HYDROGEOLOGIC ASSESSMENT REPORT
JOLIET GENERATING STATION NO. 29
JOLIET, ILLINOIS

SUBMITTED BY:
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SUBMITTED TO:
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PATRICK PROJECT NO. 21053.070

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PATRICK
ENGINEERING

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1.0 INTRODUCTION

1.1 Background

Pursuant to the request of the Illinois Environmental Protection Agency (Illinois EPA), this document presents the Hydrogeologic Assessment Report for the on-site ash pond areas at the Midwest Generation, LLC (MWG) Joliet Generating Station No. 29 in Joliet, Illinois. This hydrogeologic assessment was performed in accordance with the Hydrogeologic Assessment Plan, approved by the Illinois EPA, dated September 3, 2010.

As defined by the Hydrogeologic Assessment Plan, the purpose of this investigation was to: (i) evaluate the potential, if any, for migration of ash-related constituents from the on-site ash ponds and to conduct monitoring for groundwater constituents regulated by the Illinois Part 620 groundwater standards, as requested by the Illinois EPA; (ii) characterize the subsurface hydrogeology; and (iii) identify potable well use within 2,500 feet of the ash ponds. The results of this investigation are described in this Hydrogeologic Assessment Report.

1.2 Site Location and Description

The Joliet No. 29 facility (the Site) is located in Section 19, Township 35 North, Range 10 East, in the City of Joliet, Will County, Illinois. Figure 1 provides a Site Location Map.

The Site includes three active ash ponds (Ash Pond 1, Ash Pond 2, and Ash Pond 3). Two of the ponds are lined with a high-density polyethylene (HDPE), while the third is lined with 12" of geo-composite material on the bottom; the total area of the three ash ponds is approximately 10 acres. Figure 2 shows the locations of the three ash ponds.

1.3 Regional Settng

The Site is located along the Des Plaines River just to the south of the city of Joliet. The surrounding land use is almost entirely industrial with some parcels of undeveloped land. It is important to note that industrial properties are located hydraulically upgradient of the Site.

Patrick Engineering Inc. (Patrick) conducted a review of publically available geological information from the Illinois State Geological Survey website. Based upon water well logs from the area, the geology beneath the Site consists of approximately 5-30 feet of sandy loam, underlain by Silurian Dolomite to approximately 176 feet below ground surface, and Maquoketa shale from approximately 176 to 241 feet below ground surface. The Maquoketa shale is generally considered to be an aquitard that separates the shallow groundwater in the unconsolidated units and the Silurian dolomite from the underlying aquifers.

Groundwater flow in the shallow, unconsolidated aquifer should be largely controlled by the Des Plaines River with groundwater flowing towards the river during most periods of the year. Groundwater flow in the deeper aquifers is controlled by the regional hydraulic gradient in these aquifers, which is to the northeast. The Site lies within the Joliet Depression, which is a cone of depression of the groundwater surface caused by the large withdrawals of the groundwater from the deeper aquifers due to industrial and municipal use in the area.

2.0 HYDROGEOLOGIC ASSESSMENT METHODOLOGY

The following sections present the methodologies used to evaluate the potential for migration of ash-related constituents from the ash ponds and to monitor for all Part 620-regulated constituents, to characterize the subsurface hydrogeology, and to identify potable well use within 2,500 feet of the Site.

2.1 Evaluation of Ash-Related Constituent Migration Potential

The Illinois EPA requested that an evaluation of the potential for migration of ash-related constituents from the ash ponds and that monitoring for all Part 620-regulated constituents be performed in accordance with the groundwater standards included in 35 Illinois Administrative Code (IAC) Part 620, Subparts C and D. Accordingly, groundwater monitoring wells were installed at the Site in locations both upgradient and downgradient of the three ash ponds.

2.1.1 Installation of Groundwater Monitoring Wells

Patrick installed eleven (11) groundwater monitoring wells spaced approximately 150 to 300 feet apart around the perimeter of the ash ponds. The well locations were selected so that both upgradient and downgradient wells were represented, based upon available data regarding the expected groundwater flow direction. The spacing of the well locations at the Site along the downgradient edge of the ash ponds was calculated so as to detect a groundwater plume emanating from a point source beneath the ash ponds. Figure 3 shows the location of the eleven monitoring wells.

Three of the installed monitoring wells are located upgradient of the ash ponds; the additional eight wells are located downgradient of the ash ponds. The well borings were advanced using hollow-stem augers to depths ranging from 27.5 to 42 feet below ground surface (bgs). Borings were terminated after the field geologist determined that the boring was installed approximately 10 feet past the first intersection of the groundwater table in order to ensure that a representative

groundwater sample could be obtained. Upon termination of each boring, a 2-inch diameter, PVC well was installed in order to collect samples of the groundwater in the uppermost aquifer. The monitoring wells were completed to approximately 3 feet above grade, with PVC casing, and were covered with a stick-up, steel well protector with a locking cap. Soil lithology was inspected and logged by an experienced geologist during the boring process. Boring logs with well construction information are included as Appendix A.

2.1.2 Initial Groundwater Sampling and Analytical Testing

The groundwater sampling event for the Site took place on December 6, 2010. The groundwater elevation in each of the eleven wells was measured prior to sampling. For all but one of the eleven wells, MW-09, the depth to groundwater was outside the effective range of the peristaltic pump. Groundwater samples were collected from MW-09 with a peristaltic pump, using established low-flow sampling techniques. For the remaining ten (10) wells, groundwater samples were collected using a disposable polyethylene bailer; a different bailer was used for each well to prevent cross-contamination. Each well was purged until at least three well volumes had been extracted or until the groundwater was observed to be clear. Groundwater was then baled into a decontaminated, stainless steel container and thereafter transferred to the sampling containers via peristaltic pump. Temperature, pH, and conductivity measurements were taken using a portable meter in all wells; refer to Table 1 for these field parameter results. All groundwater samples were filtered in the field using a disposable, 0.45µm, in-line filter to allow for the analytical testing of dissolved compounds. The samples were immediately placed on ice in a cooler and kept at a temperature no higher than 4° F. The samples were transported to TestAmerica, an Illinois-EPA accredited analytical laboratory, in accordance with chain-of-custody procedures to maintain the integrity of the samples.

The analytical laboratory tested groundwater samples from each of the wells for the compounds listed in Table 2. Analytes tested include the inorganic compounds listed in 35 IAC 620.410(a), excluding both radium and the poly-aromatic hydrocarbons (PAHs) listed in 35 IAC 620.410(b).

2.2 Characterization of Subsurface Hydrogeology

The subsurface hydrogeology beneath the ash ponds was characterized by determining Site lithology and the groundwater flow patterns in the vicinity of the ash ponds as described below.

2.2.1 Site Lithology

The Site lithology was determined by logging soil samples collected from the soil borings created during the installation of the groundwater monitoring wells. The soil borings were installed under the direction of an experienced geologist. Each boring was sampled at 2-foot intervals using a 2-inch O.D. split-spoon sampler (ASTM D 1586). Each soil sample was inspected and logged by the geologist during the boring process. Boring logs with well construction information are provided as Appendix A.

2.2.2 Topographic and Water Elevation Surveys

A survey crew measured both the top-of-casing and ground surface elevations of all installed monitoring wells and the groundwater elevations within each of the monitoring wells on December 6, 2010. The survey crew concurrently measured the water elevation in two of the three of the ash ponds and the Des Plaines River. The water surface of Ash Pond 2 was inaccessible the day of the survey due to a low water elevation in the pond. However, the remaining groundwater elevation data collected from the Site was sufficient in determining groundwater flow characteristics for the purposes of this assessment.

2.2.3 Hydraulic Testing of Selected Wells

Patrick conducted four *in situ* hydraulic conductivity tests on wells MW-4, MW-6, MW-9, and MW-11 on December 21, 2010. The testing consisted of one rising-head and one falling-head slug test performed at each well. Using a data-logging pressure transducer, Patrick measured the rate of groundwater level recovery in the wells after either inserting a slug into, or removing a slug from, each monitoring well.

2.3 Identification of Potable Well Use

Natural Resource Technology, Inc. (NRT) has previously completed an investigation of potable water well use within 2,500 feet of the Joliet No. 29 ash ponds. MWG submitted the results of this investigation to the Illinois EPA by letter dated July 15, 2009. These results are summarized in Appendix B.

The following databases and sources of information were used in order to identify local community water sources and water well locations in the vicinity of the Site:

- Illinois State Geological Survey (ISGS) -Water Well Database Query;
- Illinois State Water Survey (ISWS) Private Well Database and water well construction report request; and
- Illinois Division of Public Water Supply web-based Geographic System (GIS) files.

3.0 HYDROGEOLOGIC ASSESSMENT RESULTS

3.1 Evaluation of Ash-Related Constituent Migration Potential

The analytical laboratory results for the hydrogeologic assessment are presented in Table 2. Full laboratory data packages from TestAmerica are provided as Appendix C. Antimony, chloride, manganese, sulfate, and total dissolved solids (TDS) were detected in one or more monitoring wells at concentrations exceeding the Part 620 Class I Groundwater Quality Standards. In some cases, the highest concentrations of a given compound were found in the upgradient wells. Beryllium, cadmium, chromium, cyanide, iron, lead, mercury, silver, thallium, zinc, and nitrogen/nitrite were not detected in any of the groundwater samples.

A determination of the potential for the individual ash ponds to be contributing to the distribution of analytes in the underlying groundwater and the extent, if any, of such contribution cannot be made from the results of this single sampling event alone. To develop a true, statistically-significant upgradient background concentration for the various compounds will require a number of sequential sampling events over time. Based on a statistically-developed background value, downgradient concentrations can be compared to the background value over time to determine the likelihood and extent of any constituent migration from the on-site ash ponds. A plan to develop such an analytical database through additional sampling is presented in the last section of this report.

3.2 Characterization of Subsurface Hydrogeology

The lithology of the Site is predominantly sand and gravel with intermittent seams of clay and gravel. Auger refusal was encountered throughout the Site at depths ranging from 35 to 42 feet below ground surface. Split spoon samples from these depth returned fragments of limestone, indicating the top of the bedrock layer. Refer to Figure 4 for a geologic cross-section of the Site.

The results of the topographic and water elevation surveys are presented in Table 3.

The uppermost groundwater unit at the Site is found at depths ranging from 29 to 34 feet bgs. The direction of groundwater flow is to the south towards the Des Plaines River, which runs along the southern boundary of the Site. The hydraulic gradient is approximately 0.0009 based upon the groundwater elevation data collected on December 6, 2010. A potentiometric surface map is provided as Figure 5.

Patrick used the hydraulic testing data to calculate the hydraulic conductivity of the uppermost aquifer using the Bouwer and Rice method. Hydraulic conductivity calculations are provided in Appendix D. The hydraulic conductivity of Site soils ranged from 1.948×10^{-3} to 6.949×10^{-3} ft/second. The average hydraulic conductivity was 3.896×10^{-3} ft/second. Using the highest calculated hydraulic conductivity and the measured hydraulic gradient, Patrick calculated the maximum groundwater velocity to be approximately 0.30 ft/day (3.896×10^{-3} ft/sec x 0.0009 x 60 sec/min x 60 min/hour x 24 hours/day).

3.3 Identification of Potable Well Use

As stated above, NRT has previously completed an investigation of potable water well use within 2,500 feet of the Joliet No. 29 ash ponds. MWG submitted the results of this investigation to the Illinois EPA by letter dated July 15, 2009. According to this letter, seventeen potable/industrial use wells are located within a 2,500-foot radius of the Site's ash ponds (refer to Appendix B.) However, most of these wells are screened in much deeper aquifers. Only two of the wells (Numbers 19 and 4) are located downgradient from the ash impoundments. Both of these industrial use wells are owned by MWG, and are drilled at 1,525 feet below ground surface and are screened below the Maquoketa shale, a significant aquitard separating shallower aquifers from the screened interval of the MWG wells.

4.0 LONG-TERM MONITORING PLAN

In order to properly assess the groundwater monitoring data collected in this single sampling event, MWG will conduct a quarterly groundwater sampling program in which the same monitoring wells described in this report will be sampled for the identical analyte list employed during this investigation. MWG proposes to begin this quarterly monitoring program in March 2011, and will submit the results of the sampling program to the Illinois EPA on an ongoing, quarterly basis. MWG proposes to continue this program until sufficient statistically-significant data is available to properly assess the groundwater data. If the quarterly sampling results continue to show non-detect results for certain of the analytes, as was the case in this single sampling event, MWG may propose to Illinois EPA that these analytes be eliminated from future sampling events.

Table 1
GROUNDWATER FIELD PARAMETER DATA
Joliet #29 Station, Joliet, Illinois
Midwest Generation
21053.070
Feb. 28, 2011

PATRICK ENGINEERING	Groundwater Field Paramter Data - Joliet # 29 Station				
Monitoring Well	**Date**	**Time**	**Conductance (S/cm)***	**Temperature °C**	**pH**
MW-01	12/6/2010	14:20	1.04	7.52	7.82
MW-02	12/6/2010	13:41	1.10	9.30	7.85
MW-03	12/6/2010	10:14	7.83	10.91	7.84
MW-04	12/6/2010	10:55	1.84	10.69	7.71
MW-05	12/6/2010	11:40	1.36	8.86	7.82
MW-06	12/6/2010	9:26	1.20	8.53	8.04
MW-07	12/6/2010	8.53	2.12	9.72	8.08
MW-08	12/6/2010	14:52	1.17	12.70	7.75
MW-09	12/6/2010	11:00	2.97	11.94	7.03
MW-09	12/6/2010	11:03	2.93	12.57	6.99
MW-09	12/6/2010	11:06	2.94	12.51	6.97
MW-09	12/6/2010	11:09	2.97	12.24	7.01
MW-09	12/6/2010	11:12	2.99	11.57	7.03
MW-10	12/6/2010	15:17	1.51	9.26	7.65
MW-11	12/6/2010	15.54	1.32	11.97	7.72

Notes:

* (S/cm) = Specific Conductivity measured in Seconds/Centimeters

Table 2
GROUNDWATER ANALYTICAL RESULTS
Joliet Station #29, Illinois
Midwest Generation
21053.070
February 28, 2011

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
		Class I*	12/6/10	12/6/10	12/7/10	12/7/10	12/7/10	12/7/10	12/7/10
Chemical Name									
Antimony	Metals 6020	0.006	0.0043	**0.012**	0.004	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	0.0011	ND	ND	ND	ND	ND	0.001
Barium	Metals 6020	2.0	0.13	0.082	0.089	0.065	0.061	0.075	0.13
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	ND	0.0013	ND	ND	ND	ND
Copper	Metals 6020	0.65	0.0032	0.0032	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	ND	ND	0.1	**0.33**	0.0065	0.14	**0.29**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0034	0.0033	0.011	0.0067	ND	0.0056	0.0045
Selenium	Metals 6020	0.05	ND	ND	ND	0.0025	ND	0.0029	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	0.31	0.31	0.24	0.46	0.42	0.32	0.51
Sulfate	Dissolved 9038	400	180	190	120	300	110	140	250
Chloride	Dissolved 9251	200	140	140	**260**	**270**	150	130	**430**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	3.1	ND	0.81	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	590	600	930	1100	750	650	1200
Fluoride	Dissolved 4500 FC	4	0.45	0.62	0.43	0.49	0.4	0.4	0.36
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	1.9	3.1	ND	0.81	ND	ND	ND

Notes:
Class I Groundwater Standards from 35 IAC Part 620
Bold Values areas exceed groundwater objectives
mg/L = Milligrams per Liter
ND-non detect

-Determination of the potential for the individual ash ponds to be contributing to the distribution of analytes in the underlying groundwater cannot be made from the results of this single sampling event alone. To develop a true, statistically-significant upgradient background concentration for the various compounds will require a number of sequential sampling events over time. After a statistically developed background value is available, the downgradient concentrations can be compared to this background value over time to determine the likelihood of contaminant migration from the on-site ash ponds. A plan to develop such an analytical database through additional sampling is discussed in the last section of this report.

