439-95-4	
Manganese	**5970**	ug/L	4.0	2.4	25	07/28/08 17:05	07/29/08 15:09	7439-96-5	
Molybdenum	**0.90**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 15:04	7439-98-7	
Nickel	**0.94**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 15:04	7440-02-0	
Potassium	**4030**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 15:04	7440-09-7	
Selenium	**<0.38**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 15:04	7782-49-2	
Silver	**0.20J**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 15:04	7440-22-4	
Sodium	**7280**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 15:04	7440-23-5	
Thallium	**0.040**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 15:04	7440-28-0	
Total Hardness by 2340B	**123000**	ug/L	107	33.4	5	07/28/08 17:05	07/29/08 15:04		
Vanadium	**4.2**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 15:04	7440-62-2	
Zinc	**<2.8**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 15:04	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: KMW-5 **Lab ID: 406569002** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**1530**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 15:13	7429-90-5	
Antimony	**1.2**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 15:13	7440-36-0	
Arsenic	**5.4**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 15:13	7440-38-2	
Barium	**19.2**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 15:13	7440-39-3	
Beryllium	**0.20J**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 15:13	7440-41-7	
Boron	**71.4**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 15:13	7440-42-8	
Cadmium	**0.13J**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 15:13	7440-43-9	
Calcium	**33600**	ug/L	105	32.0	5	07/28/08 17:05	07/29/08 15:13	7440-70-2	
Chromium	**12.0**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 15:13	7440-47-3	
Cobalt	**189**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 15:13	7440-48-4	
Copper	**7.9**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 15:13	7440-50-8	
Iron	**15500**	ug/L	75.0	23.0	5	07/28/08 17:05	07/29/08 15:13	7439-89-6	
Lead	**1.9**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 15:13	7439-92-1	
Lithium	**10.0**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 15:13	7439-93-2	
Magnesium	**19100**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 15:13	7439-95-4	
Manganese	**977**	ug/L	0.80	0.48	5	07/28/08 17:05	07/29/08 15:13	7439-96-5	
Molybdenum	**7.6**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 15:13	7439-98-7	
Nickel	**21.9**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 15:13	7440-02-0	
Potassium	**4800**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 15:13	7440-09-7	
Selenium	**0.42J**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 15:13	7782-49-2	
Silver	**<0.10**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 15:13	7440-22-4	
Sodium	**22600**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 15:13	7440-23-5	
Thallium	**0.13**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 15:13	7440-28-0	
Total Hardness by 2340B	**162000**	ug/L	107	33.4	5	07/28/08 17:05	07/29/08 15:13		
Vanadium	**2.7**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 15:13	7440-62-2	
Zinc	**3.7J**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 15:13	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: MW-11 **Lab ID: 406569003** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**1160**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 15:18	7429-90-5	
Antimony	**0.18**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 15:18	7440-36-0	
Arsenic	**8.7**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 15:18	7440-38-2	
Barium	**394**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 15:18	7440-39-3	
Beryllium	**<0.070**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 15:18	7440-41-7	
Boron	**15.8**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 15:18	7440-42-8	
Cadmium	**0.050J**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 15:18	7440-43-9	
Calcium	**197000**	ug/L	1050	320	50	07/28/08 17:05	07/29/08 15:23	7440-70-2	
Chromium	**9.9**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 15:18	7440-47-3	
Cobalt	**10.6**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 15:18	7440-48-4	
Copper	**5.0**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 15:18	7440-50-8	
Iron	**264000**	ug/L	750	230	50	07/28/08 17:05	07/29/08 15:23	7439-89-6	
Lead	**0.81J**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 15:18	7439-92-1	
Lithium	**2.6**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 15:18	7439-93-2	
Magnesium	**88600**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 15:18	7439-95-4	
Manganese	**17500**	ug/L	8.0	4.8	50	07/28/08 17:05	07/29/08 15:23	7439-96-5	
Molybdenum	**0.30**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 15:18	7439-98-7	
Nickel	**1.2**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 15:18	7440-02-0	
Potassium	**13400**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 15:18	7440-09-7	
Selenium	**0.92J**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 15:18	7782-49-2	
Silver	**<0.10**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 15:18	7440-22-4	
Sodium	**47900**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 15:18	7440-23-5	
Thallium	**0.050**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 15:18	7440-28-0	
Total Hardness by 2340B	**857000**	ug/L	1050	321	50	07/28/08 17:05	07/29/08 15:23		
Vanadium	**15.6**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 15:18	7440-62-2	
Zinc	**<2.8**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 15:18	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: HW-1 **Lab ID: 406569004** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**65.2**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 15:27	7429-90-5	
Antimony	**0.13J**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 15:27	7440-36-0	
Arsenic	**0.75J**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 15:27	7440-38-2	
Barium	**15.4**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 15:27	7440-39-3	
Beryllium	**<0.070**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 15:27	7440-41-7	
Boron	**75.9**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 15:27	7440-42-8	
Cadmium	**<0.048**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 15:27	7440-43-9	
Calcium	**57400**	ug/L	105	32.0	5	07/28/08 17:05	07/29/08 15:27	7440-70-2	
Chromium	**1.0**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 15:27	7440-47-3	
Cobalt	**2.4**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 15:27	7440-48-4	
Copper	**0.92**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 15:27	7440-50-8	
Iron	**396**	ug/L	75.0	23.0	5	07/28/08 17:05	07/29/08 15:27	7439-89-6	
Lead	**<0.28**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 15:27	7439-92-1	
Lithium	**2.2**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 15:27	7439-93-2	
Magnesium	**22400**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 15:27	7439-95-4	
Manganese	**356**	ug/L	0.80	0.48	5	07/28/08 17:05	07/29/08 15:27	7439-96-5	
Molybdenum	**6.6**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 15:27	7439-98-7	
Nickel	**4.3**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 15:27	7440-02-0	
Potassium	**3660**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 15:27	7440-09-7	
Selenium	**<0.38**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 15:27	7782-49-2	
Silver	**<0.10**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 15:27	7440-22-4	
Sodium	**15300**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 15:27	7440-23-5	
Thallium	**0.040**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 15:27	7440-28-0	
Total Hardness by 2340B	**236000**	ug/L	107	33.4	5	07/28/08 17:05	07/29/08 15:27		
Vanadium	**0.41J**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 15:27	7440-62-2	
Zinc	**<2.8**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 15:27	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: MW-102 **Lab ID: 406569005** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**491000**	ug/L	120	35.5	50	07/28/08 17:05	07/30/08 11:46	7429-90-5	
Antimony	**17.8**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 15:55	7440-36-0	
Arsenic	**455**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 15:55	7440-38-2	
Barium	**1.2**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 15:55	7440-39-3	
Beryllium	**58.2**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 15:55	7440-41-7	
Boron	**297**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 15:55	7440-42-8	
Cadmium	**124**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 15:55	7440-43-9	
Calcium	**388000**	ug/L	1050	320	50	07/28/08 17:05	07/30/08 11:46	7440-70-2	
Chromium	**6350**	ug/L	5.0	1.6	50	07/28/08 17:05	07/30/08 11:46	7440-47-3	
Cobalt	**7670**	ug/L	0.55	0.17	50	07/28/08 17:05	07/30/08 11:46	7440-48-4	
Copper	**16500**	ug/L	6.0	1.8	50	07/28/08 17:05	07/30/08 11:46	7440-50-8	
Iron	**5440000**	ug/L	7500	2300	500	07/28/08 17:05	07/30/08 11:51	7439-89-6	
Lead	**0.92J**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 15:55	7439-92-1	
Lithium	**462**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 15:55	7439-93-2	
Magnesium	**563000**	ug/L	16.0	14.0	50	07/28/08 17:05	07/30/08 11:46	7439-95-4	
Manganese	**21000**	ug/L	8.0	4.8	50	07/28/08 17:05	07/30/08 11:46	7439-96-5	
Molybdenum	**8.4**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 15:55	7439-98-7	
Nickel	**20500**	ug/L	7.0	2.2	50	07/28/08 17:05	07/30/08 11:46	7440-02-0	
Potassium	**89.6**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 15:55	7440-09-7	
Selenium	**21.6**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 15:55	7782-49-2	
Silver	**1.4**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 15:55	7440-22-4	
Sodium	**2390**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 15:55	7440-23-5	
Thallium	**0.040**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 15:55	7440-28-0	
Total Hardness by 2340B	**3290000**	ug/L	1070	334	50	07/28/08 17:05	07/30/08 11:46		
Vanadium	**378**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 15:55	7440-62-2	
Zinc	**9910**	ug/L	95.0	28.0	50	07/28/08 17:05	07/30/08 11:46	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: MW-601 **Lab ID: 406569006** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**8000**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 16:04	7429-90-5	
Antimony	**0.60**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 16:04	7440-36-0	
Arsenic	**135**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 16:04	7440-38-2	
Barium	**343**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 16:04	7440-39-3	
Beryllium	**0.66**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 16:04	7440-41-7	
Boron	**546**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 16:04	7440-42-8	
Cadmium	**0.37**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 16:04	7440-43-9	
Calcium	**109000**	ug/L	105	32.0	5	07/28/08 17:05	07/29/08 16:04	7440-70-2	
Chromium	**25.8**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 16:04	7440-47-3	
Cobalt	**18.8**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 16:04	7440-48-4	
Copper	**37.1**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 16:04	7440-50-8	
Iron	**112000**	ug/L	750	230	50	07/28/08 17:05	07/29/08 16:09	7439-89-6	
Lead	**9.0**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 16:04	7439-92-1	
Lithium	**6.8**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 16:04	7439-93-2	
Magnesium	**25400**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 16:04	7439-95-4	
Manganese	**8320**	ug/L	8.0	4.8	50	07/28/08 17:05	07/29/08 16:09	7439-96-5	
Molybdenum	**8.8**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 16:04	7439-98-7	
Nickel	**31.1**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 16:04	7440-02-0	
Potassium	**12600**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 16:04	7440-09-7	
Selenium	**1.8**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 16:04	7782-49-2	
Silver	**0.43**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 16:04	7440-22-4	
Sodium	**34200**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 16:04	7440-23-5	
Thallium	**0.16**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 16:04	7440-28-0	
Total Hardness by 2340B	**377000**	ug/L	107	33.4	5	07/28/08 17:05	07/29/08 16:04		
Vanadium	**33.3**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 16:04	7440-62-2	
Zinc	**57.6**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 16:04	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: DUP-003 **Lab ID: 406569007** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**7320**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 16:13	7429-90-5	
Antimony	**0.52**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 16:13	7440-36-0	
Arsenic	**122**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 16:13	7440-38-2	
Barium	**313**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 16:13	7440-39-3	
Beryllium	**0.51**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 16:13	7440-41-7	
Boron	**506**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 16:13	7440-42-8	
Cadmium	**0.35**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 16:13	7440-43-9	
Calcium	**99600**	ug/L	105	32.0	5	07/28/08 17:05	07/29/08 16:13	7440-70-2	
Chromium	**21.9**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 16:13	7440-47-3	
Cobalt	**14.9**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 16:13	7440-48-4	
Copper	**29.5**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 16:13	7440-50-8	
Iron	**111000**	ug/L	750	230	50	07/28/08 17:05	07/29/08 16:18	7439-89-6	
Lead	**8.4**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 16:13	7439-92-1	
Lithium	**6.5**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 16:13	7439-93-2	
Magnesium	**22800**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 16:13	7439-95-4	
Manganese	**8340**	ug/L	8.0	4.8	50	07/28/08 17:05	07/29/08 16:18	7439-96-5	
Molybdenum	**7.9**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 16:13	7439-98-7	
Nickel	**21.0**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 16:13	7440-02-0	
Potassium	**11400**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 16:13	7440-09-7	
Selenium	**1.6**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 16:13	7782-49-2	
Silver	**0.10J**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 16:13	7440-22-4	
Sodium	**30700**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 16:13	7440-23-5	
Thallium	**0.12**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 16:13	7440-28-0	
Total Hardness by 2340B	**343000**	ug/L	107	33.4	5	07/28/08 17:05	07/29/08 16:13		
Vanadium	**30.7**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 16:13	7440-62-2	
Zinc	**46.4**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 16:13	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: FBK-003 **Lab ID: 406569008** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**1.8J**	ug/L	2.4	0.71	1	07/28/08 17:05	07/29/08 15:00	7429-90-5	
Antimony	**0.015J**	ug/L	0.029	0.0086	1	07/28/08 17:05	07/29/08 15:00	7440-36-0	
Arsenic	**<0.075**	ug/L	0.25	0.075	1	07/28/08 17:05	07/29/08 15:00	7440-38-2	
Barium	**0.21**	ug/L	0.17	0.051	1	07/28/08 17:05	07/29/08 15:00	7440-39-3	
Beryllium	**<0.014**	ug/L	0.047	0.014	1	07/28/08 17:05	07/29/08 15:00	7440-41-7	
Boron	**13.9**	ug/L	1.4	0.41	1	07/28/08 17:05	07/29/08 15:00	7440-42-8	
Cadmium	**<0.0097**	ug/L	0.032	0.0097	1	07/28/08 17:05	07/29/08 15:00	7440-43-9	
Calcium	**8.6J**	ug/L	21.0	6.4	1	07/28/08 17:05	07/29/08 15:00	7440-70-2	
Chromium	**0.34**	ug/L	0.10	0.031	1	07/28/08 17:05	07/29/08 15:00	7440-47-3	
Cobalt	**0.0070J**	ug/L	0.011	0.0034	1	07/28/08 17:05	07/29/08 15:00	7440-48-4	B
Copper	**0.86**	ug/L	0.12	0.036	1	07/28/08 17:05	07/29/08 15:00	7440-50-8	
Iron	**<4.6**	ug/L	15.0	4.6	1	07/28/08 17:05	07/29/08 15:00	7439-89-6	
Lead	**<0.056**	ug/L	0.19	0.056	1	07/28/08 17:05	07/29/08 15:00	7439-92-1	
Lithium	**0.024J**	ug/L	0.053	0.016	1	07/28/08 17:05	07/29/08 15:00	7439-93-2	
Magnesium	**3.1**	ug/L	0.32	0.28	1	07/28/08 17:05	07/29/08 15:00	7439-95-4	
Manganese	**0.63**	ug/L	0.16	0.096	1	07/28/08 17:05	07/29/08 15:00	7439-96-5	B
Molybdenum	**0.018J**	ug/L	0.037	0.011	1	07/28/08 17:05	07/29/08 15:00	7439-98-7	B
Nickel	**0.15**	ug/L	0.14	0.043	1	07/28/08 17:05	07/29/08 15:00	7440-02-0	
Potassium	**31.5**	ug/L	11.0	3.3	1	07/28/08 17:05	07/29/08 15:00	7440-09-7	
Selenium	**<0.077**	ug/L	0.26	0.077	1	07/28/08 17:05	07/29/08 15:00	7782-49-2	
Silver	**0.055J**	ug/L	0.067	0.020	1	07/28/08 17:05	07/29/08 15:00	7440-22-4	
Sodium	**405**	ug/L	12.0	3.6	1	07/28/08 17:05	07/29/08 15:00	7440-23-5	
Thallium	**0.0030J**	ug/L	0.0033	0.0010	1	07/28/08 17:05	07/29/08 15:00	7440-28-0	
Total Hardness by 2340B	**34.1**	ug/L	21.3	6.7	1	07/28/08 17:05	07/29/08 15:00		
Vanadium	**0.058J**	ug/L	0.11	0.034	1	07/28/08 17:05	07/29/08 15:00	7440-62-2	
Zinc	**3.5**	ug/L	1.9	0.56	1	07/28/08 17:05	07/29/08 15:00	7440-66-6	

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ANALYTICAL RESULTS

Project: 406569 FOTH
Pace Project No.: 1077433

Sample: MW-5 **Lab ID: 406569009** Collected: 07/17/08 00:00 Received: 07/18/08 00:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3020								
Aluminum	**442**	ug/L	12.0	3.6	5	07/28/08 17:05	07/29/08 16:22	7429-90-5	
Antimony	**0.18**	ug/L	0.14	0.043	5	07/28/08 17:05	07/29/08 16:22	7440-36-0	
Arsenic	**141**	ug/L	1.2	0.38	5	07/28/08 17:05	07/29/08 16:22	7440-38-2	
Barium	**166**	ug/L	0.85	0.26	5	07/28/08 17:05	07/29/08 16:22	7440-39-3	
Beryllium	**<0.070**	ug/L	0.24	0.070	5	07/28/08 17:05	07/29/08 16:22	7440-41-7	
Boron	**299**	ug/L	7.0	2.0	5	07/28/08 17:05	07/29/08 16:22	7440-42-8	
Cadmium	**0.12J**	ug/L	0.16	0.048	5	07/28/08 17:05	07/29/08 16:22	7440-43-9	
Calcium	**41400**	ug/L	105	32.0	5	07/28/08 17:05	07/29/08 16:22	7440-70-2	
Chromium	**8.9**	ug/L	0.50	0.16	5	07/28/08 17:05	07/29/08 16:22	7440-47-3	
Cobalt	**6.2**	ug/L	0.055	0.017	5	07/28/08 17:05	07/29/08 16:22	7440-48-4	
Copper	**1.6**	ug/L	0.60	0.18	5	07/28/08 17:05	07/29/08 16:22	7440-50-8	
Iron	**120000**	ug/L	750	230	50	07/28/08 17:05	07/29/08 16:27	7439-89-6	
Lead	**4.5**	ug/L	0.95	0.28	5	07/28/08 17:05	07/29/08 16:22	7439-92-1	
Lithium	**0.31**	ug/L	0.26	0.080	5	07/28/08 17:05	07/29/08 16:22	7439-93-2	
Magnesium	**13300**	ug/L	1.6	1.4	5	07/28/08 17:05	07/29/08 16:22	7439-95-4	
Manganese	**3530**	ug/L	8.0	4.8	50	07/28/08 17:05	07/29/08 16:27	7439-96-5	
Molybdenum	**4.2**	ug/L	0.18	0.055	5	07/28/08 17:05	07/29/08 16:22	7439-98-7	
Nickel	**14.8**	ug/L	0.70	0.22	5	07/28/08 17:05	07/29/08 16:22	7440-02-0	
Potassium	**8460**	ug/L	55.0	16.5	5	07/28/08 17:05	07/29/08 16:22	7440-09-7	
Selenium	**0.87J**	ug/L	1.3	0.38	5	07/28/08 17:05	07/29/08 16:22	7782-49-2	
Silver	**<0.10**	ug/L	0.34	0.10	5	07/28/08 17:05	07/29/08 16:22	7440-22-4	
Sodium	**43400**	ug/L	60.0	18.0	5	07/28/08 17:05	07/29/08 16:22	7440-23-5	
Thallium	**0.045**	ug/L	0.016	0.0050	5	07/28/08 17:05	07/29/08 16:22	7440-28-0	
Total Hardness by 2340B	**158000**	ug/L	107	33.4	5	07/28/08 17:05	07/29/08 16:22		
Vanadium	**19.2**	ug/L	0.55	0.17	5	07/28/08 17:05	07/29/08 16:22	7440-62-2	
Zinc	**18.8**	ug/L	9.5	2.8	5	07/28/08 17:05	07/29/08 16:22	7440-66-6	

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QUALITY CONTROL DATA

Project: 406569 FOTH
Pace Project No.: 1077433

QC Batch: MPRP/12748 Analysis Method: EPA 6020
QC Batch Method: EPA 3020 Analysis Description: 6020 MET
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

METHOD BLANK: 504158
Associated Lab Samples: 406569001, 406569002, 406569003, 406569004, 406569005, 406569006, 406569007, 406569008, 406569009

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Aluminum	ug/L	<0.71	2.4	
Antimony	ug/L	0.018J	0.029	
Arsenic	ug/L	<0.075	0.25	
Barium	ug/L	<0.051	0.17	
Beryllium	ug/L	<0.014	0.047	
Boron	ug/L	<0.41	1.4	
Cadmium	ug/L	<0.0097	0.032	
Calcium	ug/L	<6.4	21.0	
Chromium	ug/L	<0.031	0.10	
Cobalt	ug/L	0.0060J	0.011	B
Copper	ug/L	<0.036	0.12	
Iron	ug/L	<4.6	15.0	
Lead	ug/L	<0.056	0.19	P8
Lithium	ug/L	0.025J	0.053	
Magnesium	ug/L	0.52	0.32	
Manganese	ug/L	0.11J	0.16	B
Molybdenum	ug/L	0.011J	0.037	B
Nickel	ug/L	<0.043	0.14	
Potassium	ug/L	<3.3	11.0	
Selenium	ug/L	<0.077	0.26	
Silver	ug/L	0.049J	0.067	
Sodium	ug/L	<3.6	12.0	
Thallium	ug/L	0.0040	0.0033	
Total Hardness by 2340B	ug/L	<6.7	21.3	
Vanadium	ug/L	<0.034	0.11	
Zinc	ug/L	<0.56	1.9	

LABORATORY CONTROL SAMPLE: 504159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	80	81.0	101	85-115	
Antimony	ug/L	80	81.8	102	85-115	
Arsenic	ug/L	80	82.7	103	85-115	
Barium	ug/L	80	81.3	102	85-115	
Beryllium	ug/L	80	76.8	96	85-115	
Boron	ug/L	80	80.0	100	85-115	
Cadmium	ug/L	80	83.5	104	85-115	
Calcium	ug/L	1000	933	93	85-115	
Chromium	ug/L	80	84.4	105	85-115	
Cobalt	ug/L	80	82.6	103	85-115	
Copper	ug/L	80	78.3	98	85-115	

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QUALITY CONTROL DATA

Project: 406569 FOTH
Pace Project No.: 1077433

LABORATORY CONTROL SAMPLE: 504159

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	1000	1060	106	85-115	
Lead	ug/L	80	80.3	100	85-115	
Lithium	ug/L	80	77.9	97	85-115	
Magnesium	ug/L	1000	1070	107	85-115	
Manganese	ug/L	80	80.1	100	85-115	
Molybdenum	ug/L	80	82.8	104	85-115	
Nickel	ug/L	80	83.6	104	85-115	
Potassium	ug/L	1000	1070	107	85-115	
Selenium	ug/L	160	162	101	85-115	
Silver	ug/L	80	82.8	104	85-115	
Sodium	ug/L	1000	1040	104	85-115	
Thallium	ug/L	80	80.2	100	85-115	
Total Hardness by 2340B	ug/L		6750			
Vanadium	ug/L	80	81.1	101	85-115	
Zinc	ug/L	80	79.4	99	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 504160 504161

Parameter	Units	406432001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	<10.0	80	80	87.8	96.8	98	109	70-130	10	20	
Antimony	ug/L	<0.25	80	80	80.9	82.0	101	102	70-130	1	20	
Arsenic	ug/L	<0.50	80	80	84.0	86.4	105	108	70-130	3	20	
Barium	ug/L	16.0	80	80	94.0	97.2	98	101	70-130	3	20	
Beryllium	ug/L	<0.50	80	80	72.1	76.6	90	96	70-130	6	20	
Boron	ug/L	36.7	80	80	113	114	95	97	70-130	1	20	
Cadmium	ug/L	<0.25	80	80	81.2	83.2	101	104	70-130	3	20	
Calcium	ug/L	20100	1000	1000	20600	20600	54	52	70-130	.07	20	P6
Chromium	ug/L	<1.2	80	80	82.4	85.2	103	106	70-130	3	20	
Cobalt	ug/L	0.76	80	80	83.6	84.9	104	105	70-130	1	20	
Copper	ug/L	1.1	80	80	78.4	79.6	97	98	70-130	1	20	
Iron	ug/L	<125	1000	1000	1090	1110	100	102	70-130	2	20	
Lead	ug/L	<0.25	80	80	81.8	83.0	102	104	70-130	2	20	
Lithium	ug/L	2.2	80	80	77.9	80.8	95	98	70-130	4	20	
Magnesium	ug/L	9060	1000	1000	10100	10000	102	100	70-130	.3	20	
Manganese	ug/L	1050	80	80	1100	1120	73	98	70-130	2	20	
Molybdenum	ug/L	1.8	80	80	85.4	87.4	105	107	70-130	2	20	
Nickel	ug/L	2.1	80	80	86.5	88.1	106	108	70-130	2	20	
Potassium	ug/L	3020	1000	1000	4070	4120	106	111	70-130	1	20	
Selenium	ug/L	<1.2	160	160	164	167	102	104	70-130	2	20	
Silver	ug/L	<0.50	80	80	63.6	75.0	80	94	70-130	17	20	
Sodium	ug/L	796	1000	1000	1820	1820	103	103	70-130	.03	20	
Thallium	ug/L	<0.25	80	80	81.6	83.4	102	104	70-130	2	20	
Total Hardness by 2340B	ug/L	87400			92900	92800				.2	20	
Vanadium	ug/L	<0.25	80	80	79.8	82.3	100	103	70-130	3	20	
Zinc	ug/L	<12.5	80	80	74.7	77.7	93	97	70-130	4	20	

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QUALITY CONTROL DATA

Project: 406569 FOTH
Pace Project No.: 1077433

MATRIX SPIKE SAMPLE: 504162

Parameter	Units	406425001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<10.0	80	90.6	105	70-130	
Antimony	ug/L	3.5	80	95.2	115	70-130	
Arsenic	ug/L	<0.50	80	97.2	121	70-130	
Barium	ug/L	17.3	80	107	112	70-130	
Beryllium	ug/L	<0.50	80	77.4	97	70-130	
Boron	ug/L	358	80	428	88	70-130	
Cadmium	ug/L	<0.25	80	90.6	113	70-130	
Calcium	ug/L	98000	1000	97400	-60	70-130	P6
Chromium	ug/L	<1.2	80	93.8	117	70-130	
Cobalt	ug/L	13.1	80	104	114	70-130	
Copper	ug/L	2.8	80	88.6	107	70-130	
Iron	ug/L	<125	1000	1190	117	70-130	
Lead	ug/L	<0.25	80	87.9	110	70-130	
Lithium	ug/L	7.6	80	84.4	96	70-130	
Magnesium	ug/L	61600	1000	62700	110	70-130	
Manganese	ug/L	99.8	80	185	106	70-130	
Molybdenum	ug/L	52.4	80	146	117	70-130	
Nickel	ug/L	752	80	826	93	70-130	
Potassium	ug/L	27700	1000	28600	93	70-130	
Selenium	ug/L	<1.2	160	184	114	70-130	
Silver	ug/L	<0.50	80	72.0	90	70-130	
Sodium	ug/L	57700	1000	57900	20	70-130	P6
Thallium	ug/L	<0.25	80	87.6	109	70-130	
Total Hardness by 2340B	ug/L	498000		501000			
Vanadium	ug/L	0.34J	80	91.0	113	70-130	
Zinc	ug/L	<12.5	80	85.8	107	70-130	

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 406569 FOTH
Pace Project No.: 1077433

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
P8	Analyte was detected in the method blank. All associated samples had concentrations of at least ten times greater than the blank or were below the reporting limit.

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 406569 FOTH
Pace Project No.: 1077433

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
406569001	**MW-101**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569002	**KMW-5**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569003	**MW-11**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569004	**HW-1**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569005	**MW-102**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569006	**MW-601**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569007	**DUP-003**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569008	**FBK-003**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023
406569009	**MW-5**	EPA 3020	MPRP/12748	EPA 6020	ICPM/5023

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson Project # 40669

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

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

Cooler Temperature 1° **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: G 7/18/08

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. NO_2, NO_3, Turbity
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed G Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☑No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☑N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: AH **Date:** 7/18/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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

(X) = 1-500mL[U], 2-500mL[D,G], 5-250mL[2A,C,D,S]

20080716

Page: 1 of 1

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	All data FOTH by 7/31/08.

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MI

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start DATE	COLLECTED Composite Start TIME	COLLECTED Composite End/Grab DATE	COLLECTED Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH ZnAC	Analysis Test (Y/N): Alk2, Cl, Fl, SO4, TDS, Turbidity	NITRITE, NITRATE SEPARATELY	TSS	CYANIDE	METALS, GROSS ALPHA/BETA	LLHG	SULFIDE	DOC	AMMONIA, COD, TOC	LITHIUM	VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 406569
1	MW-101	WT	G			7/17/08	1340	9	8	3	1	2		1			1	1	1		1	1	1	1		1	1		N	(X)
2	KMW-5	WT	G			7/17/08	1325		8	3	1	2		1			1	1	1		1	1	1	1		1	1			
3	MW-11	WT	G			7/17/08	1147	14	8	3	1	2		1			1	1	1		1	1	1	1		1	1			
4	HW-1	WT	G			7/17/08	1200	9	8	3	1	2		1			1	1	1		1	1	1	1		1	1			
5	MW-102	WT	G			7/17/08	1010		8	3	1	2		1			1	1	1		1	1	1	1		1	1			
6	MW-601	WT	G			7/17/08	0940		7	3	1	2		1				1	1		1	1	1	0		1	1			(X) - 1-500mL[G]
7	DUP-003	WT	G			7/17/08	—		7	3	1	2		1				1	1		1	1	1	0		1	1			
8	FBK-003	WT	G			7/17/08	0850		8	3	1	2		1			1	1	1		1	1	1	1		1	1			(X)
9	MW-5	WT	G			7/17/08	1040		11	3	1	2	3	1			1	1	1		1	1	1	1		1	1	3		(X) + 3-40mL
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
7998 8357 8883	Curt Sheffield / NJC	07/14/08	1800							
7927 2969 8162	FEDEX	7/18/08	1010		7/18/08	1010	1	Y	N	Y
7927 2969 8140										

FED EX

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Chris Cartway Curt Sheffield Richard Eagle

SIGNATURE of SAMPLER: Richard Eagle DATE Signed (MM/DD/YY): 7/17/08

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

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

October 2008

Batch No. 4010225

Pace Analytical®
www.pacelabs.com

Pace Analytical Services, Inc.
1241 Bellevue Street, Suite 9
Green Bay, WI 54302
Phone: 920.469.2436
Fax: 920.469.8827

November 20, 2008

Janis Kesy
Foth & Van Dyke
2737 South Ridge Road
Green Bay, WI 54304

Dear Ms. Kesy:

Enclosed is a report for the analysis of ground water samples and associated QC samples for the Humboldt Mill project (06W003). These samples were received from October 14 to October 23, 2008. The samples were assigned to batch numbers 4010225, 4010287, 4010358, 4010409 and 4010632 for laboratory tracking purposes.

A table of the results has also been sent to you via e-mail.

If you have any questions regarding this data please call me at (608) 232-3300.