Table 2
GROUNDWATER ANALYTICAL RESULTS
Joliet Station #29, Illinois
Midwest Generation
21053.070
February 28, 2011

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-8 mg/L	MW-9 mg/L	MW-10 mg/L	MW-11 mg/L
Chemical Name		Class I*	12/6/10	12/6/10	12/6/10	12/6/10
Antimony	Metals 6020	0.006	ND	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	ND	0.0013
Barium	Metals 6020	2.0	0.0054	0.031	0.05	0.064
Beryllium	Metals 6020	0.004	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	0.0047	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND
Manganese	Metals 6020	0.15	0.0051	**1.1**	0.12	0.052
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0025	0.0094	0.0052	0.0022
Selenium	Metals 6020	0.05	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND
Boron	Metals 6020	2	0.29	0.36	0.5	0.47
Sulfate	Dissolved 9038	400	210	**1600**	130	140
Chloride	Dissolved 9251	200	130	140	**200**	160
Nitrogen/Nitrate	Nitrogen By calc	10	0.33	ND	0.39	0.39
Total Dissolved Solids	Dissolved 2540C	1,200	670	**2600**	860	770
Fluoride	Dissolved 4500 FC	4	0.51	0.61	0.43	0.34
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	0.33	ND	0.39	0.39

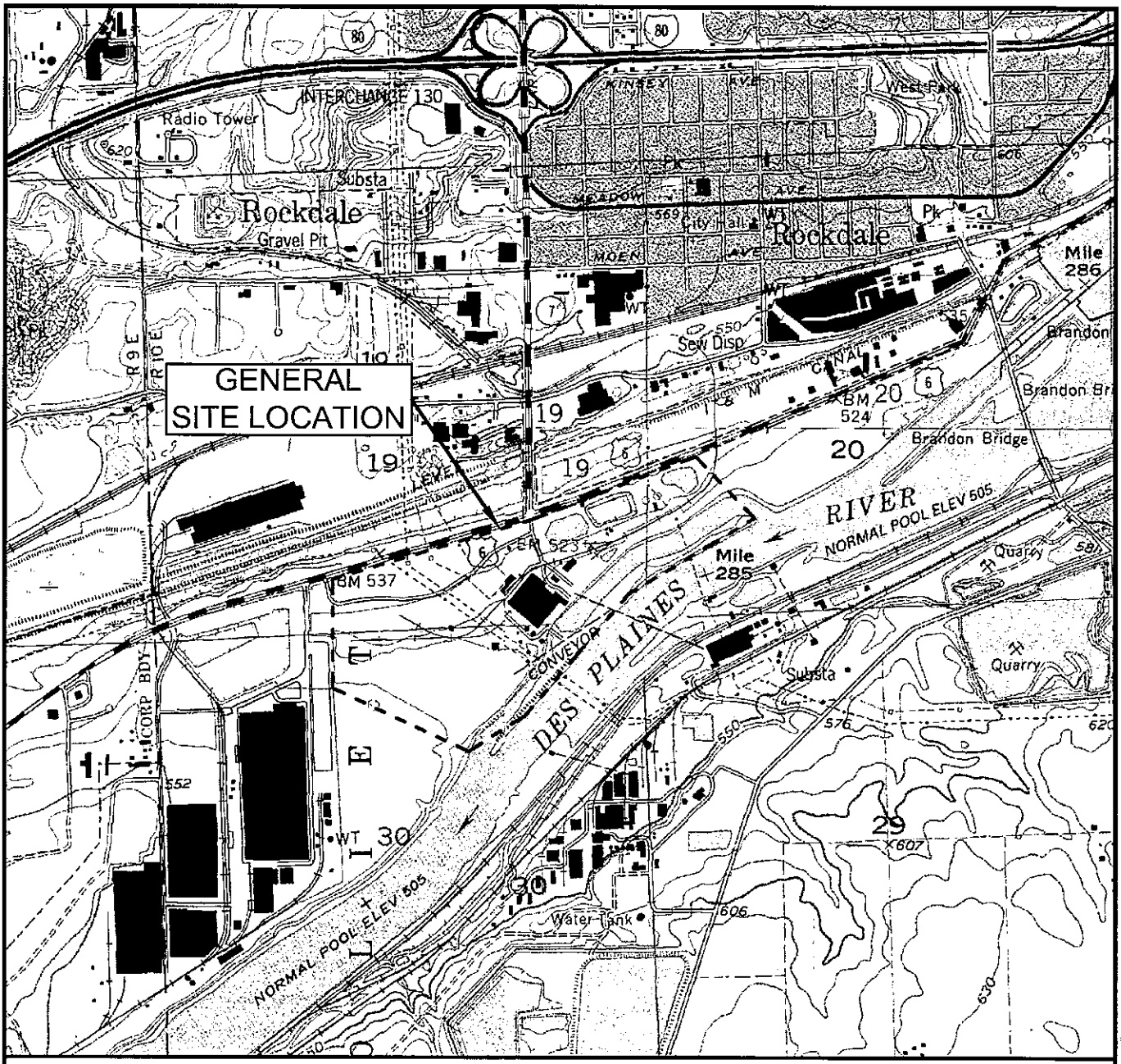
Notes:
Class I Groundwater Standards from 35 IAC Part 620
Bold Values areas exceed groundwater objectives
mg/L = Milligrams per Liter
ND-non detect

-Determination of the potential for the individual ash ponds to be contributing to the distribution of analytes in the underlying groundwater cannot be made from the results of this single sampling event alone. To develop a true, statistically-significant upgradient background concentration for the various compounds will require a number of sequential sampling events over time. After a statistically developed background value is available, the downgradient concentrations can be compared to this background value over time to determine the likelihood of contaminant migration from the on-site ash ponds. A plan to develop such an analytical database through additional sampling is discussed in the last section of this report.

Table 3
GROUNDWATER ELEVATION SURVEY DATA
Joliet #29 Station, Joliet, Illinois
Midwest Generation
21053.070
Feb. 28, 2011

PATRICK ENGINEERING	Water Elevation (feet)	Depth to Water (feet bgs)	Lid Elevation (feet)	Ground Elevation (feet)	Top of Riser Elevation (feet)
MONITORING WELLS					
MW-1	505.460	29.30	535.222	531.464	534.760
MW-2	505.083	29.20	534.799	531.186	534.283
MW-3	505.082	33.70	539.255	535.540	538.782
MW-4	504.926	34.10	539.503	535.800	539.026
MW-5	504.987	34.70	540.149	536.428	539.687
MW-6	505.061	34.00	539.550	535.858	539.061
MW-7	505.050	34.30	539.792	535.862	539.350
MW-8	505.173	31.70	537.347	533.720	536.873
MW-9	505.238	29.20	534.941	531.126	534.438
MW-10	505.227	34.80	540.532	536.949	540.027
MW-11	505.173	34.30	539.960	536.521	539.473
ASH PONDS					
East Pond	530.127	NS	NS	NS	NS
Mid Pond	NS	NS	NS	NS	NS
West Pond	533.112	NS	NS	NS	NS
RIVER					
Des Plaines River	504.827	NS	NS	NS	NS

Notes:
*Survey data taken on 12/6/10
NS = not surveyed
bgs = below ground surface
Elevations are leveled from site control points per Commonwealth Edison Drawing "Coordinates & Elevations for Coal Monuments & Test Borings-Joliet Station 29" revised



LEGEND

SITE BOUNDARY

N

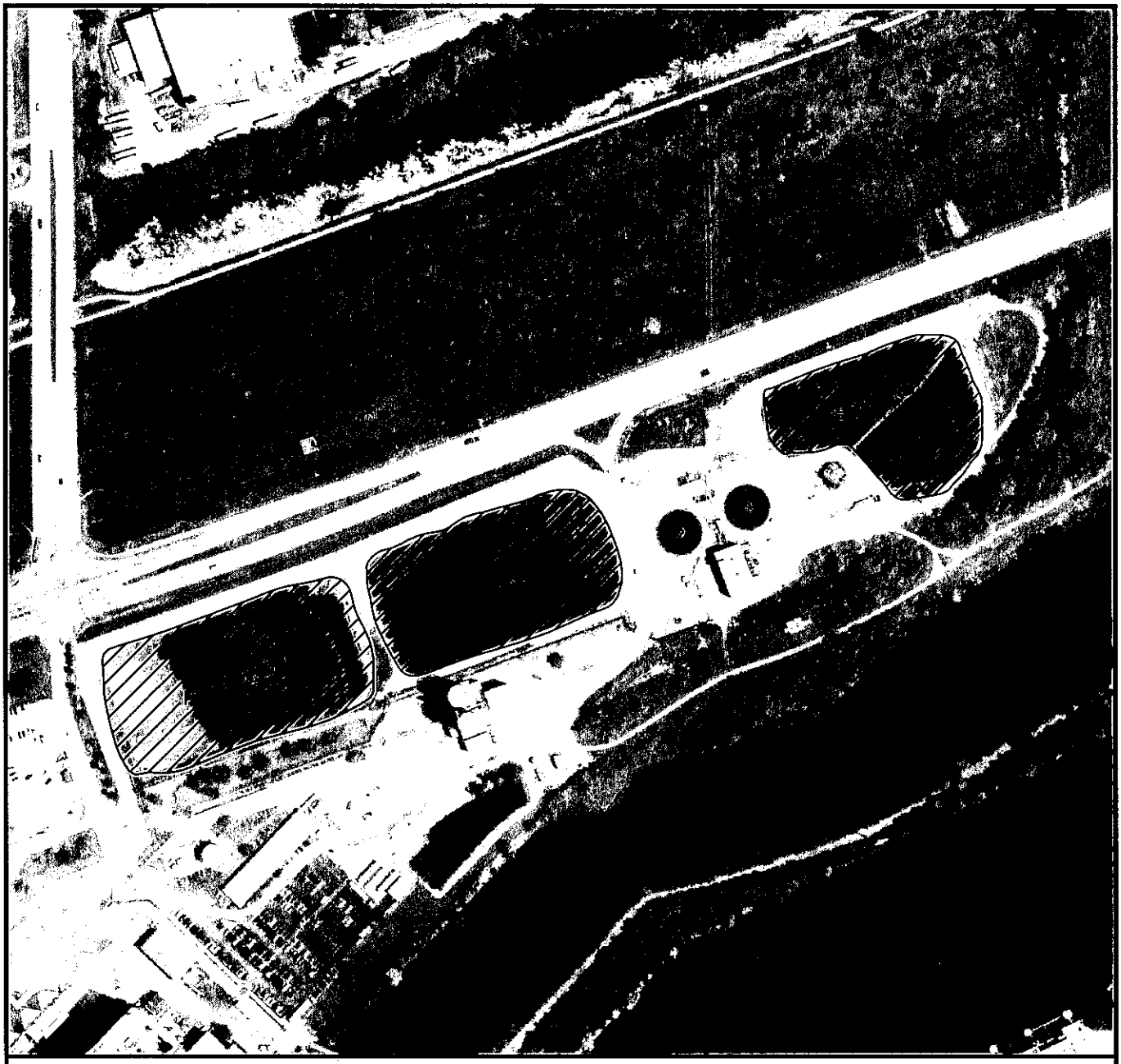
0 2,000'

GRAPHIC SCALE

NOTE:
THIS DRAWING WAS PREPARED USING ILLINOIS' PLAINFIELD (1993), JOLIET (1993), CHANNAHON (1993), AND ELWOOD (1993) 7.5 MINUTE-SERIES TOPOGRAPHIC QUADRANGLE MAP.

Date: FEB. 2011	FIGURE 1 SITE LOCATION MAP	PATRICK ENGINEERING INC.
Proj No.: 21053.070	JOLIET STATION NO. 29 JOLIET, ILLINOIS	4970 Varsity Drive Lisle, Illinois 60532-4101 TEL (630) 795-7200 FAX (630) 724-1681
App. By: RMF		PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

MWG13-15_6979



LEGEND

ASH POND

N

0 300'

GRAPHIC SCALE

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC., JULY 2008

Date: FEB. 2011	FIGURE 2 ASH POND LOCATIONS MAP	PATRICK ENGINEERING INC.
Proj No.: 21053.070	JOLIET STATION NO. 29 JOLIET, ILLINOIS	4970 Varsity Drive Lisle, Illinois 60532-4101 TEL. (630) 795-7200 FAX (630) 724-1681 PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409
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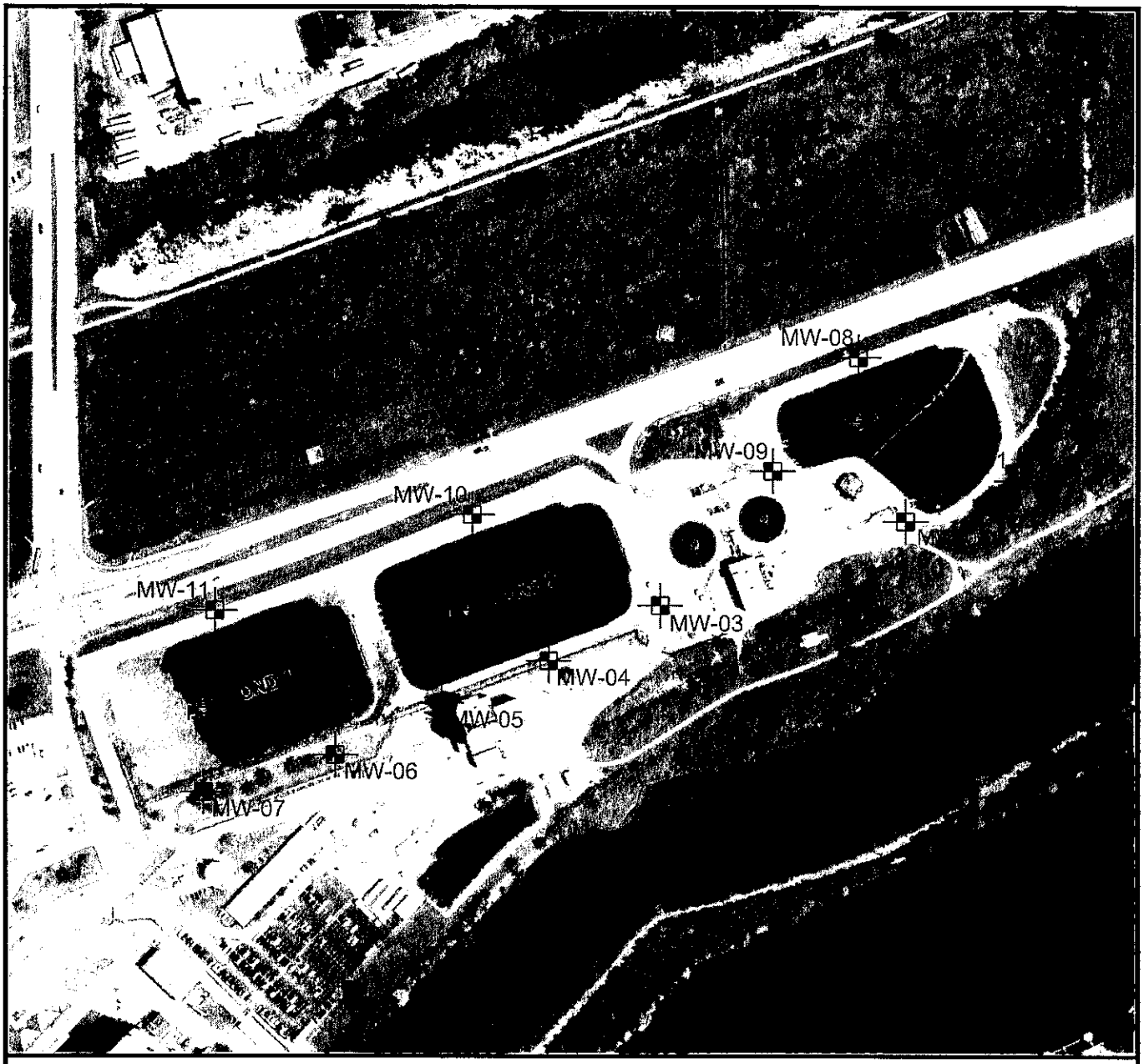
MWG13-15_6980



LEGEND

MW-01 Monitoring Well Location (November 2010)

N

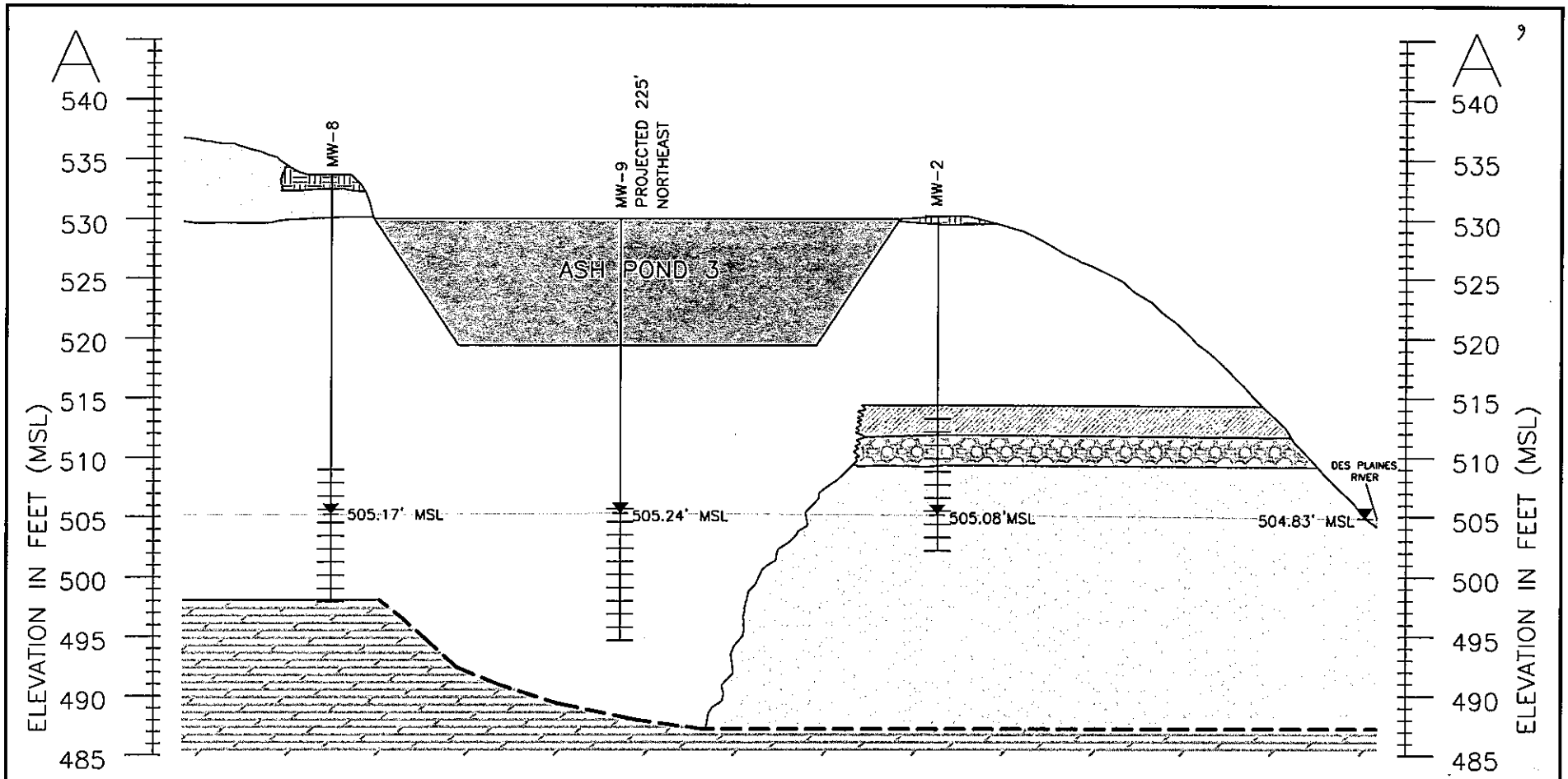
0 300'

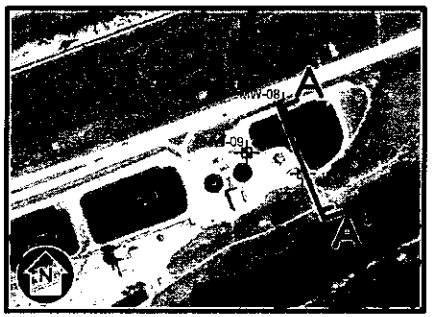
GRAPHIC SCALE

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC., JULY 2008

Date: FEB. 2011	FIGURE 3 MONITORING WELL LOCATION MAP	PATRICK ENGINEERING INC.
Proj No.: 21053.070	JOLIET STATION NO. 29 JOLIET, ILLINOIS	4970 Varsity Drive Lisle, Illinois 60532-4101 TEL. (630) 795-7200 FAX (630) 724-1681
App. By: RMF		PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

MWG13-15_6981





CROSS SECTION A-A'
NOT TO SCALE

LEGEND

- FILL
- CLAYEY GRAVEL
- SANDY GRAVEL
- GROUNDWATER ELEVATION (FT. / MSL)
- GRAVEL
- SILTY CLAY
- DOLOMITIC LIMESTONE

VERTICAL SCALE 10' 0

0 75'

HORIZONTAL SCALE

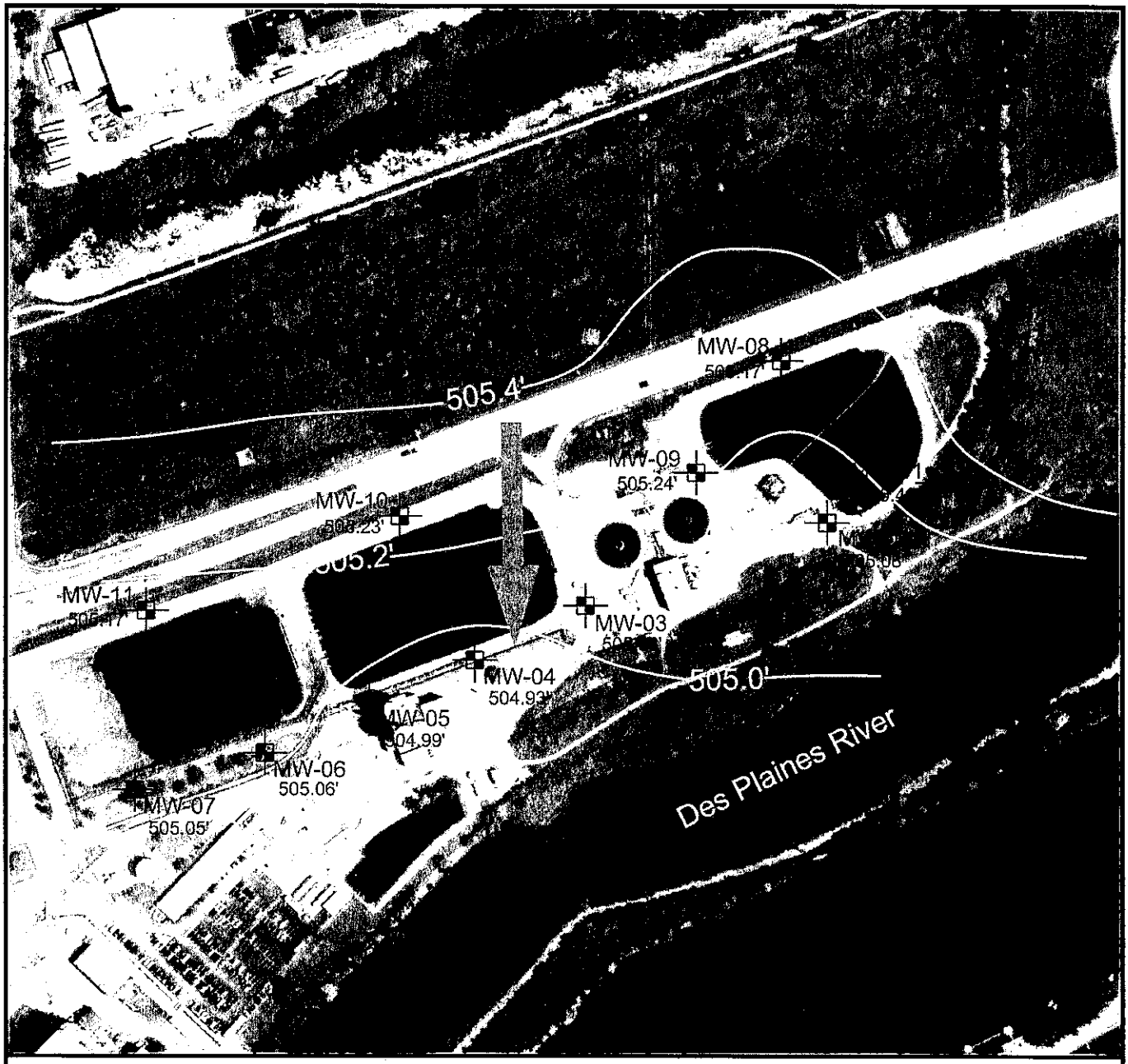
PATRICK ENGINEERING INC.
4970 Varsity Drive TEL. (630) 795-7200
Lisle, Illinois 60532-4101 FAX (630) 724-1681
http://www.patrickengineering.com
PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

FIGURE 4
CROSS SECTION A-A' - SITE LITHOLOGY

JOLIET STATION NO. 29
JOLIET, ILLINOIS

DATE: FEBRUARY 2011
PROJ. NO.: 21053.070
APP. BY: RMF

MWG13-15_6082



LEGEND

MW-01 505.46' — Monitoring Well Location (November 2010) with Groundwater Elevation (ft. / MSL)

Groundwater Flow Direction

Potentiometric Surface Contour (ft. / MSL)

N

0 300'

GRAPHIC SCALE

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC., JULY 2008

Date: FEB. 2011	FIGURE 5 POTENTIOMETRIC SURFACE MAP	PATRICK ENGINEERING INC.
Proj No.: 21053.070	JOLIET STATION NO. 29 JOLIET, ILLINOIS	4970 Varsity Drive, Lisle, Illinois 60532-4101 TEL. (630) 795-7200 FAX (630) 724-1681
App. By: RMF		PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

MWG13-15_6983

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-1** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **531.5**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
531.5	0.0		Topsoil with fine to coarse gravel, moist				
			1' to 2' rounded coarse gravel at surface	SS-1 1.0-2.5 8"R	8 10 5		
							Bentonite seal 2.0'-14.0'. Stickup protective cover installed.
				SS-2 3.5-5.0 10"R	12 32 14		
			Fine to coarse sand and gravel, limestone fragments				
				SS-3 6.0-7.5 10"R	12 12 7		
			Limestone fragments, wet	SS-4 8.5-10.0 0.5"	8 4 4		
520.5	11.0		Fine to coarse sand and gravel, some black clay, limestone fragments, wet	SS-5 11.0-12.5 8"R	5 5 5		
				SS-6 13.5-15.0 6"R	45 6 10		Sand pack 14.0'-26.25'
				SS-7 16.0-17.5 10"R	8 6 8		Set screen (slot 0.010) 16.25'-26.25'
514.5	17.0		▽ Saturated				
			Limestone fragments, saturated	SS-8 18.5-20.0 6"R	14 10 11		
511.5	20.0						

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/27/10** ENDED **10/27/10**

REMARKS.
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **17.0**
▽ **15.0'**
▼

MWG13-15_6984

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-1** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **531.5**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
511.5	20.0		Fine to coarse sand and gravel, with limestone fragments, weathered, saturated				
				SS-9 21.0-22.5 8"R	22 25 13		
				SS-10 23.5-25.0 8"R	15 11 10		
			Wet to saturated				
				SS-11 26.0-27.5 10"R	12 16 18		
504.0	27.5		Saturated				
			End of Boring at 27.5'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/27/10** ENDED **10/27/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **17.0**
▼ **15.0'**
▼

MWG13-15_6985

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-2** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **531.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) (1 2 3 4 5)	NOTES & TEST RESULTS
531.2	0.0		Fine to coarse gravel (CA-6)				1" - 6" cobbles at surface
530.2	1.0		Brown fine to coarse sand and gravel, moist	SS-1 1.0-2.5 6"R	5 7 5		Bentonite seal 2.0'-14.0'. Stickup protective cover installed.
			1" limestone fragments	SS-2 3.5-5.0 0.5"R	8 12 6		
525.2	6.0		Brown fine to coarse sand and gravel, moist	SS-3 6.0-7.5 3"R	5 9 6		
			1" limestone fragments	SS-4 8.5-10.0 9"R	11 8 10		
			Little silty clay, moist to wet	SS-5 11.0-12.5 3"R	6 37 11		
517.7	13.5		Coarse gravel with black silty clay, trace roots, trace coarse sand, moist	SS-6 13.5-15.0 4"R	15 4 3		Sand pack 14.0'-26.5'
515.2	16.0		Black silty clay, with fine to coarse sand and gravel, moist	SS-7 16.0-17.5 8"R	12 6 12		Set screen 16.5'-26.5'
512.7	18.5	▽	Brown silty fine to coarse sand, trace fine gravel, saturated	SS-8 18.5-20.0 6"R	3 4 3		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/29/10** ENDED **10/29/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **18.5**
▼ **21.5'**
▼

MWG13-15_6986

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-2** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **531.2**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
511.2	20.0						
510.2	21.0		Limestone fragments, trace light brown silty clay, moist	SS-9 21.0-22.5 8"R	13 16 13		
				SS-10 23.5-25.0 4"R	14 13 13		
			Limestone fragments, saturated				
502.7	28.5		End of Boring at 28.5'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/29/10** ENDED **10/29/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **18.5**
▼ **21.5'**
▼

MWG13-15_6987

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-3** SHEET 1 OF 2
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.5**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL–LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
535.5	0.0		Coarse gravel (CA-6)				
				SS-1 1.0-2.5			Bentonite seal 2.0'-30.5'. Stickup protective cover installed.
				SS-2 3.5-5.0	8 10 12		
			Fine to coarse sand and gravel, dry	SS-3 6.0-7.5			
				SS-4 8.5-10.0	12 11 10		
				SS-5 11.0-12.5			
				SS-6 13.5-15.0	9 12 13		
				SS-7 16.0-17.5			
517.0	18.5		Tan fine to coarse sand, with coarse gravel, dry	SS-8 18.5-20.0	12 17 23		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/1/10** ENDED **11/1/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▽
▼

MWG13-15_6988

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-3** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.5**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
514.5	21.0		Tan fine to coarse sand, with coarse gravel, dry	SS-9 21.0-22.5			
				SS-10 23.5-25.0	14 32 36		
				SS-11 26.0-27.5			
				SS-12 28.5-30.0	21 16 15		Sand pack 28.0'-40.5'
504.5	31.0	▽	Saturated	SS-13 31.0-32.5	15 11 12		Set screen (slat 0.010) 30.5'-40.5'
				SS-14 33.5-35.0			
				S-15 36.0-37.5			
				SS-16 38.5-40.0	50/0.5'		
494.5	41.0		End of Boring at 41.0'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/1/10** ENDED **11/1/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▽
▽

MWG13-15_6989

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-4** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.8**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
535.8	0.0		Coarse gravel (CA-6), dry				
534.8	1.0		Brown silty clay, trace coarse sand, stiff, dry	SS-1 1.0-2.5 6"R	6 6 7		Bentonite seal 2.0'-27.5'. Stickup protective cover installed.
				SS-2 3.5-5.0 10"R	4 7 9		
529.8	6.0		Brown fine to coarse sand and gravel, trace limestone fragments	SS-3 6.0-7.5 6"R	20 22 12		
				SS-4 8.5-10.0 6"R	10 12 16		
				SS-5 11.0-12.5 8"R	11 20 23		
				SS-6 13.5-15.0 4"R	9 8 9		
			Limestone fragments, dry	SS-7 16.0-17.5 2"R	31 31		
				SS-8 18.5-20.0 4"R	24 40		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/1/10** ENDED **11/1/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.5**
▼
▼

MWG13-15_6990

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-4** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.8**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
515.8	20.0		Brown fine to coarse sand and gravel, trace limestone fragments				
				SS-9 21.0-22.5 4"R	60/6"		
			Fine to coarse sand and gravel, dry				
				SS-10 23.5-25.0 6"R	35 36		
				SS-11 26.0-27.5 10"R	28 21 10		Sand pack 27.5'-39.5'
				SS-12 28.5-30.0 6"R	12 8 8		Set screen (slot 0.010) 29.5'-39.5'
504.3	31.5		▽ Saturated	SS-13 31.0-32.5 8"R	13 17 13		
502.8	33.0		Fine to coarse sand, saturated				
				SS-14 33.5-35.0 18"R	13 24 24		
			Fine to coarse sand and gravel, with limestone fragments				
				SS-15 36.0-37.5			
				SS-16 38.5-40.0 10"R	21 50/3"		
495.8	40.0		End of Boring at 40.0'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/1/10** ENDED **11/1/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.5**
▽
▽

MWG13-15_6991

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-5** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **536.4**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
536.4	0.0		Fine to coarse gravel, topsoil, dry				
				SS-1 1.0-2.5			Bentonite seal 2.0'-32.0'. Stickup protective cover installed.
				SS-2 3.5-5.0			
				SS-3 6.0-7.5			
527.9	8.5		Black silty clay, coarse sand, moist to wet	SS-4 8.5-10.0 1"R	2 4 2		
				SS-5 13.5-15.0 8"R	2 4 3		
				SS-6 16.0-17.5			
			Coarse gravel fragments	SS-7 18.5-20.0 0.5"R	4 3 3		
				SS-8 21.0-22.5			