Sincerely,

Marge Allen-Trunkner for Tod Noltemeyer

Tod Noltemeyer
Project Manager

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

November 21, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on October 14, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Marge Allen-Trinkner for Tod Noltemeyer
Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Green Bay Certification IDs

Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Carolina Certification #: 503
North Dakota Certification #: R-200
North Dakota Certification #: R-150
New York Certification #: 11888
New York Certification #: 11887
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87951
Florida (NELAP) Certification #: E87948

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SAMPLE SUMMARY

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4010225001	DUP-001	Water	10/13/08 00:00	10/14/08 10:30
4010225002	FBK-001	Water	10/13/08 12:45	10/14/08 10:30
4010225003	MW-602	Water	10/13/08 12:29	10/14/08 10:30
4010225004	P-602	Water	10/13/08 11:52	10/14/08 10:30
4010225005	MW-606	Water	10/13/08 13:53	10/14/08 10:30
4010225006	MW-603	Water	10/13/08 15:04	10/14/08 10:30

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4010225001	DUP-001	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010225002	FBK-001	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010225003	MW-602	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010225004	P-602	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010225005	MW-606	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010225006	MW-603	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: EPA 1631E
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: EPA 6020
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
5 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/2449

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010168017

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 90655)
  - Sulfide
- MSD (Lab ID: 90656)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: EPA 300.0
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-001 (Lab ID: 4010225001)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2540

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010225001,4010225003

M0: Matrix spike recovery was outside laboratory control limits.
- MS (Lab ID: 90178)
  - Nitrite as N
- MSD (Lab ID: 90179)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2541

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010225001,4010225003

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 90182)
  - Chloride
- MS (Lab ID: 90184)
  - Chloride
- MSD (Lab ID: 90183)
  - Chloride
- MSD (Lab ID: 90185)
  - Chloride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Method: EPA 350.1
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
6 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: DUP-001 **Lab ID: 4010225001** Collected: 10/13/08 00:00 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.268J**	ng/L	0.50	0.16	1	10/16/08 08:00	10/21/08 07:13	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**5.8J**	ug/L	250	4.5	1	10/15/08 15:30	10/22/08 05:34	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/15/08 15:30	10/22/08 05:34	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 05:34	7440-38-2	
Barium	**11.6**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 05:34	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/15/08 15:30	10/22/08 05:34	7440-41-7	
Boron	**31.4**	ug/L	5.0	1.1	1	10/15/08 15:30	10/22/08 05:34	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/15/08 15:30	10/22/08 05:34	7440-43-9	
Calcium	**12300**	ug/L	250	62.6	1	10/15/08 15:30	10/22/08 05:34	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/15/08 15:30	10/22/08 05:34	7440-47-3	
Cobalt	**0.54J**	ug/L	1.0	0.077	1	10/15/08 15:30	10/22/08 05:34	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 05:34	7440-50-8	
Iron	**3550**	ug/L	250	5.0	1	10/15/08 15:30	10/22/08 05:34	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 05:34	7439-92-1	
Lithium	**8.5**	ug/L	1.0	0.13	1	10/15/08 15:30	10/22/08 05:34	7439-93-2	
Magnesium	**9250**	ug/L	250	6.1	1	10/15/08 15:30	10/22/08 05:34	7439-95-4	
Manganese	**3750**	ug/L	1.0	0.24	1	10/15/08 15:30	10/22/08 05:34	7439-96-5	
Molybdenum	**3.1**	ug/L	1.0	0.064	1	10/15/08 15:30	10/22/08 05:34	7439-98-7	
Nickel	**16.1**	ug/L	1.0	0.15	1	10/15/08 15:30	10/22/08 05:34	7440-02-0	
Potassium	**2340**	ug/L	250	78.3	1	10/15/08 15:30	10/22/08 05:34	7440-09-7	
Selenium	**0.74J**	ug/L	1.0	0.25	1	10/15/08 15:30	10/22/08 05:34	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/15/08 15:30	10/22/08 05:34	7440-22-4	
Sodium	**462**	ug/L	250	51.2	1	10/15/08 15:30	10/22/08 22:37	7440-23-5	
Thallium	**0.12J**	ug/L	1.0	0.019	1	10/15/08 15:30	10/22/08 22:37	7440-28-0	B
Total Hardness	**68.9**	mg/L	5.0	0.15	1	10/15/08 15:30	10/22/08 05:34		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/15/08 15:30	10/22/08 05:34	7440-62-2	
Zinc	**7.8**	ug/L	5.0	1.7	1	10/15/08 15:30	10/22/08 05:34	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**47.5**	mg/L	10.0	3.2	1		10/22/08 15:53		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:53		
Alkalinity, Total as CaCO3	**47.5**	mg/L	10.0	3.2	1		10/22/08 15:53		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/17/08 08:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 00:09	14797-55-8	H1
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/15/08 08:11	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		10/15/08 00:09	16887-00-6	M0
Fluoride	**0.48J**	mg/L	0.50	0.059	1		10/15/08 00:09	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: DUP-001 **Lab ID: 4010225001** Collected: 10/13/08 00:00 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**52.2**	mg/L	4.0	0.51	1		10/15/08 00:09	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:16	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:12	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: FBK-001 **Lab ID: 4010225002** Collected: 10/13/08 12:45 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.230J**	ng/L	0.50	0.16	1	10/16/08 08:00	10/21/08 07:07	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/15/08 15:30	10/22/08 05:40	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/15/08 15:30	10/22/08 05:40	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 05:40	7440-38-2	
Barium	**0.48J**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 05:40	7440-39-3	B
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/15/08 15:30	10/22/08 05:40	7440-41-7	
Boron	**<1.1**	ug/L	5.0	1.1	1	10/15/08 15:30	10/22/08 05:40	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/15/08 15:30	10/22/08 05:40	7440-43-9	
Calcium	**<62.6**	ug/L	250	62.6	1	10/15/08 15:30	10/22/08 05:40	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/15/08 15:30	10/22/08 05:40	7440-47-3	
Cobalt	**<0.077**	ug/L	1.0	0.077	1	10/15/08 15:30	10/22/08 05:40	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 05:40	7440-50-8	
Iron	**<5.0**	ug/L	250	5.0	1	10/15/08 15:30	10/22/08 05:40	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 05:40	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/15/08 15:30	10/22/08 05:40	7439-93-2	
Magnesium	**<6.1**	ug/L	250	6.1	1	10/15/08 15:30	10/22/08 05:40	7439-95-4	
Manganese	**0.50J**	ug/L	1.0	0.24	1	10/15/08 15:30	10/22/08 05:40	7439-96-5	
Molybdenum	**<0.064**	ug/L	1.0	0.064	1	10/15/08 15:30	10/22/08 05:40	7439-98-7	
Nickel	**<0.15**	ug/L	1.0	0.15	1	10/15/08 15:30	10/22/08 05:40	7440-02-0	
Potassium	**<78.3**	ug/L	250	78.3	1	10/15/08 15:30	10/22/08 05:40	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/15/08 15:30	10/22/08 05:40	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/15/08 15:30	10/22/08 05:40	7440-22-4	
Sodium	**<51.2**	ug/L	250	51.2	1	10/15/08 15:30	10/22/08 22:43	7440-23-5	
Thallium	**0.10J**	ug/L	1.0	0.019	1	10/15/08 15:30	10/22/08 22:43	7440-28-0	B
Total Hardness	**<0.15**	mg/L	5.0	0.15	1	10/15/08 15:30	10/22/08 05:40		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/15/08 15:30	10/22/08 05:40	7440-62-2	
Zinc	**3.3J**	ug/L	5.0	1.7	1	10/15/08 15:30	10/22/08 05:40	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:53		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:53		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:53		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/17/08 08:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 00:52	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/15/08 08:54	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**<1.1**	mg/L	5.0	1.1	1		10/15/08 00:52	16887-00-6	
Fluoride	**0.19J**	mg/L	0.50	0.059	1		10/15/08 00:52	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: FBK-001 **Lab ID: 4010225002** Collected: 10/13/08 12:45 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<0.51**	mg/L	4.0	0.51	1		10/15/08 00:52	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:12	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: MW-602 **Lab ID: 4010225003** Collected: 10/13/08 12:29 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.266J**	ng/L	0.50	0.16	1	10/16/08 08:00	10/21/08 07:18	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**6.3J**	ug/L	250	4.5	1	10/15/08 15:30	10/22/08 05:47	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/15/08 15:30	10/22/08 05:47	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 05:47	7440-38-2	
Barium	**10.6**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 05:47	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/15/08 15:30	10/22/08 05:47	7440-41-7	
Boron	**29.9**	ug/L	5.0	1.1	1	10/15/08 15:30	10/22/08 05:47	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/15/08 15:30	10/22/08 05:47	7440-43-9	
Calcium	**12100**	ug/L	250	62.6	1	10/15/08 15:30	10/22/08 05:47	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/15/08 15:30	10/22/08 05:47	7440-47-3	
Cobalt	**0.52J**	ug/L	1.0	0.077	1	10/15/08 15:30	10/22/08 05:47	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 05:47	7440-50-8	
Iron	**3400**	ug/L	250	5.0	1	10/15/08 15:30	10/22/08 05:47	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 05:47	7439-92-1	
Lithium	**8.4**	ug/L	1.0	0.13	1	10/15/08 15:30	10/22/08 05:47	7439-93-2	
Magnesium	**9000**	ug/L	250	6.1	1	10/15/08 15:30	10/22/08 05:47	7439-95-4	
Manganese	**3620**	ug/L	1.0	0.24	1	10/15/08 15:30	10/22/08 05:47	7439-96-5	
Molybdenum	**3.0**	ug/L	1.0	0.064	1	10/15/08 15:30	10/22/08 05:47	7439-98-7	
Nickel	**15.9**	ug/L	1.0	0.15	1	10/15/08 15:30	10/22/08 05:47	7440-02-0	
Potassium	**2270**	ug/L	250	78.3	1	10/15/08 15:30	10/22/08 05:47	7440-09-7	
Selenium	**0.78J**	ug/L	1.0	0.25	1	10/15/08 15:30	10/22/08 05:47	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/15/08 15:30	10/22/08 05:47	7440-22-4	
Sodium	**450**	ug/L	250	51.2	1	10/15/08 15:30	10/22/08 22:49	7440-23-5	
Thallium	**0.094J**	ug/L	1.0	0.019	1	10/15/08 15:30	10/22/08 22:49	7440-28-0	B
Total Hardness	**67.3**	mg/L	5.0	0.15	1	10/15/08 15:30	10/22/08 05:47		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/15/08 15:30	10/22/08 05:47	7440-62-2	
Zinc	**6.8**	ug/L	5.0	1.7	1	10/15/08 15:30	10/22/08 05:47	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**25.9**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Total as CaCO3	**25.9**	mg/L	10.0	3.2	1		10/22/08 15:54		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/17/08 08:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 01:06	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/15/08 09:08	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		10/15/08 01:06	16887-00-6	M0
Fluoride	**0.47J**	mg/L	0.50	0.059	1		10/15/08 01:06	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: MW-602 **Lab ID: 4010225003** Collected: 10/13/08 12:29 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**51.3**	mg/L	4.0	0.51	1		10/15/08 01:06	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:20	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:13	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: P-602 **Lab ID: 4010225004** Collected: 10/13/08 11:52 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.244J**	ng/L	0.50	0.16	1	10/16/08 08:00	10/21/08 07:28	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**141J**	ug/L	250	4.5	1	10/15/08 15:30	10/22/08 06:05	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/15/08 15:30	10/22/08 06:05	7440-36-0	
Arsenic	**7.9**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 06:05	7440-38-2	
Barium	**19.4**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 06:05	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/15/08 15:30	10/22/08 06:05	7440-41-7	
Boron	**33.0**	ug/L	5.0	1.1	1	10/15/08 15:30	10/22/08 06:05	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/15/08 15:30	10/22/08 06:05	7440-43-9	
Calcium	**12000**	ug/L	250	62.6	1	10/15/08 15:30	10/22/08 06:05	7440-70-2	
Chromium	**1.4**	ug/L	1.0	0.30	1	10/15/08 15:30	10/22/08 06:05	7440-47-3	
Cobalt	**0.30J**	ug/L	1.0	0.077	1	10/15/08 15:30	10/22/08 06:05	7440-48-4	
Copper	**1.1**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 06:05	7440-50-8	
Iron	**5050**	ug/L	250	5.0	1	10/15/08 15:30	10/22/08 06:05	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 06:05	7439-92-1	
Lithium	**4.5**	ug/L	1.0	0.13	1	10/15/08 15:30	10/22/08 06:05	7439-93-2	
Magnesium	**6400**	ug/L	250	6.1	1	10/15/08 15:30	10/22/08 06:05	7439-95-4	
Manganese	**2180**	ug/L	1.0	0.24	1	10/15/08 15:30	10/22/08 06:05	7439-96-5	
Molybdenum	**5.3**	ug/L	1.0	0.064	1	10/15/08 15:30	10/22/08 06:05	7439-98-7	
Nickel	**1.1**	ug/L	1.0	0.15	1	10/15/08 15:30	10/22/08 06:05	7440-02-0	
Potassium	**2730**	ug/L	250	78.3	1	10/15/08 15:30	10/22/08 06:05	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/15/08 15:30	10/22/08 06:05	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/15/08 15:30	10/22/08 06:05	7440-22-4	
Sodium	**761**	ug/L	250	51.2	1	10/15/08 15:30	10/22/08 22:55	7440-23-5	
Thallium	**0.086J**	ug/L	1.0	0.019	1	10/15/08 15:30	10/22/08 22:55	7440-28-0	B
Total Hardness	**56.2**	mg/L	5.0	0.15	1	10/15/08 15:30	10/22/08 06:05		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/15/08 15:30	10/22/08 06:05	7440-62-2	
Zinc	**3.5J**	ug/L	5.0	1.7	1	10/15/08 15:30	10/22/08 06:05	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**62.6**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Total as CaCO3	**62.6**	mg/L	10.0	3.2	1		10/22/08 15:54		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/17/08 08:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 02:17	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/15/08 09:50	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		10/15/08 02:17	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		10/15/08 02:17	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: P-602 **Lab ID: 4010225004** Collected: 10/13/08 11:52 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**2.2J**	mg/L	4.0	0.51	1		10/15/08 02:17	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:21	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:14	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: MW-606 **Lab ID: 4010225005** Collected: 10/13/08 13:53 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.349J**	ng/L	0.50	0.16	1	10/16/08 08:00	10/21/08 07:33	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**36.4J**	ug/L	250	4.5	1	10/15/08 15:30	10/22/08 06:11	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/15/08 15:30	10/22/08 06:11	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 06:11	7440-38-2	
Barium	**12.9**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 06:11	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/15/08 15:30	10/22/08 06:11	7440-41-7	
Boron	**26.0**	ug/L	5.0	1.1	1	10/15/08 15:30	10/22/08 06:11	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/15/08 15:30	10/22/08 06:11	7440-43-9	
Calcium	**9110**	ug/L	250	62.6	1	10/15/08 15:30	10/22/08 06:11	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/15/08 15:30	10/22/08 06:11	7440-47-3	
Cobalt	**0.11J**	ug/L	1.0	0.077	1	10/15/08 15:30	10/22/08 06:11	7440-48-4	
Copper	**1.1**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 06:11	7440-50-8	
Iron	**129J**	ug/L	250	5.0	1	10/15/08 15:30	10/22/08 06:11	7439-89-6	B
Lead	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 06:11	7439-92-1	
Lithium	**3.7**	ug/L	1.0	0.13	1	10/15/08 15:30	10/22/08 06:11	7439-93-2	
Magnesium	**8010**	ug/L	250	6.1	1	10/15/08 15:30	10/22/08 06:11	7439-95-4	
Manganese	**422**	ug/L	1.0	0.24	1	10/15/08 15:30	10/22/08 06:11	7439-96-5	
Molybdenum	**16.8**	ug/L	1.0	0.064	1	10/15/08 15:30	10/22/08 06:11	7439-98-7	
Nickel	**3.2**	ug/L	1.0	0.15	1	10/15/08 15:30	10/22/08 06:11	7440-02-0	
Potassium	**2650**	ug/L	250	78.3	1	10/15/08 15:30	10/22/08 06:11	7440-09-7	
Selenium	**12.6**	ug/L	1.0	0.25	1	10/15/08 15:30	10/22/08 06:11	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/15/08 15:30	10/22/08 06:11	7440-22-4	
Sodium	**357**	ug/L	250	51.2	1	10/15/08 15:30	10/22/08 23:12	7440-23-5	
Thallium	**0.12J**	ug/L	1.0	0.019	1	10/15/08 15:30	10/22/08 23:12	7440-28-0	B
Total Hardness	**55.7**	mg/L	5.0	0.15	1	10/15/08 15:30	10/22/08 06:11		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/15/08 15:30	10/22/08 06:11	7440-62-2	
Zinc	**4.8J**	ug/L	5.0	1.7	1	10/15/08 15:30	10/22/08 06:11	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**34.6**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Total as CaCO3	**34.6**	mg/L	10.0	3.2	1		10/22/08 15:54		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.29J**	mg/L	0.40	0.085	1		10/15/08 02:31	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/15/08 10:33	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.4J**	mg/L	5.0	1.1	1		10/15/08 02:31	16887-00-6	
Fluoride	**0.38J**	mg/L	0.50	0.059	1		10/15/08 02:31	16984-48-8	
Sulfate	**22.9**	mg/L	4.0	0.51	1		10/15/08 02:31	14808-79-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: MW-606 **Lab ID: 4010225005** Collected: 10/13/08 13:53 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:25	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:17	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: MW-603 **Lab ID: 4010225006** Collected: 10/13/08 15:04 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.197J**	ng/L	0.50	0.16	1	10/16/08 08:00	10/21/08 07:37	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**15.4J**	ug/L	250	4.5	1	10/15/08 15:30	10/22/08 06:17	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/15/08 15:30	10/22/08 06:17	7440-36-0	
Arsenic	**2.0**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 06:17	7440-38-2	
Barium	**8.5**	ug/L	1.0	0.17	1	10/15/08 15:30	10/22/08 06:17	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/15/08 15:30	10/22/08 06:17	7440-41-7	
Boron	**31.3**	ug/L	5.0	1.1	1	10/15/08 15:30	10/22/08 06:17	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/15/08 15:30	10/22/08 06:17	7440-43-9	
Calcium	**7170**	ug/L	250	62.6	1	10/15/08 15:30	10/22/08 06:17	7440-70-2	
Chromium	**0.41J**	ug/L	1.0	0.30	1	10/15/08 15:30	10/22/08 06:17	7440-47-3	
Cobalt	**9.0**	ug/L	1.0	0.077	1	10/15/08 15:30	10/22/08 06:17	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 06:17	7440-50-8	
Iron	**1890**	ug/L	250	5.0	1	10/15/08 15:30	10/22/08 06:17	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/15/08 15:30	10/22/08 06:17	7439-92-1	
Lithium	**8.9**	ug/L	1.0	0.13	1	10/15/08 15:30	10/22/08 06:17	7439-93-2	
Magnesium	**5860**	ug/L	250	6.1	1	10/15/08 15:30	10/22/08 06:17	7439-95-4	
Manganese	**1670**	ug/L	1.0	0.24	1	10/15/08 15:30	10/22/08 06:17	7439-96-5	
Molybdenum	**2.1**	ug/L	1.0	0.064	1	10/15/08 15:30	10/22/08 06:17	7439-98-7	
Nickel	**91.1**	ug/L	1.0	0.15	1	10/15/08 15:30	10/22/08 06:17	7440-02-0	
Potassium	**2280**	ug/L	250	78.3	1	10/15/08 15:30	10/22/08 06:17	7440-09-7	
Selenium	**1.6**	ug/L	1.0	0.25	1	10/15/08 15:30	10/22/08 06:17	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/15/08 15:30	10/22/08 06:17	7440-22-4	
Sodium	**433**	ug/L	250	51.2	1	10/15/08 15:30	10/22/08 23:18	7440-23-5	
Thallium	**0.088J**	ug/L	1.0	0.019	1	10/15/08 15:30	10/22/08 23:18	7440-28-0	B
Total Hardness	**42.0**	mg/L	5.0	0.15	1	10/15/08 15:30	10/22/08 06:17		
Vanadium	**0.75J**	ug/L	1.0	0.45	1	10/15/08 15:30	10/22/08 06:17	7440-62-2	
Zinc	**6.3**	ug/L	5.0	1.7	1	10/15/08 15:30	10/22/08 06:17	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**19.4**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/22/08 15:54		
Alkalinity, Total as CaCO3	**19.4**	mg/L	10.0	3.2	1		10/22/08 15:54		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/17/08 08:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 02:45	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/15/08 10:47	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.5J**	mg/L	5.0	1.1	1		10/15/08 02:45	16887-00-6	
Fluoride	**0.53**	mg/L	0.50	0.059	1		10/15/08 02:45	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Sample: MW-603 **Lab ID: 4010225006** Collected: 10/13/08 15:04 Received: 10/14/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**24.4**	mg/L	4.0	0.51	1		10/15/08 02:45	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:26	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:18	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: MPRP/1855 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 89515 Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<4.5	250	10/22/08 03:33	
Antimony	ug/L	<0.071	1.0	10/22/08 03:33	
Arsenic	ug/L	<0.17	1.0	10/22/08 03:33	
Barium	ug/L	0.36J	1.0	10/22/08 03:33	
Beryllium	ug/L	<0.41	1.0	10/22/08 03:33	
Boron	ug/L	<1.1	5.0	10/22/08 03:33	
Cadmium	ug/L	<0.087	1.0	10/22/08 03:33	
Calcium	ug/L	<62.6	250	10/22/08 03:33	
Chromium	ug/L	<0.30	1.0	10/22/08 03:33	
Cobalt	ug/L	<0.077	1.0	10/22/08 03:33	
Copper	ug/L	<0.50	1.0	10/22/08 03:33	
Iron	ug/L	15.1J	250	10/22/08 03:33	
Lead	ug/L	<0.50	1.0	10/22/08 03:33	
Lithium	ug/L	<0.13	1.0	10/22/08 03:33	
Magnesium	ug/L	<6.1	250	10/22/08 03:33	
Manganese	ug/L	<0.24	1.0	10/22/08 03:33	
Molybdenum	ug/L	0.068J	1.0	10/22/08 03:33	
Nickel	ug/L	<0.15	1.0	10/22/08 03:33	
Potassium	ug/L	<78.3	250	10/22/08 03:33	
Selenium	ug/L	<0.25	1.0	10/22/08 03:33	
Silver	ug/L	<0.25	0.50	10/22/08 03:33	
Sodium	ug/L	<51.2	250	10/22/08 21:09	
Thallium	ug/L	0.11J	1.0	10/22/08 21:09	
Vanadium	ug/L	<0.45	1.0	10/22/08 03:33	
Zinc	ug/L	4.4J	5.0	10/22/08 03:33	

LABORATORY CONTROL SAMPLE: 89516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	5020	100	75-125	
Antimony	ug/L	500	488	98	75-125	
Arsenic	ug/L	500	491	98	75-125	
Barium	ug/L	500	481	96	75-125	
Beryllium	ug/L	500	494	99	75-125	
Boron	ug/L	500	488	98	75-125	
Cadmium	ug/L	500	497	99	75-125	
Calcium	ug/L	5000	4940	99	75-125	
Chromium	ug/L	500	493	99	75-125	
Cobalt	ug/L	500	494	99	75-125	
Copper	ug/L	500	491	98	75-125	
Iron	ug/L	5000	5040	101	75-125	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

LABORATORY CONTROL SAMPLE: 89516

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	500	475	95	75-125	
Lithium	ug/L	500	493	99	75-125	
Magnesium	ug/L	5000	5090	102	75-125	
Manganese	ug/L	500	493	99	75-125	
Molybdenum	ug/L	500	479	96	75-125	
Nickel	ug/L	500	508	102	75-125	
Potassium	ug/L	5000	5130	103	75-125	
Selenium	ug/L	500	499	100	75-125	
Silver	ug/L	250	247	99	75-125	
Sodium	ug/L	5000	5210	104	75-125	
Thallium	ug/L	500	475	95	75-125	
Vanadium	ug/L	500	480	96	75-125	
Zinc	ug/L	500	502	100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 89517 89518

Parameter	Units	4010120002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	<4.5	5000	5000	4930	4740	99	95	75-125	4	20	
Antimony	ug/L	0.16J	500	500	491	475	98	95	75-125	3	20	
Arsenic	ug/L	7.1	500	500	502	486	99	96	75-125	3	20	
Barium	ug/L	41.0	500	500	515	499	95	92	75-125	3	20	
Beryllium	ug/L	<0.41	500	500	487	469	97	94	75-125	4	20	
Boron	ug/L	54.9	500	500	544	521	98	93	75-125	4	20	
Cadmium	ug/L	<0.087	500	500	491	478	98	96	75-125	3	20	
Calcium	ug/L	42000	5000	5000	45300	43700	66	34	75-125	4	20	P6
Chromium	ug/L	0.39J	500	500	497	480	99	96	75-125	4	20	
Cobalt	ug/L	6.2	500	500	488	478	96	94	75-125	2	20	
Copper	ug/L	<0.50	500	500	475	461	95	92	75-125	3	20	
Iron	ug/L	6960	5000	5000	11800	11400	97	88	75-125	4	20	
Lead	ug/L	<0.50	500	500	473	459	95	92	75-125	3	20	
Lithium	ug/L	2.6	500	500	491	475	98	94	75-125	3	20	
Magnesium	ug/L	20100	5000	5000	24400	23500	86	68	75-125	4	20	P6
Manganese	ug/L	1250	500	500	1690	1640	90	79	75-125	3	20	
Molybdenum	ug/L	1.3	500	500	482	466	96	93	75-125	3	20	
Nickel	ug/L	16.9	500	500	508	495	98	96	75-125	2	20	
Potassium	ug/L	4210	5000	5000	9220	8920	100	94	75-125	3	20	
Selenium	ug/L	0.27J	500	500	499	481	100	96	75-125	4	20	
Silver	ug/L	<0.25	250	250	241	234	96	94	75-125	3	20	
Sodium	ug/L	6980	5000	5000	11600	11300	92	86	75-125	3	20	
Thallium	ug/L	0.91J	500	500	484	469	97	94	75-125	3	20	
Vanadium	ug/L	<0.45	500	500	484	469	97	94	75-125	3	20	
Zinc	ug/L	5.0	500	500	495	480	98	95	75-125	3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WETA/2540 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 90174 — Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	10/14/08 20:51	
Nitrite as N	mg/L	<0.036	0.10	10/15/08 04:53	

LABORATORY CONTROL SAMPLE: 90175

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	97	90-110	
Nitrite as N	mg/L	.8	0.77	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90176 90177

Parameter	Units	4010225001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.5	1.5	96	96	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.74	0.72	92	90	90-110	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90178 90179

Parameter	Units	4010225003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.5	1.5	96	96	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.71	0.70	89	88	90-110	1	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WETA/2541 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 90180 Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.1	5.0	10/14/08 20:51	
Fluoride	mg/L	<0.059	0.50	10/14/08 20:51	
Sulfate	mg/L	<0.51	4.0	10/14/08 20:51	

LABORATORY CONTROL SAMPLE: 90181

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.7	93	90-110	
Fluoride	mg/L	2	2.0	99	90-110	
Sulfate	mg/L	16	15.2	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90182 90183

Parameter	Units	4010225001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.4J	20	20	18.7	18.9	82	83	90-110	1	20	M0
Fluoride	mg/L	0.48J	2	2	2.4	2.4	95	95	90-110	0	20	
Sulfate	mg/L	52.2	16	16	68.9	69.4	104	108	90-110	.8	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90184 90185

Parameter	Units	4010225003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.5J	20	20	18.9	18.8	82	82	90-110	.2	20	M0
Fluoride	mg/L	0.47J	2	2	2.4	2.4	94	94	90-110	.4	20	
Sulfate	mg/L	51.3	16	16	68.2	68.1	106	105	90-110	.1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WET/2449 — Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) — Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010225001, 4010225002, 4010225003

METHOD BLANK: 90653 — Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/17/08 08:30	

LABORATORY CONTROL SAMPLE: 90654

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	47.6	38.4	81	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90655 90656

Parameter	Units	4010168017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	5.0 U	47.6	47.6	37.6	37.2	78	77	80-120	1	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WET/2450 — Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) — Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010225004, 4010225006

METHOD BLANK: 90665 — Matrix: Water
Associated Lab Samples: 4010225004, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/17/08 08:30	

LABORATORY CONTROL SAMPLE: 90666

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	47.6	38.8	82	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90667 90668

Parameter	Units	4010263001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	5.0 U	47.6	47.6	41.2	39.2	85	81	80-120	5	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: CVFS/1278 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 91865 Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.267J	0.50	10/21/08 07:02	

METHOD BLANK: 91866 Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.163J	0.50	10/21/08 06:12	

METHOD BLANK: 91867 Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	<0.16	0.50	10/21/08 06:20	

LABORATORY CONTROL SAMPLE & LCSD: 91868 91869

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.34	5.13	107	103	79-121	4	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91870 91871

Parameter	Units	9229806012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	18.4	90	90	116	106	109	97	75-125	9	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91872 91873

Parameter	Units	9229868003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.03	5	5	6.62	6.16	112	102	75-125	7	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WETA/2575
QC Batch Method: EPA 335.4
Analysis Method: EPA 335.4
Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010225001, 4010225002

METHOD BLANK: 92364
Matrix: Water
Associated Lab Samples: 4010225001, 4010225002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	10/22/08 14:52	

LABORATORY CONTROL SAMPLE: 92365

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.098	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92366 92367

Parameter	Units	4010099005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.036	.6	.6	0.62	0.58	104	96	90-110	8	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92368 92369

Parameter	Units	4010225001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.098	101	98	90-110	3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WETA/2576 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 92370 Matrix: Water
Associated Lab Samples: 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	10/22/08 15:19	

LABORATORY CONTROL SAMPLE: 92371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.099	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92372 92373

Parameter	Units	4010287003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.099	0.10	98	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92374 92375

Parameter	Units	4010354002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	102	103	90-110	.6	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WET/2481 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 92604 Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/22/08 15:45	

LABORATORY CONTROL SAMPLE: 92605

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	486	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92606 92607

Parameter	Units	4010120002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	97.2	500	500	583	590	97	98	80-120	1	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

QC Batch: WETA/2629 — Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 — Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

METHOD BLANK: 94534 — Matrix: Water
Associated Lab Samples: 4010225001, 4010225002, 4010225003, 4010225004, 4010225005, 4010225006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/28/08 15:07	

LABORATORY CONTROL SAMPLE: 94535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94536 94537

Parameter	Units	4010225006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10	9.7	100	97	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94538 94539

Parameter	Units	4010287007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.1	10.0	100	99	90-110	.9	20	

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QUALIFIERS

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010225001	DUP-001	EPA 3010	MPRP/1855	EPA 6020	ICPM/1203
4010225002	FBK-001	EPA 3010	MPRP/1855	EPA 6020	ICPM/1203
4010225003	MW-602	EPA 3010	MPRP/1855	EPA 6020	ICPM/1203
4010225004	P-602	EPA 3010	MPRP/1855	EPA 6020	ICPM/1203
4010225005	MW-606	EPA 3010	MPRP/1855	EPA 6020	ICPM/1203
4010225006	MW-603	EPA 3010	MPRP/1855	EPA 6020	ICPM/1203
4010225001	DUP-001	EPA 300.0	WETA/2540		
4010225002	FBK-001	EPA 300.0	WETA/2540		
4010225003	MW-602	EPA 300.0	WETA/2540		
4010225004	P-602	EPA 300.0	WETA/2540		
4010225005	MW-606	EPA 300.0	WETA/2540		
4010225006	MW-603	EPA 300.0	WETA/2540		
4010225001	DUP-001	EPA 300.0	WETA/2541		
4010225002	FBK-001	EPA 300.0	WETA/2541		
4010225003	MW-602	EPA 300.0	WETA/2541		
4010225004	P-602	EPA 300.0	WETA/2541		
4010225005	MW-606	EPA 300.0	WETA/2541		
4010225006	MW-603	EPA 300.0	WETA/2541		
4010225001	DUP-001	SM 4500-S F (2000)	WET/2449		
4010225002	FBK-001	SM 4500-S F (2000)	WET/2449		
4010225003	MW-602	SM 4500-S F (2000)	WET/2449		
4010225004	P-602	SM 4500-S F (2000)	WET/2450		
4010225006	MW-603	SM 4500-S F (2000)	WET/2450		
4010225001	DUP-001	EPA 1631E	CVFS/1278	EPA 1631E	CVFS/1279
4010225002	FBK-001	EPA 1631E	CVFS/1278	EPA 1631E	CVFS/1279
4010225003	MW-602	EPA 1631E	CVFS/1278	EPA 1631E	CVFS/1279
4010225004	P-602	EPA 1631E	CVFS/1278	EPA 1631E	CVFS/1279
4010225005	MW-606	EPA 1631E	CVFS/1278	EPA 1631E	CVFS/1279
4010225006	MW-603	EPA 1631E	CVFS/1278	EPA 1631E	CVFS/1279
4010225001	DUP-001	EPA 335.4	WETA/2575		
4010225002	FBK-001	EPA 335.4	WETA/2575		
4010225003	MW-602	EPA 335.4	WETA/2576		
4010225004	P-602	EPA 335.4	WETA/2576		
4010225005	MW-606	EPA 335.4	WETA/2576		
4010225006	MW-603	EPA 335.4	WETA/2576		
4010225001	DUP-001	SM 2320B	WET/2481		
4010225002	FBK-001	SM 2320B	WET/2481		
4010225003	MW-602	SM 2320B	WET/2481		
4010225004	P-602	SM 2320B	WET/2481		
4010225005	MW-606	SM 2320B	WET/2481		
4010225006	MW-603	SM 2320B	WET/2481		
4010225001	DUP-001	EPA 350.1	WETA/2629		
4010225002	FBK-001	EPA 350.1	WETA/2629		
4010225003	MW-602	EPA 350.1	WETA/2629		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL, MI GROUNDWATER
Pace Project No.: 4010225

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010225004	**P-602**	EPA 350.1	WETA/2629		
4010225005	**MW-606**	EPA 350.1	WETA/2629		
4010225006	**MW-603**	EPA 350.1	WETA/2629		

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Client Name: NORTH JACKSON Project # 4010225

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

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

Cooler Temperature 2° **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10/14/08

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. NITRATE
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed ✓ / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10/14/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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

20081013

Page: 1 of 1

Section A
Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	~~All data FOTH by 7/31/08.~~

Section B
Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI GROUNDWATER
Project Number:	

Section C
Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D
Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH Zn Ac	Analysis Test (Y/N)	Alk2, Cl, Fl, SO4,	NITRITE, NITRATE SEPARATELY	CYANIDE	METALS	ILHG	SULFIDE	LITHIUM	AMMONIA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DUP-001 GW 001	WT	G			10/13/08	--	--	8	3	1	2		1			1		1	1	1	1	1	1	1		N	4010225 3-500mL G, D, G, 5-250mL 2A,
2	FBK-001 GW 002	WT	G			10/13/08	1245	--	8	3	1	2		1			1		1	1	1	1	1	1	1		N	
3	MW-602 GW 003	WT	G			10/13/08	1229	11	8	3	1	2		1			1		1	1	1	1	1	1	1		N	
4	P-602 GW 004	WT	G			10/13/08	1152	9.9	8	3	1	2		1			1		1	1	1	1	1	1	1		N	
5	MW-606 GW 005	WT	G			10/13/08	1353	12	7	3	1	2		1			0		1	1	1	1	0	1	1		N	(-) 1-500mL G
6	MW-603 GW 006	WT	G			10/13/08	1504	11	8	3	1	2		1			1		1	1	1	1	1	1	1		N	
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / NJC	10/13/08	1800							
	Fedex	10/14/08	1030	[signature]	10/14/08	1030	2	Y	N	Y

FED EX 7993 9290 0903
7927 6884 7782

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Curt Sheffield

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/13/08

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

Batch No. 4010287

Pace Analytical Services, Inc.
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November 04, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

for Tod N.