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/2/10** ENDED **11/2/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**

MWG13-15_6992

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-5** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **536.4**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ ○ △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
~~513.9~~ 513.4	~~22.5~~ 23.0						
			Tan to light brown fine to coarse sand, little coarse gravel, dry	SS-9 23.5-25.0 12"R	27 35 38		
				SS-10 26.0-27.5	42 49		
				SS-11 28.5-30.0 8"R	7 8 9		
505.4	31.0	▽	Fine to coarse sand and gravel, saturated	SS-12 31.0-32.5 4"R	7 10 27		Sand pack 30.0'-42.0'
				SS-13 33.5-35.0			Set screen (slot 0.010") 32.0'-42.0'
				SS-14 36.0-37.5			
				SS-15 38.5-40.0	29 18		
494.4	42.0		Tan to light brown fine to coarse sand, little coarse gravel, dry				
			End of Boring at 42.0'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/2/10** ENDED **11/2/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▽
▽

MWG13-15_6993

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-6** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.9**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
535.9	0.0		Gravel (CA-6), topsoil, dry				
				SS-1 1.0-2.5			Bentonite seal 2.0'-30.5'. Stickup protective cover installed.
				SS-2 3.5-5.0			
				SS-3 6.0-7.5			
527.4	8.5		Brown to tan fine to coarse sand and gravel, trace limestone, gravel seams, dry	SS-4 8.5-10.0 12"R	12 12 12		
				SS-5 11.0-12.5			
				SS-6 13.5-15.0 14"R	23 30 27		
				SS-7 16.0-17.5			
				SS-8 18.5-20.0 12"R	18 28 24		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/3/10** ENDED **11/3/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**

MWG13-15_6994

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-6** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.9**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) * (1 2 3 4 5)	NOTES & TEST RESULTS
514.9	21.0		Brown to tan fine to coarse sand and gravel, trace limestone, gravel seams, dry	SS-9 21.0-22.5			
				SS-10 23.5-25.0 14"R	23 34 18/3"		
				SS-11 26.0-27.5			
				SS-12 28.5-30.0 12"R	33 21 27		Sand pack 28.0'-40.5'
504.9	31.0		▽ Fine to coarse sand and gravel, saturated	SS-13 31.0-32.5 12"R			Set screen (slot 0.010) 30.5'-40.5'
				SS-14 33.5-35.0			
				SS-15 36.0-37.5			
497.4	38.5		Limestone bedrock	SS-16 38.5-40.0 0.5"R	50/0.5"		
495.4	40.5		End of Boring at 40.5'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/3/10** ENDED **11/3/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▼
▼

MWG13-15_6995

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-7** SHEET 1 OF 2
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.9**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
535.9	0.0		Gravel (CA-6), topsoil, dry				
				SS-1 1.0-2.5			Bentonite seal 2.0'-28.75'. Stickup protective cover installed.
				SS-2 3.5-5.0			
				SS-3 6.0-7.5			
527.4	8.5		Tan to brown fine to coarse sand and gravel, dry	SS-4 8.5-10.0 8"R	32 16 17		
				SS-5 11.0-12.5			
				SS-6 13.5-15.0	13 21		
				SS-7 16.0-17.5			
				SS-8 18.5-20.0	28 17		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/3/10** ENDED **11/3/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ 31.0
▼
▼

MWG13-15_6996

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-7** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **535.9**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
515.9	20.0		Tan to brown fine to coarse sand and gravel, dry				
				SS-9 21.0-22.5			
				SS-10 23.5-25.0 8"R	21 28 1		
				SS-11 26.0-27.5			Sand pack 26.5'-38.75'
				SS-12 28.5-30.0 12"R	22 31 37		Set screen (slot 0.010) 28.75'-38.75'
504.9	31.0		▽ Saturated	SS-13 31.0-32.5 10"R	12 8 5		
496.4	39.5		End of Boring at 39.5'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/3/10** ENDED **11/3/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▽
▼

MWG13-15_6997

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-8** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **533.7**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ ○ △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
533.7	0.0		Fine to coarse gravel fill, dry				
532.7	1.0		Dark brown silty clay, some fine to coarse sand, stiff, moist	SS-1 1.0-2.5 6"R	2 5 9		Bentonite seal 2.0'-25.5'. Stickup protective cover installed.
530.2	3.5		Black/brown fine to coarse sand and gravel, moist	SS-2 3.5-5.0 6"R	5 5 10		
			Limestone fragments, dry	SS-3 6.0-7.5 8"R	13 16 14		
				SS-4 8.5-10.0 8"R	7 15 22		
				SS-5 11.0-12.5 8"R	15 13 13		
				SS-6 13.5-15.0 8"R	17 14 12		
				SS-7 16.0-17.5 8"R	5 12 8		
				SS-8 18.5-20.0 3"R	12 9 9		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/27/10** ENDED **10/27/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **27.0**
▼
▼

MWG13-15_6998

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-8** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **533.7**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 50 LL / Unconfined Compressive Strength (TSF) 1 2 3 4 5	NOTES & TEST RESULTS
513.7	20.0		Black/brown fine to coarse sand and gravel, moist				
				SS-9 21.0-22.5 4"R	5 4 5		
			Moist to wet	SS-10 23.5-25.0 6"R	6 9 18		Sand pack 23.0'-35.5'
							Screen set (slot 0.010) 25.5'-35.5'
				SS-11 26.0-27.5 8"R	6 9 8		
506.7	27.0	▽	Saturated				
				SS-12 28.5-30.0 6"R	4 8 8		
				SS-13 33.5-35.0 2"R	50/1"		
498.2	35.5		End of Boring at 35.5'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/27/10** ENDED **10/27/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **27.0**
▼
▼

MWG13-15_6999

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-9** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **531.1**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
531.1	0.0		Coarse sand and gravel (CA-6), dry				
530.1	1.0		Coarse gravel, with black silty clay, trace root seams, moist	SS-1 1.0-2.5 6"R	15 14 13		Bentonite seal 2.0'-34.75'. Stickup protective cover installed.
527.6	3.5		Coarse gravel fragments, with fine to coarse sand, dry	SS-2 3.5-5.0 2"R	4 5 6		
				SS-3 6.0-7.5			
				SS-4 8.5-10.0			
520.1	11.0		Limestone fragments, with light brown silty fine to coarse sand, dry	SS-5 11.0-12.5 8"R	34 37		
				SS-6 13.5-15.0 10"R	20 16 16		
				SS-7 16.0-17.5 6"R	10 15 23		
512.6	18.5		Limestone fragments, with light brown to dark orange fine to coarse sand, moist	SS-8 18.5-20.0 10"R	15 24 28		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/29/10** ENDED **10/29/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **26.0**
▼
▼

MWG13-15_7000

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-9** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **531.1**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL 10 20 30 40 LL 50 / Unconfined Compressive Strength (TSF) * 1 2 3 4 5	NOTES & TEST RESULTS
511.1	20.0		Limestone fragments, with light brown to dark orange fine to coarse sand, moist				
				SS-9 21.0-22.5			
							Sand pack 22.5'-34.75'
507.6	23.5		Light brown/orange fine to coarse sand, with coarse gravel, moist	SS-10 23.5-25.0 12"R	15 29 36		
							Screen set (slot 0.010) 24.75'-34.75'
505.1	26.0	▽		SS-11 26.0-27.5 1"R	16 10 8		
502.6	28.5		Light brown coarse sand, some fine to coarse gravel, little fine sand, saturated	SS-12 28.5-30.0 10"R	6 10 13		
				SS-13 31.0-32.5			
				SS-14 33.5-35.0 6"R	18 50/4"		
496.1	35.0		End of Boring at 35.0'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **10/29/10** ENDED **10/29/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **26.0**
▽
▽

MWG13-15_7001

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-10** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **536.9**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
536.9	0.0		Coarse gravel, dry				
				SS-1 1.0-2.5 10"R	5 4 5		Bentonite seal 2.0'-28.0'. Stickup protective cover installed.
			Brown clay				
				SS-2 3.5-5.0 10"R	3 2 2		
				SS-3 6.0-7.5 16"R	2 1 1		
529.9	7.0		Black/gray sandy silt, moist				
				SS-4 8.5-10.0 12"R	1 3 1		
				SS-5 11.0-12.5 18"R	1 1 1		
				SS-6 13.5-15.0 18"R	1 2 2		
				SS-7 16.0-17.5 18"R	1 3 2		
517.9	19.0		Gray silty clay, trace coarse sand, soft, wet	SS-8 18.5-20.0 18"R	2 3 4		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/2/10** ENDED **11/2/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**

MWG13-15_7002

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-10** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **536.9**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
515.9	21.0		Gray silty clay, trace coarse sand, soft, wet	SS-9 21.0-22.5 8"R	12 28 31		
				SS-10 23.5-25.0 10"R	11 24 21		
				SS-11 26.0-27.5 12"R	6 13 17		
				SS-12 28.5-30.0 18"R	13 19 24		Sand pack 28.0'-40.5'
505.9	31.0		▽	SS-13 31.0-32.5 10"R	28 24 14		Screen set (slot 0.010) 30.5'-40.5'
				SS-14 33.5-35.0 18"R	16 63 12		
				SS-15 36.0-37.5			
				SS-16 38.5-40.0 18"R	9 14		
495.9	41.0		End of Boring at 41.0'				

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/2/10** ENDED **11/2/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▼
▼

MWG13-15_7003

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-11** SHEET **1** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **536.5**

ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □---○---△ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
536.5	0.0		Fine to coarse sand and gravel, fill, dry				
				SS-1 1.0-2.5			Bentonite seal 2.0'-27.0'. Stickup protective cover installed.
				SS-2 3.5-5.0	3 2 2		
				SS-3 6.0-7.5			
			Grades to dark gray clayey silt	SS-4 8.5-10.0	3 2 2		
				SS-5 11.0-12.5			
522.5	14.0		Dark gray clayey silt, soft, moist	SS-6 13.5-15.0	1 2 2		
				SS-7 16.0-17.5			
				SS-8 18.5-20.0	1 3 5		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/4/10** ENDED **11/4/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▽
▽

MWG13-15_7004

PATRICK ENGINEERING INC.

BORING NUMBER **B-MW-11** SHEET **2** OF **2**
CLIENT **Midwest Generation**
PROJECT & NO. **21053.070**
LOCATION **Joliet No. 29**

LOGGED BY **AFG**
GROUND ELEVATION **536.5**

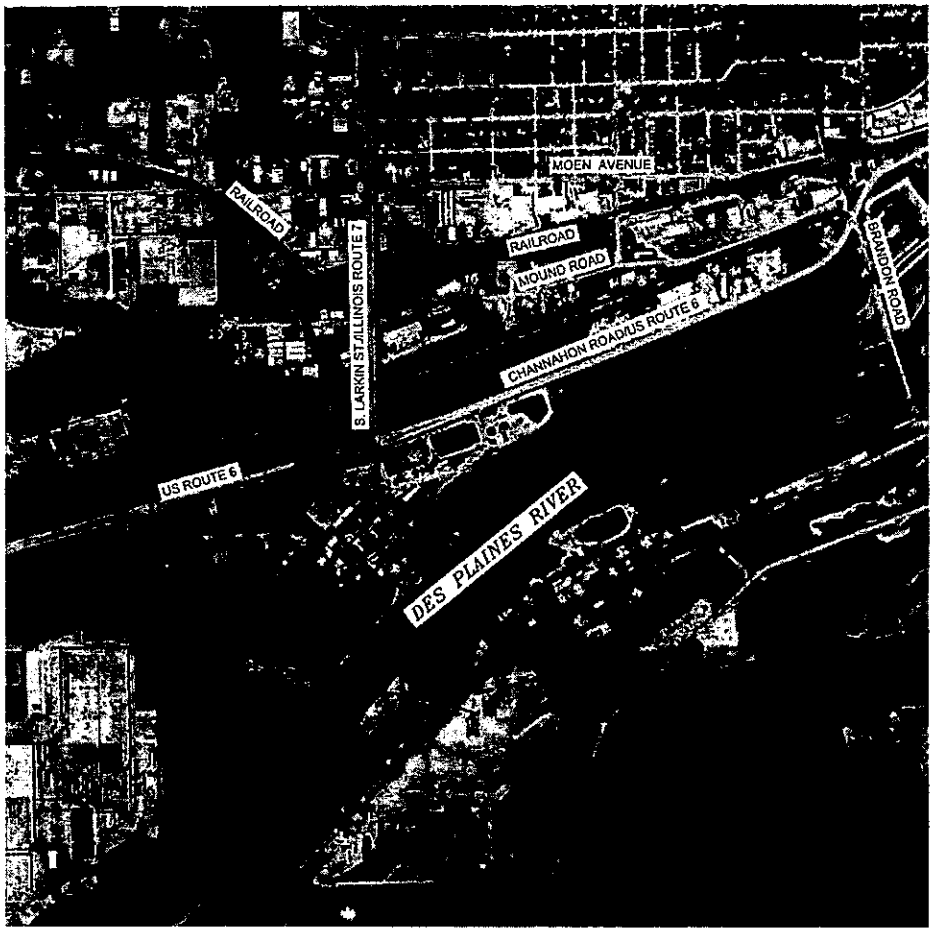
ELEVATION	DEPTH (FT)	STRATA	SOIL/ROCK DESCRIPTION	SAMPLE TYPE & NO. DEPTH (FT) RECOVERY(IN)	BLOW COUNTS	Water Content PL □ ○ △ LL (10 20 30 40 50) / Unconfined Compressive Strength (TSF) ✳ (1 2 3 4 5)	NOTES & TEST RESULTS
516.5	20.0		Dark gray clayey silt, soft, moist				
				SS-9 21.0-22.5			
			Light brown fine to coarse silt and gravel, moist	SS-10 23.5-25.0	9 11 12		
				SS-11 26.0-27.5			Sand pack 27.0'-39.5'
				SS-12 28.5-30.0	1 3 13		Screen set (slot 0.010) 29.5'-39.5'
505.5	31.0	▽		SS-13 31.0-32.5	8 7 8		
				SS-14 33.5-35.0			
				SS-15 36.0-37.5			
497.0	39.5		End of Boring at 39.5'	SS-16 38.5-40.0	36 50/2"		

DRILLING CONTRACTOR **Groff Testing**
DRILLING METHOD **4.25" I.D. HSA**
DRILLING EQUIPMENT **CME**
DRILLING STARTED **11/4/10** ENDED **11/4/10**

REMARKS
Installed 2" diameter PVC monitoring well.

WATER LEVEL (ft.)
▽ **31.0**
▽
▼

MWG13-15_7005



LEGEND

- CWS-1 — COMMUNITY WELL LOCATION
- POTABLE WELL LOCATION (APPROXIMATE)
- ASH POND
- 2,500 FOOT RADIUS OF ASH POND SYSTEMS

NOTE:
REFER TO SUMMARY TABLE FOR SPECIFIC WELL INFORMATION.

SOURCE:
2005 DIGITAL ORTHOPHOTO FROM ILLINOIS NATURAL RESOURCES GEOSPATIAL DATA CLEARINGHOUSE
WELL LOCATIONS FROM ILLINOIS STATE GEOLOGICAL SURVEY, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND ILLINOIS STATE WATER SURVEY.

N

0 600 1200
SCALE IN FEET

DRAWN BY: RLH/KNW DATE: 05/20/09
CHECKED BY: HMS DATE: 05/22/09
APPROVED BY: HMS DATE: 07/07/09
DRAWING NO: 1792-3-B03
REFERENCE: 1610L050930.sid, 050945.sid, 085930.sid, 085945.sid

POTABLE WATER WELLS

JOLIET STATION NO. 29
MIDWEST GENERATION
ROCKDALE, WILL COUNTY, ILLINOIS

NATURAL RESOURCE TECHNOLOGY

PROJECT NO. 1792/3.0

FIGURE NO. 1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 500-29703-1

Job Description: Joliet Ash Pond Assessments

For:
Midwest Generation EME LLC
1800 Channahon Road
Joliet, IL 60436

Attention: James DiCola

Cindy Pritchard

Approved for release.
Cindy R Pritchard
Project Mgmt. Assistant
12/17/2010 1:46 PM

Designee for
Bonnie M Stadelmann
Project Manager II
bonnie.stadelmann@testamericainc.com
12/17/2010

cc: Andrew Gagnon
Ms. Maria Race

These test results meet all the requirements of NELAC for accredited parameters.