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Green Bay Certification IDs

Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Carolina Certification #: 503
North Dakota Certification #: R-200
North Dakota Certification #: R-150
New York Certification #: 11888
New York Certification #: 11887
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87951
Florida (NELAP) Certification #: E87948

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SAMPLE SUMMARY

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4010287001	DUP-002	Water	10/14/08 00:00	10/15/08 09:45
4010287002	FBK-002	Water	10/14/08 09:59	10/15/08 09:45
4010287003	MW-605	Water	10/14/08 10:49	10/15/08 09:45
4010287004	P-605	Water	10/14/08 09:43	10/15/08 09:45
4010287005	KMW-10	Water	10/14/08 13:16	10/15/08 09:45
4010287006	MW-604	Water	10/14/08 13:04	10/15/08 09:45
4010287007	P-604	Water	10/14/08 12:24	10/15/08 09:45
4010287008	KMW-3	Water	10/14/08 13:55	10/15/08 09:45
4010287009	MW-11	Water	10/14/08 14:18	10/15/08 09:45
4010287010	KMW-4	Water	10/14/08 14:45	10/15/08 09:45
4010287011	MW-101	Water	10/14/08 15:13	10/15/08 09:45

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4010287001	DUP-002	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010287002	FBK-002	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010287003	MW-605	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010287004	P-605	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010287005	KMW-10	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010287006	MW-604	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010287007	P-604	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010287008	KMW-3	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010287009	MW-11	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010287010	KMW-4	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010287011	MW-101	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
6 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/2463

1j: This sample was received with insufficient preservation. Sodium hydroxide was added to the sample in the lab before it was analyzed.

- MW-11 (Lab ID: 4010287009)
  - Sulfide

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: EPA 300.0
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-002 (Lab ID: 4010287001)
- P-605 (Lab ID: 4010287004)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2542

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010287001,4010287003

M0: Matrix spike recovery was outside laboratory control limits.
- MS (Lab ID: 90202)
  - Nitrite as N
- MS (Lab ID: 90204)
  - Nitrite as N
- MSD (Lab ID: 90203)
  - Nitrite as N
- MSD (Lab ID: 90205)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: EPA 300.0
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2543

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010287001,4010287003

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 90212)
  - Chloride
  - Sulfate
- MS (Lab ID: 90214)
  - Chloride
  - Sulfate
- MSD (Lab ID: 90213)
  - Chloride
  - Sulfate
- MSD (Lab ID: 90215)
  - Chloride
  - Sulfate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: EPA 335.4
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 04, 2008

General Information:
11 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: DUP-002 **Lab ID: 4010287001** Collected: 10/14/08 00:00 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.26**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:05	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**5.3J**	ug/L	250	4.5	1	10/17/08 09:10	10/23/08 23:46	7429-90-5	
Antimony	**0.16J**	ug/L	1.0	0.071	1	10/17/08 09:10	10/23/08 23:46	7440-36-0	
Arsenic	**0.79J**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:46	7440-38-2	
Barium	**28.7**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:46	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/23/08 23:46	7440-41-7	
Boron	**47.6**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:00	7440-42-8	
Cadmium	**0.26J**	ug/L	1.0	0.087	1	10/17/08 09:10	10/23/08 23:46	7440-43-9	SD
Calcium	**19700**	ug/L	250	62.6	1	10/17/08 09:10	10/23/08 23:46	7440-70-2	
Chromium	**0.65J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/23/08 23:46	7440-47-3	
Cobalt	**1.4**	ug/L	1.0	0.077	1	10/17/08 09:10	10/23/08 23:46	7440-48-4	SD
Copper	**2.0**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:46	7440-50-8	
Iron	**130J**	ug/L	250	5.0	1	10/17/08 09:10	10/23/08 23:46	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:46	7439-92-1	
Lithium	**2.1**	ug/L	1.0	0.13	1	10/17/08 09:10	10/23/08 23:46	7439-93-2	SD
Magnesium	**10800**	ug/L	250	6.1	1	10/17/08 09:10	10/23/08 23:46	7439-95-4	
Manganese	**4090**	ug/L	1.0	0.24	1	10/17/08 09:10	10/23/08 23:46	7439-96-5	
Molybdenum	**3.8**	ug/L	1.0	0.064	1	10/17/08 09:10	10/23/08 23:46	7439-98-7	
Nickel	**4.0**	ug/L	1.0	0.15	1	10/17/08 09:10	10/23/08 23:46	7440-02-0	
Potassium	**4360**	ug/L	250	78.3	1	10/17/08 09:10	10/23/08 23:46	7440-09-7	
Selenium	**0.38J**	ug/L	1.0	0.25	1	10/17/08 09:10	10/23/08 23:46	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/23/08 23:46	7440-22-4	
Sodium	**888**	ug/L	250	51.2	1	10/17/08 09:10	10/23/08 23:46	7440-23-5	
Thallium	**0.58J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/23/08 23:46	7440-28-0	
Total Hardness	**93.4**	mg/L	5.0	0.15	1	10/17/08 09:10	10/23/08 23:46		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/23/08 23:46	7440-62-2	
Zinc	**4.3J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/23/08 23:46	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**99.4**	mg/L	10.0	3.2	1		10/23/08 13:56		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/23/08 13:56		
Alkalinity, Total as CaCO3	**99.4**	mg/L	10.0	3.2	1		10/23/08 13:56		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 23:03	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 09:12	14797-65-0	H1,M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		10/15/08 23:03	16887-00-6	M0
Fluoride	**0.39J**	mg/L	0.50	0.059	1		10/15/08 23:03	16984-48-8	
Sulfate	**7.6**	mg/L	4.0	0.51	1		10/15/08 23:03	14808-79-8	M0

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: DUP-002 **Lab ID: 4010287001** Collected: 10/14/08 00:00 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:29	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:22	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: FBK-002 **Lab ID: 4010287002** Collected: 10/14/08 09:59 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.224J**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 06:59	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/17/08 09:10	10/23/08 23:41	7429-90-5	
Antimony	**0.36J**	ug/L	1.0	0.071	1	10/17/08 09:10	10/23/08 23:41	7440-36-0	
Arsenic	**0.48J**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:41	7440-38-2	
Barium	**0.33J**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:41	7440-39-3	B
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/23/08 23:41	7440-41-7	
Boron	**1.8J**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 19:53	7440-42-8	
Cadmium	**0.27J**	ug/L	1.0	0.087	1	10/17/08 09:10	10/23/08 23:41	7440-43-9	
Calcium	**<62.6**	ug/L	250	62.6	1	10/17/08 09:10	10/23/08 23:41	7440-70-2	
Chromium	**0.46J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/23/08 23:41	7440-47-3	
Cobalt	**0.27J**	ug/L	1.0	0.077	1	10/17/08 09:10	10/23/08 23:41	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:41	7440-50-8	
Iron	**10.2J**	ug/L	250	5.0	1	10/17/08 09:10	10/23/08 23:41	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:41	7439-92-1	
Lithium	**0.33J**	ug/L	1.0	0.13	1	10/17/08 09:10	10/23/08 23:41	7439-93-2	
Magnesium	**8.1J**	ug/L	250	6.1	1	10/17/08 09:10	10/23/08 23:41	7439-95-4	
Manganese	**2.7**	ug/L	1.0	0.24	1	10/17/08 09:10	10/23/08 23:41	7439-96-5	
Molybdenum	**0.72J**	ug/L	1.0	0.064	1	10/17/08 09:10	10/23/08 23:41	7439-98-7	
Nickel	**0.26J**	ug/L	1.0	0.15	1	10/17/08 09:10	10/23/08 23:41	7440-02-0	
Potassium	**<78.3**	ug/L	250	78.3	1	10/17/08 09:10	10/23/08 23:41	7440-09-7	
Selenium	**0.34J**	ug/L	1.0	0.25	1	10/17/08 09:10	10/23/08 23:41	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/23/08 23:41	7440-22-4	
Sodium	**<51.2**	ug/L	250	51.2	1	10/17/08 09:10	10/23/08 23:41	7440-23-5	
Thallium	**1.2**	ug/L	1.0	0.019	1	10/17/08 09:10	10/23/08 23:41	7440-28-0	
Total Hardness	**<0.15**	mg/L	5.0	0.15	1	10/17/08 09:10	10/23/08 23:41		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/23/08 23:41	7440-62-2	
Zinc	**4.4J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/23/08 23:41	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/23/08 13:56		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/23/08 13:56		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		10/23/08 13:56		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 23:45	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 09:55	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.2J**	mg/L	5.0	1.1	1		10/15/08 23:45	16887-00-6	
Fluoride	**0.19J**	mg/L	0.50	0.059	1		10/15/08 23:45	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: FBK-002 **Lab ID: 4010287002** Collected: 10/14/08 09:59 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<0.51**	mg/L	4.0	0.51	1		10/15/08 23:45	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:30	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:23	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-605 **Lab ID: 4010287003** Collected: 10/14/08 10:49 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.35**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:09	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**5.5J**	ug/L	250	4.5	1	10/17/08 09:10	10/23/08 23:04	7429-90-5	
Antimony	**0.18J**	ug/L	1.0	0.071	1	10/17/08 09:10	10/23/08 23:04	7440-36-0	
Arsenic	**0.67J**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:04	7440-38-2	
Barium	**28.2**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:04	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/23/08 23:04	7440-41-7	
Boron	**49.9**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 19:15	7440-42-8	
Cadmium	**0.29J**	ug/L	1.0	0.087	1	10/17/08 09:10	10/23/08 23:04	7440-43-9	
Calcium	**19300**	ug/L	250	62.6	1	10/17/08 09:10	10/23/08 23:04	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/17/08 09:10	10/23/08 23:04	7440-47-3	
Cobalt	**1.4**	ug/L	1.0	0.077	1	10/17/08 09:10	10/23/08 23:04	7440-48-4	
Copper	**1.9**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:04	7440-50-8	
Iron	**112J**	ug/L	250	5.0	1	10/17/08 09:10	10/23/08 23:04	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:04	7439-92-1	
Lithium	**2.2**	ug/L	1.0	0.13	1	10/17/08 09:10	10/23/08 23:04	7439-93-2	
Magnesium	**10800**	ug/L	250	6.1	1	10/17/08 09:10	10/23/08 23:04	7439-95-4	
Manganese	**4070**	ug/L	1.0	0.24	1	10/17/08 09:10	10/23/08 23:04	7439-96-5	
Molybdenum	**3.9**	ug/L	1.0	0.064	1	10/17/08 09:10	10/23/08 23:04	7439-98-7	
Nickel	**3.7**	ug/L	1.0	0.15	1	10/17/08 09:10	10/23/08 23:04	7440-02-0	
Potassium	**4330**	ug/L	250	78.3	1	10/17/08 09:10	10/23/08 23:04	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/23/08 23:04	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/23/08 23:04	7440-22-4	
Sodium	**886**	ug/L	250	51.2	1	10/17/08 09:10	10/23/08 23:04	7440-23-5	
Thallium	**0.54J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/23/08 23:04	7440-28-0	
Total Hardness	**92.6**	mg/L	5.0	0.15	1	10/17/08 09:10	10/23/08 23:04		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/23/08 23:04	7440-62-2	
Zinc	**4.4J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/23/08 23:04	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**97.2**	mg/L	10.0	3.2	1		10/23/08 13:57		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/23/08 13:57		
Alkalinity, Total as CaCO3	**97.2**	mg/L	10.0	3.2	1		10/23/08 13:57		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/15/08 23:59	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 10:09	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		10/15/08 23:59	16887-00-6	M0
Fluoride	**0.39J**	mg/L	0.50	0.059	1		10/15/08 23:59	16984-48-8	
Sulfate	**7.5**	mg/L	4.0	0.51	1		10/15/08 23:59	14808-79-8	M0

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-605 **Lab ID: 4010287003** Collected: 10/14/08 10:49 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:31	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:23	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: P-605 **Lab ID: 4010287004** Collected: 10/14/08 09:43 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.369J**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:19	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**15.4J**	ug/L	250	4.5	1	10/17/08 09:10	10/23/08 23:58	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/23/08 23:58	7440-36-0	
Arsenic	**8.3**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:58	7440-38-2	
Barium	**27.6**	ug/L	1.0	0.17	1	10/17/08 09:10	10/23/08 23:58	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/23/08 23:58	7440-41-7	
Boron	**48.0**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:12	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/23/08 23:58	7440-43-9	
Calcium	**21600**	ug/L	250	62.6	1	10/17/08 09:10	10/23/08 23:58	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/17/08 09:10	10/23/08 23:58	7440-47-3	
Cobalt	**1.9**	ug/L	1.0	0.077	1	10/17/08 09:10	10/23/08 23:58	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:58	7440-50-8	
Iron	**5520**	ug/L	250	5.0	1	10/17/08 09:10	10/23/08 23:58	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/23/08 23:58	7439-92-1	
Lithium	**1.9**	ug/L	1.0	0.13	1	10/17/08 09:10	10/23/08 23:58	7439-93-2	
Magnesium	**11400**	ug/L	250	6.1	1	10/17/08 09:10	10/23/08 23:58	7439-95-4	
Manganese	**3050**	ug/L	1.0	0.24	1	10/17/08 09:10	10/23/08 23:58	7439-96-5	
Molybdenum	**5.1**	ug/L	1.0	0.064	1	10/17/08 09:10	10/23/08 23:58	7439-98-7	
Nickel	**0.42J**	ug/L	1.0	0.15	1	10/17/08 09:10	10/23/08 23:58	7440-02-0	
Potassium	**4550**	ug/L	250	78.3	1	10/17/08 09:10	10/23/08 23:58	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/23/08 23:58	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/23/08 23:58	7440-22-4	
Sodium	**1220**	ug/L	250	51.2	1	10/17/08 09:10	10/23/08 23:58	7440-23-5	
Thallium	**0.20J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/23/08 23:58	7440-28-0	
Total Hardness	**101**	mg/L	5.0	0.15	1	10/17/08 09:10	10/23/08 23:58		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/23/08 23:58	7440-62-2	
Zinc	**4.2J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/23/08 23:58	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	10.0	3.2	1		10/24/08 15:05		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:05		
Alkalinity, Total as CaCO3	**110**	mg/L	10.0	3.2	1		10/24/08 15:05		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 00:42	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 10:52	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.6J**	mg/L	5.0	1.1	1		10/16/08 00:42	16887-00-6	
Fluoride	**0.43J**	mg/L	0.50	0.059	1		10/16/08 00:42	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: P-605 **Lab ID: 4010287004** Collected: 10/14/08 09:43 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**5.4**	mg/L	4.0	0.51	1		10/16/08 00:42	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:37	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.0**	mg/L	1.0	0.50	1		10/28/08 15:26	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: KMW-10 **Lab ID: 4010287005** Collected: 10/14/08 13:16 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.642**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:23	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**18.3J**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:03	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:03	7440-36-0	
Arsenic	**4.7**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:03	7440-38-2	
Barium	**24.1**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:03	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:03	7440-41-7	
Boron	**49.4**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:19	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:03	7440-43-9	
Calcium	**20800**	ug/L	250	62.6	1	10/17/08 09:10	10/24/08 00:03	7440-70-2	
Chromium	**0.37J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:03	7440-47-3	
Cobalt	**5.0**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:03	7440-48-4	
Copper	**0.83J**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:03	7440-50-8	
Iron	**6430**	ug/L	250	5.0	1	10/17/08 09:10	10/24/08 00:03	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:03	7439-92-1	
Lithium	**1.8**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:03	7439-93-2	
Magnesium	**9930**	ug/L	250	6.1	1	10/17/08 09:10	10/24/08 00:03	7439-95-4	
Manganese	**1870**	ug/L	1.0	0.24	1	10/17/08 09:10	10/24/08 00:03	7439-96-5	
Molybdenum	**2.7**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:03	7439-98-7	
Nickel	**1.4**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:03	7440-02-0	
Potassium	**3490**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:03	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:03	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:03	7440-22-4	
Sodium	**1630**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:03	7440-23-5	
Thallium	**0.13J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:03	7440-28-0	
Total Hardness	**92.8**	mg/L	5.0	0.15	1	10/17/08 09:10	10/24/08 00:03		
Vanadium	**0.96J**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:03	7440-62-2	
Zinc	**3.0J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:03	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**90.7**	mg/L	10.0	3.2	1		10/24/08 15:06		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:06		
Alkalinity, Total as CaCO3	**90.7**	mg/L	10.0	3.2	1		10/24/08 15:06		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 00:56	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 11:06	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.7J**	mg/L	5.0	1.1	1		10/16/08 00:56	16887-00-6	
Fluoride	**0.40J**	mg/L	0.50	0.059	1		10/16/08 00:56	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: KMW-10 **Lab ID: 4010287005** Collected: 10/14/08 13:16 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**10.3**	mg/L	4.0	0.51	1		10/16/08 00:56	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:37	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**15.6**	mg/L	1.0	0.50	1		10/28/08 15:27	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-604 **Lab ID: 4010287006** Collected: 10/14/08 13:04 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.304J**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:28	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**39.4J**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:09	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:09	7440-36-0	
Arsenic	**5.5**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:09	7440-38-2	
Barium	**35.1**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:09	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:09	7440-41-7	
Boron	**53.6**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:25	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:09	7440-43-9	
Calcium	**24400**	ug/L	250	62.6	1	10/17/08 09:10	10/24/08 00:09	7440-70-2	
Chromium	**0.49J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:09	7440-47-3	
Cobalt	**0.70J**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:09	7440-48-4	
Copper	**0.51J**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:09	7440-50-8	
Iron	**15200**	ug/L	250	5.0	1	10/17/08 09:10	10/24/08 00:09	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:09	7439-92-1	
Lithium	**4.3**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:09	7439-93-2	
Magnesium	**10200**	ug/L	250	6.1	1	10/17/08 09:10	10/24/08 00:09	7439-95-4	
Manganese	**1700**	ug/L	1.0	0.24	1	10/17/08 09:10	10/24/08 00:09	7439-96-5	
Molybdenum	**1.8**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:09	7439-98-7	
Nickel	**0.38J**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:09	7440-02-0	
Potassium	**2970**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:09	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:09	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:09	7440-22-4	
Sodium	**1540**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:09	7440-23-5	
Thallium	**0.088J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:09	7440-28-0	
Total Hardness	**103**	mg/L	5.0	0.15	1	10/17/08 09:10	10/24/08 00:09		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:09	7440-62-2	
Zinc	**3.7J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:09	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**112**	mg/L	10.0	3.2	1		10/24/08 15:06		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:06		
Alkalinity, Total as CaCO3	**112**	mg/L	10.0	3.2	1		10/24/08 15:06		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		10/16/08 01:10	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 11:20	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.1J**	mg/L	5.0	1.1	1		10/16/08 01:10	16887-00-6	
Fluoride	**0.37J**	mg/L	0.50	0.059	1		10/16/08 01:10	16984-48-8	
Sulfate	**3.5J**	mg/L	4.0	0.51	1		10/16/08 01:10	14808-79-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-604 **Lab ID: 4010287006** Collected: 10/14/08 13:04 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:38	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:28	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: P-604 **Lab ID: 4010287007** Collected: 10/14/08 12:24 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.332J**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:33	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**5.9J**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:15	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:15	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:15	7440-38-2	
Barium	**8.8**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:15	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:15	7440-41-7	
Boron	**24.7**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:31	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:15	7440-43-9	
Calcium	**25400**	ug/L	250	62.6	1	10/17/08 09:10	10/24/08 00:15	7440-70-2	
Chromium	**0.34J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:15	7440-47-3	
Cobalt	**0.40J**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:15	7440-48-4	
Copper	**0.59J**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:15	7440-50-8	
Iron	**37.1J**	ug/L	250	5.0	1	10/17/08 09:10	10/24/08 00:15	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:15	7439-92-1	
Lithium	**0.34J**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:15	7439-93-2	
Magnesium	**9310**	ug/L	250	6.1	1	10/17/08 09:10	10/24/08 00:15	7439-95-4	
Manganese	**6.5**	ug/L	1.0	0.24	1	10/17/08 09:10	10/24/08 00:15	7439-96-5	
Molybdenum	**1.9**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:15	7439-98-7	
Nickel	**1.0**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:15	7440-02-0	
Potassium	**2140**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:15	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:15	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:15	7440-22-4	
Sodium	**1990**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:15	7440-23-5	
Thallium	**0.068J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:15	7440-28-0	
Total Hardness	**102**	mg/L	5.0	0.15	1	10/17/08 09:10	10/24/08 00:15		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:15	7440-62-2	
Zinc	**4.7J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:15	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**92.9**	mg/L	10.0	3.2	1		10/24/08 15:07		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:07		
Alkalinity, Total as CaCO3	**92.9**	mg/L	10.0	3.2	1		10/24/08 15:07		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 01:53	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 12:03	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.8J**	mg/L	5.0	1.1	1		10/16/08 01:53	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		10/16/08 01:53	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: P-604 **Lab ID: 4010287007** Collected: 10/14/08 12:24 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**10.2**	mg/L	4.0	0.51	1		10/16/08 01:53	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:39	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:29	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: KMW-3 **Lab ID: 4010287008** Collected: 10/14/08 13:55 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.242J**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:42	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**5.4J**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:32	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:32	7440-36-0	
Arsenic	**18.1**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:32	7440-38-2	
Barium	**90.7**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:32	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:32	7440-41-7	
Boron	**42.4**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:38	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:32	7440-43-9	
Calcium	**51100**	ug/L	250	62.6	1	10/17/08 09:10	10/24/08 00:32	7440-70-2	
Chromium	**0.77J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:32	7440-47-3	
Cobalt	**3.2**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:32	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:32	7440-50-8	
Iron	**30000**	ug/L	250	5.0	1	10/17/08 09:10	10/24/08 00:32	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:32	7439-92-1	
Lithium	**2.0**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:32	7439-93-2	
Magnesium	**21700**	ug/L	250	6.1	1	10/17/08 09:10	10/24/08 00:32	7439-95-4	
Manganese	**6060**	ug/L	1.0	0.24	1	10/17/08 09:10	10/24/08 00:32	7439-96-5	
Molybdenum	**0.79J**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:32	7439-98-7	
Nickel	**0.51J**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:32	7440-02-0	
Potassium	**2900**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:32	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:32	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:32	7440-22-4	
Sodium	**3810**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:32	7440-23-5	
Thallium	**0.064J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:32	7440-28-0	
Total Hardness	**217**	mg/L	5.0	0.15	1	10/17/08 09:10	10/24/08 00:32		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:32	7440-62-2	
Zinc	**3.1J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:32	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**82.1**	mg/L	10.0	3.2	1		10/24/08 15:07		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:07		
Alkalinity, Total as CaCO3	**82.1**	mg/L	10.0	3.2	1		10/24/08 15:07		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 02:07	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 12:17	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.1J**	mg/L	5.0	1.1	1		10/16/08 02:07	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		10/16/08 02:07	16984-48-8	
Sulfate	**178**	mg/L	20.0	2.6	5		10/24/08 23:10	14808-79-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: KMW-3 **Lab ID: 4010287008** Collected: 10/14/08 13:55 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:40	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.63J**	mg/L	1.0	0.50	1		10/28/08 15:32	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-11 **Lab ID: 4010287009** Collected: 10/14/08 14:18 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**6.53**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:50	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**904**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:37	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:37	7440-36-0	
Arsenic	**9.7**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:37	7440-38-2	
Barium	**398**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:37	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:37	7440-41-7	
Boron	**25.8J**	ug/L	50.0	10.8	10	10/17/08 09:10	10/24/08 20:44	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:37	7440-43-9	
Calcium	**220000**	ug/L	2500	626	10	10/17/08 09:10	10/24/08 20:44	7440-70-2	
Chromium	**9.4**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:37	7440-47-3	
Cobalt	**10.3**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:37	7440-48-4	
Copper	**1.4**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:37	7440-50-8	
Iron	**245000**	ug/L	2500	49.6	10	10/17/08 09:10	10/24/08 20:44	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:37	7439-92-1	
Lithium	**2.1**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:37	7439-93-2	
Magnesium	**86800**	ug/L	2500	61.0	10	10/17/08 09:10	10/24/08 20:44	7439-95-4	
Manganese	**18300**	ug/L	10.0	2.4	10	10/17/08 09:10	10/24/08 20:44	7439-96-5	
Molybdenum	**0.12J**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:37	7439-98-7	
Nickel	**1.3**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:37	7440-02-0	
Potassium	**14100**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:37	7440-09-7	
Selenium	**1.1**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:37	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:37	7440-22-4	
Sodium	**44700**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:37	7440-23-5	
Thallium	**0.034J**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:37	7440-28-0	
Total Hardness	**907**	mg/L	50.0	1.5	10	10/17/08 09:10	10/24/08 20:44		
Vanadium	**16.5**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:37	7440-62-2	
Zinc	**7.2**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:37	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**445**	mg/L	10.0	3.2	1		10/24/08 15:07		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:07		
Alkalinity, Total as CaCO3	**445**	mg/L	10.0	3.2	1		10/24/08 15:07		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		1j
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 02:21	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 12:31	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**32.5**	mg/L	5.0	1.1	1		10/16/08 02:21	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		10/16/08 02:21	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-11 **Lab ID: 4010287009** Collected: 10/14/08 14:18 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**724**	mg/L	200	25.5	50		10/24/08 23:25	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:40	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**15.3**	mg/L	1.0	0.50	1		10/28/08 15:33	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: KMW-4 **Lab ID: 4010287010** Collected: 10/14/08 14:45 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.574**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 07:55	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**8.6J**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:43	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:43	7440-36-0	
Arsenic	**1.3**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:43	7440-38-2	
Barium	**40.5**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:43	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:43	7440-41-7	
Boron	**53.4**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 20:51	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:43	7440-43-9	
Calcium	**42400**	ug/L	250	62.6	1	10/17/08 09:10	10/24/08 00:43	7440-70-2	
Chromium	**0.58J**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:43	7440-47-3	
Cobalt	**3.4**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:43	7440-48-4	
Copper	**0.89J**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:43	7440-50-8	
Iron	**3460**	ug/L	250	5.0	1	10/17/08 09:10	10/24/08 00:43	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:43	7439-92-1	
Lithium	**0.38J**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:43	7439-93-2	
Magnesium	**15200**	ug/L	250	6.1	1	10/17/08 09:10	10/24/08 00:43	7439-95-4	
Manganese	**4670**	ug/L	1.0	0.24	1	10/17/08 09:10	10/24/08 00:43	7439-96-5	
Molybdenum	**0.65J**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:43	7439-98-7	
Nickel	**5.8**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:43	7440-02-0	
Potassium	**3100**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:43	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:43	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:43	7440-22-4	
Sodium	**3830**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:43	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:43	7440-28-0	
Total Hardness	**168**	mg/L	5.0	0.15	1	10/17/08 09:10	10/24/08 00:43		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:43	7440-62-2	
Zinc	**3.8J**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:43	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**88.6**	mg/L	10.0	3.2	1		10/24/08 15:08		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:08		
Alkalinity, Total as CaCO3	**88.6**	mg/L	10.0	3.2	1		10/24/08 15:08		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 02:35	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 12:45	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.2J**	mg/L	5.0	1.1	1		10/16/08 02:35	16887-00-6	
Fluoride	**0.25J**	mg/L	0.50	0.059	1		10/16/08 02:35	16984-48-8	
Sulfate	**107**	mg/L	20.0	2.6	5		10/24/08 23:39	14808-79-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: KMW-4 **Lab ID: 4010287010** Collected: 10/14/08 14:45 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:41	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:36	7664-41-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-101 **Lab ID: 4010287011** Collected: 10/14/08 15:13 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.15**	ng/L	0.50	0.16	1	10/17/08 06:30	10/24/08 08:05	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**263**	ug/L	250	4.5	1	10/17/08 09:10	10/24/08 00:49	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/17/08 09:10	10/24/08 00:49	7440-36-0	
Arsenic	**27.8**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:49	7440-38-2	
Barium	**77.5**	ug/L	1.0	0.17	1	10/17/08 09:10	10/24/08 00:49	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/17/08 09:10	10/24/08 00:49	7440-41-7	
Boron	**90.9**	ug/L	5.0	1.1	1	10/17/08 09:10	10/24/08 21:10	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/17/08 09:10	10/24/08 00:49	7440-43-9	
Calcium	**33700**	ug/L	250	62.6	1	10/17/08 09:10	10/24/08 00:49	7440-70-2	
Chromium	**1.8**	ug/L	1.0	0.30	1	10/17/08 09:10	10/24/08 00:49	7440-47-3	
Cobalt	**0.37J**	ug/L	1.0	0.077	1	10/17/08 09:10	10/24/08 00:49	7440-48-4	
Copper	**218**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:49	7440-50-8	
Iron	**35200**	ug/L	250	5.0	1	10/17/08 09:10	10/24/08 00:49	7439-89-6	
Lead	**9.9**	ug/L	1.0	0.50	1	10/17/08 09:10	10/24/08 00:49	7439-92-1	
Lithium	**0.83J**	ug/L	1.0	0.13	1	10/17/08 09:10	10/24/08 00:49	7439-93-2	
Magnesium	**8630**	ug/L	250	6.1	1	10/17/08 09:10	10/24/08 00:49	7439-95-4	
Manganese	**6170**	ug/L	1.0	0.24	1	10/17/08 09:10	10/24/08 00:49	7439-96-5	
Molybdenum	**5.7**	ug/L	1.0	0.064	1	10/17/08 09:10	10/24/08 00:49	7439-98-7	
Nickel	**0.85J**	ug/L	1.0	0.15	1	10/17/08 09:10	10/24/08 00:49	7440-02-0	
Potassium	**4130**	ug/L	250	78.3	1	10/17/08 09:10	10/24/08 00:49	7440-09-7	
Selenium	**0.29J**	ug/L	1.0	0.25	1	10/17/08 09:10	10/24/08 00:49	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/17/08 09:10	10/24/08 00:49	7440-22-4	
Sodium	**6920**	ug/L	250	51.2	1	10/17/08 09:10	10/24/08 00:49	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/17/08 09:10	10/24/08 00:49	7440-28-0	
Total Hardness	**120**	mg/L	5.0	0.15	1	10/17/08 09:10	10/24/08 00:49		
Vanadium	**3.4**	ug/L	1.0	0.45	1	10/17/08 09:10	10/24/08 00:49	7440-62-2	
Zinc	**106**	ug/L	5.0	1.7	1	10/17/08 09:10	10/24/08 00:49	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**156**	mg/L	10.0	3.2	1		10/24/08 15:08		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:08		
Alkalinity, Total as CaCO3	**156**	mg/L	10.0	3.2	1		10/24/08 15:08		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/16/08 02:50	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/16/08 12:59	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.5J**	mg/L	5.0	1.1	1		10/16/08 02:50	16887-00-6	
Fluoride	**0.34J**	mg/L	0.50	0.059	1		10/16/08 02:50	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Sample: MW-101 **Lab ID: 4010287011** Collected: 10/14/08 15:13 Received: 10/15/08 09:45 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**1.9J**	mg/L	4.0	0.51	1		10/16/08 02:50	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/22/08 15:42	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.5**	mg/L	1.0	0.50	1		10/28/08 15:37	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WETA/2542 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 90200 — Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	10/15/08 20:12	
Nitrite as N	mg/L	<0.036	0.10	10/16/08 06:22	

LABORATORY CONTROL SAMPLE: 90201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.5	94	90-110	
Nitrite as N	mg/L	.8	0.74	92	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90202 90203

Parameter	Units	4010287001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.5	1.5	96	96	90-110	.7	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.70	0.68	88	85	90-110	3	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90204 90205

Parameter	Units	4010287003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.5	1.5	96	96	90-110	.7	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.71	0.67	89	84	90-110	6	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WETA/2543 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 90210 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.1	5.0	10/15/08 20:12	
Fluoride	mg/L	<0.059	0.50	10/15/08 20:12	
Sulfate	mg/L	<0.51	4.0	10/15/08 20:12	

LABORATORY CONTROL SAMPLE: 90211

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.6	93	90-110	
Fluoride	mg/L	2	1.9	97	90-110	
Sulfate	mg/L	16	15.1	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90212 90213

Parameter	Units	4010287001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6J	20	20	18.9	19.0	82	82	90-110	.3	20	M0
Fluoride	mg/L	0.39J	2	2	2.2	2.3	93	94	90-110	1	20	
Sulfate	mg/L	7.6	16	16	21.8	21.9	89	89	90-110	.4	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90214 90215

Parameter	Units	4010287003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.6J	20	20	18.9	19.1	82	82	90-110	.8	20	M0
Fluoride	mg/L	0.39J	2	2	2.2	2.3	92	94	90-110	.9	20	
Sulfate	mg/L	7.5	16	16	21.6	21.7	88	89	90-110	.5	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: MPRP/1866 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 90370 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<4.5	250	10/23/08 22:29	
Antimony	ug/L	<0.071	1.0	10/23/08 22:29	
Arsenic	ug/L	<0.17	1.0	10/23/08 22:29	
Barium	ug/L	0.28J	1.0	10/23/08 22:29	
Beryllium	ug/L	<0.41	1.0	10/23/08 22:29	
Boron	ug/L	<1.1	5.0	10/24/08 19:02	
Cadmium	ug/L	<0.087	1.0	10/23/08 22:29	
Calcium	ug/L	<62.6	250	10/23/08 22:29	
Chromium	ug/L	<0.30	1.0	10/23/08 22:29	
Cobalt	ug/L	<0.077	1.0	10/23/08 22:29	
Copper	ug/L	<0.50	1.0	10/23/08 22:29	
Iron	ug/L	<5.0	250	10/23/08 22:29	
Lead	ug/L	<0.50	1.0	10/23/08 22:29	
Lithium	ug/L	<0.13	1.0	10/23/08 22:29	
Magnesium	ug/L	<6.1	250	10/23/08 22:29	
Manganese	ug/L	<0.24	1.0	10/23/08 22:29	
Molybdenum	ug/L	<0.064	1.0	10/23/08 22:29	
Nickel	ug/L	<0.15	1.0	10/23/08 22:29	
Potassium	ug/L	<78.3	250	10/23/08 22:29	
Selenium	ug/L	<0.25	1.0	10/23/08 22:29	
Silver	ug/L	<0.25	0.50	10/23/08 22:29	
Sodium	ug/L	<51.2	250	10/23/08 22:29	
Thallium	ug/L	<0.019	1.0	10/23/08 22:29	
Total Hardness	mg/L	<0.15	5.0	10/23/08 22:29	
Vanadium	ug/L	<0.45	1.0	10/23/08 22:29	
Zinc	ug/L	3.5J	5.0	10/23/08 22:29	

LABORATORY CONTROL SAMPLE: 90371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4980	100	75-125	
Antimony	ug/L	500	492	98	75-125	
Arsenic	ug/L	500	515	103	75-125	
Barium	ug/L	500	480	96	75-125	
Beryllium	ug/L	500	490	98	75-125	
Boron	ug/L	500	485	97	75-125	
Cadmium	ug/L	500	488	98	75-125	
Calcium	ug/L	5000	5130	103	75-125	
Chromium	ug/L	500	496	99	75-125	
Cobalt	ug/L	500	485	97	75-125	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

LABORATORY CONTROL SAMPLE: 90371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	500	504	101	75-125	
Iron	ug/L	5000	5000	100	75-125	
Lead	ug/L	500	492	98	75-125	
Lithium	ug/L	500	490	98	75-125	
Magnesium	ug/L	5000	5030	101	75-125	
Manganese	ug/L	500	486	97	75-125	
Molybdenum	ug/L	500	482	96	75-125	
Nickel	ug/L	500	494	99	75-125	
Potassium	ug/L	5000	4930	99	75-125	
Selenium	ug/L	500	514	103	75-125	
Silver	ug/L	250	245	98	75-125	
Sodium	ug/L	5000	5100	102	75-125	
Thallium	ug/L	500	479	96	75-125	
Vanadium	ug/L	500	488	98	75-125	
Zinc	ug/L	500	503	101	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90372 90373

Parameter	Units	4010287003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	5.5J	5000	5000	5040	4980	101	100	75-125	1	20	
Antimony	ug/L	0.18J	500	500	505	501	101	100	75-125	.8	20	
Arsenic	ug/L	0.67J	500	500	523	514	104	103	75-125	2	20	
Barium	ug/L	28.2	500	500	518	515	98	97	75-125	.6	20	
Beryllium	ug/L	<0.41	500	500	498	497	100	99	75-125	.3	20	
Boron	ug/L	49.9	500	500	540	544	98	99	75-125	.6	20	
Cadmium	ug/L	0.29J	500	500	495	490	99	98	75-125	1	20	
Calcium	ug/L	19300	5000	5000	24600	24500	106	104	75-125	.3	20	
Chromium	ug/L	<0.30	500	500	505	501	101	100	75-125	.8	20	
Cobalt	ug/L	1.4	500	500	491	483	98	96	75-125	1	20	
Copper	ug/L	1.9	500	500	502	495	100	99	75-125	2	20	
Iron	ug/L	112J	5000	5000	5200	5290	102	104	75-125	2	20	
Lead	ug/L	<0.50	500	500	501	497	100	99	75-125	.9	20	
Lithium	ug/L	2.2	500	500	502	503	100	100	75-125	.3	20	
Magnesium	ug/L	10800	5000	5000	15800	15700	99	99	75-125	.1	20	
Manganese	ug/L	4070	500	500	4580	4520	102	90	75-125	1	20	
Molybdenum	ug/L	3.9	500	500	498	493	99	98	75-125	1	20	
Nickel	ug/L	3.7	500	500	499	492	99	98	75-125	1	20	
Potassium	ug/L	4330	5000	5000	9480	9370	103	101	75-125	1	20	
Selenium	ug/L	<0.25	500	500	519	515	104	103	75-125	.7	20	
Silver	ug/L	<0.25	250	250	247	244	99	98	75-125	1	20	
Sodium	ug/L	886	5000	5000	6100	6080	104	104	75-125	.2	20	
Thallium	ug/L	0.54J	500	500	485	484	97	97	75-125	.3	20	
Total Hardness	mg/L	92.6			126	126				.2	20	
Vanadium	ug/L	<0.45	500	500	499	492	100	98	75-125	1	20	
Zinc	ug/L	4.4J	500	500	503	500	100	99	75-125	.6	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WET/2463 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010287002, 4010287004, 4010287005, 4010287007, 4010287009, 4010287011

METHOD BLANK: 91556 Matrix: Water
Associated Lab Samples: 4010287002, 4010287004, 4010287005, 4010287007, 4010287009, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/20/08 09:30	

LABORATORY CONTROL SAMPLE: 91557

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	47.2	39.6	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91558 91559

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	5.0 U	47.2	47.2	40.4	40.8	84	85	80-120	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WETA/2576 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 92370 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	10/22/08 15:19	

LABORATORY CONTROL SAMPLE: 92371

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.099	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92372 92373

Parameter	Units	4010287003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.099	0.10	98	99	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92374 92375

Parameter	Units	4010354002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.10	0.10	102	103	90-110	.6	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WET/2490 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010287001, 4010287002, 4010287003

METHOD BLANK: 93049 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/23/08 13:51	

LABORATORY CONTROL SAMPLE: 93050

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	497	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93051 93052

Parameter	Units	4010169014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	324	500	500	819	825	99	100	80-120	.8	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: CVFS/1286 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 93428 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.351J	0.50	10/24/08 06:35	

METHOD BLANK: 93429 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.186J	0.50	10/24/08 06:40	

METHOD BLANK: 93430 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.382J	0.50	10/24/08 06:46	

LABORATORY CONTROL SAMPLE & LCSD: 93431 93432

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.48	5.57	110	111	79-121	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93433 93434

Parameter	Units	4010287001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.26	5	5	6.74	6.66	110	108	75-125	1	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93435 93436

Parameter	Units	4010287003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.35	5	5	6.38	6.55	101	104	75-125	3	24	

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1241 Bellevue Street
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WET/2500 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 93787 Matrix: Water
Associated Lab Samples: 4010287004, 4010287005, 4010287006, 4010287007, 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/24/08 15:02	

LABORATORY CONTROL SAMPLE: 93788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	497	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93789 93790

Parameter	Units	4010287004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	110	500	500	605	611	99	100	80-120	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WETA/2629 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007

METHOD BLANK: 94534 Matrix: Water
Associated Lab Samples: 4010287001, 4010287002, 4010287003, 4010287004, 4010287005, 4010287006, 4010287007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/28/08 15:07	

LABORATORY CONTROL SAMPLE: 94535

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94536 94537

Parameter	Units	4010225006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10	9.7	100	97	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94538 94539

Parameter	Units	4010287007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.1	10.0	100	99	90-110	.9	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

QC Batch: WETA/2630 — Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 — Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010287008, 4010287009, 4010287010, 4010287011

METHOD BLANK: 94542 — Matrix: Water
Associated Lab Samples: 4010287008, 4010287009, 4010287010, 4010287011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/28/08 15:31	

LABORATORY CONTROL SAMPLE: 94543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94544 94545

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.0 U	10	10	10	9.1	100	91	90-110	9	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94546 94547

Parameter	Units	4010358003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.57J	10	10	10.6	10.3	100	98	90-110	2	20	

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QUALIFIERS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

1j	This sample was received with insufficient preservation. Sodium hydroxide was added to the sample in the lab before it was analyzed.
B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery was outside laboratory control limits.
SD	The serial dilution and the original analysis did not agree within ±10%. The concentration is estimated due to a suspected chemical or physical interference.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010287001	DUP-002	EPA 300.0	WETA/2542		
4010287002	FBK-002	EPA 300.0	WETA/2542		
4010287003	MW-605	EPA 300.0	WETA/2542		
4010287004	P-605	EPA 300.0	WETA/2542		
4010287005	KMW-10	EPA 300.0	WETA/2542		
4010287006	MW-604	EPA 300.0	WETA/2542		
4010287007	P-604	EPA 300.0	WETA/2542		
4010287008	KMW-3	EPA 300.0	WETA/2542		
4010287009	MW-11	EPA 300.0	WETA/2542		
4010287010	KMW-4	EPA 300.0	WETA/2542		
4010287011	MW-101	EPA 300.0	WETA/2542		
4010287001	DUP-002	EPA 300.0	WETA/2543		
4010287002	FBK-002	EPA 300.0	WETA/2543		
4010287003	MW-605	EPA 300.0	WETA/2543		
4010287004	P-605	EPA 300.0	WETA/2543		
4010287005	KMW-10	EPA 300.0	WETA/2543		
4010287006	MW-604	EPA 300.0	WETA/2543		
4010287007	P-604	EPA 300.0	WETA/2543		
4010287008	KMW-3	EPA 300.0	WETA/2543		
4010287009	MW-11	EPA 300.0	WETA/2543		
4010287010	KMW-4	EPA 300.0	WETA/2543		
4010287011	MW-101	EPA 300.0	WETA/2543		
4010287001	DUP-002	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287002	FBK-002	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287003	MW-605	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287004	P-605	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287005	KMW-10	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287006	MW-604	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287007	P-604	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287008	KMW-3	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287009	MW-11	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287010	KMW-4	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287011	MW-101	EPA 3010	MPRP/1866	EPA 6020	ICPM/1209
4010287002	FBK-002	SM 4500-S F (2000)	WET/2463		
4010287004	P-605	SM 4500-S F (2000)	WET/2463		
4010287005	KMW-10	SM 4500-S F (2000)	WET/2463		
4010287007	P-604	SM 4500-S F (2000)	WET/2463		
4010287009	MW-11	SM 4500-S F (2000)	WET/2463		
4010287011	MW-101	SM 4500-S F (2000)	WET/2463		
4010287001	DUP-002	EPA 335.4	WETA/2576		
4010287002	FBK-002	EPA 335.4	WETA/2576		
4010287003	MW-605	EPA 335.4	WETA/2576		
4010287004	P-605	EPA 335.4	WETA/2576		
4010287005	KMW-10	EPA 335.4	WETA/2576		
4010287006	MW-604	EPA 335.4	WETA/2576		
4010287007	P-604	EPA 335.4	WETA/2576		
4010287008	KMW-3	EPA 335.4	WETA/2576		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010287

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010287009	MW-11	EPA 335.4	WETA/2576		
4010287010	KMW-4	EPA 335.4	WETA/2576		
4010287011	MW-101	EPA 335.4	WETA/2576		
4010287001	DUP-002	SM 2320B	WET/2490		
4010287002	FBK-002	SM 2320B	WET/2490		
4010287003	MW-605	SM 2320B	WET/2490		
4010287001	DUP-002	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287002	FBK-002	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287003	MW-605	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287004	P-605	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287005	KMW-10	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287006	MW-604	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287007	P-604	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287008	KMW-3	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287009	MW-11	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287010	KMW-4	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287011	MW-101	EPA 1631E	CVFS/1286	EPA 1631E	CVFS/1287
4010287004	P-605	SM 2320B	WET/2500		
4010287005	KMW-10	SM 2320B	WET/2500		
4010287006	MW-604	SM 2320B	WET/2500		
4010287007	P-604	SM 2320B	WET/2500		
4010287008	KMW-3	SM 2320B	WET/2500		
4010287009	MW-11	SM 2320B	WET/2500		
4010287010	KMW-4	SM 2320B	WET/2500		
4010287011	MW-101	SM 2320B	WET/2500		
4010287001	DUP-002	EPA 350.1	WETA/2629		
4010287002	FBK-002	EPA 350.1	WETA/2629		
4010287003	MW-605	EPA 350.1	WETA/2629		
4010287004	P-605	EPA 350.1	WETA/2629		
4010287005	KMW-10	EPA 350.1	WETA/2629		
4010287006	MW-604	EPA 350.1	WETA/2629		
4010287007	P-604	EPA 350.1	WETA/2629		
4010287008	KMW-3	EPA 350.1	WETA/2630		
4010287009	MW-11	EPA 350.1	WETA/2630		
4010287010	KMW-4	EPA 350.1	WETA/2630		
4010287011	MW-101	EPA 350.1	WETA/2630		

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Pace Analytical

Client Name: NORTH JACKSON Project # 4010287

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Tracking #: _____

Optional: Proj. Due Date: Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used on N/A JB Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature 1° Biological Tissue is Frozen: Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10/15/08 RB

Comments:

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.	
Chain of Custody Filled Out:	☒Yes ☐No ☐N/A	2.	
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.	
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.	
Samples Arrived within Hold Time:	☒Yes ☐No ☐N/A	5.	
Short Hold Time Analysis (<72hr):	☒Yes ☒No ☐N/A	6. Nitrate	
Rush Turn Around Time Requested:	☐Yes ☒No ☐N/A	7.	
Sufficient Volume:	☒Yes ☐No ☐N/A	8.	
Correct Containers Used:	☒Yes ☐No ☐N/A	9.	
-Pace Containers Used:	☒Yes ☐No ☐N/A		
Containers Intact:	☒Yes ☐No ☐N/A	10.	
Filtered volume received for Dissolved tests	☒Yes ☐No ☐N/A	11.	
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.	
-Includes date/time/ID/Analysis Matrix: W			
All containers needing preservation have been checked.	☒Yes ☐No ☐N/A	13.	
All containers needing preservation are found to be in compliance with EPA recommendation.	☒Yes ☐No ☐N/A		
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed	Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☒N/A	14.	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☒N/A	15.	
Trip Blank Present:	☐Yes ☒No ☐N/A	16.	
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A		
Pace Trip Blank Lot # (if purchased): _____			

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 10/15/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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

20081014

Page: 1 of 1

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI GROUNDWATER
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	Composite Start Time	Composite End/Grab Date	Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other: NaOH Zn Ac	Analysis Test Y/N	Alk2, Cl, Fl, SO4,	NITRITE, NITRATE SEPARATELY	CYANIDE	METALS	LLHG	SULFIDE	LITHIUM	AMMONIA				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 4010287
																		Y/N	N	N	N	N	N	N	N	N					
1	001 DUP-002 GW				--	10/14/08	—	—	7	3	1	2		1					1	1	1	1	1	0	1	1			(X) =	N	2-500mL 4°C 5-250mL
2	002 FBK-002 GW					10/14/08	959	—	8	3	1	2		1			1		1	1	1	1	1	1	1	1				N	(X) + 1-500mL 6 —
3	003 MW-605 GW					10/14/08	1049	11.7	7	3	1	2		1					1	1	1	1	1	0	1	1				N	(X)
4	004 P-605 GW					10/14/08	943	8.7	8	3	1	2		1			1		1	1	1	1	1	1	1	1				N	
5	005 KMW-10 GW					10/14/08	1316	12.5	8	3	1	2		1			1		1	1	1	1	1	1	1	1				N	
6	006 MW-604 GW					10/14/08	1304	12	7	3	1	2		1					1	1	1	1	1	0	1	1				N	(X)
7	007 P-604 GW					10/14/08	1224	10	8	3	1	2		1			1		1	1	1	1	1	1	1	1				N	
8	008 KMW-3 GW					10/14/08	1355	8.6	7	3	1	2		1					1	1	1	1	1	0	1	1				N	(X)
9	009 MW-11 GW					10/14/08	1418	13	8	3	1	2		1			1		1	1	1	1	1	1	1	1				N	
10	010 KMW-4 GW					10/14/08	1445	7.1	7	3	1	2		1					1	1	1	1	1	0	1	1				N	(X)
11	011 MW-101 GW					10/14/08	1513	11	8	3	1	2		1			1		1	1	1	1	1	1	1	1				N	
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / NTC	10/14/08	1800							
	[signature]	10/15/08	945	[signature]	10/15/08	945	1	4	4	4

FED Ex 7927 6972 4259
7993 9377 0267
7927 6972 4329
7919 7066 4697

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: CURT SHEFFIELD, ANDY MARACLE

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/14/08

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

Batch No. 4010358

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

November 21, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on October 16, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Marge Allen-Trunkner for Tod Noltemeyer

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Green Bay Certification IDs

Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Carolina Certification #: 503
North Dakota Certification #: R-200
North Dakota Certification #: R-150
New York Certification #: 11888
New York Certification #: 11887
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87951
Florida (NELAP) Certification #: E87948

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SAMPLE SUMMARY

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4010358001	DUP-003	Water	10/15/08 00:00	10/16/08 10:00
4010358002	FBK-003	Water	10/15/08 10:00	10/16/08 10:00
4010358003	MW-12	Water	10/15/08 09:45	10/16/08 10:00
4010358004	KMW-7	Water	10/15/08 10:56	10/16/08 10:00
4010358005	KMW-9P	Water	10/15/08 11:50	10/16/08 10:00
4010358006	KMW-9	Water	10/15/08 12:48	10/16/08 10:00
4010358007	HW-3	Water	10/15/08 14:39	10/16/08 10:00
4010358008	MW-103	Water	10/15/08 14:20	10/16/08 10:00
4010358009	PW-2	Water	10/15/08 15:51	10/16/08 10:00
4010358010	HW-4	Water	10/15/08 15:39	10/16/08 10:00

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4010358001	DUP-003	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358002	FBK-003	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358003	MW-12	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010358004	KMW-7	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358005	KMW-9P	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358006	KMW-9	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358007	HW-3	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358008	MW-103	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358009	PW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010358010	HW-4	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: EPA 6020
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
9 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/2471

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010358004

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 92109)
  - Sulfide
- MSD (Lab ID: 92110)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/2471

1j: This sample was received with insufficient preservation. More sodium hydoxide was added to the sample before analysis.

- KMW-9P (Lab ID: 4010358005)
  - Sulfide

2j: This sample was received with insufficient preservation. More sodium hydroxide was added to the sample before analysis.

- KMW-7 (Lab ID: 4010358004)
  - Sulfide

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-003 (Lab ID: 4010358001)
- FBK-003 (Lab ID: 4010358002)
- HW-3 (Lab ID: 4010358007)
- HW-4 (Lab ID: 4010358010)
- KMW-7 (Lab ID: 4010358004)
- KMW-9 (Lab ID: 4010358006)
- KMW-9P (Lab ID: 4010358005)
- MW-103 (Lab ID: 4010358008)
- MW-12 (Lab ID: 4010358003)
- PW-2 (Lab ID: 4010358009)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2551

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010269019,4010354001

M0: Matrix spike recovery was outside laboratory control limits.
- MS (Lab ID: 90575)
  - Nitrite as N
- MS (Lab ID: 90577)
  - Nitrite as N
- MSD (Lab ID: 90576)
  - Nitrite as N
- MSD (Lab ID: 90578)
  - Nitrite as N

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: EPA 300.0
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

QC Batch: WETA/2553

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010358008,4010358009

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 90599)
  - Nitrite as N
- MSD (Lab ID: 90600)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: EPA 300.0
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2552

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010269019,4010354001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 90588)
  - Chloride
- MSD (Lab ID: 90589)
  - Chloride

QC Batch: WETA/2554

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010358008

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 90603)
  - Chloride
  - Fluoride
- MSD (Lab ID: 90604)
  - Chloride
  - Fluoride

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Method: EPA 350.1
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
10 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: DUP-003 **Lab ID: 4010358001** Collected: 10/15/08 00:00 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.537**	ng/L	0.50	0.16	1	10/17/08 11:15	10/20/08 15:39	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**26.5J**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 05:07	7429-90-5	
Antimony	**0.088J**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 05:07	7440-36-0	
Arsenic	**4.3**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 05:07	7440-38-2	
Barium	**57.5**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 05:07	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 05:07	7440-41-7	
Boron	**58.4**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 05:07	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 05:07	7440-43-9	
Calcium	**52200**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 05:07	7440-70-2	
Chromium	**1.2**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 05:07	7440-47-3	
Cobalt	**6.8**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 05:07	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 05:07	7440-50-8	
Iron	**5960**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 05:07	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 05:07	7439-92-1	
Lithium	**0.36J**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 05:07	7439-93-2	
Magnesium	**21500**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 05:07	7439-95-4	
Manganese	**9120**	ug/L	10.0	2.4	10	10/20/08 09:35	10/23/08 04:43	7439-96-5	P6
Molybdenum	**0.92J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 05:07	7439-98-7	B
Nickel	**11.3**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 05:07	7440-02-0	
Potassium	**3320**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 05:07	7440-09-7	
Selenium	**0.52J**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 05:07	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 05:07	7440-22-4	
Sodium	**3400**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 05:07	7440-23-5	
Thallium	**0.50J**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 05:07	7440-28-0	
Total Hardness	**219**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 05:07		
Vanadium	**2.0**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 05:07	7440-62-2	
Zinc	**12.6**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 05:07	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**73.4**	mg/L	10.0	3.2	1		10/24/08 15:10		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:10		
Alkalinity, Total as CaCO3	**73.4**	mg/L	10.0	3.2	1		10/24/08 15:10		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 06:20	14797-55-8	H1
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 16:02	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.1J**	mg/L	5.0	1.1	1		10/17/08 06:20	16887-00-6	
Fluoride	**0.21J**	mg/L	0.50	0.059	1		10/17/08 06:20	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: DUP-003 **Lab ID: 4010358001** Collected: 10/15/08 00:00 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**174**	mg/L	40.0	5.1	10		10/28/08 04:41	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:47	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:51	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: FBK-003 **Lab ID: 4010358002** Collected: 10/15/08 10:00 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.432J**	ng/L	0.50	0.16	1	10/17/08 11:15	10/20/08 16:02	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 05:43	7429-90-5	
Antimony	**0.13J**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 05:43	7440-36-0	
Arsenic	**0.17J**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 05:43	7440-38-2	
Barium	**<0.17**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 05:43	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 14:21	7440-41-7	
Boron	**1.8J**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 05:43	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 05:43	7440-43-9	
Calcium	**<62.6**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 05:43	7440-70-2	
Chromium	**0.46J**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 05:43	7440-47-3	
Cobalt	**0.090J**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 05:43	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 05:43	7440-50-8	
Iron	**<5.0**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 05:43	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 05:43	7439-92-1	
Lithium	**0.22J**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 05:43	7439-93-2	
Magnesium	**<6.1**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 05:43	7439-95-4	
Manganese	**2.2**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 05:43	7439-96-5	
Molybdenum	**0.24J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 05:43	7439-98-7	B
Nickel	**0.27J**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 05:43	7440-02-0	
Potassium	**<78.3**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 05:43	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 05:43	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 05:43	7440-22-4	
Sodium	**<51.2**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 05:43	7440-23-5	
Thallium	**0.37J**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 05:43	7440-28-0	
Total Hardness	**<0.15**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 05:43		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 05:43	7440-62-2	
Zinc	**3.5J**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 05:43	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:10		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:10		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:10		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/20/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 06:34	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 16:44	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**<1.1**	mg/L	5.0	1.1	1		10/17/08 06:34	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		10/17/08 06:34	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: FBK-003 **Lab ID: 4010358002** Collected: 10/15/08 10:00 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<0.51**	mg/L	4.0	0.51	1		10/17/08 06:34	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:48	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:51	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: MW-12 **Lab ID: 4010358003** Collected: 10/15/08 09:45 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.248J**	ng/L	0.50	0.16	1	10/17/08 11:15	10/20/08 15:48	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 05:49	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 05:49	7440-36-0	
Arsenic	**10.5**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 05:49	7440-38-2	
Barium	**33.9**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 05:49	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 14:27	7440-41-7	
Boron	**35.6**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 05:49	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 05:49	7440-43-9	
Calcium	**37100**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 05:49	7440-70-2	
Chromium	**0.49J**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 05:49	7440-47-3	
Cobalt	**0.30J**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 05:49	7440-48-4	SD
Copper	**156**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 05:49	7440-50-8	
Iron	**10000**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 05:49	7439-89-6	
Lead	**3.1**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 05:49	7439-92-1	SD
Lithium	**1.7**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 05:49	7439-93-2	
Magnesium	**12900**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 05:49	7439-95-4	SD
Manganese	**1000**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 05:49	7439-96-5	
Molybdenum	**1.8**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 05:49	7439-98-7	B
Nickel	**0.23J**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 05:49	7440-02-0	
Potassium	**1950**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 05:49	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 05:49	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 05:49	7440-22-4	
Sodium	**3890**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 05:49	7440-23-5	SD
Thallium	**0.22J**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 05:49	7440-28-0	
Total Hardness	**146**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 05:49		
Vanadium	**0.49J**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 05:49	7440-62-2	
Zinc	**11.1**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 05:49	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**145**	mg/L	10.0	3.2	1		10/24/08 15:11		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:11		
Alkalinity, Total as CaCO3	**145**	mg/L	10.0	3.2	1		10/24/08 15:11		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 06:49	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 16:58	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.0J**	mg/L	5.0	1.1	1		10/17/08 06:49	16887-00-6	
Fluoride	**0.86**	mg/L	0.50	0.059	1		10/17/08 06:49	16984-48-8	
Sulfate	**8.6**	mg/L	4.0	0.51	1		10/17/08 06:49	14808-79-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: MW-12 **Lab ID: 4010358003** Collected: 10/15/08 09:45 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:49	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.57J**	mg/L	1.0	0.50	1		10/28/08 15:52	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: KMW-7 **Lab ID: 4010358004** Collected: 10/15/08 10:56 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.414J**	ng/L	0.50	0.16	1	10/17/08 11:15	10/20/08 15:53	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**21.8J**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 06:00	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 06:00	7440-36-0	
Arsenic	**4.7**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:00	7440-38-2	
Barium	**46.8**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:00	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 14:44	7440-41-7	
Boron	**78.6**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 06:00	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 06:00	7440-43-9	
Calcium	**109000**	ug/L	2500	626	10	10/20/08 09:35	10/23/08 14:38	7440-70-2	
Chromium	**1.3**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 06:00	7440-47-3	
Cobalt	**116**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 06:00	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:00	7440-50-8	
Iron	**156000**	ug/L	2500	49.6	10	10/20/08 09:35	10/23/08 14:38	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:00	7439-92-1	
Lithium	**5.0**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 06:00	7439-93-2	
Magnesium	**53300**	ug/L	2500	61.0	10	10/20/08 09:35	10/23/08 14:38	7439-95-4	
Manganese	**17600**	ug/L	10.0	2.4	10	10/20/08 09:35	10/23/08 14:38	7439-96-5	
Molybdenum	**0.17J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 06:00	7439-98-7	B
Nickel	**103**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 06:00	7440-02-0	
Potassium	**6690**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 06:00	7440-09-7	
Selenium	**1.1**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 06:00	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 06:00	7440-22-4	
Sodium	**5860**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 06:00	7440-23-5	
Thallium	**0.047J**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 06:00	7440-28-0	
Total Hardness	**492**	mg/L	50.0	1.5	10	10/20/08 09:35	10/23/08 14:38		
Vanadium	**3.8**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 06:00	7440-62-2	
Zinc	**9.1**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 06:00	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**67.0**	mg/L	10.0	3.2	1		10/24/08 15:11		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:11		
Alkalinity, Total as CaCO3	**67.0**	mg/L	10.0	3.2	1		10/24/08 15:11		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		2j,M0
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 07:03	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 17:12	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.3J**	mg/L	5.0	1.1	1		10/17/08 07:03	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		10/17/08 07:03	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: KMW-7 **Lab ID: 4010358004** Collected: 10/15/08 10:56 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**684**	mg/L	200	25.5	50		10/28/08 04:55	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:50	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.4**	mg/L	1.0	0.50	1		10/28/08 15:58	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: KMW-9P **Lab ID: 4010358005** Collected: 10/15/08 11:50 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.313J**	ng/L	0.50	0.16	1	10/17/08 11:15	10/20/08 15:58	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 06:06	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 06:06	7440-36-0	
Arsenic	**3.3**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:06	7440-38-2	
Barium	**39.2**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:06	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 14:55	7440-41-7	
Boron	**80.4**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 06:06	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 06:06	7440-43-9	
Calcium	**172000**	ug/L	2500	626	10	10/20/08 09:35	10/23/08 14:49	7440-70-2	
Chromium	**0.69J**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 06:06	7440-47-3	
Cobalt	**23.3**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 06:06	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:06	7440-50-8	
Iron	**172000**	ug/L	2500	49.6	10	10/20/08 09:35	10/23/08 14:49	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:06	7439-92-1	
Lithium	**5.1**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 06:06	7439-93-2	
Magnesium	**71600**	ug/L	2500	61.0	10	10/20/08 09:35	10/23/08 14:49	7439-95-4	
Manganese	**24900**	ug/L	10.0	2.4	10	10/20/08 09:35	10/23/08 14:49	7439-96-5	
Molybdenum	**0.21J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 06:06	7439-98-7	B
Nickel	**0.46J**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 06:06	7440-02-0	
Potassium	**7270**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 06:06	7440-09-7	
Selenium	**0.28J**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 06:06	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 06:06	7440-22-4	
Sodium	**6500**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 06:06	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 06:06	7440-28-0	
Total Hardness	**725**	mg/L	50.0	1.5	10	10/20/08 09:35	10/23/08 14:49		
Vanadium	**0.67J**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 06:06	7440-62-2	
Zinc	**2.9J**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 06:06	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**82.1**	mg/L	10.0	3.2	1		10/24/08 15:12		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:12		
Alkalinity, Total as CaCO3	**82.1**	mg/L	10.0	3.2	1		10/24/08 15:12		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		1j
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 07:17	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 17:27	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.2J**	mg/L	5.0	1.1	1		10/17/08 07:17	16887-00-6	
Fluoride	**0.20J**	mg/L	0.50	0.059	1		10/17/08 07:17	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: KMW-9P **Lab ID: 4010358005** Collected: 10/15/08 11:50 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**880**	mg/L	200	25.5	50		10/28/08 05:10	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:50	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	1.0	0.50	1		10/28/08 15:59	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: KMW-9 **Lab ID: 4010358006** Collected: 10/15/08 12:48 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.393J**	ng/L	0.50	0.16	1	10/21/08 05:45	10/22/08 06:34	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**9.7J**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 06:12	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 06:12	7440-36-0	
Arsenic	**3.7**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:12	7440-38-2	
Barium	**55.4**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:12	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 15:01	7440-41-7	
Boron	**59.6**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 06:12	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 06:12	7440-43-9	
Calcium	**50300**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 06:12	7440-70-2	
Chromium	**0.99J**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 06:12	7440-47-3	
Cobalt	**6.7**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 06:12	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:12	7440-50-8	
Iron	**5690**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 06:12	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:12	7439-92-1	
Lithium	**0.28J**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 06:12	7439-93-2	
Magnesium	**21000**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 06:12	7439-95-4	
Manganese	**8580**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 06:12	7439-96-5	
Molybdenum	**0.40J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 06:12	7439-98-7	B
Nickel	**11.4**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 06:12	7440-02-0	
Potassium	**3230**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 06:12	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 06:12	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 06:12	7440-22-4	
Sodium	**3420**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 06:12	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 06:12	7440-28-0	
Total Hardness	**212**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 06:12		
Vanadium	**1.7**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 06:12	7440-62-2	
Zinc	**12.4**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 06:12	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**73.4**	mg/L	10.0	3.2	1		10/24/08 15:12		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:12		
Alkalinity, Total as CaCO3	**73.4**	mg/L	10.0	3.2	1		10/24/08 15:12		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 07:31	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 17:41	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.0J**	mg/L	5.0	1.1	1		10/17/08 07:31	16887-00-6	
Fluoride	**0.22J**	mg/L	0.50	0.059	1		10/17/08 07:31	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: KMW-9 **Lab ID: 4010358006** Collected: 10/15/08 12:48 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**180**	mg/L	20.0	2.6	5		10/28/08 05:24	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:51	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 15:59	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: HW-3 **Lab ID: 4010358007** Collected: 10/15/08 14:39 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.179J**	ng/L	0.50	0.16	1	10/21/08 05:45	10/22/08 06:40	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**218J**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 06:18	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 06:18	7440-36-0	
Arsenic	**0.41J**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:18	7440-38-2	
Barium	**10.3**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:18	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 15:06	7440-41-7	
Boron	**8.9**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 06:18	7440-42-8	
Cadmium	**0.088J**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 06:18	7440-43-9	
Calcium	**6180**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 06:18	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 06:18	7440-47-3	
Cobalt	**9.3**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 06:18	7440-48-4	
Copper	**20.4**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:18	7440-50-8	
Iron	**1560**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 06:18	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:18	7439-92-1	
Lithium	**1.9**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 06:18	7439-93-2	
Magnesium	**3060**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 06:18	7439-95-4	
Manganese	**36.2**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 06:18	7439-96-5	
Molybdenum	**<0.064**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 06:18	7439-98-7	
Nickel	**38.3**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 06:18	7440-02-0	
Potassium	**1400**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 06:18	7440-09-7	
Selenium	**0.44J**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 06:18	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 06:18	7440-22-4	
Sodium	**14500**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 06:18	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 06:18	7440-28-0	
Total Hardness	**28.0**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 06:18		
Vanadium	**0.52J**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 06:18	7440-62-2	
Zinc	**13.6**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 06:18	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**4.3J**	mg/L	10.0	3.2	1		10/24/08 15:13		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:13		
Alkalinity, Total as CaCO3	**4.3J**	mg/L	10.0	3.2	1		10/24/08 15:13		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.25J**	mg/L	0.40	0.085	1		10/17/08 08:14	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 17:55	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**18.0**	mg/L	5.0	1.1	1		10/17/08 08:14	16887-00-6	
Fluoride	**0.24J**	mg/L	0.50	0.059	1		10/17/08 08:14	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: HW-3 **Lab ID: 4010358007** Collected: 10/15/08 14:39 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**28.4**	mg/L	4.0	0.51	1		10/17/08 08:14	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:52	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:00	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: MW-103 **Lab ID: 4010358008** Collected: 10/15/08 14:20 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.165J**	ng/L	0.50	0.16	1	10/21/08 05:45	10/22/08 06:47	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**14.3J**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 06:23	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 06:23	7440-36-0	
Arsenic	**13.8**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:23	7440-38-2	
Barium	**98.5**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 06:23	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 15:12	7440-41-7	
Boron	**43.8**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 06:23	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 06:23	7440-43-9	
Calcium	**67600**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 06:23	7440-70-2	
Chromium	**0.70J**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 06:23	7440-47-3	
Cobalt	**0.32J**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 06:23	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:23	7440-50-8	
Iron	**66300**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 06:23	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 06:23	7439-92-1	
Lithium	**0.97J**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 06:23	7439-93-2	
Magnesium	**22500**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 06:23	7439-95-4	
Manganese	**5260**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 06:23	7439-96-5	
Molybdenum	**0.60J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 06:23	7439-98-7	B
Nickel	**0.25J**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 06:23	7440-02-0	
Potassium	**3890**	ug/L	250	78.3	1	10/20/08 09:35	10/23/08 06:23	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 06:23	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 06:23	7440-22-4	
Sodium	**5850**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 06:23	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 06:23	7440-28-0	
Total Hardness	**262**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 06:23		
Vanadium	**1.8**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 06:23	7440-62-2	
Zinc	**3.6J**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 06:23	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**77.8**	mg/L	10.0	3.2	1		10/24/08 15:13		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:13		
Alkalinity, Total as CaCO3	**77.8**	mg/L	10.0	3.2	1		10/24/08 15:13		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 08:56	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 18:38	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.0J**	mg/L	5.0	1.1	1		10/17/08 08:56	16887-00-6	B,M0
Fluoride	**0.24J**	mg/L	0.50	0.059	1		10/17/08 08:56	16984-48-8	M0