The Lab Certification ID#:
TestAmerica Chicago 100201

All questions regarding this test report should be directed to the TestAmerica Project Manager whose signature appears on this report. All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.

Comments
No additional comments.

Receipt
All samples were received in good condition within temperature requirements.

Metals
The matrix spike / matrix spike duplicate (MS/MSD) recoveries for sample 500-29703-1 were outside control limits for Ag. The MSD was also out for Se. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

Field Service / Mobile Lab
No analytical or quality issues were noted.

General Chemistry
Method(s) 353.2, SM 4500 NO3 F: The nitrate continuing calibration verification (CCV) for 101888 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. MW-06 (500-29703-6), MW-07 (500-29703-7), MW-09 (500-29703-9)

No other analytical or quality issues were noted.

EXECUTIVE SUMMARY - Detections

Client: Midwest Generation EME LLC Job Number: 500-29703-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
500-29703-1	**MW-01**				
Dissolved					
Antimony		0.0043	0.0030	mg/L	6020
Arsenic		0.0011	0.0010	mg/L	6020
Barium		0.13	0.0025	mg/L	6020
Boron		0.31	0.050	mg/L	6020
Copper		0.0032	0.0020	mg/L	6020
Nickel		0.0034	0.0020	mg/L	6020
Sulfate-Dissolved		180	50	mg/L	9038
Chloride-Dissolved		140	10	mg/L	9251
Nitrogen, Nitrate-Dissolved		1.9	0.10	mg/L	Nitrate by calc
Total Dissolved Solids-Dissolved		590	10	mg/L	SM 2540C
Fluoride-Dissolved		0.45	0.10	mg/L	SM 4500 F C
Nitrogen, Nitrate Nitrite-Dissolved		1.9	0.20	mg/L	SM 4500 NO3 F
500-29703-2	**MW-02**				
Dissolved					
Antimony		0.012	0.0030	mg/L	6020
Barium		0.082	0.0025	mg/L	6020
Boron		0.31	0.050	mg/L	6020
Copper		0.0032	0.0020	mg/L	6020
Nickel		0.0033	0.0020	mg/L	6020
Sulfate-Dissolved		190	50	mg/L	9038
Chloride-Dissolved		140	10	mg/L	9251
Nitrogen, Nitrate-Dissolved		3.1	0.10	mg/L	Nitrate by calc
Total Dissolved Solids-Dissolved		600	10	mg/L	SM 2540C
Fluoride-Dissolved		0.62	0.10	mg/L	SM 4500 F C
Nitrogen, Nitrate Nitrite-Dissolved		3.1	0.20	mg/L	SM 4500 NO3 F
500-29703-3	**MW-03**				
Dissolved					
Antimony		0.0040	0.0030	mg/L	6020
Barium		0.089	0.0025	mg/L	6020
Boron		0.24	0.050	mg/L	6020
Cobalt		0.0013	0.0010	mg/L	6020
Manganese		0.10	0.0025	mg/L	6020
Nickel		0.011	0.0020	mg/L	6020
Sulfate-Dissolved		120	50	mg/L	9038
Chloride-Dissolved		260	10	mg/L	9251
Total Dissolved Solids-Dissolved		930	10	mg/L	SM 2540C
Fluoride-Dissolved		0.43	0.10	mg/L	SM 4500 F C

EXECUTIVE SUMMARY - Detections

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
500-29703-4	**MW-04**				
Dissolved					
Barium		0.065	0.0025	mg/L	6020
Boron		0.46	0.050	mg/L	6020
Manganese		0.33	0.0025	mg/L	6020
Nickel		0.0067	0.0020	mg/L	6020
Selenium		0.0025	0.0025	mg/L	6020
Sulfate-Dissolved		300	50	mg/L	9038
Chloride-Dissolved		270	10	mg/L	9251
Nitrogen, Nitrate-Dissolved		0.81	0.10	mg/L	Nitrate by calc
Total Dissolved Solids-Dissolved		1100	10	mg/L	SM 2540C
Fluoride-Dissolved		0.49	0.10	mg/L	SM 4500 F C
Nitrogen, Nitrate Nitrite-Dissolved		0.81	0.10	mg/L	SM 4500 NO3 F
500-29703-5	**MW-05**				
Dissolved					
Barium		0.061	0.0025	mg/L	6020
Boron		0.42	0.050	mg/L	6020
Manganese		0.0065	0.0025	mg/L	6020
Sulfate-Dissolved		110	25	mg/L	9038
Chloride-Dissolved		150	10	mg/L	9251
Total Dissolved Solids-Dissolved		750	10	mg/L	SM 2540C
Fluoride-Dissolved		0.40	0.10	mg/L	SM 4500 F C
500-29703-6	**MW-06**				
Dissolved					
Barium		0.075	0.0025	mg/L	6020
Boron		0.32	0.050	mg/L	6020
Manganese		0.14	0.0025	mg/L	6020
Nickel		0.0056	0.0020	mg/L	6020
Selenium		0.0029	0.0025	mg/L	6020
Sulfate-Dissolved		140	50	mg/L	9038
Chloride-Dissolved		130	10	mg/L	9251
Total Dissolved Solids-Dissolved		650	10	mg/L	SM 2540C
Fluoride-Dissolved		0.40	0.10	mg/L	SM 4500 F C

EXECUTIVE SUMMARY - Detections

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
500-29703-7	**MW-07**				
Dissolved					
Arsenic		0.0010	0.0010	mg/L	6020
Barium		0.13	0.0025	mg/L	6020
Boron		0.51	0.050	mg/L	6020
Manganese		0.29	0.0025	mg/L	6020
Nickel		0.0045	0.0020	mg/L	6020
Sulfate-Dissolved		250	50	mg/L	9038
Chloride-Dissolved		430	50	mg/L	9251
Total Dissolved Solids-Dissolved		1200	10	mg/L	SM 2540C
Fluoride-Dissolved		0.36	0.10	mg/L	SM 4500 F C
500-29703-8	**MW-08**				
Dissolved					
Barium		0.054	0.0025	mg/L	6020
Boron		0.29	0.050	mg/L	6020
Manganese		0.0051	0.0025	mg/L	6020
Nickel		0.0025	0.0020	mg/L	6020
Sulfate-Dissolved		210	50	mg/L	9038
Chloride-Dissolved		130	10	mg/L	9251
Nitrogen, Nitrate-Dissolved		0.33	0.10	mg/L	Nitrate by calc
Total Dissolved Solids-Dissolved		670	10	mg/L	SM 2540C
Fluoride-Dissolved		0.51	0.10	mg/L	SM 4500 F C
Nitrogen, Nitrate Nitrite-Dissolved		0.33	0.10	mg/L	SM 4500 NO3 F
500-29703-9	**MW-09**				
Dissolved					
Barium		0.031	0.0025	mg/L	6020
Boron		0.36	0.050	mg/L	6020
Cobalt		0.0047	0.0010	mg/L	6020
Manganese		1.1	0.0025	mg/L	6020
Nickel		0.0094	0.0020	mg/L	6020
Sulfate-Dissolved		1600	250	mg/L	9038
Chloride-Dissolved		140	10	mg/L	9251
Total Dissolved Solids-Dissolved		2600	10	mg/L	SM 2540C
Fluoride-Dissolved		0.61	0.10	mg/L	SM 4500 F C

EXECUTIVE SUMMARY - Detections

Client: Midwest Generation EME LLC Job Number: 500-29703-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier	Reporting Limit	Units	Method
500-29703-10	**MW-10**				
Dissolved					
Barium		0.050	0.0025	mg/L	6020
Boron		0.50	0.050	mg/L	6020
Manganese		0.12	0.0025	mg/L	6020
Nickel		0.0052	0.0020	mg/L	6020
Sulfate-Dissolved		130	50	mg/L	9038
Chloride-Dissolved		200	10	mg/L	9251
Nitrogen, Nitrate-Dissolved		0.39	0.10	mg/L	Nitrate by calc
Total Dissolved Solids-Dissolved		860	10	mg/L	SM 2540C
Fluoride-Dissolved		0.43	0.10	mg/L	SM 4500 F C
Nitrogen, Nitrate Nitrite-Dissolved		0.39	0.10	mg/L	SM 4500 NO3 F
500-29703-11	**MW-11**				
Dissolved					
Arsenic		0.0013	0.0010	mg/L	6020
Barium		0.064	0.0025	mg/L	6020
Boron		0.47	0.050	mg/L	6020
Manganese		0.052	0.0025	mg/L	6020
Nickel		0.0022	0.0020	mg/L	6020
Sulfate-Dissolved		140	50	mg/L	9038
Chloride-Dissolved		160	10	mg/L	9251
Nitrogen, Nitrate-Dissolved		0.39	0.10	mg/L	Nitrate by calc
Total Dissolved Solids-Dissolved		770	10	mg/L	SM 2540C
Fluoride-Dissolved		0.34	0.10	mg/L	SM 4500 F C
Nitrogen, Nitrate Nitrite-Dissolved		0.39	0.10	mg/L	SM 4500 NO3 F

METHOD SUMMARY

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Metals (ICP/MS)	TAL CHI	SW846 6020	
Preparation, Soluble	TAL CHI		Soluble Metals
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL CHI	SW846 7470A	
Preparation, Mercury	TAL CHI		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
Cyanide	TAL CHI	SW846 9014	
Cyanide, Distillation	TAL CHI		SW846 9010B
Sample Filtration, Field			FIELD_FLTRD
Sulfate, Turbidimetric	TAL CHI	SW846 9038	
Sample Filtration, Field			FIELD_FLTRD
Chloride	TAL CHI	SW846 9251	
Sample Filtration, Field			FIELD_FLTRD
Nitrogen, Nitrate-Nitrite	TAL CHI	SM Nitrate by calc	
Sample Filtration, Field			FIELD_FLTRD
Solids, Total Dissolved (TDS)	TAL CHI	SM SM 2540C	
Sample Filtration, Field			FIELD_FLTRD
Fluoride	TAL CHI	SM SM 4500 F C	
Sample Filtration, Field			FIELD_FLTRD
Nitrogen, Nitrite	TAL CHI	SM SM 4500 NO2 B	
Sample Filtration, Field			FIELD_FLTRD
Nitrogen, Nitrate	TAL CHI	SM SM 4500 NO3 F	
Sample Filtration, Field			FIELD_FLTRD

Lab References:

TAL CHI = TestAmerica Chicago

Method References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

METHOD / ANALYST SUMMARY

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method	Analyst	Analyst ID
SW846 6020	Kolarczyk, Paul F	PFK
SW846 7470A	Roach, Jessica	JR
SW846 9014	Moore, Colleen L	CLM
SW846 9038	Boyd, Cheryl L	CLB
SW846 9251	Deb, Khona	KD
SM Nitrate by calc	Ficarello, Peter M	PMF
SM SM 2540C	Boyd, Cheryl L	CLB
SM SM 4500 F C	Moore, Colleen L	CLM
SM SM 4500 NO2 B	Moore, Colleen L	CLM
SM SM 4500 NO3 F	Ficarello, Peter M	PMF

SAMPLE SUMMARY

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
500-29703-1	MW-01	Water	12/06/2010 1425	12/07/2010 1250
500-29703-2	MW-02	Water	12/06/2010 1345	12/07/2010 1250
500-29703-3	MW-03	Water	12/07/2010 1010	12/07/2010 1250
500-29703-4	MW-04	Water	12/07/2010 1100	12/07/2010 1250
500-29703-5	MW-05	Water	12/07/2010 1145	12/07/2010 1250
500-29703-6	MW-06	Water	12/07/2010 0930	12/07/2010 1250
500-29703-7	MW-07	Water	12/07/2010 0855	12/07/2010 1250
500-29703-8	MW-08	Water	12/06/2010 1455	12/07/2010 1250
500-29703-9	MW-09	Water	12/06/2010 1115	12/07/2010 1250
500-29703-10	MW-10	Water	12/06/2010 1520	12/07/2010 1250
500-29703-11	MW-11	Water	12/06/2010 1600	12/07/2010 1250

SAMPLE RESULTS

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Job Number: 500-29703-1

Client Sample ID: MW-01
Lab Sample ID: 500-29703-1

Date Sampled: 12/06/2010 1425
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2048	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.31	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 1936	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	0.0011	mg/L	0.0010	1.0
Barium	0.13	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	0.0032	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	<0.0025	mg/L	0.0025	1.0
Nickel	0.0034	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1023	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	0.0043	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1305	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1608	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0609	
Sulfate	180	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1704	
Chloride	140	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	1.9	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2329	

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Job Number: 500-29703-1

Client Sample ID: MW-01
Lab Sample ID: 500-29703-1

Date Sampled: 12/06/2010 1425
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	590	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1218	
Fluoride	0.45	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1043	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/14/2010 1610	
Nitrogen, Nitrate Nitrite	1.9	mg/L	0.20	2.0

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Job Number: 500-29703-1

Client Sample ID: MW-02
Lab Sample ID: 500-29703-2

Date Sampled: 12/06/2010 1345
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2056	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.31	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 1955	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.082	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	0.0032	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	<0.0025	mg/L	0.0025	1.0
Nickel	0.0033	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1028	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	0.012	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1312	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1609	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0610	
Sulfate	190	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1705	
Chloride	140	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	3.1	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2335	

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Job Number: 500-29703-1

Client Sample ID: MW-02
Lab Sample ID: 500-29703-2

Date Sampled: 12/06/2010 1345
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	600	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1226	
Fluoride	0.62	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1044	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/14/2010 1611	
Nitrogen, Nitrate Nitrite	3.1	mg/L	0.20	2.0

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Job Number: 500-29703-1

Client Sample ID: MW-03
Lab Sample ID: 500-29703-3

Date Sampled: 12/07/2010 1010
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2057	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.24	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 1957	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.089	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	0.0013	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.10	mg/L	0.0025	1.0
Nickel	0.011	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1029	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	0.0040	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1313	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1609	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0611	
Sulfate	120	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1705	
Chloride	260	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	<0.10	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2337	

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Job Number: 500-29703-1

Client Sample ID: MW-03
Lab Sample ID: 500-29703-3

Date Sampled: 12/07/2010 1010
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	930	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1230	
Fluoride	0.43	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1045	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/15/2010 1450	
Nitrogen, Nitrate Nitrite	<0.10	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-04
Lab Sample ID: 500-29703-4

Date Sampled: 12/07/2010 1100
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2058	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.46	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2000	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.065	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.33	mg/L	0.0025	1.0
Nickel	0.0067	mg/L	0.0020	1.0
Selenium	0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1046	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1318	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1609	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0707	
Sulfate	300	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1706	
Chloride	270	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	0.81	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2339	

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Job Number: 500-29703-1

Client Sample ID: MW-04
Lab Sample ID: 500-29703-4

Date Sampled: 12/07/2010 1100
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	1100	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1233	
Fluoride	0.49	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1046	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/15/2010 1452	
Nitrogen, Nitrate Nitrite	0.81	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-05
Lab Sample ID: 500-29703-5

Date Sampled: 12/07/2010 1145
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2059	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.42	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2003	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.061	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.0065	mg/L	0.0025	1.0
Nickel	<0.0020	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1039	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1320	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1609	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0708	
Sulfate	110	mg/L	25	5.0
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1706	
Chloride	150	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	<0.10	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2341	

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Job Number: 500-29703-1

Client Sample ID: MW-05
Lab Sample ID: 500-29703-5

Date Sampled: 12/07/2010 1145
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	750	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1237	
Fluoride	0.40	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1046	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/15/2010 1458	
Nitrogen, Nitrate Nitrite	<0.10	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-06
Lab Sample ID: 500-29703-6

Date Sampled: 12/07/2010 0930
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2100	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.32	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2005	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.075	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.14	mg/L	0.0025	1.0
Nickel	0.0056	mg/L	0.0020	1.0
Selenium	0.0029	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1040	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1322	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1610	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0709	
Sulfate	140	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1707	
Chloride	130	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	<0.10	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2343	

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Job Number: 500-29703-1

Client Sample ID: MW-06
Lab Sample ID: 500-29703-6

Date Sampled: 12/07/2010 0930
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	Dilution
Total Dissolved Solids	650		mg/L	10	1.0
Method: Dissolved-SM 4500 F C			Date Analyzed:	12/13/2010 1240	
Fluoride	0.40		mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B			Date Analyzed:	12/08/2010 1046	
Nitrogen, Nitrite	<0.020		mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F			Date Analyzed:	12/14/2010 1534	
Nitrogen, Nitrate Nitrite	<0.10	^	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-07
Lab Sample ID: 500-29703-7