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: MW-103 **Lab ID: 4010358008** Collected: 10/15/08 14:20 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**251**	mg/L	40.0	5.1	10		10/28/08 05:38	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:56	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.96J**	mg/L	1.0	0.50	1		10/28/08 16:01	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: PW-2 **Lab ID: 4010358009** Collected: 10/15/08 15:51 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**3.02**	ng/L	0.50	0.16	1	10/21/08 05:45	10/22/08 06:52	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**2420**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 15:29	7429-90-5	
Antimony	**0.21J**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 15:29	7440-36-0	
Arsenic	**7.4**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 15:29	7440-38-2	
Barium	**45.7**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 15:29	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 15:29	7440-41-7	
Boron	**87.2**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 15:29	7440-42-8	
Cadmium	**2.5**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 15:29	7440-43-9	
Calcium	**73500**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 15:29	7440-70-2	
Chromium	**4.2**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 15:29	7440-47-3	
Cobalt	**32.4**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 15:29	7440-48-4	
Copper	**16.7**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 15:29	7440-50-8	
Iron	**5010**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 15:29	7439-89-6	
Lead	**1.5**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 15:29	7439-92-1	
Lithium	**10.1**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 15:29	7439-93-2	
Magnesium	**37500**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 15:29	7439-95-4	
Manganese	**1470**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 15:29	7439-96-5	
Molybdenum	**1.0**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 15:29	7439-98-7	B
Nickel	**132**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 15:29	7440-02-0	
Potassium	**4580**	ug/L	250	78.3	1	10/20/08 09:35	10/24/08 18:43	7440-09-7	
Selenium	**0.64J**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 15:29	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 15:29	7440-22-4	
Sodium	**5540**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 15:29	7440-23-5	
Thallium	**0.070J**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 15:29	7440-28-0	
Total Hardness	**338**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 15:29		
Vanadium	**6.8**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 15:29	7440-62-2	
Zinc	**61.2**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 15:29	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**151**	mg/L	10.0	3.2	1		10/24/08 15:14		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/24/08 15:14		
Alkalinity, Total as CaCO3	**151**	mg/L	10.0	3.2	1		10/24/08 15:14		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.2**	mg/L	0.40	0.085	1		10/17/08 09:39	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 18:52	14797-65-0	H1,M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.0J**	mg/L	5.0	1.1	1		10/17/08 09:39	16887-00-6	B
Fluoride	**0.30J**	mg/L	0.50	0.059	1		10/17/08 09:39	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: PW-2 **Lab ID: 4010358009** Collected: 10/15/08 15:51 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**172**	mg/L	40.0	5.1	10		10/28/08 06:21	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:57	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:01	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: HW-4 **Lab ID: 4010358010** Collected: 10/15/08 15:39 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.841**	ng/L	0.50	0.16	1	10/21/08 05:45	10/22/08 06:57	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**5.9J**	ug/L	250	4.5	1	10/20/08 09:35	10/23/08 15:35	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/20/08 09:35	10/23/08 15:35	7440-36-0	
Arsenic	**3.3**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 15:35	7440-38-2	
Barium	**136**	ug/L	1.0	0.17	1	10/20/08 09:35	10/23/08 15:35	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/20/08 09:35	10/23/08 15:35	7440-41-7	
Boron	**76.1**	ug/L	5.0	1.1	1	10/20/08 09:35	10/23/08 15:35	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/20/08 09:35	10/23/08 15:35	7440-43-9	
Calcium	**52700**	ug/L	250	62.6	1	10/20/08 09:35	10/23/08 15:35	7440-70-2	
Chromium	**0.81J**	ug/L	1.0	0.30	1	10/20/08 09:35	10/23/08 15:35	7440-47-3	
Cobalt	**0.13J**	ug/L	1.0	0.077	1	10/20/08 09:35	10/23/08 15:35	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 15:35	7440-50-8	
Iron	**53000**	ug/L	250	5.0	1	10/20/08 09:35	10/23/08 15:35	7439-89-6	
Lead	**77.8**	ug/L	1.0	0.50	1	10/20/08 09:35	10/23/08 15:35	7439-92-1	
Lithium	**2.6**	ug/L	1.0	0.13	1	10/20/08 09:35	10/23/08 15:35	7439-93-2	
Magnesium	**25600**	ug/L	250	6.1	1	10/20/08 09:35	10/23/08 15:35	7439-95-4	
Manganese	**914**	ug/L	1.0	0.24	1	10/20/08 09:35	10/23/08 15:35	7439-96-5	
Molybdenum	**0.36J**	ug/L	1.0	0.064	1	10/20/08 09:35	10/23/08 15:35	7439-98-7	B
Nickel	**0.52J**	ug/L	1.0	0.15	1	10/20/08 09:35	10/23/08 15:35	7440-02-0	
Potassium	**5590**	ug/L	250	78.3	1	10/20/08 09:35	10/24/08 18:50	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/20/08 09:35	10/23/08 15:35	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/20/08 09:35	10/23/08 15:35	7440-22-4	
Sodium	**5060**	ug/L	250	51.2	1	10/20/08 09:35	10/23/08 15:35	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/20/08 09:35	10/23/08 15:35	7440-28-0	
Total Hardness	**237**	mg/L	5.0	0.15	1	10/20/08 09:35	10/23/08 15:35		
Vanadium	**0.73J**	ug/L	1.0	0.45	1	10/20/08 09:35	10/23/08 15:35	7440-62-2	
Zinc	**6.0**	ug/L	5.0	1.7	1	10/20/08 09:35	10/23/08 15:35	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**257**	mg/L	10.0	3.2	1		10/27/08 09:08		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/27/08 09:08		
Alkalinity, Total as CaCO3	**257**	mg/L	10.0	3.2	1		10/27/08 09:08		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/17/08 09:53	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/17/08 20:03	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**5.8**	mg/L	5.0	1.1	1		10/17/08 09:53	16887-00-6	B
Fluoride	**0.21J**	mg/L	0.50	0.059	1		10/17/08 09:53	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Sample: HW-4 **Lab ID: 4010358010** Collected: 10/15/08 15:39 Received: 10/16/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**2.4J**	mg/L	4.0	0.51	1		10/17/08 09:53	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 13:59	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.0**	mg/L	1.0	0.50	1		10/28/08 16:05	7664-41-7	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2551 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007

METHOD BLANK: 90573 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	10/17/08 00:54	
Nitrite as N	mg/L	<0.036	0.10	10/17/08 11:04	

LABORATORY CONTROL SAMPLE: 90574

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.5	96	90-110	
Nitrite as N	mg/L	.8	0.76	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90575 90576

Parameter	Units	4010354001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.6	1.6	97	98	90-110	.6	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.68	0.68	85	85	90-110	0	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90577 90578

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.40 U	1.6	1.6	1.6	1.6	98	98	90-110	.6	20	
Nitrite as N	mg/L	0.10 U	.8	.8	0.46	0.43	58	54	90-110	7	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2552 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007

METHOD BLANK: 90584 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.1	5.0	10/17/08 00:54	
Fluoride	mg/L	<0.059	0.50	10/17/08 00:54	
Sulfate	mg/L	<0.51	4.0	10/17/08 00:54	

LABORATORY CONTROL SAMPLE: 90585

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.7	94	90-110	
Fluoride	mg/L	2	2.0	100	90-110	
Sulfate	mg/L	16	15.4	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90586 90587

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	22.2	20	20	41.5	42.0	97	99	90-110	1	20	
Fluoride	mg/L	0.27J	2	2	2.1	2.2	93	94	90-110	1	20	
Sulfate	mg/L	43.6	16	16	60.3	60.6	104	106	90-110	.6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90588 90589

Parameter	Units	4010354001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3.0J	20	20	19.8	19.9	84	84	90-110	.5	20	M0
Fluoride	mg/L	0.21J	2	2	2.1	2.1	94	94	90-110	.5	20	
Sulfate	mg/L	17.6	16	16	32.8	33.0	95	97	90-110	.6	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2553 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010358008, 4010358009, 4010358010

METHOD BLANK: 90595 Matrix: Water
Associated Lab Samples: 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	10/17/08 08:28	
Nitrite as N	mg/L	<0.036	0.10	10/17/08 18:09	

LABORATORY CONTROL SAMPLE: 90596

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	98	90-110	
Nitrite as N	mg/L	.8	0.76	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90597 90598

Parameter	Units	4010358008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.5	1.6	96	97	90-110	.6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90599 90600

Parameter	Units	4010358009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrite as N	mg/L	<0.036	.8	.8	0.64	0.63	80	79	90-110	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2554 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010358008, 4010358009, 4010358010

METHOD BLANK: 90601 — Matrix: Water
Associated Lab Samples: 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	2.2J	5.0	10/17/08 08:28	
Fluoride	mg/L	<0.059	0.50	10/17/08 08:28	
Sulfate	mg/L	<0.51	4.0	10/17/08 08:28	

LABORATORY CONTROL SAMPLE: 90602

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.9	94	90-110	
Fluoride	mg/L	2	2.0	100	90-110	
Sulfate	mg/L	16	15.4	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 90603 90604

Parameter	Units	4010358008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	4.0J	20	20	20.3	20.3	82	82	90-110	.2	20	M0
Fluoride	mg/L	0.24J	2	2	1.6	1.7	70	72	90-110	2	20	M0
Sulfate	mg/L	251	160	160	423	427	108	110	90-110	.8	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: MPRP/1873 | Analysis Method: EPA 6020
QC Batch Method: EPA 3010 | Analysis Description: 6020 MET
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

METHOD BLANK: 91389 | Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<4.5	250	10/23/08 04:31	
Antimony	ug/L	<0.071	1.0	10/23/08 04:31	
Arsenic	ug/L	<0.17	1.0	10/23/08 04:31	
Barium	ug/L	<0.17	1.0	10/23/08 04:31	
Beryllium	ug/L	<0.41	1.0	10/23/08 04:31	
Boron	ug/L	<1.1	5.0	10/23/08 04:31	
Cadmium	ug/L	<0.087	1.0	10/23/08 04:31	
Calcium	ug/L	<62.6	250	10/23/08 04:31	
Chromium	ug/L	<0.30	1.0	10/24/08 18:37	
Cobalt	ug/L	<0.077	1.0	10/23/08 04:31	
Copper	ug/L	<0.50	1.0	10/23/08 04:31	
Iron	ug/L	14.2J	250	10/23/08 04:31	
Lead	ug/L	<0.50	1.0	10/23/08 04:31	
Lithium	ug/L	<0.13	1.0	10/23/08 04:31	
Magnesium	ug/L	<6.1	250	10/23/08 04:31	
Manganese	ug/L	<0.24	1.0	10/23/08 04:31	
Molybdenum	ug/L	0.12J	1.0	10/23/08 04:31	
Nickel	ug/L	<0.15	1.0	10/23/08 04:31	
Potassium	ug/L	<78.3	250	10/23/08 04:31	
Selenium	ug/L	<0.25	1.0	10/23/08 04:31	
Silver	ug/L	<0.25	0.50	10/23/08 04:31	
Sodium	ug/L	<51.2	250	10/23/08 04:31	
Thallium	ug/L	<0.019	1.0	10/23/08 04:31	
Total Hardness	mg/L	<0.15	5.0	10/23/08 04:31	
Vanadium	ug/L	<0.45	1.0	10/23/08 04:31	
Zinc	ug/L	2.7J	5.0	10/23/08 04:31	

LABORATORY CONTROL SAMPLE: 91390

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	5030	101	75-125	
Antimony	ug/L	500	507	101	75-125	
Arsenic	ug/L	500	522	104	75-125	
Barium	ug/L	500	496	99	75-125	
Beryllium	ug/L	500	504	101	75-125	
Boron	ug/L	500	496	99	75-125	
Cadmium	ug/L	500	509	102	75-125	
Calcium	ug/L	5000	5310	106	75-125	
Chromium	ug/L	500	506	101	75-125	
Cobalt	ug/L	500	494	99	75-125	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

LABORATORY CONTROL SAMPLE: 91390

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Copper	ug/L	500	511	102	75-125	
Iron	ug/L	5000	5100	102	75-125	
Lead	ug/L	500	507	101	75-125	
Lithium	ug/L	500	506	101	75-125	
Magnesium	ug/L	5000	5120	102	75-125	
Manganese	ug/L	500	491	98	75-125	
Molybdenum	ug/L	500	500	100	75-125	
Nickel	ug/L	500	506	101	75-125	
Potassium	ug/L	5000	5050	101	75-125	
Selenium	ug/L	500	504	101	75-125	
Silver	ug/L	250	253	101	75-125	
Sodium	ug/L	5000	5070	101	75-125	
Thallium	ug/L	500	494	99	75-125	
Vanadium	ug/L	500	501	100	75-125	
Zinc	ug/L	500	498	100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91391 91392

Parameter	Units	4010358001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	26.5J	5000	5000	4940	4930	98	98	75-125	.06	20	
Antimony	ug/L	0.088J	500	500	508	524	101	105	75-125	3	20	
Arsenic	ug/L	4.3	500	500	525	536	104	106	75-125	2	20	
Barium	ug/L	57.5	500	500	550	564	99	101	75-125	3	20	
Beryllium	ug/L	<0.41	500	500	539	486	108	97	75-125	10	20	
Boron	ug/L	58.4	500	500	616	572	112	103	75-125	8	20	
Cadmium	ug/L	<0.087	500	500	507	518	101	104	75-125	2	20	
Calcium	ug/L	52200	5000	5000	56300	57700	83	110	75-125	2	20	
Chromium	ug/L	1.2	500	500	509	519	102	104	75-125	2	20	
Cobalt	ug/L	6.8	500	500	500	509	99	100	75-125	2	20	
Copper	ug/L	<0.50	500	500	504	517	101	103	75-125	2	20	
Iron	ug/L	5960	5000	5000	10900	11100	99	103	75-125	2	20	
Lead	ug/L	<0.50	500	500	512	518	102	104	75-125	1	20	
Lithium	ug/L	0.36J	500	500	553	505	111	101	75-125	9	20	
Magnesium	ug/L	21500	5000	5000	26300	26700	95	103	75-125	1	20	
Manganese	ug/L	9120	500	500	9610	9790	98	134	75-125	2	20	P6
Molybdenum	ug/L	0.92J	500	500	503	517	100	103	75-125	3	20	
Nickel	ug/L	11.3	500	500	511	524	100	103	75-125	3	20	
Potassium	ug/L	3320	5000	5000	8330	8560	100	105	75-125	3	20	
Selenium	ug/L	0.52J	500	500	496	501	99	100	75-125	1	20	
Silver	ug/L	<0.25	250	250	249	257	100	103	75-125	3	20	
Sodium	ug/L	3400	5000	5000	8390	8620	100	104	75-125	3	20	
Thallium	ug/L	0.50J	500	500	503	511	100	102	75-125	2	20	
Vanadium	ug/L	2.0	500	500	509	514	101	102	75-125	.9	20	
Zinc	ug/L	12.6	500	500	504	516	98	101	75-125	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WET/2463
QC Batch Method: SM 4500-S F (2000)
Analysis Method: SM 4500-S F (2000)
Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010358001, 4010358002

METHOD BLANK: 91556
Matrix: Water
Associated Lab Samples: 4010358001, 4010358002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/20/08 09:30	

LABORATORY CONTROL SAMPLE: 91557

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	47.2	39.6	84	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91558 91559

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	5.0 U	47.2	47.2	40.4	40.8	84	85	80-120	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: CVFS/1276 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005

METHOD BLANK: 91615 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.349J	0.50	10/20/08 12:23	

METHOD BLANK: 91616 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.387J	0.50	10/20/08 12:56	

METHOD BLANK: 91617 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.238J	0.50	10/20/08 13:01	

LABORATORY CONTROL SAMPLE & LCSD: 91618 91619

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.21	5.21	104	104	79-121	.03	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91620 91621

Parameter	Units	4010352003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	4.24	20	20	26.6	27.0	112	114	75-125	1	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91622 91623

Parameter	Units	4010352005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	3.18	20	20	25.6	24.2	112	105	75-125	6	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WET/2471 — Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) — Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

METHOD BLANK: 92107 — Matrix: Water
Associated Lab Samples: 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/21/08 09:30	

LABORATORY CONTROL SAMPLE: 92108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	46	39.2	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92109 92110

Parameter	Units	4010358004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	46	46	26.8	26.4	57	56	80-120	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: CVFS/1282 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

METHOD BLANK: 92479 Matrix: Water
Associated Lab Samples: 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.377J	0.50	10/22/08 06:01	

METHOD BLANK: 92480 Matrix: Water
Associated Lab Samples: 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.320J	0.50	10/22/08 06:06	

METHOD BLANK: 92481 Matrix: Water
Associated Lab Samples: 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.446J	0.50	10/22/08 06:12	

LABORATORY CONTROL SAMPLE & LCSD: 92482 92483

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	4.67	5.64	93	113	79-121	19	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92484 92485

Parameter	Units	4010021003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	431	2000	2000	2660	2450	112	101	75-125	8	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92486 92487

Parameter	Units	4010475003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	73.9	200	200	304	298	115	112	75-125	2	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WET/2500 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009

METHOD BLANK: 93787 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/24/08 15:02	

LABORATORY CONTROL SAMPLE: 93788

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	497	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93789 93790

Parameter	Units	4010287004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	110	500	500	605	611	99	100	80-120	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WET/2511
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010358010

METHOD BLANK: 94416
Matrix: Water
Associated Lab Samples: 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/27/08 08:57	

LABORATORY CONTROL SAMPLE: 94417

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	497	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94418 94419

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	220	500	500	711	713	98	98	80-120	.3	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2630 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010358001, 4010358002, 4010358003

METHOD BLANK: 94542 Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/28/08 15:31	

LABORATORY CONTROL SAMPLE: 94543

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94544 94545

Parameter	Units	4010269019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.0 U	10	10	10	9.1	100	91	90-110	9	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94546 94547

Parameter	Units	4010358003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.57J	10	10	10.6	10.3	100	98	90-110	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2631 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

METHOD BLANK: 94548 Matrix: Water
Associated Lab Samples: 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/28/08 15:57	

LABORATORY CONTROL SAMPLE: 94549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94550 94551

Parameter	Units	4010403001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.83J	10	10	10.9	11.1	100	103	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94552 94553

Parameter	Units	4010409010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.8	10.6	107	104	90-110	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

QC Batch: WETA/2635 — Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 — Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

METHOD BLANK: 94945 — Matrix: Water
Associated Lab Samples: 4010358001, 4010358002, 4010358003, 4010358004, 4010358005, 4010358006, 4010358007, 4010358008, 4010358009, 4010358010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	10/29/08 13:45	

LABORATORY CONTROL SAMPLE: 94946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94947 94948

Parameter	Units	4010358009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	109	107	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94949 94950

Parameter	Units	4010409008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	107	109	90-110	2	20	

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QUALIFIERS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

1j	This sample was received with insufficient preservation. More sodium hydoxide was added to the sample before analysis.
2j	This sample was received with insufficient preservation. More sodium hydroxide was added to the sample before analysis.
B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
SD	The serial dilution and the original analysis did not agree within ±10%. The concentration is estimated due to a suspected chemical or physical interference.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010358001	DUP-003	EPA 300.0	WETA/2551		
4010358002	FBK-003	EPA 300.0	WETA/2551		
4010358003	MW-12	EPA 300.0	WETA/2551		
4010358004	KMW-7	EPA 300.0	WETA/2551		
4010358005	KMW-9P	EPA 300.0	WETA/2551		
4010358006	KMW-9	EPA 300.0	WETA/2551		
4010358007	HW-3	EPA 300.0	WETA/2551		
4010358001	DUP-003	EPA 300.0	WETA/2552		
4010358002	FBK-003	EPA 300.0	WETA/2552		
4010358003	MW-12	EPA 300.0	WETA/2552		
4010358004	KMW-7	EPA 300.0	WETA/2552		
4010358005	KMW-9P	EPA 300.0	WETA/2552		
4010358006	KMW-9	EPA 300.0	WETA/2552		
4010358007	HW-3	EPA 300.0	WETA/2552		
4010358008	MW-103	EPA 300.0	WETA/2553		
4010358009	PW-2	EPA 300.0	WETA/2553		
4010358010	HW-4	EPA 300.0	WETA/2553		
4010358008	MW-103	EPA 300.0	WETA/2554		
4010358009	PW-2	EPA 300.0	WETA/2554		
4010358010	HW-4	EPA 300.0	WETA/2554		
4010358001	DUP-003	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358002	FBK-003	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358003	MW-12	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358004	KMW-7	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358005	KMW-9P	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358006	KMW-9	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358007	HW-3	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358008	MW-103	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358009	PW-2	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358010	HW-4	EPA 3010	MPRP/1873	EPA 6020	ICPM/1213
4010358001	DUP-003	SM 4500-S F (2000)	WET/2463		
4010358002	FBK-003	SM 4500-S F (2000)	WET/2463		
4010358001	DUP-003	EPA 1631E	CVFS/1276	EPA 1631E	CVFS/1277
4010358002	FBK-003	EPA 1631E	CVFS/1276	EPA 1631E	CVFS/1277
4010358003	MW-12	EPA 1631E	CVFS/1276	EPA 1631E	CVFS/1277
4010358004	KMW-7	EPA 1631E	CVFS/1276	EPA 1631E	CVFS/1277
4010358005	KMW-9P	EPA 1631E	CVFS/1276	EPA 1631E	CVFS/1277
4010358004	KMW-7	SM 4500-S F (2000)	WET/2471		
4010358005	KMW-9P	SM 4500-S F (2000)	WET/2471		
4010358006	KMW-9	SM 4500-S F (2000)	WET/2471		
4010358007	HW-3	SM 4500-S F (2000)	WET/2471		
4010358008	MW-103	SM 4500-S F (2000)	WET/2471		
4010358009	PW-2	SM 4500-S F (2000)	WET/2471		
4010358010	HW-4	SM 4500-S F (2000)	WET/2471		
4010358006	KMW-9	EPA 1631E	CVFS/1282	EPA 1631E	CVFS/1283

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010358

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010358007	HW-3	EPA 1631E	CVFS/1282	EPA 1631E	CVFS/1283
4010358008	MW-103	EPA 1631E	CVFS/1282	EPA 1631E	CVFS/1283
4010358009	PW-2	EPA 1631E	CVFS/1282	EPA 1631E	CVFS/1283
4010358010	HW-4	EPA 1631E	CVFS/1282	EPA 1631E	CVFS/1283
4010358001	DUP-003	SM 2320B	WET/2500		
4010358002	FBK-003	SM 2320B	WET/2500		
4010358003	MW-12	SM 2320B	WET/2500		
4010358004	KMW-7	SM 2320B	WET/2500		
4010358005	KMW-9P	SM 2320B	WET/2500		
4010358006	KMW-9	SM 2320B	WET/2500		
4010358007	HW-3	SM 2320B	WET/2500		
4010358008	MW-103	SM 2320B	WET/2500		
4010358009	PW-2	SM 2320B	WET/2500		
4010358010	HW-4	SM 2320B	WET/2511		
4010358001	DUP-003	EPA 350.1	WETA/2630		
4010358002	FBK-003	EPA 350.1	WETA/2630		
4010358003	MW-12	EPA 350.1	WETA/2630		
4010358004	KMW-7	EPA 350.1	WETA/2631		
4010358005	KMW-9P	EPA 350.1	WETA/2631		
4010358006	KMW-9	EPA 350.1	WETA/2631		
4010358007	HW-3	EPA 350.1	WETA/2631		
4010358008	MW-103	EPA 350.1	WETA/2631		
4010358009	PW-2	EPA 350.1	WETA/2631		
4010358010	HW-4	EPA 350.1	WETA/2631		
4010358001	DUP-003	EPA 335.4	WETA/2635		
4010358002	FBK-003	EPA 335.4	WETA/2635		
4010358003	MW-12	EPA 335.4	WETA/2635		
4010358004	KMW-7	EPA 335.4	WETA/2635		
4010358005	KMW-9P	EPA 335.4	WETA/2635		
4010358006	KMW-9	EPA 335.4	WETA/2635		
4010358007	HW-3	EPA 335.4	WETA/2635		
4010358008	MW-103	EPA 335.4	WETA/2635		
4010358009	PW-2	EPA 335.4	WETA/2635		
4010358010	HW-4	EPA 335.4	WETA/2635		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: NORTH JACKSON Project # 4010358

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

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

Cooler Temperature 2° **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: 10/16/08

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Nitrates
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed: G Lot # of added preservative:
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☐No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): _____		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] **Date:** 10/16/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

2008 10 15

Page: 1 of 1

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI GROUNDWATER
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH Zn Ac	Analysis Test (Y/N): Alk2, Cl, Fl, SO4	NITRITE, NITRATE SEPARATELY	CYANIDE	METALS	LLHG	SULFIDE	LITHIUM	AMMONIA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 4010358
1	001 DUP-003 GW	WT	G		--	10/15/08	—	-	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	3-500mL 4,0,6, 5-250mL 2A 0,4
2	002 FBK-003 GW	WT	G			10/15/08	1000	—	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
3	003 MW-12 GW	WT	G			10/15/08	945	10	7	3	1	2		1				1	1	1	1	1	0	1	1	N	(No 500mL 6)
4	004 KMW-7 GW	WT	G			10/15/08	1056	8.9	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
5	005 KMW-9P GW	WT	G			10/15/08	1150	9.3	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
6	006 KMW-9 GW	WT	G			10/15/08	1248	8.6	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
7	007 HW-3 GW	WT	G			10/15/08	1439	7.4	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
8	008 MW-103 GW	WT	G			10/15/08	1420	9.6	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
9	009 PW-2 GW	WT	G			10/15/08	1551	8.9	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
10	010 HW-4 GW	WT	G			10/15/08	1539	7.6	8	3	1	2		1			1	1	1	1	1	1	1	1	1	N	
11																											
12																											

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / NJC	10/15/08	1800							
	[signature]	10/16/08	1000	[signature]	10/16/08	1000	2	4	4	4

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

FED EX 7980 3916 7387
7901 1215 8193
7906 0406 6275
7901 1215 8171

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: CURTSHEFFIELD, ANDY MACINT

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/15/08

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

Batch No. 4010409

Pace Analytical Services, Inc.
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(920)469-2436

November 21, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Marge Allen-Trinkner for Tod Noltemeyer

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Green Bay Certification IDs

Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Carolina Certification #: 503
North Dakota Certification #: R-200
North Dakota Certification #: R-150
New York Certification #: 11888
New York Certification #: 11887
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87951
Florida (NELAP) Certification #: E87948

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SAMPLE SUMMARY

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4010409001	DUP-004	Water	10/16/08 00:00	10/17/08 10:00
4010409002	FBK-004	Water	10/16/08 11:18	10/17/08 10:00
4010409003	MW-5	Water	10/16/08 09:40	10/17/08 10:00
4010409004	MW-102	Water	10/16/08 10:55	10/17/08 10:00
4010409005	HW-5	Water	10/16/08 11:39	10/17/08 10:00
4010409006	HW-5A	Water	10/16/08 10:25	10/17/08 10:00
4010409007	MW-601	Water	10/16/08 12:03	10/17/08 10:00
4010409008	HYG-1	Water	10/16/08 14:53	10/17/08 10:00
4010409009	HW-1A	Water	10/16/08 14:02	10/17/08 10:00
4010409010	HW-6A	Water	10/16/08 15:10	10/17/08 10:00
4010409011	HW-1	Water	10/16/08 14:09	10/17/08 10:00
4010409012	HW-6	Water	10/16/08 16:02	10/17/08 10:00
4010409013	TRIP BLANK	Water	10/16/08 00:00	10/17/08 10:00

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4010409001	DUP-004	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409002	FBK-004	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409003	MW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		EPA 8021	SES	6	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409004	MW-102	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409005	HW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409006	HW-5A	EPA 1631E	GMW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409007	MW-601	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
4010409008	HYG-1	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409009	HW-1A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409010	HW-6A	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409011	HW-1	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409012	HW-6	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010409013	TRIP BLANK	EPA 8021	SES	6	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **EPA 8021**
Description: 8021 GCV Short List
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
2 samples were analyzed for EPA 8021. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: EPA 6020
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: MPRP/1884

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-102 (Lab ID: 4010409004)
  - Silver
  - Thallium

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
11 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/2471

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010358004

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 92109)
  - Sulfide
- MSD (Lab ID: 92110)
  - Sulfide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/2471

1j: This sample was received with insufficient preservation. More sodium hydoxide was added to the sample before analysis.

- HW-1 (Lab ID: 4010409011)
  - Sulfide
- HW-6 (Lab ID: 4010409012)
  - Sulfide
- HW-6A (Lab ID: 4010409010)
  - Sulfide
- MW-102 (Lab ID: 4010409004)
  - Sulfide
- MW-5 (Lab ID: 4010409003)
  - Sulfide

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-004 (Lab ID: 4010409001)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2562

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010409001,4010409005

M0: Matrix spike recovery was outside laboratory control limits.
- MS (Lab ID: 91457)
  - Nitrite as N
- MS (Lab ID: 91459)
  - Nitrite as N
- MSD (Lab ID: 91458)
  - Nitrite as N
- MSD (Lab ID: 91460)
  - Nitrite as N

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: EPA 300.0
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2563

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010409001,4010409005

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 91465)
  - Sulfate
- MSD (Lab ID: 91466)
  - Sulfate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 21, 2008

General Information:
12 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: DUP-004 **Lab ID: 4010409001** Collected: 10/16/08 00:00 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.605**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 10:35	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 03:49	7429-90-5	
Antimony	**11.2**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 03:49	7440-36-0	
Arsenic	**0.48J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 03:49	7440-38-2	
Barium	**42.2**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 03:49	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 03:49	7440-41-7	
Boron	**128**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 15:07	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 03:49	7440-43-9	
Calcium	**49400**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 03:49	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 03:49	7440-47-3	
Cobalt	**2.3**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 03:49	7440-48-4	
Copper	**0.98J**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 03:49	7440-50-8	
Iron	**239J**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 03:49	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 03:49	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 03:49	7439-93-2	
Magnesium	**24100**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 03:49	7439-95-4	
Manganese	**12.8**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 03:49	7439-96-5	
Molybdenum	**10.2**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 03:49	7439-98-7	
Nickel	**24.9**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 03:49	7440-02-0	
Potassium	**7010**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 03:49	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 03:49	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 03:49	7440-22-4	
Sodium	**12700**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 03:49	7440-23-5	
Thallium	**0.20J**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 03:49	7440-28-0	
Total Hardness	**223**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 03:49		
Vanadium	**0.64J**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 03:49	7440-62-2	
Zinc	**3.3J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 03:49	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**108**	mg/L	10.0	3.2	1		10/29/08 15:26		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:26		
Alkalinity, Total as CaCO3	**108**	mg/L	10.0	3.2	1		10/29/08 15:26		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.0**	mg/L	0.40	0.085	1		10/18/08 02:43	14797-55-8	H1
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 00:45	14797-65-0	H1,M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**10.6**	mg/L	5.0	1.1	1		10/18/08 02:43	16887-00-6	
Fluoride	**0.31J**	mg/L	0.50	0.059	1		10/18/08 02:43	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: DUP-004 **Lab ID: 4010409001** Collected: 10/16/08 00:00 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**131**	mg/L	20.0	2.6	5		10/28/08 19:45	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:01	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:09	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: FBK-004 **Lab ID: 4010409002** Collected: 10/16/08 11:18 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.258J**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 10:31	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:00	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:00	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:00	7440-38-2	
Barium	**<0.17**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:00	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:00	7440-41-7	
Boron	**<1.1**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 15:20	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:00	7440-43-9	
Calcium	**<62.6**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:00	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:00	7440-47-3	
Cobalt	**<0.077**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:00	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:00	7440-50-8	
Iron	**<5.0**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 04:00	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:00	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:00	7439-93-2	
Magnesium	**<6.1**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:00	7439-95-4	
Manganese	**<0.24**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:00	7439-96-5	
Molybdenum	**<0.064**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:00	7439-98-7	
Nickel	**<0.15**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:00	7440-02-0	
Potassium	**<78.3**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:00	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:00	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:00	7440-22-4	
Sodium	**<51.2**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:00	7440-23-5	
Thallium	**0.041J**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:00	7440-28-0	
Total Hardness	**<0.15**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:00		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:00	7440-62-2	
Zinc	**2.7J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:00	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:26		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:26		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:26		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/18/08 03:19	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 01:28	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**<1.1**	mg/L	5.0	1.1	1		10/18/08 03:19	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		10/18/08 03:19	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: FBK-004 **Lab ID: 4010409002** Collected: 10/16/08 11:18 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<0.51**	mg/L	4.0	0.51	1		10/18/08 03:19	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:01	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:10	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: MW-5 **Lab ID: 4010409003** Collected: 10/16/08 09:40 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**2.82**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 10:40	7439-97-6	
8021 GCV Short List	Analytical Method: EPA 8021								
Benzene	**5.5**	ug/L	2.5	0.57	2.5		10/22/08 01:13	71-43-2	
Ethylbenzene	**50.2**	ug/L	2.5	1.0	2.5		10/22/08 01:13	100-41-4	
Toluene	**3.8**	ug/L	2.5	0.89	2.5		10/22/08 01:13	108-88-3	
m&p-Xylene	**252**	ug/L	5.0	1.9	2.5		10/22/08 01:13	1330-20-7	
o-Xylene	**290**	ug/L	2.5	0.90	2.5		10/22/08 01:13	95-47-6	
a,a,a-Trifluorotoluene (S)	104	%	80-124		2.5		10/22/08 01:13	98-08-8	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**489**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:05	7429-90-5	
Antimony	**2.1**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:05	7440-36-0	
Arsenic	**137**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:05	7440-38-2	
Barium	**200**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:05	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:05	7440-41-7	
Boron	**215**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 04:05	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:05	7440-43-9	
Calcium	**42700**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:05	7440-70-2	
Chromium	**10.1**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:05	7440-47-3	
Cobalt	**2.8**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:05	7440-48-4	
Copper	**1.3**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:05	7440-50-8	
Iron	**140000**	ug/L	2500	49.6	10	10/22/08 08:06	10/27/08 18:06	7439-89-6	
Lead	**2.6**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:05	7439-92-1	
Lithium	**0.78J**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:05	7439-93-2	
Magnesium	**13200**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:05	7439-95-4	
Manganese	**3830**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:05	7439-96-5	
Molybdenum	**2.6**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:05	7439-98-7	
Nickel	**25.3**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:05	7440-02-0	
Potassium	**11600**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:05	7440-09-7	
Selenium	**1.1**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:05	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:05	7440-22-4	
Sodium	**46700**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:05	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:05	7440-28-0	
Total Hardness	**161**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:05		
Vanadium	**20.7**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:05	7440-62-2	
Zinc	**24.9**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:05	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**315**	mg/L	10.0	3.2	1		10/29/08 15:26		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:26		
Alkalinity, Total as CaCO3	**315**	mg/L	10.0	3.2	1		10/29/08 15:26		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		1j

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: MW-5 **Lab ID: 4010409003** Collected: 10/16/08 09:40 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/18/08 03:31	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 01:42	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**8.1**	mg/L	5.0	1.1	1		10/18/08 03:31	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		10/18/08 03:31	16984-48-8	
Sulfate	**<0.51**	mg/L	4.0	0.51	1		10/18/08 03:31	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:02	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**14.9**	mg/L	1.0	0.50	1		10/28/08 16:10	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: MW-102 **Lab ID: 4010409004** Collected: 10/16/08 10:55 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**112**	ng/L	10.0	3.3	20	10/21/08 12:15	10/24/08 11:56	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**368000**	ug/L	2500	44.9	10	10/22/08 08:06	10/24/08 15:26	7429-90-5	
Antimony	**34.9**	ug/L	10.0	0.71	10	10/22/08 08:06	10/24/08 15:26	7440-36-0	
Arsenic	**491**	ug/L	10.0	1.7	10	10/22/08 08:06	10/24/08 15:26	7440-38-2	
Barium	**27.8**	ug/L	10.0	1.7	10	10/22/08 08:06	10/24/08 15:26	7440-39-3	
Beryllium	**49.9**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:11	7440-41-7	
Boron	**282**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 04:11	7440-42-8	
Cadmium	**77.6**	ug/L	10.0	0.87	10	10/22/08 08:06	10/24/08 15:26	7440-43-9	
Calcium	**424000**	ug/L	2500	626	10	10/22/08 08:06	10/24/08 15:26	7440-70-2	
Chromium	**2950**	ug/L	10.0	3.0	10	10/22/08 08:06	10/24/08 15:26	7440-47-3	
Cobalt	**6030**	ug/L	10.0	0.77	10	10/22/08 08:06	10/24/08 15:26	7440-48-4	
Copper	**7710**	ug/L	10.0	5.0	10	10/22/08 08:06	10/24/08 15:26	7440-50-8	
Iron	**4190000**	ug/L	25000	496	100	10/22/08 08:06	10/24/08 16:37	7439-89-6	
Lead	**47.1**	ug/L	10.0	5.0	10	10/22/08 08:06	10/24/08 15:26	7439-92-1	
Lithium	**406**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:11	7439-93-2	
Magnesium	**510000**	ug/L	2500	61.0	10	10/22/08 08:06	10/24/08 15:26	7439-95-4	
Manganese	**28700**	ug/L	10.0	2.4	10	10/22/08 08:06	10/24/08 15:26	7439-96-5	
Molybdenum	**17.2**	ug/L	10.0	0.64	10	10/22/08 08:06	10/24/08 15:26	7439-98-7	
Nickel	**16600**	ug/L	10.0	1.5	10	10/22/08 08:06	10/24/08 15:26	7440-02-0	
Potassium	**2890**	ug/L	2500	783	10	10/22/08 08:06	10/24/08 15:26	7440-09-7	
Selenium	**79.5**	ug/L	10.0	2.5	10	10/22/08 08:06	10/24/08 15:26	7782-49-2	
Silver	**4.0J**	ug/L	5.0	2.5	10	10/22/08 08:06	10/24/08 15:26	7440-22-4	D3
Sodium	**5110**	ug/L	2500	512	10	10/22/08 08:06	10/24/08 15:26	7440-23-5	
Thallium	**<0.19**	ug/L	10.0	0.19	10	10/22/08 08:06	10/24/08 15:26	7440-28-0	D3
Total Hardness	**3160**	mg/L	50.0	1.5	10	10/22/08 08:06	10/24/08 15:26		
Vanadium	**187**	ug/L	10.0	4.5	10	10/22/08 08:06	10/24/08 15:26	7440-62-2	
Zinc	**11000**	ug/L	50.0	17.0	10	10/22/08 08:06	10/24/08 15:26	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:27		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:27		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:27		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		1j
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/18/08 04:08	14797-55-8	
Nitrite as N	**1.1**	mg/L	0.10	0.036	1		10/18/08 01:56	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.2J**	mg/L	5.0	1.1	1		10/18/08 04:08	16887-00-6	
Fluoride	**0.93**	mg/L	0.50	0.059	1		10/18/08 04:08	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: MW-102 **Lab ID: 4010409004** Collected: 10/16/08 10:55 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**14000**	mg/L	8000	1020	2000		10/28/08 20:56	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:03	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:11	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-5 **Lab ID: 4010409005** Collected: 10/16/08 11:39 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.354J**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 10:52	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**49.8J**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:17	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:17	7440-36-0	
Arsenic	**0.51J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:17	7440-38-2	
Barium	**7.6**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:17	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:17	7440-41-7	
Boron	**68.7**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 15:33	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:17	7440-43-9	
Calcium	**6460**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:17	7440-70-2	
Chromium	**0.71J**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:17	7440-47-3	
Cobalt	**0.86J**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:17	7440-48-4	
Copper	**1.2**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:17	7440-50-8	
Iron	**4040**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 04:17	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:17	7439-92-1	
Lithium	**4.1**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:17	7439-93-2	
Magnesium	**18700**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:17	7439-95-4	
Manganese	**75.2**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:17	7439-96-5	
Molybdenum	**2.2**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:17	7439-98-7	
Nickel	**2.8**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:17	7440-02-0	
Potassium	**5330**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:17	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:17	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:17	7440-22-4	
Sodium	**23700**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:17	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:17	7440-28-0	
Total Hardness	**93.3**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:17		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:17	7440-62-2	
Zinc	**5.8**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:17	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**86.4**	mg/L	10.0	3.2	1		10/29/08 15:27		
Alkalinity, Carbonate (CaCO3)	**17.3**	mg/L	10.0	3.2	1		10/29/08 15:27		
Alkalinity, Total as CaCO3	**104**	mg/L	10.0	3.2	1		10/29/08 15:27		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/18/08 04:20	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 02:10	14797-65-0	M0
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**24.3**	mg/L	5.0	1.1	1		10/18/08 04:20	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		10/18/08 04:20	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-5 **Lab ID: 4010409005** Collected: 10/16/08 11:39 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**17.2**	mg/L	4.0	0.51	1		10/18/08 04:20	14808-79-8	M0
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:07	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:14	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-5A **Lab ID: 4010409006** Collected: 10/16/08 10:25 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.603**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 11:01	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 03:12	7429-90-5	
Antimony	**11.6**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 03:12	7440-36-0	
Arsenic	**0.60J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 03:12	7440-38-2	
Barium	**42.7**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 03:12	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 03:12	7440-41-7	
Boron	**129**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 03:12	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 03:12	7440-43-9	
Calcium	**51400**	ug/L	2500	626	10	10/22/08 08:06	10/24/08 02:48	7440-70-2	
Chromium	**0.88J**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 03:12	7440-47-3	
Cobalt	**2.3**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 03:12	7440-48-4	
Copper	**1.0**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 03:12	7440-50-8	
Iron	**244J**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 03:12	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 03:12	7439-92-1	
Lithium	**0.15J**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 03:12	7439-93-2	
Magnesium	**25100**	ug/L	2500	61.0	10	10/22/08 08:06	10/24/08 02:48	7439-95-4	
Manganese	**12.9**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 03:12	7439-96-5	
Molybdenum	**10.6**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 03:12	7439-98-7	
Nickel	**25.4**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 03:12	7440-02-0	
Potassium	**7140**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 03:12	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 03:12	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 03:12	7440-22-4	
Sodium	**12900**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 03:12	7440-23-5	
Thallium	**0.19J**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 03:12	7440-28-0	
Total Hardness	**232**	mg/L	50.0	1.5	10	10/22/08 08:06	10/24/08 02:48		
Vanadium	**0.76J**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 03:12	7440-62-2	
Zinc	**3.5J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 03:12	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**108**	mg/L	10.0	3.2	1		10/29/08 15:28		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:28		
Alkalinity, Total as CaCO3	**108**	mg/L	10.0	3.2	1		10/29/08 15:28		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.0**	mg/L	0.40	0.085	1		10/18/08 04:56	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 03:21	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.0**	mg/L	5.0	1.1	1		10/18/08 04:56	16887-00-6	
Fluoride	**0.31J**	mg/L	0.50	0.059	1		10/18/08 04:56	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-5A **Lab ID: 4010409006** Collected: 10/16/08 10:25 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**132**	mg/L	20.0	2.6	5		10/28/08 21:10	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:08	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:15	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: MW-601 **Lab ID: 4010409007** Collected: 10/16/08 12:03 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.91**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 11:06	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**10800**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:23	7429-90-5	
Antimony	**0.98J**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:23	7440-36-0	
Arsenic	**368**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:23	7440-38-2	
Barium	**274**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:23	7440-39-3	
Beryllium	**0.77J**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:23	7440-41-7	
Boron	**1060**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 04:23	7440-42-8	
Cadmium	**0.24J**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:23	7440-43-9	
Calcium	**81500**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:23	7440-70-2	
Chromium	**28.7**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:23	7440-47-3	
Cobalt	**13.2**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:23	7440-48-4	
Copper	**36.2**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:23	7440-50-8	
Iron	**117000**	ug/L	2500	49.6	10	10/22/08 08:06	10/24/08 15:39	7439-89-6	
Lead	**10.9**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:23	7439-92-1	
Lithium	**10.0**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:23	7439-93-2	
Magnesium	**18100**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:23	7439-95-4	
Manganese	**7820**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:23	7439-96-5	
Molybdenum	**17.5**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:23	7439-98-7	
Nickel	**33.5**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:23	7440-02-0	
Potassium	**12300**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:23	7440-09-7	
Selenium	**2.9**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:23	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:23	7440-22-4	
Sodium	**44400**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:23	7440-23-5	
Thallium	**0.14J**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:23	7440-28-0	
Total Hardness	**278**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:23		
Vanadium	**45.6**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:23	7440-62-2	
Zinc	**72.1**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:23	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**382**	mg/L	10.0	3.2	1		10/29/08 15:28		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:28		
Alkalinity, Total as CaCO3	**382**	mg/L	10.0	3.2	1		10/29/08 15:28		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/18/08 05:09	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 03:35	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.9J**	mg/L	5.0	1.1	1		10/18/08 05:09	16887-00-6	
Fluoride	**0.41J**	mg/L	0.50	0.059	1		10/18/08 05:09	16984-48-8	
Sulfate	**2.2J**	mg/L	4.0	0.51	1		10/18/08 05:09	14808-79-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: MW-601 **Lab ID: 4010409007** Collected: 10/16/08 12:03 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:09	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**6.3**	mg/L	1.0	0.50	1		10/28/08 16:16	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HYG-1 **Lab ID: 4010409008** Collected: 10/16/08 14:53 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.06**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 11:26	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**24.0J**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:29	7429-90-5	
Antimony	**11.8**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:29	7440-36-0	
Arsenic	**0.73J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:29	7440-38-2	
Barium	**42.2**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:29	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:29	7440-41-7	
Boron	**128**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 04:29	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:29	7440-43-9	
Calcium	**49400**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:29	7440-70-2	
Chromium	**0.43J**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:29	7440-47-3	
Cobalt	**2.4**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:29	7440-48-4	
Copper	**1.7**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:29	7440-50-8	
Iron	**232J**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 04:29	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:29	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:29	7439-93-2	
Magnesium	**22500**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:29	7439-95-4	
Manganese	**17.9**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:29	7439-96-5	
Molybdenum	**10**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:29	7439-98-7	
Nickel	**1.2**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:29	7440-02-0	
Potassium	**7490**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:29	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:29	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:29	7440-22-4	
Sodium	**12800**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:29	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:29	7440-28-0	
Total Hardness	**216**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:29		
Vanadium	**0.81J**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:29	7440-62-2	
Zinc	**3.4J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:29	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**104**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Total as CaCO3	**104**	mg/L	10.0	3.2	1		10/29/08 15:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.3**	mg/L	0.40	0.085	1		10/18/08 05:21	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 03:49	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.0**	mg/L	5.0	1.1	1		10/18/08 05:21	16887-00-6	
Fluoride	**0.32J**	mg/L	0.50	0.059	1		10/18/08 05:21	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HYG-1 **Lab ID: 4010409008** Collected: 10/16/08 14:53 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**132**	mg/L	20.0	2.6	5		10/28/08 21:24	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:09	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:16	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-1A **Lab ID: 4010409009** Collected: 10/16/08 14:02 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.768**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 11:11	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**10.5J**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:35	7429-90-5	
Antimony	**11.6**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:35	7440-36-0	
Arsenic	**0.60J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:35	7440-38-2	
Barium	**53.0**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:35	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:35	7440-41-7	
Boron	**101**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 04:35	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:35	7440-43-9	
Calcium	**49700**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:35	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:35	7440-47-3	
Cobalt	**2.2**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:35	7440-48-4	
Copper	**1.7**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:35	7440-50-8	
Iron	**246J**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 04:35	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:35	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:35	7439-93-2	
Magnesium	**23700**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:35	7439-95-4	
Manganese	**7.4**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:35	7439-96-5	
Molybdenum	**10.3**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:35	7439-98-7	
Nickel	**0.87J**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:35	7440-02-0	
Potassium	**7020**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:35	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:35	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:35	7440-22-4	
Sodium	**12400**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:35	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:35	7440-28-0	
Total Hardness	**222**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:35		
Vanadium	**1.1**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:35	7440-62-2	
Zinc	**3.1J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:35	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Total as CaCO3	**102**	mg/L	10.0	3.2	1		10/29/08 15:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.6**	mg/L	0.40	0.085	1		10/18/08 05:33	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 04:04	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**10.9**	mg/L	5.0	1.1	1		10/18/08 05:33	16887-00-6	
Fluoride	**0.31J**	mg/L	0.50	0.059	1		10/18/08 05:33	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-1A **Lab ID: 4010409009** Collected: 10/16/08 14:02 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**130**	mg/L	20.0	2.6	5		10/28/08 21:39	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:13	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:17	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-6A **Lab ID: 4010409010** Collected: 10/16/08 15:10 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.01**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 11:32	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**4.7J**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:40	7429-90-5	
Antimony	**13.4**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:40	7440-36-0	
Arsenic	**0.39J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:40	7440-38-2	
Barium	**61.0**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:40	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:40	7440-41-7	
Boron	**48.0**	ug/L	5.0	1.1	1	10/22/08 08:06	10/27/08 18:12	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:40	7440-43-9	
Calcium	**54400**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:40	7440-70-2	
Chromium	**0.45J**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:40	7440-47-3	
Cobalt	**3.3**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:40	7440-48-4	
Copper	**1.4**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:40	7440-50-8	
Iron	**1320**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 04:40	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:40	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:40	7439-93-2	
Magnesium	**24900**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:40	7439-95-4	
Manganese	**17.6**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:40	7439-96-5	
Molybdenum	**10.8**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:40	7439-98-7	
Nickel	**0.63J**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:40	7440-02-0	
Potassium	**9960**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:40	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:40	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:40	7440-22-4	
Sodium	**12200**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:40	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:40	7440-28-0	
Total Hardness	**238**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:40		
Vanadium	**0.47J**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:40	7440-62-2	
Zinc	**3.3J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:40	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Total as CaCO3	**102**	mg/L	10.0	3.2	1		10/29/08 15:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		1j
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**1.8**	mg/L	0.40	0.085	1		10/18/08 05:45	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 04:18	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.1**	mg/L	5.0	1.1	1		10/18/08 05:45	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		10/18/08 05:45	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-6A **Lab ID: 4010409010** Collected: 10/16/08 15:10 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**143**	mg/L	20.0	2.6	5		10/28/08 21:53	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:14	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/28/08 16:18	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-1 **Lab ID: 4010409011** Collected: 10/16/08 14:09 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.528**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 12:05	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**26.4J**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 04:58	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 04:58	7440-36-0	
Arsenic	**0.68J**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:58	7440-38-2	
Barium	**22.1**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 04:58	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 04:58	7440-41-7	
Boron	**80.5**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 16:05	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 04:58	7440-43-9	
Calcium	**59100**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 04:58	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 04:58	7440-47-3	
Cobalt	**0.84J**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 04:58	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:58	7440-50-8	
Iron	**3170**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 04:58	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 04:58	7439-92-1	
Lithium	**2.4**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 04:58	7439-93-2	
Magnesium	**21600**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 04:58	7439-95-4	
Manganese	**406**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 04:58	7439-96-5	
Molybdenum	**8.9**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 04:58	7439-98-7	
Nickel	**1.0**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 04:58	7440-02-0	
Potassium	**3910**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 04:58	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 04:58	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 04:58	7440-22-4	
Sodium	**14400**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 04:58	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 04:58	7440-28-0	
Total Hardness	**236**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 04:58		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 04:58	7440-62-2	
Zinc	**3.0J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 04:58	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**130**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:29		
Alkalinity, Total as CaCO3	**130**	mg/L	10.0	3.2	1		10/29/08 15:29		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		1j
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.19J**	mg/L	0.40	0.085	1		10/18/08 05:57	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 04:32	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.9**	mg/L	5.0	1.1	1		10/18/08 05:57	16887-00-6	
Fluoride	**0.28J**	mg/L	0.50	0.059	1		10/18/08 05:57	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-1 **Lab ID: 4010409011** Collected: 10/16/08 14:09 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**127**	mg/L	20.0	2.6	5		10/28/08 22:07	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:18	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/31/08 12:38	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-6 **Lab ID: 4010409012** Collected: 10/16/08 16:02 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.246J**	ng/L	0.50	0.16	1	10/21/08 12:15	10/24/08 12:10	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/22/08 08:06	10/24/08 05:03	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/22/08 08:06	10/24/08 05:03	7440-36-0	
Arsenic	**4.6**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 05:03	7440-38-2	
Barium	**35.9**	ug/L	1.0	0.17	1	10/22/08 08:06	10/24/08 05:03	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/22/08 08:06	10/24/08 05:03	7440-41-7	
Boron	**66.3**	ug/L	5.0	1.1	1	10/22/08 08:06	10/24/08 16:12	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/22/08 08:06	10/24/08 05:03	7440-43-9	
Calcium	**64800**	ug/L	250	62.6	1	10/22/08 08:06	10/24/08 05:03	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/22/08 08:06	10/24/08 05:03	7440-47-3	
Cobalt	**0.38J**	ug/L	1.0	0.077	1	10/22/08 08:06	10/24/08 05:03	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 05:03	7440-50-8	
Iron	**2250**	ug/L	250	5.0	1	10/22/08 08:06	10/24/08 05:03	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/22/08 08:06	10/24/08 05:03	7439-92-1	
Lithium	**4.2**	ug/L	1.0	0.13	1	10/22/08 08:06	10/24/08 05:03	7439-93-2	
Magnesium	**19100**	ug/L	250	6.1	1	10/22/08 08:06	10/24/08 05:03	7439-95-4	
Manganese	**341**	ug/L	1.0	0.24	1	10/22/08 08:06	10/24/08 05:03	7439-96-5	
Molybdenum	**3.2**	ug/L	1.0	0.064	1	10/22/08 08:06	10/24/08 05:03	7439-98-7	
Nickel	**0.37J**	ug/L	1.0	0.15	1	10/22/08 08:06	10/24/08 05:03	7440-02-0	
Potassium	**3360**	ug/L	250	78.3	1	10/22/08 08:06	10/24/08 05:03	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/22/08 08:06	10/24/08 05:03	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/22/08 08:06	10/24/08 05:03	7440-22-4	
Sodium	**14600**	ug/L	250	51.2	1	10/22/08 08:06	10/24/08 05:03	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/22/08 08:06	10/24/08 05:03	7440-28-0	
Total Hardness	**240**	mg/L	5.0	0.15	1	10/22/08 08:06	10/24/08 05:03		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/22/08 08:06	10/24/08 05:03	7440-62-2	
Zinc	**2.7J**	ug/L	5.0	1.7	1	10/22/08 08:06	10/24/08 05:03	7440-66-6	B
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**149**	mg/L	10.0	3.2	1		10/29/08 15:30		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/29/08 15:30		
Alkalinity, Total as CaCO3	**149**	mg/L	10.0	3.2	1		10/29/08 15:30		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/21/08 09:30		1j
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/18/08 06:34	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/18/08 04:46	14797-65-0	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**12.0**	mg/L	5.0	1.1	1		10/18/08 06:34	16887-00-6	
Fluoride	**0.27J**	mg/L	0.50	0.059	1		10/18/08 06:34	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: HW-6 **Lab ID: 4010409012** Collected: 10/16/08 16:02 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**111**	mg/L	20.0	2.6	5		10/28/08 22:21	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		10/29/08 14:19	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**4.7**	mg/L	1.0	0.50	1		10/31/08 12:39	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Sample: TRIP BLANK **Lab ID: 4010409013** Collected: 10/16/08 00:00 Received: 10/17/08 10:00 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8021 GCV Short List	Analytical Method: EPA 8021								
Benzene	**<0.23**	ug/L	1.0	0.23	1		10/21/08 03:37	71-43-2	
Ethylbenzene	**<0.40**	ug/L	1.0	0.40	1		10/21/08 03:37	100-41-4	
Toluene	**<0.36**	ug/L	1.0	0.36	1		10/21/08 03:37	108-88-3	
m&p-Xylene	**<0.74**	ug/L	2.0	0.74	1		10/21/08 03:37	1330-20-7	
o-Xylene	**<0.36**	ug/L	1.0	0.36	1		10/21/08 03:37	95-47-6	
a,a,a-Trifluorotoluene (S)	99	%	80-124		1		10/21/08 03:37	98-08-8	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WETA/2562 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 91455 — Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	10/18/08 02:06	
Nitrite as N	mg/L	<0.036	0.10	10/18/08 00:03	