Date Sampled: 12/07/2010 0855
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2101	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.51	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2008	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	0.0010	mg/L	0.0010	1.0
Barium	0.13	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.29	mg/L	0.0025	1.0
Nickel	0.0045	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1040	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1324	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1610	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0710	
Sulfate	250	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1707	
Chloride	430	mg/L	50	25
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	<0.10	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2345	

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Job Number: 500-29703-1

Client Sample ID: MW-07
Lab Sample ID: 500-29703-7

Date Sampled: 12/07/2010 0855
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	Dilution
Total Dissolved Solids	1200		mg/L	10	1.0
Method: Dissolved-SM 4500 F C			Date Analyzed:	12/13/2010 1244	
Fluoride	0.36		mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B			Date Analyzed:	12/08/2010 1047	
Nitrogen, Nitrite	<0.020		mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F			Date Analyzed:	12/14/2010 1536	
Nitrogen, Nitrate Nitrite	<0.10	^	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-08
Lab Sample ID: 500-29703-8

Date Sampled: 12/06/2010 1455
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2102	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.29	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2011	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.054	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.0051	mg/L	0.0025	1.0
Nickel	0.0025	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1041	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1325	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1610	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0711	
Sulfate	210	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1708	
Chloride	130	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	0.33	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2347	

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Job Number: 500-29703-1

Client Sample ID: MW-08
Lab Sample ID: 500-29703-8

Date Sampled: 12/06/2010 1455
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	670	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1247	
Fluoride	0.51	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1047	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/14/2010 1612	
Nitrogen, Nitrate Nitrite	0.33	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-09
Lab Sample ID: 500-29703-9

Date Sampled: 12/06/2010 1115
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2105	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.36	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2013	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.031	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	0.0047	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	1.1	mg/L	0.0025	1.0
Nickel	0.0094	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1042	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1327	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1611	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0712	
Sulfate	1600	mg/L	250	50
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1708	
Chloride	140	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	<0.10	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2349	

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Job Number: 500-29703-1

Client Sample ID: MW-09
Lab Sample ID: 500-29703-9

Date Sampled: 12/06/2010 1115
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier		Unit	RL	Dilution
Total Dissolved Solids	2600		mg/L	10	1.0
Method: Dissolved-SM 4500 F C			Date Analyzed:	12/13/2010 1300	
Fluoride	0.61		mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B			Date Analyzed:	12/08/2010 1048	
Nitrogen, Nitrite	<0.020		mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F			Date Analyzed:	12/14/2010 1538	
Nitrogen, Nitrate Nitrite	<0.10	^	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-10
Lab Sample ID: 500-29703-10

Date Sampled: 12/06/2010 1520
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2106	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.50	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2016	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	<0.0010	mg/L	0.0010	1.0
Barium	0.050	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.12	mg/L	0.0025	1.0
Nickel	0.0052	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1043	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1329	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1611	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0713	
Sulfate	130	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1709	
Chloride	200	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	0.39	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2351	

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Job Number: 500-29703-1

Client Sample ID: MW-10
Lab Sample ID: 500-29703-10

Date Sampled: 12/06/2010 1520
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	860	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1303	
Fluoride	0.43	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1048	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/15/2010 1505	
Nitrogen, Nitrate Nitrite	0.39	mg/L	0.10	1.0

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Job Number: 500-29703-1

Client Sample ID: MW-11
Lab Sample ID: 500-29703-11

Date Sampled: 12/06/2010 1600
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Method: Dissolved-6020		Date Analyzed:	12/13/2010 2108	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Beryllium	<0.0010	mg/L	0.0010	1.0
Boron	0.47	mg/L	0.050	1.0
Method: Dissolved-6020		Date Analyzed:	12/14/2010 2019	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Arsenic	0.0013	mg/L	0.0010	1.0
Barium	0.064	mg/L	0.0025	1.0
Cadmium	<0.00050	mg/L	0.00050	1.0
Chromium	<0.0050	mg/L	0.0050	1.0
Cobalt	<0.0010	mg/L	0.0010	1.0
Copper	<0.0020	mg/L	0.0020	1.0
Iron	<0.10	mg/L	0.10	1.0
Lead	<0.00050	mg/L	0.00050	1.0
Manganese	0.052	mg/L	0.0025	1.0
Nickel	0.0022	mg/L	0.0020	1.0
Selenium	<0.0025	mg/L	0.0025	1.0
Silver	<0.00050	mg/L	0.00050	1.0
Thallium	<0.0020	mg/L	0.0020	1.0
Zinc	<0.020	mg/L	0.020	1.0
Method: Dissolved-6020		Date Analyzed:	12/17/2010 1044	
Prep Method: Soluble Metals		Date Prepared:	12/08/2010 1252	
Antimony	<0.0030	mg/L	0.0030	1.0
Method: Dissolved-7470A		Date Analyzed:	12/08/2010 1330	
Prep Method: 7470A		Date Prepared:	12/08/2010 0920	
Mercury	<0.00020	mg/L	0.00020	1.0
Method: Dissolved-9014		Date Analyzed:	12/09/2010 1611	
Prep Method: 9010B		Date Prepared:	12/09/2010 1250	
Cyanide, Total	<0.010	mg/L	0.010	1.0
Method: Dissolved-9038		Date Analyzed:	12/09/2010 0714	
Sulfate	140	mg/L	50	10
Method: Dissolved-9251		Date Analyzed:	12/13/2010 1710	
Chloride	160	mg/L	10	5.0
Method: Dissolved-Nitrate by calc		Date Analyzed:	12/15/2010 1641	
Nitrogen, Nitrate	0.39	mg/L	0.10	1.0
Method: Dissolved-SM 2540C		Date Analyzed:	12/08/2010 2353	

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Job Number: 500-29703-1

Client Sample ID: MW-11
Lab Sample ID: 500-29703-11

Date Sampled: 12/06/2010 1600
Date Received: 12/07/2010 1250
Client Matrix: Water

Analyte	Result/Qualifier	Unit	RL	Dilution
Total Dissolved Solids	770	mg/L	10	1.0
Method: Dissolved-SM 4500 F C		Date Analyzed:	12/13/2010 1307	
Fluoride	0.34	mg/L	0.10	1.0
Method: Dissolved-SM 4500 NO2 B		Date Analyzed:	12/08/2010 1048	
Nitrogen, Nitrite	<0.020	mg/L	0.020	1.0
Method: Dissolved-SM 4500 NO3 F		Date Analyzed:	12/15/2010 1507	
Nitrogen, Nitrate Nitrite	0.39	mg/L	0.10	1.0

DATA REPORTING QUALIFIERS

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Section	Qualifier	Description
Metals		
	F	MS or MSD exceeds the control limits
General Chemistry		
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

QUALITY CONTROL RESULTS

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 500-101452					
LCS 500-101452/8-A	Lab Control Sample	T	Water	7470A	
MB 500-101452/7-A	Method Blank	T	Water	7470A	
500-29703-1	MW-01	D	Water	7470A	
500-29703-1DU	Duplicate	D	Water	7470A	
500-29703-1MS	Matrix Spike	D	Water	7470A	
500-29703-1MSD	Matrix Spike Duplicate	D	Water	7470A	
500-29703-2	MW-02	D	Water	7470A	
500-29703-3	MW-03	D	Water	7470A	
500-29703-4	MW-04	D	Water	7470A	
500-29703-5	MW-05	D	Water	7470A	
500-29703-6	MW-06	D	Water	7470A	
500-29703-7	MW-07	D	Water	7470A	
500-29703-8	MW-08	D	Water	7470A	
500-29703-9	MW-09	D	Water	7470A	
500-29703-10	MW-10	D	Water	7470A	
500-29703-11	MW-11	D	Water	7470A	
Prep Batch: 500-101483					
LCS 500-101483/2-A	Lab Control Sample	S	Water	Soluble Metals	
MB 500-101483/1-A	Method Blank	S	Water	Soluble Metals	
500-29703-1	MW-01	D	Water	Soluble Metals	
500-29703-1DU	Duplicate	D	Water	Soluble Metals	
500-29703-1MS	Matrix Spike	D	Water	Soluble Metals	
500-29703-1MSD	Matrix Spike Duplicate	D	Water	Soluble Metals	
500-29703-2	MW-02	D	Water	Soluble Metals	
500-29703-3	MW-03	D	Water	Soluble Metals	
500-29703-4	MW-04	D	Water	Soluble Metals	
500-29703-5	MW-05	D	Water	Soluble Metals	
500-29703-6	MW-06	D	Water	Soluble Metals	
500-29703-7	MW-07	D	Water	Soluble Metals	
500-29703-8	MW-08	D	Water	Soluble Metals	
500-29703-9	MW-09	D	Water	Soluble Metals	
500-29703-10	MW-10	D	Water	Soluble Metals	
500-29703-11	MW-11	D	Water	Soluble Metals	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:500-101510					
LCS 500-101452/8-A	Lab Control Sample	T	Water	7470A	500-101452
MB 500-101452/7-A	Method Blank	T	Water	7470A	500-101452
500-29703-1	MW-01	D	Water	7470A	500-101452
500-29703-1DU	Duplicate	D	Water	7470A	500-101452
500-29703-1MS	Matrix Spike	D	Water	7470A	500-101452
500-29703-1MSD	Matrix Spike Duplicate	D	Water	7470A	500-101452
500-29703-2	MW-02	D	Water	7470A	500-101452
500-29703-3	MW-03	D	Water	7470A	500-101452
500-29703-4	MW-04	D	Water	7470A	500-101452
500-29703-5	MW-05	D	Water	7470A	500-101452
500-29703-6	MW-06	D	Water	7470A	500-101452
500-29703-7	MW-07	D	Water	7470A	500-101452
500-29703-8	MW-08	D	Water	7470A	500-101452
500-29703-9	MW-09	D	Water	7470A	500-101452
500-29703-10	MW-10	D	Water	7470A	500-101452
500-29703-11	MW-11	D	Water	7470A	500-101452
Analysis Batch:500-101835					
LCS 500-101483/2-A	Lab Control Sample	S	Water	6020	500-101483
MB 500-101483/1-A	Method Blank	S	Water	6020	500-101483
500-29703-1	MW-01	D	Water	6020	500-101483
500-29703-1DU	Duplicate	D	Water	6020	500-101483
500-29703-1MS	Matrix Spike	D	Water	6020	500-101483
500-29703-1MSD	Matrix Spike Duplicate	D	Water	6020	500-101483
500-29703-2	MW-02	D	Water	6020	500-101483
500-29703-3	MW-03	D	Water	6020	500-101483
500-29703-4	MW-04	D	Water	6020	500-101483
500-29703-5	MW-05	D	Water	6020	500-101483
500-29703-6	MW-06	D	Water	6020	500-101483
500-29703-7	MW-07	D	Water	6020	500-101483
500-29703-8	MW-08	D	Water	6020	500-101483
500-29703-9	MW-09	D	Water	6020	500-101483
500-29703-10	MW-10	D	Water	6020	500-101483
500-29703-11	MW-11	D	Water	6020	500-101483

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:500-101913					
LCS 500-101483/2-A	Lab Control Sample	S	Water	6020	500-101483
MB 500-101483/1-A	Method Blank	S	Water	6020	500-101483
500-29703-1	MW-01	D	Water	6020	500-101483
500-29703-1DU	Duplicate	D	Water	6020	500-101483
500-29703-1MS	Matrix Spike	D	Water	6020	500-101483
500-29703-1MSD	Matrix Spike Duplicate	D	Water	6020	500-101483
500-29703-2	MW-02	D	Water	6020	500-101483
500-29703-3	MW-03	D	Water	6020	500-101483
500-29703-4	MW-04	D	Water	6020	500-101483
500-29703-5	MW-05	D	Water	6020	500-101483
500-29703-6	MW-06	D	Water	6020	500-101483
500-29703-7	MW-07	D	Water	6020	500-101483
500-29703-8	MW-08	D	Water	6020	500-101483
500-29703-9	MW-09	D	Water	6020	500-101483
500-29703-10	MW-10	D	Water	6020	500-101483
500-29703-11	MW-11	D	Water	6020	500-101483
Analysis Batch:500-102128					
LCS 500-101483/2-A	Lab Control Sample	S	Water	6020	500-101483
MB 500-101483/1-A	Method Blank	S	Water	6020	500-101483
500-29703-1	MW-01	D	Water	6020	500-101483
500-29703-1DU	Duplicate	D	Water	6020	500-101483
500-29703-1MS	Matrix Spike	D	Water	6020	500-101483
500-29703-1MSD	Matrix Spike Duplicate	D	Water	6020	500-101483
500-29703-2	MW-02	D	Water	6020	500-101483
500-29703-3	MW-03	D	Water	6020	500-101483
500-29703-4	MW-04	D	Water	6020	500-101483
500-29703-5	MW-05	D	Water	6020	500-101483
500-29703-6	MW-06	D	Water	6020	500-101483
500-29703-7	MW-07	D	Water	6020	500-101483
500-29703-8	MW-08	D	Water	6020	500-101483
500-29703-9	MW-09	D	Water	6020	500-101483
500-29703-10	MW-10	D	Water	6020	500-101483
500-29703-11	MW-11	D	Water	6020	500-101483