LABORATORY CONTROL SAMPLE: 91456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	99	90-110	
Nitrite as N	mg/L	.8	0.76	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91457 91458

Parameter	Units	4010409001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	1.0	1.6	1.6	2.5	2.5	93	93	90-110	0	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.56	0.53	70	66	90-110	6	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91459 91460

Parameter	Units	4010409005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	<0.085	1.6	1.6	1.6	1.6	99	99	90-110	.6	20	
Nitrite as N	mg/L	<0.036	.8	.8	0.40	0.38	50	48	90-110	5	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WETA/2563 — Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 — Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 91461 — Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.1	5.0	10/18/08 02:06	
Fluoride	mg/L	<0.059	0.50	10/18/08 02:06	
Sulfate	mg/L	<0.51	4.0	10/18/08 02:06	

LABORATORY CONTROL SAMPLE: 91462

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	18.9	94	90-110	
Fluoride	mg/L	2	2.0	98	90-110	
Sulfate	mg/L	16	15.6	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91463 91464

Parameter	Units	4010409001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	10.6	20	20	29.6	29.6	95	95	90-110	.1	20	
Fluoride	mg/L	0.31J	2	2	2.1	2.1	90	90	90-110	0	20	
Sulfate	mg/L	131	80	80	215	214	105	104	90-110	.5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91465 91466

Parameter	Units	4010409005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.3	20	20	44.3	44.3	100	100	90-110	.1	20	
Fluoride	mg/L	<0.059	2	2	1.8	1.9	92	94	90-110	2	20	
Sulfate	mg/L	17.2	16	16	27.6	26.9	65	61	90-110	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: GCV/2471 | Analysis Method: EPA 8021
QC Batch Method: EPA 8021 | Analysis Description: 8021 GCV BTEX
Associated Lab Samples: 4010409013

METHOD BLANK: 91494 | Matrix: Water
Associated Lab Samples: 4010409013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.23	1.0	10/20/08 21:14	
Ethylbenzene	ug/L	<0.40	1.0	10/20/08 21:14	
m&p-Xylene	ug/L	<0.74	2.0	10/20/08 21:14	
o-Xylene	ug/L	<0.36	1.0	10/20/08 21:14	
Toluene	ug/L	<0.36	1.0	10/20/08 21:14	
a,a,a-Trifluorotoluene (S)	%	99	80-124	10/20/08 21:14	

LABORATORY CONTROL SAMPLE & LCSD: 91495 91496

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	20.3	20.2	101	101	80-120	.1	20	
Ethylbenzene	ug/L	20	20.5	20.6	103	103	80-120	.2	20	
m&p-Xylene	ug/L	40	40.0	40.0	100	100	80-120	.09	20	
o-Xylene	ug/L	20	20.3	20.1	102	100	80-120	1	20	
Toluene	ug/L	20	20.6	20.7	103	103	80-120	.7	20	
a,a,a-Trifluorotoluene (S)	%				98	99	80-124			

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: GCV/2472 | Analysis Method: EPA 8021
QC Batch Method: EPA 8021 | Analysis Description: 8021 GCV BTEX
Associated Lab Samples: 4010409003

METHOD BLANK: 91757 | Matrix: Water
Associated Lab Samples: 4010409003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.23	1.0	10/21/08 16:39	
Ethylbenzene	ug/L	<0.40	1.0	10/21/08 16:39	
m&p-Xylene	ug/L	<0.74	2.0	10/21/08 16:39	
o-Xylene	ug/L	<0.36	1.0	10/21/08 16:39	
Toluene	ug/L	<0.36	1.0	10/21/08 16:39	
a,a,a-Trifluorotoluene (S)	%	101	80-124	10/21/08 16:39	

LABORATORY CONTROL SAMPLE & LCSD: 91758 91759

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Benzene	ug/L	20	20.4	20.9	102	105	80-120	2	20	
Ethylbenzene	ug/L	20	21.2	21.6	106	108	80-120	2	20	
m&p-Xylene	ug/L	40	40.7	41.2	102	103	80-120	1	20	
o-Xylene	ug/L	20	20.5	20.8	102	104	80-120	2	20	
Toluene	ug/L	20	20.7	21.1	103	105	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				99	100	80-124			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 91804 91805

Parameter	Units	4010387006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	234	200	200	398	400	82	83	58-141	.5	20	
Ethylbenzene	ug/L	341	200	200	517	518	88	89	80-127	.2	20	
m&p-Xylene	ug/L	404	400	400	730	738	81	83	77-131	1	20	
o-Xylene	ug/L	<50.0	200	200	179	182	87	89	80-122	2	20	
Toluene	ug/L	<50.0	200	200	208	214	95	99	80-120	3	20	
a,a,a-Trifluorotoluene (S)	%						89	89	80-124			

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WET/2471 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 92107 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/21/08 09:30	

LABORATORY CONTROL SAMPLE: 92108

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	46	39.2	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92109 92110

Parameter	Units	4010358004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	46	46	26.8	26.4	57	56	80-120	2	20	M0

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: MPRP/1884 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 92337 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<4.5	250	10/24/08 02:36	
Antimony	ug/L	<0.071	1.0	10/24/08 02:36	
Arsenic	ug/L	<0.17	1.0	10/24/08 02:36	
Barium	ug/L	<0.17	1.0	10/24/08 02:36	
Beryllium	ug/L	<0.41	1.0	10/24/08 02:36	
Boron	ug/L	<1.1	5.0	10/24/08 15:01	
Cadmium	ug/L	<0.087	1.0	10/24/08 02:36	
Calcium	ug/L	<62.6	250	10/24/08 02:36	
Chromium	ug/L	<0.30	1.0	10/24/08 02:36	
Cobalt	ug/L	<0.077	1.0	10/24/08 02:36	
Copper	ug/L	<0.50	1.0	10/24/08 02:36	
Iron	ug/L	<5.0	250	10/24/08 02:36	
Lead	ug/L	<0.50	1.0	10/24/08 02:36	
Lithium	ug/L	<0.13	1.0	10/24/08 02:36	
Magnesium	ug/L	<6.1	250	10/24/08 02:36	
Manganese	ug/L	<0.24	1.0	10/24/08 02:36	
Molybdenum	ug/L	<0.064	1.0	10/24/08 02:36	
Nickel	ug/L	<0.15	1.0	10/24/08 02:36	
Potassium	ug/L	<78.3	250	10/24/08 02:36	
Selenium	ug/L	<0.25	1.0	10/24/08 02:36	
Silver	ug/L	<0.25	0.50	10/24/08 02:36	
Sodium	ug/L	<51.2	250	10/24/08 02:36	
Thallium	ug/L	<0.019	1.0	10/24/08 02:36	
Vanadium	ug/L	<0.45	1.0	10/24/08 02:36	
Zinc	ug/L	3.5J	5.0	10/24/08 02:36	

LABORATORY CONTROL SAMPLE: 92338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	5010	100	75-125	
Antimony	ug/L	500	503	101	75-125	
Arsenic	ug/L	500	512	102	75-125	
Barium	ug/L	500	494	99	75-125	
Beryllium	ug/L	500	500	100	75-125	
Boron	ug/L	500	502	100	75-125	
Cadmium	ug/L	500	499	100	75-125	
Calcium	ug/L	5000	5130	103	75-125	
Chromium	ug/L	500	500	100	75-125	
Cobalt	ug/L	500	484	97	75-125	
Copper	ug/L	500	495	99	75-125	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

LABORATORY CONTROL SAMPLE: 92338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	5000	5080	102	75-125	
Lead	ug/L	500	516	103	75-125	
Lithium	ug/L	500	503	101	75-125	
Magnesium	ug/L	5000	5110	102	75-125	
Manganese	ug/L	500	499	100	75-125	
Molybdenum	ug/L	500	500	100	75-125	
Nickel	ug/L	500	498	100	75-125	
Potassium	ug/L	5000	5010	100	75-125	
Selenium	ug/L	500	521	104	75-125	
Silver	ug/L	250	248	99	75-125	
Sodium	ug/L	5000	5100	102	75-125	
Thallium	ug/L	500	513	103	75-125	
Vanadium	ug/L	500	500	100	75-125	
Zinc	ug/L	500	502	100	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 92339 92340

Parameter	Units	4010409006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	<4.5	5000	5000	4860	4800	97	96	75-125	1	20	
Antimony	ug/L	11.6	500	500	515	509	101	99	75-125	1	20	
Arsenic	ug/L	0.60J	500	500	511	507	102	101	75-125	.9	20	
Barium	ug/L	42.7	500	500	535	527	98	97	75-125	1	20	
Beryllium	ug/L	<0.41	500	500	488	481	98	96	75-125	2	20	
Boron	ug/L	129	500	500	632	624	100	99	75-125	1	20	
Cadmium	ug/L	<0.087	500	500	491	484	98	97	75-125	1	20	
Calcium	ug/L	51400	5000	5000	56200	55600	95	84	75-125	1	20	
Chromium	ug/L	0.88J	500	500	496	485	99	97	75-125	2	20	
Cobalt	ug/L	2.3	500	500	476	466	95	93	75-125	2	20	
Copper	ug/L	1.0	500	500	475	465	95	93	75-125	2	20	
Iron	ug/L	244J	5000	5000	5290	5170	101	99	75-125	2	20	
Lead	ug/L	<0.50	500	500	518	509	104	102	75-125	2	20	
Lithium	ug/L	0.15J	500	500	497	489	99	98	75-125	2	20	
Magnesium	ug/L	25100	5000	5000	30400	29600	106	90	75-125	3	20	
Manganese	ug/L	12.9	500	500	506	497	99	97	75-125	2	20	
Molybdenum	ug/L	10.6	500	500	506	497	99	97	75-125	2	20	
Nickel	ug/L	25.4	500	500	506	496	96	94	75-125	2	20	
Potassium	ug/L	7140	5000	5000	12000	11800	97	93	75-125	1	20	
Selenium	ug/L	<0.25	500	500	517	512	103	102	75-125	.9	20	
Silver	ug/L	<0.25	250	250	239	234	96	94	75-125	2	20	
Sodium	ug/L	12900	5000	5000	17300	17100	88	84	75-125	1	20	
Thallium	ug/L	0.19J	500	500	520	507	104	101	75-125	3	20	
Vanadium	ug/L	0.76J	500	500	502	491	100	98	75-125	2	20	
Zinc	ug/L	3.5J	500	500	488	483	97	96	75-125	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: CVFS/1288 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 93717 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.362J	0.50	10/24/08 09:41	

METHOD BLANK: 93718 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.375J	0.50	10/24/08 10:11	

METHOD BLANK: 93719 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.446J	0.50	10/24/08 10:20	

LABORATORY CONTROL SAMPLE & LCSD: 93720 93721

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.25	5.12	105	102	79-121	2	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93722 93723

Parameter	Units	4010409001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	0.605	2.5	2.5	3.36	3.24	110	105	75-125	4	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93724 93725

Parameter	Units	4010409004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	112	400	400	525	483	103	93	75-125	8	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WETA/2631 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010

METHOD BLANK: 94548 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/28/08 15:57	

LABORATORY CONTROL SAMPLE: 94549

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94550 94551

Parameter	Units	4010403001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	0.83J	10	10	10.9	11.1	100	103	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94552 94553

Parameter	Units	4010409010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.8	10.6	107	104	90-110	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WETA/2635 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008

METHOD BLANK: 94945 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	10/29/08 13:45	

LABORATORY CONTROL SAMPLE: 94946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94947 94948

Parameter	Units	4010358009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	109	107	90-110	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94949 94950

Parameter	Units	4010409008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	107	109	90-110	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WETA/2640 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 94979 Matrix: Water
Associated Lab Samples: 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	10/29/08 14:12	

LABORATORY CONTROL SAMPLE: 94980

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.11	108	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94981 94982

Parameter	Units	4010518001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	0.016J	.1	.1	0.12	0.12	107	108	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94983 94984

Parameter	Units	4010516005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	105	107	90-110	1	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WET/2532 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

METHOD BLANK: 95309 Matrix: Water
Associated Lab Samples: 4010409001, 4010409002, 4010409003, 4010409004, 4010409005, 4010409006, 4010409007, 4010409008, 4010409009, 4010409010, 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/29/08 15:22	

LABORATORY CONTROL SAMPLE: 95310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	503	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 95311 95312

Parameter	Units	4010409001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	108	500	500	600	605	98	99	80-120	.7	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

QC Batch: WETA/2659 | Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 | Analysis Description: 350.1 Ammonia, Distilled
Associated Lab Samples: 4010409011, 4010409012

METHOD BLANK: 96033 | Matrix: Water
Associated Lab Samples: 4010409011, 4010409012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/31/08 12:36	

LABORATORY CONTROL SAMPLE: 96034

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.4	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96035 96036

Parameter	Units	4010516001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.2	10.5	101	104	90-110	3	20	

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QUALIFIERS

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

1j	This sample was received with insufficient preservation. More sodium hydoxide was added to the sample before analysis.
B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010409001	DUP-004	EPA 300.0	WETA/2562		
4010409002	FBK-004	EPA 300.0	WETA/2562		
4010409003	MW-5	EPA 300.0	WETA/2562		
4010409004	MW-102	EPA 300.0	WETA/2562		
4010409005	HW-5	EPA 300.0	WETA/2562		
4010409006	HW-5A	EPA 300.0	WETA/2562		
4010409007	MW-601	EPA 300.0	WETA/2562		
4010409008	HYG-1	EPA 300.0	WETA/2562		
4010409009	HW-1A	EPA 300.0	WETA/2562		
4010409010	HW-6A	EPA 300.0	WETA/2562		
4010409011	HW-1	EPA 300.0	WETA/2562		
4010409012	HW-6	EPA 300.0	WETA/2562		
4010409001	DUP-004	EPA 300.0	WETA/2563		
4010409002	FBK-004	EPA 300.0	WETA/2563		
4010409003	MW-5	EPA 300.0	WETA/2563		
4010409004	MW-102	EPA 300.0	WETA/2563		
4010409005	HW-5	EPA 300.0	WETA/2563		
4010409006	HW-5A	EPA 300.0	WETA/2563		
4010409007	MW-601	EPA 300.0	WETA/2563		
4010409008	HYG-1	EPA 300.0	WETA/2563		
4010409009	HW-1A	EPA 300.0	WETA/2563		
4010409010	HW-6A	EPA 300.0	WETA/2563		
4010409011	HW-1	EPA 300.0	WETA/2563		
4010409012	HW-6	EPA 300.0	WETA/2563		
4010409013	TRIP BLANK	EPA 8021	GCV/2471		
4010409003	MW-5	EPA 8021	GCV/2472		
4010409001	DUP-004	SM 4500-S F (2000)	WET/2471		
4010409002	FBK-004	SM 4500-S F (2000)	WET/2471		
4010409003	MW-5	SM 4500-S F (2000)	WET/2471		
4010409004	MW-102	SM 4500-S F (2000)	WET/2471		
4010409005	HW-5	SM 4500-S F (2000)	WET/2471		
4010409006	HW-5A	SM 4500-S F (2000)	WET/2471		
4010409008	HYG-1	SM 4500-S F (2000)	WET/2471		
4010409009	HW-1A	SM 4500-S F (2000)	WET/2471		
4010409010	HW-6A	SM 4500-S F (2000)	WET/2471		
4010409011	HW-1	SM 4500-S F (2000)	WET/2471		
4010409012	HW-6	SM 4500-S F (2000)	WET/2471		
4010409001	DUP-004	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409002	FBK-004	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409003	MW-5	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409004	MW-102	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409005	HW-5	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409006	HW-5A	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409007	MW-601	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409008	HYG-1	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409009	HW-1A	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010409010	HW-6A	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409011	HW-1	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409012	HW-6	EPA 3010	MPRP/1884	EPA 6020	ICPM/1217
4010409001	DUP-004	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409002	FBK-004	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409003	MW-5	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409004	MW-102	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409005	HW-5	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409006	HW-5A	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409007	MW-601	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409008	HYG-1	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409009	HW-1A	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409010	HW-6A	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409011	HW-1	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409012	HW-6	EPA 1631E	CVFS/1288	EPA 1631E	CVFS/1289
4010409001	DUP-004	EPA 350.1	WETA/2631		
4010409002	FBK-004	EPA 350.1	WETA/2631		
4010409003	MW-5	EPA 350.1	WETA/2631		
4010409004	MW-102	EPA 350.1	WETA/2631		
4010409005	HW-5	EPA 350.1	WETA/2631		
4010409006	HW-5A	EPA 350.1	WETA/2631		
4010409007	MW-601	EPA 350.1	WETA/2631		
4010409008	HYG-1	EPA 350.1	WETA/2631		
4010409009	HW-1A	EPA 350.1	WETA/2631		
4010409010	HW-6A	EPA 350.1	WETA/2631		
4010409001	DUP-004	EPA 335.4	WETA/2635		
4010409002	FBK-004	EPA 335.4	WETA/2635		
4010409003	MW-5	EPA 335.4	WETA/2635		
4010409004	MW-102	EPA 335.4	WETA/2635		
4010409005	HW-5	EPA 335.4	WETA/2635		
4010409006	HW-5A	EPA 335.4	WETA/2635		
4010409007	MW-601	EPA 335.4	WETA/2635		
4010409008	HYG-1	EPA 335.4	WETA/2635		
4010409009	HW-1A	EPA 335.4	WETA/2640		
4010409010	HW-6A	EPA 335.4	WETA/2640		
4010409011	HW-1	EPA 335.4	WETA/2640		
4010409012	HW-6	EPA 335.4	WETA/2640		
4010409001	DUP-004	SM 2320B	WET/2532		
4010409002	FBK-004	SM 2320B	WET/2532		
4010409003	MW-5	SM 2320B	WET/2532		
4010409004	MW-102	SM 2320B	WET/2532		
4010409005	HW-5	SM 2320B	WET/2532		
4010409006	HW-5A	SM 2320B	WET/2532		
4010409007	MW-601	SM 2320B	WET/2532		
4010409008	HYG-1	SM 2320B	WET/2532		
4010409009	HW-1A	SM 2320B	WET/2532		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT GROUND WATERS
Pace Project No.: 4010409

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010409010	HW-6A	SM 2320B	WET/2532		
4010409011	HW-1	SM 2320B	WET/2532		
4010409012	HW-6	SM 2320B	WET/2532		
4010409011	HW-1	EPA 350.1	WETA/2659		
4010409012	HW-6	EPA 350.1	WETA/2659		

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Sample Condition Upon Receipt

Pace Analytical

Client Name: North Jackson + Fath ITE Project # 4010409

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☑ Other poly bags

Thermometer Used DIA **Type of Ice:** (Wet) Blue None ☑ Samples on ice, cooling process has begun

Cooler Temperature ROI **Biological Tissue is Frozen:** Yes No

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 10/17/08 CLL

				Comments:
Chain of Custody Present:	☑Yes	☐No	☐N/A	1.
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A	2.
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A	3.
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A	4.
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A	6. Nitrate/Nitrite
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A	7.
Sufficient Volume:	☑Yes	☐No	☐N/A	8.
Correct Containers Used:	☑Yes	☐No	☐N/A	9.
-Pace Containers Used:	☑Yes	☐No	☐N/A	
Containers Intact:	☑Yes	☐No	☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: WT	☑Yes	☐No	☐N/A	12.
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A	13. PH's on 500ml GtZN are 9,5,+7 on a few. #'s 003,004,010,011,012. CLL 10/17/08
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☑No	☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes	☐No		Initial when completed CJ / Lot # of added preservative
Samples checked for dechlorination:	☐Yes	☐No	☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A	15.
Trip Blank Present:	☑Yes	☐No	☐N/A	16. 2-40ml H_2O HCL rec'd + not on COC. Added by lab. CJ 10/17/08
Trip Blank Custody Seals Present	☑Yes	☐No	☐N/A	
Pace Trip Blank Lot # (if purchased): _____				

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: All Sample points have 1-500ml cg A, 1-250ml p D, 1-250ml p C, 1-250ml G, 1-500ml p GtZN, + 2-250ml p A.
#007 does not have 1-500ml p GtZN.
#003 add 3-40ml B
CLL 10/17/08

Project Manager Review: DM **Date:** 10/17/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

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CHAIN-OF-CUSTODY / Analytical Request Document

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

20081016

Page: 1 of 1

Section A Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI GROUNDWATER
Project Number:	

Section C Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: MI

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH ZnAc	Analysis Test (Y/N)	Alk2, Cl, Fl, SO4	NITRITE, NITRATE SEPARATELY	CYANIDE	METALS	LLHG	SULFIDE	LITHIUM	AMMONIA	VOC				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 4010409
1	001 DUP-004 GW				--	10/16/08	-	-	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
2	002 FBK-004 GW	WT	G			10/16/08	1118	-	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
3	003 MW-5 GW	WT	G			10/16/08	940	-	11	3	1	2	3	1			1		1	1	1	1	1	1	1	1	3				N	
4	004 ~~MW-12 GW~~ MW-102 GW	WT	G			10/16/08	1055	--	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
5	005 HW-5 GW	WT	G			10/16/08	1139	9.6	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
6	006 HW-5A GW	WT	G			10/16/08	1025	12.9	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
7	007 MW-601 GW	WT	G			10/16/08	1203	-	7	3	1	2		1					1	1	1	1	1	0	1	1					N	
8	008 HYG-1 GW	WT	G			10/16/08	1453	12.3	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
9	009 HW-1A GW	WT	G			10/16/08	1402	14.4	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
10	010 HW-6A GW	WT	G			10/16/08	1510	10	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
11	011 HW-1 GW	WT	G			10/16/08	1409	10	8	3	1	2		1			1		1	1	1	1	1	1	1	1					N	
12	012 HW-6	WT	G			10/16/08	1602	9	8	3	1	2		1			1		1	1	1	1	1	1	1	1						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / NJC	10/16/08	1800							
	Fed Ex	10/17/08	1000	[signature] Pace	10/17/08	10:00	ROI	Yes	Yes	y

FED EX 7927 7163 7808 7919 7256 7332
7927 7163 7819
7921 2800 4994
7919 7256 7310

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: CURT STEFFEN / ANDY MARACCHI

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/16/08

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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

#012 2-4oz jar blocks (HCl #09) Rec'd + set on ice. Added by lab [illegible] 10/17/08

Batch No. 4010632

Pace Analytical Services, Inc.
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

November 19, 2008

JANIS KESY
FOTH INFRASTRUCTURE & ENVIRONMENT
2737 SOUTH RIDGE ROAD
Green Bay, WI 54304

RE: Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Dear JANIS KESY:
Enclosed are the analytical results for sample(s) received by the laboratory on October 23, 2008. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Tod Noltemeyer

tod.noltemeyer@pacelabs.com
Project Manager

Enclosures

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CERTIFICATIONS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Green Bay Certification IDs

Louisiana Certification #: 04169
Louisiana Certification #: 04168
Kentucky Certification #: 83
Kentucky Certification #: 82
Wisconsin DATCP Certification #: 105-444
Wisconsin DATCP Certification #: 105-444
Wisconsin Certification #: 405132750
Wisconsin Certification #: 405132750
South Carolina Certification #: 83006001
South Carolina Certification #: 83006001
Minnesota Certification #: 055-999-334
Minnesota Certification #: 055-999-334
North Carolina Certification #: 503
North Carolina Certification #: 503
North Dakota Certification #: R-200
North Dakota Certification #: R-150
New York Certification #: 11888
New York Certification #: 11887
Illinois Certification #: 200051
Illinois Certification #: 200050
Florida (NELAP) Certification #: E87951
Florida (NELAP) Certification #: E87948

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SAMPLE SUMMARY

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Lab ID	Sample ID	Matrix	Date Collected	Date Received
4010632001	**KMW-5**	Water	10/22/08 12:00	10/23/08 10:30
4010632002	**HW-2**	Water	10/22/08 10:41	10/23/08 10:30
4010632003	**DUP-005**	Water	10/22/08 00:00	10/23/08 10:30
4010632004	**FBK-005**	Water	10/22/08 10:15	10/23/08 10:30
4010632005	**KMW-2**	Water	10/22/08 12:19	10/23/08 10:30

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SAMPLE ANALYTE COUNT

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
4010632001	KMW-5	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 350.1	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010632002	HW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010632003	DUP-005	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010632004	FBK-005	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G
4010632005	KMW-2	EPA 1631E	GMW	1	PASI-G
		EPA 300.0	DDY	5	PASI-G
		EPA 335.4	DAW	1	PASI-G
		EPA 6020	DS1	26	PASI-G
		SM 2320B	RRS	3	PASI-G
		SM 4500-S F (2000)	DEY	1	PASI-G

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **EPA 1631E**
Description: 1631E Mercury, Low Level
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for EPA 1631E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 1631E with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **EPA 6020**
Description: 6020 MET ICPMS
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for EPA 6020. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/1899

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010516001

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 93374)
  - Potassium
  - Sodium

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **SM 4500-S F (2000)**
Description: 4500S2F Sulfide, Iodometric
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for SM 4500-S F (2000). All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **EPA 300.0**
Description: 300.0 IC Anions
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- DUP-005 (Lab ID: 4010632003)
- FBK-005 (Lab ID: 4010632004)
- HW-2 (Lab ID: 4010632002)
- KMW-2 (Lab ID: 4010632005)
- KMW-5 (Lab ID: 4010632001)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **EPA 335.4**
Description: 335.4 Cyanide, Total
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
5 samples were analyzed for EPA 335.4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2681

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010632003,4010836005

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 96967)
  - Cyanide
- MSD (Lab ID: 96968)
  - Cyanide

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Method: **EPA 350.1**
Description: 350.1 Ammonia, Distilled
Client: FOTH INFRASTRUCTURE & ENVIRONMENT
Date: November 19, 2008

General Information:
1 sample was analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/2660

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 4010632001,409886012

M0: Matrix spike recovery was outside laboratory control limits.

- MS (Lab ID: 96044)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: KMW-5 **Lab ID: 4010632001** Collected: 10/22/08 12:00 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.818**	ng/L	0.50	0.16	1	10/24/08 12:05	11/03/08 12:41	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**462**	ug/L	250	4.5	1	10/24/08 08:00	11/03/08 21:22	7429-90-5	
Antimony	**1.3**	ug/L	1.0	0.071	1	10/24/08 08:00	11/03/08 21:22	7440-36-0	
Arsenic	**4.1**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:22	7440-38-2	
Barium	**15.3**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:22	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/24/08 08:00	11/03/08 21:22	7440-41-7	
Boron	**64.5**	ug/L	5.0	1.1	1	10/24/08 08:00	11/03/08 21:22	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/24/08 08:00	11/03/08 21:22	7440-43-9	
Calcium	**30500**	ug/L	250	62.6	1	10/24/08 08:00	11/03/08 21:22	7440-70-2	
Chromium	**4.2**	ug/L	1.0	0.30	1	10/24/08 08:00	11/03/08 21:22	7440-47-3	
Cobalt	**169**	ug/L	1.0	0.077	1	10/24/08 08:00	11/03/08 21:22	7440-48-4	
Copper	**4.5**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:22	7440-50-8	
Iron	**10000**	ug/L	250	5.0	1	10/24/08 08:00	11/03/08 21:22	7439-89-6	
Lead	**0.73J**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:22	7439-92-1	
Lithium	**8.7**	ug/L	1.0	0.13	1	10/24/08 08:00	11/03/08 21:22	7439-93-2	
Magnesium	**16500**	ug/L	250	6.1	1	10/24/08 08:00	11/03/08 21:22	7439-95-4	
Manganese	**858**	ug/L	1.0	0.24	1	10/24/08 08:00	11/03/08 21:22	7439-96-5	
Molybdenum	**5.0**	ug/L	1.0	0.064	1	10/24/08 08:00	11/03/08 21:22	7439-98-7	
Nickel	**23.7**	ug/L	1.0	0.15	1	10/24/08 08:00	11/03/08 21:22	7440-02-0	
Potassium	**3880**	ug/L	250	78.3	1	10/24/08 08:00	11/03/08 21:22	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/24/08 08:00	11/03/08 21:22	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/24/08 08:00	11/03/08 21:22	7440-22-4	
Sodium	**13600**	ug/L	250	51.2	1	10/24/08 08:00	11/03/08 21:22	7440-23-5	
Thallium	**0.053J**	ug/L	1.0	0.019	1	10/24/08 08:00	11/03/08 21:22	7440-28-0	B
Total Hardness	**144**	mg/L	5.0	0.15	1	10/24/08 08:00	11/03/08 21:22		
Vanadium	**0.49J**	ug/L	1.0	0.45	1	10/24/08 08:00	11/03/08 21:22	7440-62-2	
Zinc	**180**	ug/L	5.0	1.7	1	10/24/08 08:00	11/03/08 21:22	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**60.5**	mg/L	10.0	3.2	1		10/30/08 10:00		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:00		
Alkalinity, Total as CaCO3	**60.5**	mg/L	10.0	3.2	1		10/30/08 10:00		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/27/08 09:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.98**	mg/L	0.40	0.085	1		10/24/08 09:54	14797-55-8	
Nitrite as N	**0.060J**	mg/L	0.10	0.036	1		10/24/08 12:59	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.9J**	mg/L	5.0	1.1	1		10/24/08 09:54	16887-00-6	
Fluoride	**0.20J**	mg/L	0.50	0.059	1		10/24/08 09:54	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: KMW-5 **Lab ID: 4010632001** Collected: 10/22/08 12:00 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**119**	mg/L	20.0	2.6	5		10/24/08 23:53	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		11/04/08 13:42	57-12-5	
350.1 Ammonia, Distilled	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**<0.50**	mg/L	1.0	0.50	1		10/31/08 13:21	7664-41-7	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: HW-2 **Lab ID: 4010632002** Collected: 10/22/08 10:41 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.43**	ng/L	0.50	0.16	1	10/24/08 12:05	11/03/08 12:46	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/24/08 08:00	11/03/08 21:28	7429-90-5	
Antimony	**8.8**	ug/L	1.0	0.071	1	10/24/08 08:00	11/03/08 21:28	7440-36-0	
Arsenic	**0.34J**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:28	7440-38-2	
Barium	**20.1**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:28	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/24/08 08:00	11/03/08 21:28	7440-41-7	
Boron	**113**	ug/L	5.0	1.1	1	10/24/08 08:00	11/03/08 21:28	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/24/08 08:00	11/03/08 21:28	7440-43-9	
Calcium	**55600**	ug/L	250	62.6	1	10/24/08 08:00	11/03/08 21:28	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/24/08 08:00	11/03/08 21:28	7440-47-3	
Cobalt	**1.7**	ug/L	1.0	0.077	1	10/24/08 08:00	11/03/08 21:28	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:28	7440-50-8	
Iron	**479**	ug/L	250	5.0	1	10/24/08 08:00	11/03/08 21:28	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:28	7439-92-1	
Lithium	**0.99J**	ug/L	1.0	0.13	1	10/24/08 08:00	11/03/08 21:28	7439-93-2	
Magnesium	**22600**	ug/L	250	6.1	1	10/24/08 08:00	11/03/08 21:28	7439-95-4	
Manganese	**349**	ug/L	1.0	0.24	1	10/24/08 08:00	11/03/08 21:28	7439-96-5	
Molybdenum	**10.7**	ug/L	1.0	0.064	1	10/24/08 08:00	11/03/08 21:28	7439-98-7	
Nickel	**0.94J**	ug/L	1.0	0.15	1	10/24/08 08:00	11/03/08 21:28	7440-02-0	
Potassium	**7540**	ug/L	250	78.3	1	10/24/08 08:00	11/03/08 21:28	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/24/08 08:00	11/03/08 21:28	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/24/08 08:00	11/03/08 21:28	7440-22-4	
Sodium	**13700**	ug/L	250	51.2	1	10/24/08 08:00	11/03/08 21:28	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/24/08 08:00	11/03/08 21:28	7440-28-0	
Total Hardness	**232**	mg/L	5.0	0.15	1	10/24/08 08:00	11/03/08 21:28		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/24/08 08:00	11/03/08 21:28	7440-62-2	
Zinc	**2.2J**	ug/L	5.0	1.7	1	10/24/08 08:00	11/03/08 21:28	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	10.0	3.2	1		10/30/08 10:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:01		
Alkalinity, Total as CaCO3	**125**	mg/L	10.0	3.2	1		10/30/08 10:01		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/27/08 09:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.18J**	mg/L	0.40	0.085	1		10/24/08 10:37	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/24/08 13:41	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.4**	mg/L	5.0	1.1	1		10/24/08 10:37	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		10/24/08 10:37	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: HW-2 **Lab ID: 4010632002** Collected: 10/22/08 10:41 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**134**	mg/L	20.0	2.6	5		10/25/08 00:35	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		11/04/08 13:43	57-12-5	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: DUP-005 **Lab ID: 4010632003** Collected: 10/22/08 00:00 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**1.70**	ng/L	0.50	0.16	1	10/24/08 12:05	11/03/08 12:51	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/24/08 08:00	11/03/08 21:34	7429-90-5	
Antimony	**8.6**	ug/L	1.0	0.071	1	10/24/08 08:00	11/03/08 21:34	7440-36-0	
Arsenic	**0.34J**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:34	7440-38-2	
Barium	**19.0**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:34	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/24/08 08:00	11/03/08 21:34	7440-41-7	
Boron	**110**	ug/L	5.0	1.1	1	10/24/08 08:00	11/03/08 21:34	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/24/08 08:00	11/03/08 21:34	7440-43-9	
Calcium	**53100**	ug/L	250	62.6	1	10/24/08 08:00	11/03/08 21:34	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/24/08 08:00	11/03/08 21:34	7440-47-3	
Cobalt	**1.7**	ug/L	1.0	0.077	1	10/24/08 08:00	11/03/08 21:34	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:34	7440-50-8	
Iron	**443**	ug/L	250	5.0	1	10/24/08 08:00	11/03/08 21:34	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:34	7439-92-1	
Lithium	**1.0**	ug/L	1.0	0.13	1	10/24/08 08:00	11/03/08 21:34	7439-93-2	
Magnesium	**21500**	ug/L	250	6.1	1	10/24/08 08:00	11/03/08 21:34	7439-95-4	
Manganese	**332**	ug/L	1.0	0.24	1	10/24/08 08:00	11/03/08 21:34	7439-96-5	
Molybdenum	**10.2**	ug/L	1.0	0.064	1	10/24/08 08:00	11/03/08 21:34	7439-98-7	
Nickel	**0.99J**	ug/L	1.0	0.15	1	10/24/08 08:00	11/03/08 21:34	7440-02-0	
Potassium	**7140**	ug/L	250	78.3	1	10/24/08 08:00	11/03/08 21:34	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/24/08 08:00	11/03/08 21:34	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/24/08 08:00	11/03/08 21:34	7440-22-4	
Sodium	**13000**	ug/L	250	51.2	1	10/24/08 08:00	11/03/08 21:34	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/24/08 08:00	11/03/08 21:34	7440-28-0	
Total Hardness	**221**	mg/L	5.0	0.15	1	10/24/08 08:00	11/03/08 21:34		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/24/08 08:00	11/03/08 21:34	7440-62-2	
Zinc	**2.7J**	ug/L	5.0	1.7	1	10/24/08 08:00	11/03/08 21:34	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**123**	mg/L	10.0	3.2	1		10/30/08 10:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:01		
Alkalinity, Total as CaCO3	**123**	mg/L	10.0	3.2	1		10/30/08 10:01		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/27/08 09:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.18J**	mg/L	0.40	0.085	1		10/24/08 10:51	14797-55-8	H1
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/24/08 13:55	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**11.3**	mg/L	5.0	1.1	1		10/24/08 10:51	16887-00-6	
Fluoride	**0.30J**	mg/L	0.50	0.059	1		10/24/08 10:51	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: DUP-005 **Lab ID: 4010632003** Collected: 10/22/08 00:00 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**133**	mg/L	20.0	2.6	5		10/25/08 01:18	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		11/04/08 13:44	57-12-5	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: FBK-005 **Lab ID: 4010632004** Collected: 10/22/08 10:15 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.443J**	ng/L	0.50	0.16	1	10/24/08 12:05	11/03/08 12:37	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**<4.5**	ug/L	250	4.5	1	10/24/08 08:00	11/03/08 21:40	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/24/08 08:00	11/03/08 21:40	7440-36-0	
Arsenic	**<0.17**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:40	7440-38-2	
Barium	**<0.17**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:40	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/24/08 08:00	11/03/08 21:40	7440-41-7	
Boron	**1.9J**	ug/L	5.0	1.1	1	10/24/08 08:00	11/03/08 21:40	7440-42-8	B
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/24/08 08:00	11/03/08 21:40	7440-43-9	
Calcium	**<62.6**	ug/L	250	62.6	1	10/24/08 08:00	11/03/08 21:40	7440-70-2	
Chromium	**<0.30**	ug/L	1.0	0.30	1	10/24/08 08:00	11/03/08 21:40	7440-47-3	
Cobalt	**<0.077**	ug/L	1.0	0.077	1	10/24/08 08:00	11/03/08 21:40	7440-48-4	
Copper	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:40	7440-50-8	
Iron	**<5.0**	ug/L	250	5.0	1	10/24/08 08:00	11/03/08 21:40	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:40	7439-92-1	
Lithium	**<0.13**	ug/L	1.0	0.13	1	10/24/08 08:00	11/03/08 21:40	7439-93-2	
Magnesium	**<6.1**	ug/L	250	6.1	1	10/24/08 08:00	11/03/08 21:40	7439-95-4	
Manganese	**<0.24**	ug/L	1.0	0.24	1	10/24/08 08:00	11/03/08 21:40	7439-96-5	
Molybdenum	**<0.064**	ug/L	1.0	0.064	1	10/24/08 08:00	11/03/08 21:40	7439-98-7	
Nickel	**<0.15**	ug/L	1.0	0.15	1	10/24/08 08:00	11/03/08 21:40	7440-02-0	
Potassium	**<78.3**	ug/L	250	78.3	1	10/24/08 08:00	11/03/08 21:40	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/24/08 08:00	11/03/08 21:40	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/24/08 08:00	11/03/08 21:40	7440-22-4	
Sodium	**<51.2**	ug/L	250	51.2	1	10/24/08 08:00	11/03/08 21:40	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/24/08 08:00	11/03/08 21:40	7440-28-0	
Total Hardness	**<0.15**	mg/L	5.0	0.15	1	10/24/08 08:00	11/03/08 21:40		
Vanadium	**<0.45**	ug/L	1.0	0.45	1	10/24/08 08:00	11/03/08 21:40	7440-62-2	
Zinc	**<1.7**	ug/L	5.0	1.7	1	10/24/08 08:00	11/03/08 21:40	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:01		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:01		
Alkalinity, Total as CaCO3	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:01		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/27/08 09:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**0.15J**	mg/L	0.40	0.085	1		10/24/08 11:05	14797-55-8	H1
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/24/08 14:09	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**2.2J**	mg/L	5.0	1.1	1		10/24/08 11:05	16887-00-6	
Fluoride	**<0.059**	mg/L	0.50	0.059	1		10/24/08 11:05	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: FBK-005 **Lab ID: 4010632004** Collected: 10/22/08 10:15 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<0.51**	mg/L	4.0	0.51	1		10/24/08 11:05	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		11/04/08 13:49	57-12-5	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: KMW-2 **Lab ID: 4010632005** Collected: 10/22/08 12:19 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1631E Mercury, Low Level	Analytical Method: EPA 1631E Preparation Method: EPA 1631E								
Mercury	**0.843**	ng/L	0.50	0.16	1	10/24/08 12:05	11/03/08 12:58	7439-97-6	
6020 MET ICPMS	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum	**161J**	ug/L	250	4.5	1	10/24/08 08:00	11/03/08 21:45	7429-90-5	
Antimony	**<0.071**	ug/L	1.0	0.071	1	10/24/08 08:00	11/03/08 21:45	7440-36-0	
Arsenic	**37.6**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:45	7440-38-2	
Barium	**360**	ug/L	1.0	0.17	1	10/24/08 08:00	11/03/08 21:45	7440-39-3	
Beryllium	**<0.41**	ug/L	1.0	0.41	1	10/24/08 08:00	11/03/08 21:45	7440-41-7	
Boron	**58.4**	ug/L	5.0	1.1	1	10/24/08 08:00	11/03/08 21:45	7440-42-8	
Cadmium	**<0.087**	ug/L	1.0	0.087	1	10/24/08 08:00	11/03/08 21:45	7440-43-9	
Calcium	**66700**	ug/L	250	62.6	1	10/24/08 08:00	11/03/08 21:45	7440-70-2	
Chromium	**1.2**	ug/L	1.0	0.30	1	10/24/08 08:00	11/03/08 21:45	7440-47-3	
Cobalt	**6.6**	ug/L	1.0	0.077	1	10/24/08 08:00	11/03/08 21:45	7440-48-4	
Copper	**0.66J**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:45	7440-50-8	
Iron	**40900**	ug/L	250	5.0	1	10/24/08 08:00	11/03/08 21:45	7439-89-6	
Lead	**<0.50**	ug/L	1.0	0.50	1	10/24/08 08:00	11/03/08 21:45	7439-92-1	
Lithium	**1.7**	ug/L	1.0	0.13	1	10/24/08 08:00	11/03/08 21:45	7439-93-2	
Magnesium	**23200**	ug/L	250	6.1	1	10/24/08 08:00	11/03/08 21:45	7439-95-4	
Manganese	**6880**	ug/L	1.0	0.24	1	10/24/08 08:00	11/03/08 21:45	7439-96-5	
Molybdenum	**2.1**	ug/L	1.0	0.064	1	10/24/08 08:00	11/03/08 21:45	7439-98-7	B
Nickel	**11.4**	ug/L	1.0	0.15	1	10/24/08 08:00	11/03/08 21:45	7440-02-0	
Potassium	**4250**	ug/L	250	78.3	1	10/24/08 08:00	11/03/08 21:45	7440-09-7	
Selenium	**<0.25**	ug/L	1.0	0.25	1	10/24/08 08:00	11/03/08 21:45	7782-49-2	
Silver	**<0.25**	ug/L	0.50	0.25	1	10/24/08 08:00	11/03/08 21:45	7440-22-4	
Sodium	**5780**	ug/L	250	51.2	1	10/24/08 08:00	11/03/08 21:45	7440-23-5	
Thallium	**<0.019**	ug/L	1.0	0.019	1	10/24/08 08:00	11/03/08 21:45	7440-28-0	
Total Hardness	**262**	mg/L	5.0	0.15	1	10/24/08 08:00	11/03/08 21:45		
Vanadium	**0.62J**	ug/L	1.0	0.45	1	10/24/08 08:00	11/03/08 21:45	7440-62-2	
Zinc	**5.3**	ug/L	5.0	1.7	1	10/24/08 08:00	11/03/08 21:45	7440-66-6	
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**104**	mg/L	10.0	3.2	1		10/30/08 10:02		
Alkalinity, Carbonate (CaCO3)	**<3.2**	mg/L	10.0	3.2	1		10/30/08 10:02		
Alkalinity, Total as CaCO3	**104**	mg/L	10.0	3.2	1		10/30/08 10:02		
4500S2F Sulfide, Iodometric	Analytical Method: SM 4500-S F (2000)								
Sulfide	**<2.3**	mg/L	5.0	2.3	1		10/27/08 09:00		
300.0 IC Anions	Analytical Method: EPA 300.0								
Nitrate as N	**<0.085**	mg/L	0.40	0.085	1		10/24/08 11:19	14797-55-8	
Nitrite as N	**<0.036**	mg/L	0.10	0.036	1		10/24/08 14:24	14797-65-0	H1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**3.4J**	mg/L	5.0	1.1	1		10/24/08 11:19	16887-00-6	
Fluoride	**0.23J**	mg/L	0.50	0.059	1		10/24/08 11:19	16984-48-8	

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ANALYTICAL RESULTS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Sample: KMW-2 **Lab ID: 4010632005** Collected: 10/22/08 12:19 Received: 10/23/08 10:30 Matrix: Water

Parameters	Results	Units	PQL	MDL	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**229**	mg/L	40.0	5.1	10		10/25/08 01:32	14808-79-8	
335.4 Cyanide, Total	Analytical Method: EPA 335.4								
Cyanide	**<0.0060**	mg/L	0.020	0.0060	1		11/04/08 13:50	57-12-5	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: MPRP/1899 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 93372 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<4.5	250	11/03/08 18:37	
Antimony	ug/L	<0.071	1.0	11/03/08 18:37	
Arsenic	ug/L	<0.17	1.0	11/03/08 18:37	
Barium	ug/L	<0.17	1.0	11/03/08 18:37	
Beryllium	ug/L	<0.41	1.0	11/03/08 18:37	
Boron	ug/L	1.5J	5.0	11/04/08 19:14	
Cadmium	ug/L	<0.087	1.0	11/03/08 18:37	
Calcium	ug/L	<62.6	250	11/03/08 18:37	
Chromium	ug/L	<0.30	1.0	11/03/08 18:37	
Cobalt	ug/L	<0.077	1.0	11/03/08 18:37	
Copper	ug/L	<0.50	1.0	11/03/08 18:37	
Iron	ug/L	<5.0	250	11/03/08 18:37	
Lead	ug/L	<0.50	1.0	11/03/08 18:37	
Lithium	ug/L	<0.13	1.0	11/03/08 18:37	
Magnesium	ug/L	<6.1	250	11/03/08 18:37	
Manganese	ug/L	<0.24	1.0	11/03/08 18:37	
Molybdenum	ug/L	0.16J	1.0	11/03/08 18:37	
Nickel	ug/L	<0.15	1.0	11/03/08 18:37	
Potassium	ug/L	<78.3	250	11/03/08 18:37	
Selenium	ug/L	<0.25	1.0	11/03/08 18:37	
Silver	ug/L	<0.25	0.50	11/03/08 18:37	
Sodium	ug/L	<51.2	250	11/03/08 18:37	
Thallium	ug/L	0.069J	1.0	11/03/08 18:37	
Vanadium	ug/L	<0.45	1.0	11/03/08 18:37	
Zinc	ug/L	<1.7	5.0	11/03/08 18:37	

LABORATORY CONTROL SAMPLE: 93373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	5000	4700	94	75-125	
Antimony	ug/L	500	490	98	75-125	
Arsenic	ug/L	500	492	98	75-125	
Barium	ug/L	500	482	96	75-125	
Beryllium	ug/L	500	496	99	75-125	
Boron	ug/L	500	470	94	75-125	
Cadmium	ug/L	500	505	101	75-125	
Calcium	ug/L	5000	5110	102	75-125	
Chromium	ug/L	500	495	99	75-125	
Cobalt	ug/L	500	485	97	75-125	
Copper	ug/L	500	501	100	75-125	
Iron	ug/L	5000	4750	95	75-125	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

LABORATORY CONTROL SAMPLE: 93373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	500	460	92	75-125	
Lithium	ug/L	500	505	101	75-125	
Magnesium	ug/L	5000	4810	96	75-125	
Manganese	ug/L	500	480	96	75-125	
Molybdenum	ug/L	500	481	96	75-125	
Nickel	ug/L	500	503	101	75-125	
Potassium	ug/L	5000	4720	94	75-125	
Selenium	ug/L	500	507	101	75-125	
Silver	ug/L	250	251	100	75-125	
Sodium	ug/L	5000	4810	96	75-125	
Thallium	ug/L	500	458	92	75-125	
Vanadium	ug/L	500	485	97	75-125	
Zinc	ug/L	500	503	101	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93374 93375

Parameter	Units	4010516001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum	ug/L	10.5J	5000	5000	4360	4450	87	89	75-125	2	20	
Antimony	ug/L	6.8	500	500	471	480	93	95	75-125	2	20	
Arsenic	ug/L	1.2	500	500	472	480	94	96	75-125	2	20	
Barium	ug/L	7.8	500	500	463	471	91	93	75-125	2	20	
Beryllium	ug/L	<0.41	500	500	460	466	92	93	75-125	1	20	
Boron	ug/L	81.1	500	500	510	524	86	89	75-125	3	20	
Cadmium	ug/L	0.094J	500	500	475	486	95	97	75-125	2	20	
Calcium	ug/L	49800	5000	5000	50300	52000	11	45	75-125	3	20	P6
Chromium	ug/L	3.1	500	500	465	475	92	94	75-125	2	20	
Cobalt	ug/L	3.3	500	500	457	467	91	93	75-125	2	20	
Copper	ug/L	1.7	500	500	460	471	92	94	75-125	2	20	
Iron	ug/L	271	5000	5000	4700	4800	89	91	75-125	2	20	
Lead	ug/L	<0.50	500	500	440	450	88	90	75-125	2	20	
Lithium	ug/L	3.5	500	500	475	489	94	97	75-125	3	20	
Magnesium	ug/L	24100	5000	5000	26400	27100	47	60	75-125	2	20	P6
Manganese	ug/L	62.2	500	500	510	520	90	92	75-125	2	20	
Molybdenum	ug/L	11.3	500	500	466	478	91	93	75-125	3	20	
Nickel	ug/L	9.5	500	500	472	481	92	94	75-125	2	20	
Potassium	ug/L	7990	5000	5000	11700	11900	74	79	75-125	2	20	M0
Selenium	ug/L	0.50J	500	500	477	487	95	97	75-125	2	20	
Silver	ug/L	<0.25	250	250	230	236	92	94	75-125	3	20	
Sodium	ug/L	12500	5000	5000	15900	16300	69	76	75-125	2	20	M0
Thallium	ug/L	0.40J	500	500	439	451	88	90	75-125	3	20	
Vanadium	ug/L	<0.45	500	500	459	468	92	93	75-125	2	20	
Zinc	ug/L	3.7J	500	500	472	482	94	96	75-125	2	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: WETA/2603 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 93455 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate as N	mg/L	<0.085	0.40	10/24/08 08:58	
Nitrite as N	mg/L	<0.036	0.10	10/24/08 12:30	

LABORATORY CONTROL SAMPLE: 93456

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate as N	mg/L	1.6	1.6	102	90-110	
Nitrite as N	mg/L	.8	0.77	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93457 93458

Parameter	Units	4010632001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrate as N	mg/L	0.98	1.6	1.6	2.6	2.6	100	99	90-110	.4	20	
Nitrite as N	mg/L	0.060J	.8	.8	0.81	0.78	94	90	90-110	4	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: WETA/2604 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 93462 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	<1.1	5.0	10/24/08 08:58	
Fluoride	mg/L	<0.059	0.50	10/24/08 08:58	
Sulfate	mg/L	<0.51	4.0	10/24/08 08:58	

LABORATORY CONTROL SAMPLE: 93463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.1	100	90-110	
Fluoride	mg/L	2	2.2	108	90-110	
Sulfate	mg/L	16	16.3	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 93464 93465

Parameter	Units	4010632001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	2.9J	20	20	21.0	21.0	91	91	90-110	.3	20	
Fluoride	mg/L	0.20J	2	2	2.3	2.3	104	106	90-110	2	20	
Sulfate	mg/L	119	80	80	206	205	109	107	90-110	.5	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: WET/2507 Analysis Method: SM 4500-S F (2000)
QC Batch Method: SM 4500-S F (2000) Analysis Description: 4500S2F Sulfide, Iodometric
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 94312 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.3	5.0	10/27/08 09:00	

LABORATORY CONTROL SAMPLE: 94313

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	45.2	45.6	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 94314 94315

Parameter	Units	4010660003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide	mg/L	<2.3	45.2	45.2	49.6	49.6	110	110	80-120	0	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: WET/2537 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 95748 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<3.2	10.0	10/30/08 09:54	

LABORATORY CONTROL SAMPLE: 95749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	495	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 95750 95751

Parameter	Units	4010538001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	160	500	500	659	657	100	99	80-120	.3	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: WETA/2660
QC Batch Method: EPA 350.1
Associated Lab Samples: 4010632001

Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia, Distilled

METHOD BLANK: 96042
Matrix: Water
Associated Lab Samples: 4010632001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.50	1.0	10/31/08 13:00	

LABORATORY CONTROL SAMPLE: 96043

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10	10.6	106	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96044 96045

Parameter	Units	409886012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	1.0 U	10	10	11.7	10.2	113	97	90-110	14	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96046 96047

Parameter	Units	4010632001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, Ammonia	mg/L	<0.50	10	10	10.7	10.3	104	100	90-110	4	20	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: CVFS/1298 Analysis Method: EPA 1631E
QC Batch Method: EPA 1631E Analysis Description: 1631E Mercury
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 96754 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.203J	0.50	11/03/08 09:33	

METHOD BLANK: 96755 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	<0.16	0.50	11/03/08 09:37	

METHOD BLANK: 96756 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ng/L	0.196J	0.50	11/03/08 10:08	

LABORATORY CONTROL SAMPLE & LCSD: 96757 96758

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Mercury	ng/L	5	5.70	5.72	114	114	79-121	.4	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96759 96760

Parameter	Units	4010606001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	1.32	5	5	5.70	6.40	88	102	75-125	12	24	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96761 96762

Parameter	Units	4010609003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ng/L	4.33	20	20	26.5	25.2	111	104	75-125	5	24	

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QUALITY CONTROL DATA

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

QC Batch: WETA/2681 Analysis Method: EPA 335.4
QC Batch Method: EPA 335.4 Analysis Description: 335.4 Cyanide, Total
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

METHOD BLANK: 96963 Matrix: Water
Associated Lab Samples: 4010632001, 4010632002, 4010632003, 4010632004, 4010632005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	<0.0060	0.020	11/04/08 13:33	

LABORATORY CONTROL SAMPLE: 96964

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.1	0.10	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96965 96966

Parameter	Units	4010632003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.0060	.1	.1	0.11	0.11	105	105	90-110	.3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 96967 96968

Parameter	Units	4010836005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	<0.036	.1	.1	0.079	0.087	79	87	90-110	9	20	M0

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QUALIFIERS

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

DEFINITIONS

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

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

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LABORATORIES

PASI-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HUMBOLDT MILL GW
Pace Project No.: 4010632

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
4010632001	KMW-5	EPA 3010	MPRP/1899	EPA 6020	ICPM/1224
4010632002	HW-2	EPA 3010	MPRP/1899	EPA 6020	ICPM/1224
4010632003	DUP-005	EPA 3010	MPRP/1899	EPA 6020	ICPM/1224
4010632004	FBK-005	EPA 3010	MPRP/1899	EPA 6020	ICPM/1224
4010632005	KMW-2	EPA 3010	MPRP/1899	EPA 6020	ICPM/1224
4010632001	KMW-5	EPA 300.0	WETA/2603		
4010632002	HW-2	EPA 300.0	WETA/2603		
4010632003	DUP-005	EPA 300.0	WETA/2603		
4010632004	FBK-005	EPA 300.0	WETA/2603		
4010632005	KMW-2	EPA 300.0	WETA/2603		
4010632001	KMW-5	EPA 300.0	WETA/2604		
4010632002	HW-2	EPA 300.0	WETA/2604		
4010632003	DUP-005	EPA 300.0	WETA/2604		
4010632004	FBK-005	EPA 300.0	WETA/2604		
4010632005	KMW-2	EPA 300.0	WETA/2604		
4010632001	KMW-5	SM 4500-S F (2000)	WET/2507		
4010632002	HW-2	SM 4500-S F (2000)	WET/2507		
4010632003	DUP-005	SM 4500-S F (2000)	WET/2507		
4010632004	FBK-005	SM 4500-S F (2000)	WET/2507		
4010632005	KMW-2	SM 4500-S F (2000)	WET/2507		
4010632001	KMW-5	SM 2320B	WET/2537		
4010632002	HW-2	SM 2320B	WET/2537		
4010632003	DUP-005	SM 2320B	WET/2537		
4010632004	FBK-005	SM 2320B	WET/2537		
4010632005	KMW-2	SM 2320B	WET/2537		
4010632001	KMW-5	EPA 350.1	WETA/2660		
4010632001	KMW-5	EPA 1631E	CVFS/1298	EPA 1631E	CVFS/1299
4010632002	HW-2	EPA 1631E	CVFS/1298	EPA 1631E	CVFS/1299
4010632003	DUP-005	EPA 1631E	CVFS/1298	EPA 1631E	CVFS/1299
4010632004	FBK-005	EPA 1631E	CVFS/1298	EPA 1631E	CVFS/1299
4010632005	KMW-2	EPA 1631E	CVFS/1298	EPA 1631E	CVFS/1299
4010632001	KMW-5	EPA 335.4	WETA/2681		
4010632002	HW-2	EPA 335.4	WETA/2681		
4010632003	DUP-005	EPA 335.4	WETA/2681		
4010632004	FBK-005	EPA 335.4	WETA/2681		
4010632005	KMW-2	EPA 335.4	WETA/2681		

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November 18, 2008

Mr. Todd Noltemeyer
Pace Analytical Services, Inc
Green Bay Laboratory
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

Dear Mr. Noltemeyer:

Enclosed are analytical results for samples submitted to Pace Analytical by Pace Analytical Services, Inc. The samples were received on November 14, 2008. The results reported in this project meet the requirements as specified in Chapter 5 of the NELAC Standards. Any deviations or discrepancies from the NELAC standards are documented in the case narrative(s) of this report. Parameters printed in italics represent Non-NELAC accredited parameters. Please reference Pace project number 08-8545 when inquiring about this report.

Client Site: Green Bay Laboratory
Client Ref.: 4010632 (FOTH)

Pace Sample Identification	Client Sample Identification
0811-1986	HW-2 (4010632-002)
0811-1987	DUP-005 (4010632-003)
0811-1988	FBK-005 (4010632-004)
0811-1989	KMW-2 (4010632--005)

General Comments: Cooler temperature 3.9° C upon receipt. Ice was present.

Please call me if you have any questions regarding the information contained within this report.

Sincerely,

Rachel D. Christner
Project Manager

RDC: tpr

Enclosures

Mr. Todd Noltemeyer
Pace Analytical Services, Inc
Green Bay Laboratory
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

Client Site: Green Bay Laboratory
Client Ref.: 4010632 (FOTH)

Lab Project ID: **08-8545**
Lab Sample ID: **0811-1986**
Client Sample ID: HW-2 (4010632-002)
Sample Matrix: Aqueous

Date Sampled: 10/22/2008
Date Received: 11/14/2008

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Ammonia	350.1[1]	0.21	0.10	mg/l	DJT	11/18/2008	0079179-1	<0.10

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

Sample Comments: Results reported on an as received basis.

Mr. Todd Noltemeyer
Pace Analytical Services, Inc
Green Bay Laboratory
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

Client Site: Green Bay Laboratory
Client Ref.: 4010632 (FOTH)

Lab Project ID: **08-8545**
Lab Sample ID: **0811-1987**
Client Sample ID: DUP-005 (4010632-003)
Sample Matrix: Aqueous

Date Sampled: 10/22/2008
Date Received: 11/14/2008

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Ammonia	350.1[1]	<0.10	0.10	mg/l	DJT	11/18/2008	0079179-1	<0.10

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

Sample Comments: Results reported on an as received basis.

Mr. Todd Noltemeyer
Pace Analytical Services, Inc
Green Bay Laboratory
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

Client Site: Green Bay Laboratory
Client Ref.: 4010632 (FOTH)

Lab Project ID: **08-8545**
Lab Sample ID: **0811-1988**
Client Sample ID: FBK-005 (4010632-004)
Sample Matrix: Aqueous

Date Sampled: 10/22/2008
Date Received: 11/14/2008

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Ammonia	350.1[1]	<0.10	0.10	mg/l	DJT	11/18/2008	0079179-1	<0.10

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

Sample Comments: Results reported on an as received basis.

Mr. Todd Noltemeyer
Pace Analytical Services, Inc
Green Bay Laboratory
1241 Bellevue Street
Suite 9
Green Bay, WI 54302

Client Site: Green Bay Laboratory
Client Ref.: 4010632 (FOTH)

Lab Project ID: **08-8545**
Lab Sample ID: **0811-1989**
Client Sample ID: KMW-2 (4010632--005)
Sample Matrix: Aqueous

Date Sampled: 10/22/2008
Date Received: 11/14/2008

General Chemistry

Test	Method	Result	Reporting Limit	Units	Analyst	Analysis Date	Method Blank ID	Blank Result
Ammonia	350.1[1]	0.61	0.10	mg/l	DJT	11/18/2008	0079179-1	<0.10

[1] U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

Sample Comments: Results reported on an as received basis.

Pace Analytical

Client Name: NORTH JACKSON Project # 40101632

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

Tracking #: _____

Optional
Proj. Due Date:
Proj. Name:

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

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

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

Cooler Temperature 1° **Biological Tissue is Frozen:** Yes No

Date and Initials of person examining contents: G 10/23/08

Temp should be above freezing to 6°C

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	5.
Short Hold Time Analysis (<72hr):	☑Yes ☐No ☐N/A	6. Nitate
Rush Turn Around Time Requested:	☐Yes ☑No ☐N/A	7.
Sufficient Volume:	☑Yes ☐No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No ☐N/A	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
Containers Intact:	☑Yes ☐No ☐N/A	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: W		
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	13.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed G / Lot # of added preservative
Samples checked for dechlorination:	☐Yes ☐No ☑N/A	14.
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	15.
Trip Blank Present:	☐Yes ☑No ☐N/A	16.
Trip Blank Custody Seals Present	☐Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased):		

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: DM **Date:** 10/23/08

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

2008 10 22

Page: 1 of 1

Section A
Required Client Information:

Company:	North Jackson & Foth I & E
Address:	2737 South Ridge Road
	Green Bay, WI 54304
Email To:	
Phone: 920-497-2500	Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	Sharon Felix - Foth I & E
Copy To:	
Purchase Order No.:	
Project Name:	HUMBOLDT MILL, MI GROUNDWATER
Project Number:	

Section C
Invoice Information:

Attention:	JANIS KESY
Company Name:	FOTH I & E
Address:	2737 South Ridge Rd, Green Bay, WI
Pace Quote Reference:	
Pace Project Manager:	Tod Noltemeyer
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: MI

Section D
Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED Composite Start Date	COLLECTED Composite Start Time	COLLECTED Composite End/Grab Date	COLLECTED Composite End/Grab Time	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other NaOH Zn Ac	Analysis Test (Y/N): Alk2, Cl, Fl, SO4,	NITRATE, NITRATE SEPARATELY	CYANIDE	METALS	LLHG	SULFIDE	LITHIUM	AMMONIA	VOC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	KMW-5 GW 001	WT	G		--	10/22/08	1200	—	8	3	1	2		1			1	1	1	1	1	1	1	1	1		N	4010632 3-500mL LL,D,G, 5-250mL 2A,C D,J
2	HW-2 GW 002	WT	G			10/22/08	1041	14	8	3	1	2		1			1	1	1	1	1	1	1	1	1		N	
3	DUP-005 GW 003	WT	G			10/22/08	—	—	8	3	1	2		1			1	1	1	1	1	1	1	1	1		N	
4	FBK-005 GW 004	WT	G			10/22/08	1015	—	8	3	1	2		1			1	1	1	1	1	1	1	1	1		N	
5	KMW-2 GW 005	WT	G			10/22/08	1219	13	8	3	1	2		1			1	1	1	1	1	1	1	1	1		N	
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / NTC	10/22/08	1800							
	fedex	10/23/08	1030	[signature]	10/23/08	1030	1	4	4	4
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

FED EX 791169848793
791169848808
~~[illegible]~~

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Paul Sheffield / Andy McKenzie

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/22/08

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