Report Basis
D = Dissolved
S = Soluble
T = Total

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:500-101499					
LCS 500-101499/4	Lab Control Sample	T	Water	SM 4500 NO2 B	
MB 500-101499/3	Method Blank	T	Water	SM 4500 NO2 B	
500-29703-1	MW-01	D	Water	SM 4500 NO2 B	
500-29703-1MS	Matrix Spike	D	Water	SM 4500 NO2 B	
500-29703-1MSD	Matrix Spike Duplicate	D	Water	SM 4500 NO2 B	
500-29703-2	MW-02	D	Water	SM 4500 NO2 B	
500-29703-3	MW-03	D	Water	SM 4500 NO2 B	
500-29703-4	MW-04	D	Water	SM 4500 NO2 B	
500-29703-5	MW-05	D	Water	SM 4500 NO2 B	
500-29703-6	MW-06	D	Water	SM 4500 NO2 B	
500-29703-7	MW-07	D	Water	SM 4500 NO2 B	
500-29703-8	MW-08	D	Water	SM 4500 NO2 B	
500-29703-9	MW-09	D	Water	SM 4500 NO2 B	
500-29703-10	MW-10	D	Water	SM 4500 NO2 B	
500-29703-11	MW-11	D	Water	SM 4500 NO2 B	
Analysis Batch:500-101531					
LCS 500-101531/2	Lab Control Sample	T	Water	SM 2540C	
MB 500-101531/1	Method Blank	T	Water	SM 2540C	
500-29703-1	MW-01	D	Water	SM 2540C	
500-29703-1DU	Duplicate	D	Water	SM 2540C	
500-29703-1MS	Matrix Spike	D	Water	SM 2540C	
500-29703-2	MW-02	D	Water	SM 2540C	
500-29703-3	MW-03	D	Water	SM 2540C	
500-29703-4	MW-04	D	Water	SM 2540C	
500-29703-5	MW-05	D	Water	SM 2540C	
500-29703-6	MW-06	D	Water	SM 2540C	
500-29703-7	MW-07	D	Water	SM 2540C	
500-29703-8	MW-08	D	Water	SM 2540C	
500-29703-9	MW-09	D	Water	SM 2540C	
500-29703-10	MW-10	D	Water	SM 2540C	
500-29703-11	MW-11	D	Water	SM 2540C	
Analysis Batch:500-101547					
LCS 500-101547/4	Lab Control Sample	T	Water	9038	
MB 500-101547/3	Method Blank	T	Water	9038	
500-29703-1	MW-01	D	Water	9038	
500-29703-2	MW-02	D	Water	9038	
500-29703-3	MW-03	D	Water	9038	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 500-101579					
HLCS 500-101579/3-A	High Level Control Sample	T	Water	9010B	
LCS 500-101579/2-A	Lab Control Sample	T	Water	9010B	
LLCS 500-101579/4-A	Low Level Control Sample	T	Water	9010B	
MB 500-101579/1-A	Method Blank	T	Water	9010B	
500-29703-1	MW-01	D	Water	9010B	
500-29703-2	MW-02	D	Water	9010B	
500-29703-3	MW-03	D	Water	9010B	
500-29703-4	MW-04	D	Water	9010B	
500-29703-5	MW-05	D	Water	9010B	
500-29703-6	MW-06	D	Water	9010B	
500-29703-7	MW-07	D	Water	9010B	
500-29703-8	MW-08	D	Water	9010B	
500-29703-9	MW-09	D	Water	9010B	
500-29703-10	MW-10	D	Water	9010B	
500-29703-11	MW-11	D	Water	9010B	
Analysis Batch:500-101622					
HLCS 500-101579/3-A	High Level Control Sample	T	Water	9014	500-101579
LCS 500-101579/2-A	Lab Control Sample	T	Water	9014	500-101579
LLCS 500-101579/4-A	Low Level Control Sample	T	Water	9014	500-101579
MB 500-101579/1-A	Method Blank	T	Water	9014	500-101579
500-29703-1	MW-01	D	Water	9014	500-101579
500-29703-2	MW-02	D	Water	9014	500-101579
500-29703-3	MW-03	D	Water	9014	500-101579
500-29703-4	MW-04	D	Water	9014	500-101579
500-29703-5	MW-05	D	Water	9014	500-101579
500-29703-6	MW-06	D	Water	9014	500-101579
500-29703-7	MW-07	D	Water	9014	500-101579
500-29703-8	MW-08	D	Water	9014	500-101579
500-29703-9	MW-09	D	Water	9014	500-101579
500-29703-10	MW-10	D	Water	9014	500-101579
500-29703-11	MW-11	D	Water	9014	500-101579
Analysis Batch:500-101632					
LCS 500-101632/4	Lab Control Sample	T	Water	9038	
MB 500-101632/3	Method Blank	T	Water	9038	
500-29703-4	MW-04	D	Water	9038	
500-29703-5	MW-05	D	Water	9038	
500-29703-6	MW-06	D	Water	9038	
500-29703-7	MW-07	D	Water	9038	
500-29703-8	MW-08	D	Water	9038	
500-29703-9	MW-09	D	Water	9038	
500-29703-10	MW-10	D	Water	9038	
500-29703-11	MW-11	D	Water	9038	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:500-101787					
LCS 500-101787/4	Lab Control Sample	T	Water	SM 4500 F C	
MB 500-101787/3	Method Blank	T	Water	SM 4500 F C	
500-29703-1	MW-01	D	Water	SM 4500 F C	
500-29703-1MS	Matrix Spike	D	Water	SM 4500 F C	
500-29703-1MSD	Matrix Spike Duplicate	D	Water	SM 4500 F C	
500-29703-2	MW-02	D	Water	SM 4500 F C	
500-29703-3	MW-03	D	Water	SM 4500 F C	
500-29703-4	MW-04	D	Water	SM 4500 F C	
500-29703-5	MW-05	D	Water	SM 4500 F C	
500-29703-6	MW-06	D	Water	SM 4500 F C	
500-29703-7	MW-07	D	Water	SM 4500 F C	
500-29703-8	MW-08	D	Water	SM 4500 F C	
500-29703-9	MW-09	D	Water	SM 4500 F C	
500-29703-10	MW-10	D	Water	SM 4500 F C	
500-29703-11	MW-11	D	Water	SM 4500 F C	
Analysis Batch:500-101815					
LCS 500-101815/40	Lab Control Sample	T	Water	9251	
MB 500-101815/39	Method Blank	T	Water	9251	
500-29703-1	MW-01	D	Water	9251	
500-29703-2	MW-02	D	Water	9251	
500-29703-3	MW-03	D	Water	9251	
500-29703-4	MW-04	D	Water	9251	
500-29703-5	MW-05	D	Water	9251	
500-29703-6	MW-06	D	Water	9251	
500-29703-7	MW-07	D	Water	9251	
500-29703-8	MW-08	D	Water	9251	
500-29703-9	MW-09	D	Water	9251	
500-29703-10	MW-10	D	Water	9251	
500-29703-11	MW-11	D	Water	9251	
Analysis Batch:500-101888					
LCS 500-101888/38	Lab Control Sample	T	Water	SM 4500 NO3 F	
MB 500-101888/19	Method Blank	T	Water	SM 4500 NO3 F	
500-29703-1	MW-01	D	Water	SM 4500 NO3 F	
500-29703-2	MW-02	D	Water	SM 4500 NO3 F	
500-29703-6	MW-06	D	Water	SM 4500 NO3 F	
500-29703-7	MW-07	D	Water	SM 4500 NO3 F	
500-29703-8	MW-08	D	Water	SM 4500 NO3 F	
500-29703-9	MW-09	D	Water	SM 4500 NO3 F	
500-29703-9MS	Matrix Spike	D	Water	SM 4500 NO3 F	
500-29703-9MSD	Matrix Spike Duplicate	D	Water	SM 4500 NO3 F	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:500-101968					
LCS 500-101968/13	Lab Control Sample	T	Water	SM 4500 NO3 F	
LCS 500-101968/26	Lab Control Sample	T	Water	SM 4500 NO3 F	
MB 500-101968/12	Method Blank	T	Water	SM 4500 NO3 F	
MB 500-101968/25	Method Blank	T	Water	SM 4500 NO3 F	
500-29703-3	MW-03	D	Water	SM 4500 NO3 F	
500-29703-4	MW-04	D	Water	SM 4500 NO3 F	
500-29703-5	MW-05	D	Water	SM 4500 NO3 F	
500-29703-10	MW-10	D	Water	SM 4500 NO3 F	
500-29703-11	MW-11	D	Water	SM 4500 NO3 F	
Analysis Batch:500-101971					
500-29703-1	MW-01	D	Water	Nitrate by calc	
500-29703-2	MW-02	D	Water	Nitrate by calc	
500-29703-3	MW-03	D	Water	Nitrate by calc	
500-29703-4	MW-04	D	Water	Nitrate by calc	
500-29703-5	MW-05	D	Water	Nitrate by calc	
500-29703-6	MW-06	D	Water	Nitrate by calc	
500-29703-7	MW-07	D	Water	Nitrate by calc	
500-29703-8	MW-08	D	Water	Nitrate by calc	
500-29703-9	MW-09	D	Water	Nitrate by calc	
500-29703-10	MW-10	D	Water	Nitrate by calc	
500-29703-11	MW-11	D	Water	Nitrate by calc	

Report Basis
D = Dissolved
T = Total

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Soluble

Lab Sample ID: MB 500-101483/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 2046
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101835
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121310E.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Beryllium	<0.0010		0.0010
Boron	<0.050		0.050

Method Blank - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Soluble

Lab Sample ID: MB 500-101483/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1930
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101913
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121410B.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Arsenic	<0.0010		0.0010
Barium	<0.0025		0.0025
Cadmium	<0.00050		0.00050
Chromium	<0.0050		0.0050
Cobalt	<0.0010		0.0010
Copper	<0.0020		0.0020
Iron	<0.10		0.10
Lead	<0.00050		0.00050
Manganese	<0.0025		0.0025
Nickel	<0.0020		0.0020
Selenium	<0.0025		0.0025
Silver	<0.00050		0.00050
Thallium	<0.0020		0.0020
Zinc	<0.020		0.020

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Soluble

Lab Sample ID: MB 500-101483/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/17/2010 1021
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-102128
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121710A.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Antimony	<0.0030		0.0030

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Control Sample - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Soluble

Lab Sample ID: LCS 500-101483/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 2047
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101835
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121310E.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Beryllium	0.0500	0.0488	98	80 - 120	
Boron	1.00	1.01	101	80 - 120	

Lab Control Sample - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Soluble

Lab Sample ID: LCS 500-101483/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1933
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101913
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121410B.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Arsenic	0.100	0.0999	100	80 - 120	
Barium	0.500	0.488	98	80 - 120	
Cadmium	0.0500	0.0529	106	80 - 120	
Chromium	0.200	0.204	102	80 - 120	
Cobalt	0.500	0.517	103	80 - 120	
Copper	0.250	0.270	108	80 - 120	
Iron	1.00	0.965	96	80 - 120	
Lead	0.100	0.0997	100	80 - 120	
Manganese	0.500	0.519	104	80 - 120	
Nickel	0.500	0.539	108	80 - 120	
Selenium	0.100	0.104	104	80 - 120	
Silver	0.0500	0.0522	104	80 - 120	
Thallium	0.100	0.103	103	80 - 120	
Zinc	0.500	0.548	110	80 - 120	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Control Sample - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Soluble

Lab Sample ID: LCS 500-101483/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/17/2010 1022
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-102128
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121710A.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Antimony	0.500	0.432	86	80 - 120	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Dissolved

MS Lab Sample ID:	500-29703-1	Analysis Batch: 500-101835	Instrument ID: ICPMS2
Client Matrix:	Water	Prep Batch: 500-101483	Lab File ID: MS2121310E.csv
Dilution:	1.0		Initial Weight/Volume: 1.0 mL
Date Analyzed:	12/13/2010 2054		Final Weight/Volume: 1.0 mL
Date Prepared:	12/08/2010 1252		

MSD Lab Sample ID:	500-29703-1	Analysis Batch: 500-101835	Instrument ID: ICPMS2
Client Matrix:	Water	Prep Batch: 500-101483	Lab File ID: MS2121310E.csv
Dilution:	1.0		Initial Weight/Volume: 1.0 mL
Date Analyzed:	12/13/2010 2055		Final Weight/Volume: 1.0 mL
Date Prepared:	12/08/2010 1252		

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Beryllium	95	95	75 - 125	0	20		
Boron	98	99	75 - 125	1	20		

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Dissolved

MS Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1944
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101913
Prep Batch: 500-101483

Instrument ID: ICPMS2
Lab File ID: MS2121410B.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

MSD Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1946
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101913
Prep Batch: 500-101483

Instrument ID: ICPMS2
Lab File ID: MS2121410B.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Arsenic	107	111	75 - 125	3	20		
Barium	94	96	75 - 125	2	20		
Cadmium	102	103	75 - 125	1	20		
Chromium	95	101	75 - 125	6	20		
Cobalt	95	100	75 - 125	6	20		
Copper	96	103	75 - 125	6	20		
Iron	90	98	75 - 125	9	20		
Lead	98	99	75 - 125	1	20		
Manganese	98	104	75 - 125	6	20		
Nickel	97	103	75 - 125	7	20		
Selenium	121	126	75 - 125	5	20		F
Silver	64	62	75 - 125	2	20	F	F
Thallium	102	103	75 - 125	1	20		
Zinc	105	113	75 - 125	7	20		

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Dissolved

MS Lab Sample ID:	500-29703-1	Analysis Batch:	500-102128	Instrument ID:	ICPMS2
Client Matrix:	Water	Prep Batch:	500-101483	Lab File ID:	MS2121710A.csv
Dilution:	1.0			Initial Weight/Volume:	1.0 mL
Date Analyzed:	12/17/2010 1026			Final Weight/Volume:	1.0 mL
Date Prepared:	12/08/2010 1252				

MSD Lab Sample ID:	500-29703-1	Analysis Batch:	500-102128	Instrument ID:	ICPMS2
Client Matrix:	Water	Prep Batch:	500-101483	Lab File ID:	MS2121710A.csv
Dilution:	1.0			Initial Weight/Volume:	1.0 mL
Date Analyzed:	12/17/2010 1027			Final Weight/Volume:	1.0 mL
Date Prepared:	12/08/2010 1252				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Antimony	87	91	75 - 125	4	20		

Duplicate - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Dissolved

Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 2053
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101835
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121310E.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Beryllium	<0.0010	<0.0010	NC	20	
Boron	0.31	0.307	0.7	20	

Duplicate - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Dissolved

Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1941
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-101913
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121410B.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Arsenic	0.0011	<0.0010	NC	20	
Barium	0.13	0.130	2	20	
Cadmium	<0.00050	<0.00050	NC	20	
Chromium	<0.0050	<0.0050	NC	20	
Cobalt	<0.0010	<0.0010	NC	20	
Copper	0.0032	0.00325	2	20	
Iron	<0.10	<0.10	NC	20	
Lead	<0.00050	<0.00050	NC	20	
Manganese	<0.0025	<0.0025	NC	20	
Nickel	0.0034	0.00317	7	20	
Selenium	<0.0025	<0.0025	NC	20	
Silver	<0.00050	<0.00050	NC	20	
Thallium	<0.0020	<0.0020	NC	20	
Zinc	<0.020	<0.020	NC	20	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Duplicate - Batch: 500-101483

Method: 6020
Preparation: Soluble Metals Dissolved

Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/17/2010 1025
Date Prepared: 12/08/2010 1252

Analysis Batch: 500-102128
Prep Batch: 500-101483
Units: mg/L

Instrument ID: ICPMS2
Lab File ID: MS2121710A.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Antimony	0.0043	<0.0030	NC	20	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101452

Method: 7470A
Preparation: 7470A

Lab Sample ID: MB 500-101452/7-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1248
Date Prepared: 12/08/2010 0920

Analysis Batch: 500-101510
Prep Batch: 500-101452
Units: mg/L

Instrument ID: HG6
Lab File ID: 120810R.CSV
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Result	Qual	RL
Mercury	<0.00020		0.00020

Lab Control Sample - Batch: 500-101452

Method: 7470A
Preparation: 7470A

Lab Sample ID: LCS 500-101452/8-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1250
Date Prepared: 12/08/2010 0920

Analysis Batch: 500-101510
Prep Batch: 500-101452
Units: mg/L

Instrument ID: HG6
Lab File ID: 120810R.CSV
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.00200	0.00203	101	80 - 120	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101452

Method: 7470A
Preparation: 7470A
Dissolved

MS Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1308
Date Prepared: 12/08/2010 0920

Analysis Batch: 500-101510
Prep Batch: 500-101452

Instrument ID: HG6
Lab File ID: 120810R.CSV
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

MSD Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1310
Date Prepared: 12/08/2010 0920

Analysis Batch: 500-101510
Prep Batch: 500-101452

Instrument ID: HG6
Lab File ID: 120810R.CSV
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	125	116	75 - 125	7	20		

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Duplicate - Batch: 500-101452

Method: 7470A
Preparation: 7470A
Dissolved

Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1306
Date Prepared: 12/08/2010 0920

Analysis Batch: 500-101510
Prep Batch: 500-101452
Units: mg/L

Instrument ID: HG6
Lab File ID: 120810R.CSV
Initial Weight/Volume: 25 mL
Final Weight/Volume: 25 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Mercury	<0.00020	<0.00020	NC	20	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101579

Method: 9014
Preparation: 9010B

Lab Sample ID: MB 500-101579/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 1605
Date Prepared: 12/09/2010 1250

Analysis Batch: 500-101622
Prep Batch: 500-101579
Units: mg/L

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Cyanide, Total-Dissolved	<0.010		0.010

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Control Sample - Batch: 500-101579

Method: 9014
Preparation: 9010B

Lab Sample ID: LCS 500-101579/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 1605
Date Prepared: 12/09/2010 1250

Analysis Batch: 500-101622
Prep Batch: 500-101579
Units: mg/L

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total-Dissolved	0.100	0.105	105	80 - 120	

High Level Control Sample - Batch: 500-101579

Method: 9014
Preparation: 9010B

Lab Sample ID: HLCS 500-101579/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 1606
Date Prepared: 12/09/2010 1250

Analysis Batch: 500-101622
Prep Batch: 500-101579
Units: mg/L

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total-Dissolved	0.400	0.405	101	90 - 110	

Low Level Control Sample - Batch: 500-101579

Method: 9014
Preparation: 9010B

Lab Sample ID: LLCS 500-101579/4-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 1606
Date Prepared: 12/09/2010 1250

Analysis Batch: 500-101622
Prep Batch: 500-101579
Units: mg/L

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total-Dissolved	0.0400	0.0437	109	75 - 125	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101547

Method: 9038
Preparation: N/A

Lab Sample ID: MB 500-101547/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 0550
Date Prepared: N/A

Analysis Batch: 500-101547
Prep Batch: N/A
Units: mg/L

Instrument ID: SPEC3
Lab File ID: N/A
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Sulfate-Dissolved	<5.0		5.0

Lab Control Sample - Batch: 500-101547

Method: 9038
Preparation: N/A

Lab Sample ID: LCS 500-101547/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 0551
Date Prepared: N/A

Analysis Batch: 500-101547
Prep Batch: N/A
Units: mg/L

Instrument ID: SPEC3
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate-Dissolved	20.0	18.4	92	80 - 120	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101632

Method: 9038
Preparation: N/A

Lab Sample ID: MB 500-101632/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 0654
Date Prepared: N/A

Analysis Batch: 500-101632
Prep Batch: N/A
Units: mg/L

Instrument ID: SPEC3
Lab File ID: N/A
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Sulfate-Dissolved	<5.0		5.0

Lab Control Sample - Batch: 500-101632

Method: 9038
Preparation: N/A

Lab Sample ID: LCS 500-101632/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/09/2010 0655
Date Prepared: N/A

Analysis Batch: 500-101632
Prep Batch: N/A
Units: mg/L

Instrument ID: SPEC3
Lab File ID: N/A
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Sulfate-Dissolved	20.0	19.6	98	80 - 120	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101815

Method: 9251
Preparation: N/A

Lab Sample ID: MB 500-101815/39
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 1654
Date Prepared: N/A

Analysis Batch: 500-101815
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 2010-12-13-17-30-12.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Chloride-Dissolved	<2.0		2.0

Lab Control Sample - Batch: 500-101815

Method: 9251
Preparation: N/A

Lab Sample ID: LCS 500-101815/40
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 1655
Date Prepared: N/A

Analysis Batch: 500-101815
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 2010-12-13-17-30-12.csv
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Chloride-Dissolved	50.0	52.1	104	80 - 120	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101531

Method: SM 2540C
Preparation: N/A

Lab Sample ID: MB 500-101531/1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 2321
Date Prepared: N/A

Analysis Batch: 500-101531
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Total Dissolved Solids-Dissolved	<10		10

Lab Control Sample - Batch: 500-101531

Method: SM 2540C
Preparation: N/A

Lab Sample ID: LCS 500-101531/2
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 2323
Date Prepared: N/A

Analysis Batch: 500-101531
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids-Dissolved	250	260	104	80 - 120	

Matrix Spike - Batch: 500-101531

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 2333
Date Prepared: N/A

Analysis Batch: 500-101531
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Spike Amount	Result	% Rec.	Limit	Qual
Total Dissolved Solids-Dissolved	590	250	854	105	75 - 125	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Duplicate - Batch: 500-101531

Method: SM 2540C
Preparation: N/A

Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 2331
Date Prepared: N/A

Analysis Batch: 500-101531
Prep Batch: N/A
Units: mg/L

Instrument ID: No Equipment Assigned
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Sample Result/Qual	Result	RPD	Limit	Qual
Total Dissolved Solids-Dissolved	590	598	1	20	

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101787

Method: SM 4500 F C
Preparation: N/A

Lab Sample ID: MB 500-101787/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 1131
Date Prepared: N/A

Analysis Batch: 500-101787
Prep Batch: N/A
Units: mg/L

Instrument ID: PC-Titrate
Lab File ID: 10121300.txt
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Fluoride-Dissolved	<0.10		0.10

Lab Control Sample - Batch: 500-101787

Method: SM 4500 F C
Preparation: N/A

Lab Sample ID: LCS 500-101787/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 1134
Date Prepared: N/A

Analysis Batch: 500-101787
Prep Batch: N/A
Units: mg/L

Instrument ID: PC-Titrate
Lab File ID: 10121300.txt
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Fluoride-Dissolved	10.0	10.3	103	80 - 120	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101787

Method: SM 4500 F C
Preparation: N/A

MS Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 1221
Date Prepared: N/A

Analysis Batch: 500-101787
Prep Batch: N/A

Instrument ID: PC-Titrate
Lab File ID: 10121300.txt
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

MSD Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/13/2010 1224
Date Prepared: N/A

Analysis Batch: 500-101787
Prep Batch: N/A

Instrument ID: PC-Titrate
Lab File ID: 10121300.txt
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Fluoride-Dissolved	107	105	75 - 125	1	20		

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101499

Method: SM 4500 NO2 B
Preparation: N/A

Lab Sample ID: MB 500-101499/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1040
Date Prepared: N/A

Analysis Batch: 500-101499
Prep Batch: N/A
Units: mg/L

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Result	Qual	RL
Nitrogen, Nitrite-Dissolved	<0.020		0.020

Lab Control Sample - Batch: 500-101499

Method: SM 4500 NO2 B
Preparation: N/A

Lab Sample ID: LCS 500-101499/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1041
Date Prepared: N/A

Analysis Batch: 500-101499
Prep Batch: N/A
Units: mg/L

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrogen, Nitrite-Dissolved	0.100	0.0995	100	80 - 120	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101499

Method: SM 4500 NO2 B
Preparation: N/A

MS Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1043
Date Prepared: N/A

Analysis Batch: 500-101499
Prep Batch: N/A

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

MSD Lab Sample ID: 500-29703-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/08/2010 1044
Date Prepared: N/A

Analysis Batch: 500-101499
Prep Batch: N/A

Instrument ID: SPEC5
Lab File ID: N/A
Initial Weight/Volume: 50 mL
Final Weight/Volume: 50 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrogen, Nitrite-Dissolved	93	94	75 - 125	1	20		

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101888

Method: SM 4500 NO3 F
Preparation: N/A

Lab Sample ID: MB 500-101888/19
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1515
Date Prepared: N/A

Analysis Batch: 500-101888
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 2010-12-14-16-16-11.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Nitrogen, Nitrate Nitrite-Dissolved	<0.10	^	0.10

Lab Control Sample - Batch: 500-101888

Method: SM 4500 NO3 F
Preparation: N/A

Lab Sample ID: LCS 500-101888/38
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1606
Date Prepared: N/A

Analysis Batch: 500-101888
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 2010-12-14-16-16-11.csv
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrogen, Nitrate Nitrite-Dissolved	1.00	1.08	108	80 - 120	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 500-101888

Method: SM 4500 NO3 F
Preparation: N/A

MS Lab Sample ID: 500-29703-9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1613
Date Prepared: N/A

Analysis Batch: 500-101888
Prep Batch: N/A

Instrument ID: AQ2
Lab File ID: 2010-12-14-16-16-11.csv
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 500-29703-9
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2010 1614
Date Prepared: N/A

Analysis Batch: 500-101888
Prep Batch: N/A

Instrument ID: AQ2
Lab File ID: 2010-12-14-16-16-11.csv
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Nitrogen, Nitrate Nitrite-Dissolved	91	97	75 - 125	5	20		

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Method Blank - Batch: 500-101968

Method: SM 4500 NO3 F
Preparation: N/A

Lab Sample ID: MB 500-101968/12
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2010 1433
Date Prepared: N/A

Analysis Batch: 500-101968
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 20101215.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Nitrogen, Nitrate Nitrite-Dissolved	<0.10		0.10

Method Blank - Batch: 500-101968

Method: SM 4500 NO3 F
Preparation: N/A

Lab Sample ID: MB 500-101968/25
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2010 1501
Date Prepared: N/A

Analysis Batch: 500-101968
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 20101215.csv
Initial Weight/Volume: 1.0 mL
Final Weight/Volume: 1.0 mL

Analyte	Result	Qual	RL
Nitrogen, Nitrate Nitrite-Dissolved	<0.10		0.10

Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Lab Control Sample - Batch: 500-101968

Method: SM 4500 NO3 F
Preparation: N/A

Lab Sample ID: LCS 500-101968/13
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2010 1435
Date Prepared: N/A

Analysis Batch: 500-101968
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 20101215.csv
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrogen, Nitrate Nitrite-Dissolved	1.00	1.15	115	80 - 120	

Lab Control Sample - Batch: 500-101968

Method: SM 4500 NO3 F
Preparation: N/A

Lab Sample ID: LCS 500-101968/26
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2010 1503
Date Prepared: N/A

Analysis Batch: 500-101968
Prep Batch: N/A
Units: mg/L

Instrument ID: AQ2
Lab File ID: 20101215.csv
Initial Weight/Volume: 100 mL
Final Weight/Volume: 100 mL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Nitrogen, Nitrate Nitrite-Dissolved	1.00	1.14	114	80 - 120	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Chain of Custody Record

Lab Job #: 500-29703

Chain of Custody Number:

Page ____ of ____

Temperature °C of Cooler: (3.4)(2.9)

Report To (optional)		Bill To (optional)	
Contact:	Andrew Gaydon	Contact:	
Company:	Patrick Eng.	Company:	
Address:	4985 Varsity Dr.	Address:	
Address:	Lisle IL 60532	Address:	
Phone:	630-795-7359	Phone:	
Fax:	630-724-9290	Fax:	
E-Mail:	agaydon@patrickengineering.com	PO#/Reference#	

Client: Patrick Engineering	Client Project #: 21053.070	Preservative	
Project Name: Midwest Gen. 136 pond		Parameter	Dissolved NO3-NO2; Dissolved TDS, SO4, Cl; Dissolved chloride; Nitrate-Nitrite; Dissolved NO2
Project Location/State: Joliet, IL	Lab Project #		
Sampler: DM	Lab PM		

Preservative Key
1. HCL, Cool to 4°
2. H2SO4, Cool to 4°
3. HNO3, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. NaHSO4
7. Cool to 4°
8. None
9. Other

Lab ID	MS/MSD	Sample ID	Sampling Date	Sampling Time	# of Containers	Matrix	Dissolved NO3-NO2	Dissolved TDS, SO4, Cl	Dissolved chloride	Nitrate-Nitrite	Dissolved NO2	Comments
1		MW-01	12/6/10	14:25	5	W	X	X	X	X	X	
2		MW-02	12/6/10	13:45								
3		MW-03	12/7/10	10:10								
4		MW-04	12/7/10	11:00								
5		MW-05	12/7/10	11:45								
6		MW-06	12/7	9:30								
7		MW-07	12/7/10	8:55								
8		MW-08	12/6/10	14:55								
9		MW-09	12/6/10	11:15								
10		MW-10	12/6/10	15:20								
11		MW-11	12/6/10	11:00								

Turnaround Time Required (Business Days)

___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ___ 10 Days X 15 Days ___ Other

Requested Due Date: ____

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months (A fee may be assessed if samples are retained longer than 1 month)

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Dave Ng	Patrick Eng	12/7/10	1250		TestAmerica	12/7/10	1250
Relinquished By	Company	Date	Time	Received By	Company	Date	Time
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Lab Courier: ____ Shipped: ____ Hand Delivered: ____

Matrix Key

WW – Wastewater	SE – Sediment
W – Water	SO – Soil
S – Soil	L – Leachate
SL – Sludge	WI – Wipe
MS – Miscellaneous	DW – Drinking Water
OL – Oil	O – Other
A – Air	

Client Comments:

Lab Comments:

12/17/2010

MWGS13-15_7071

Login Sample Receipt Check List

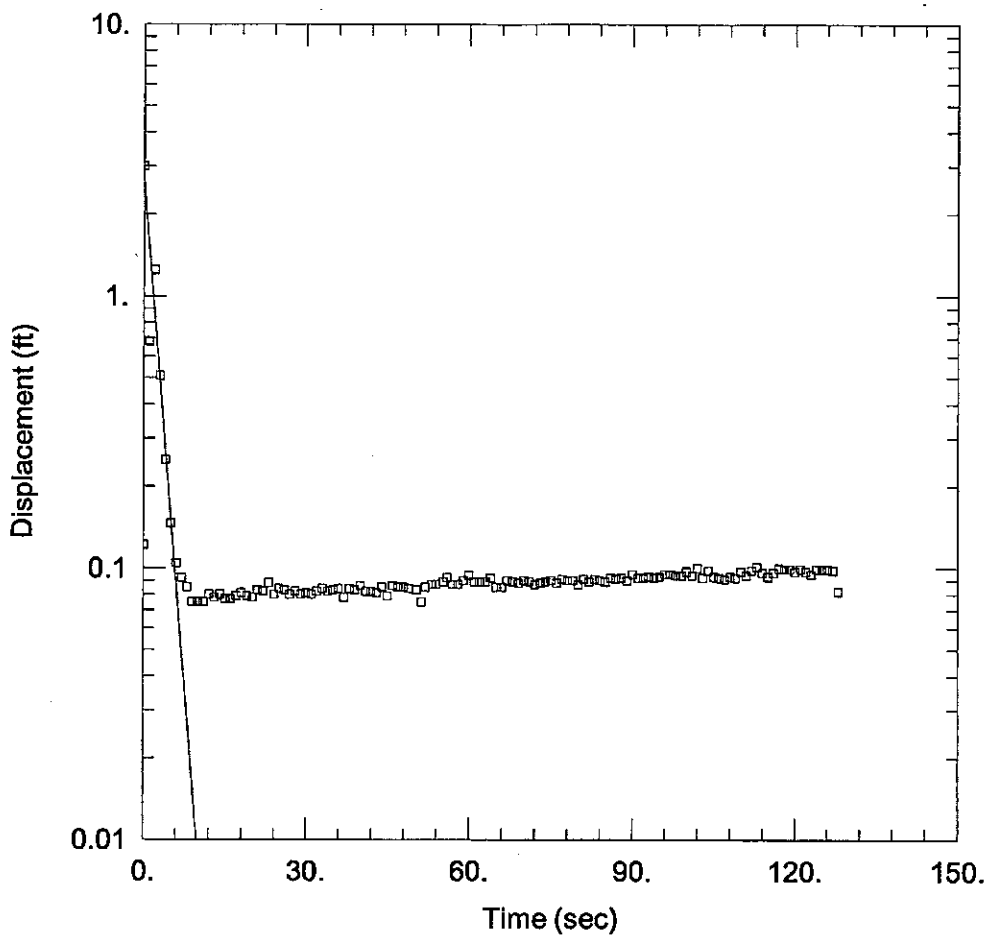
Client: Midwest Generation EME LLC

Job Number: 500-29703-1

Login Number: 29703
Creator: Kelsey, Shawn M
List Number: 1

List Source: TestAmerica Chicago

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-11 u2.aqt
Date: 02/17/11 Time: 09:38:17

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-11 (u2)
Test Date: 12/22/10

AQUIFER DATA

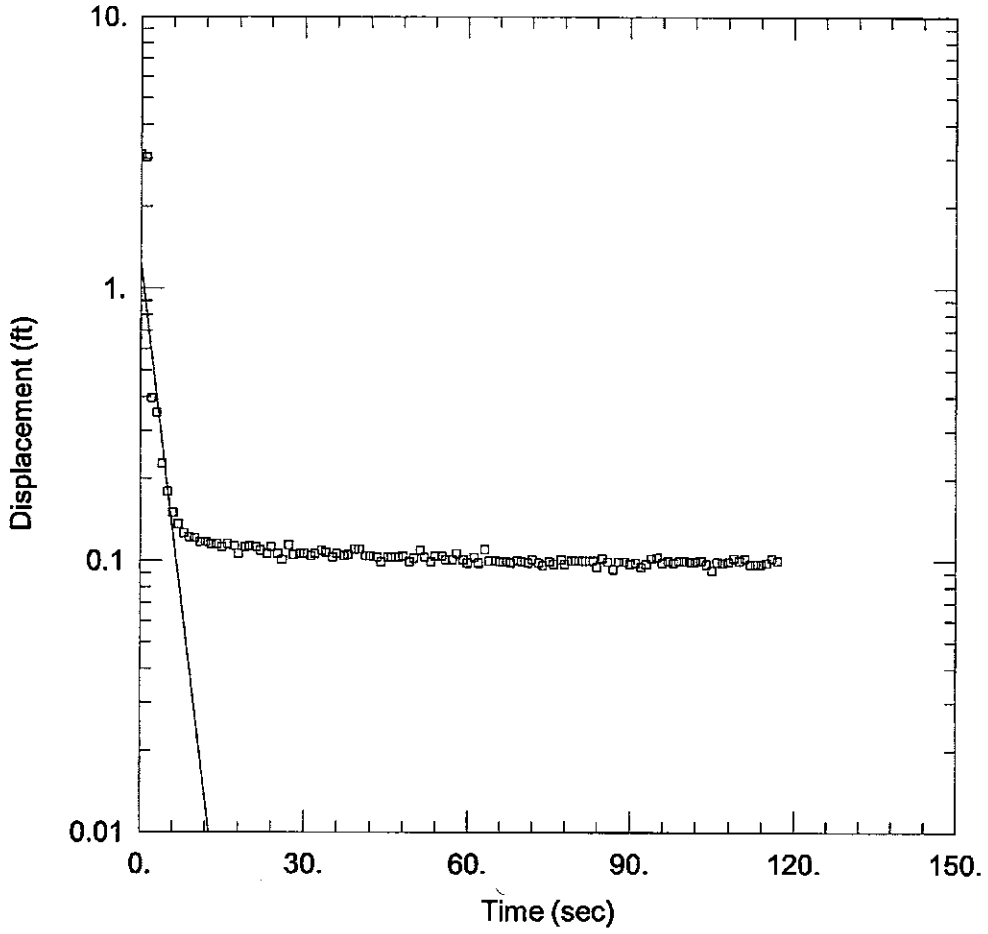
Saturated Thickness: 8.22 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-11 (u2))

Initial Displacement: 3. ft
Total Well Penetration Depth: 42.35 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.22 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.004685 ft/sec
y0 = 2.66 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-11 d1.aqt
Date: 02/17/11 Time: 09:42:17

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-11 (d1)
Test Date: 12/22/10

AQUIFER DATA

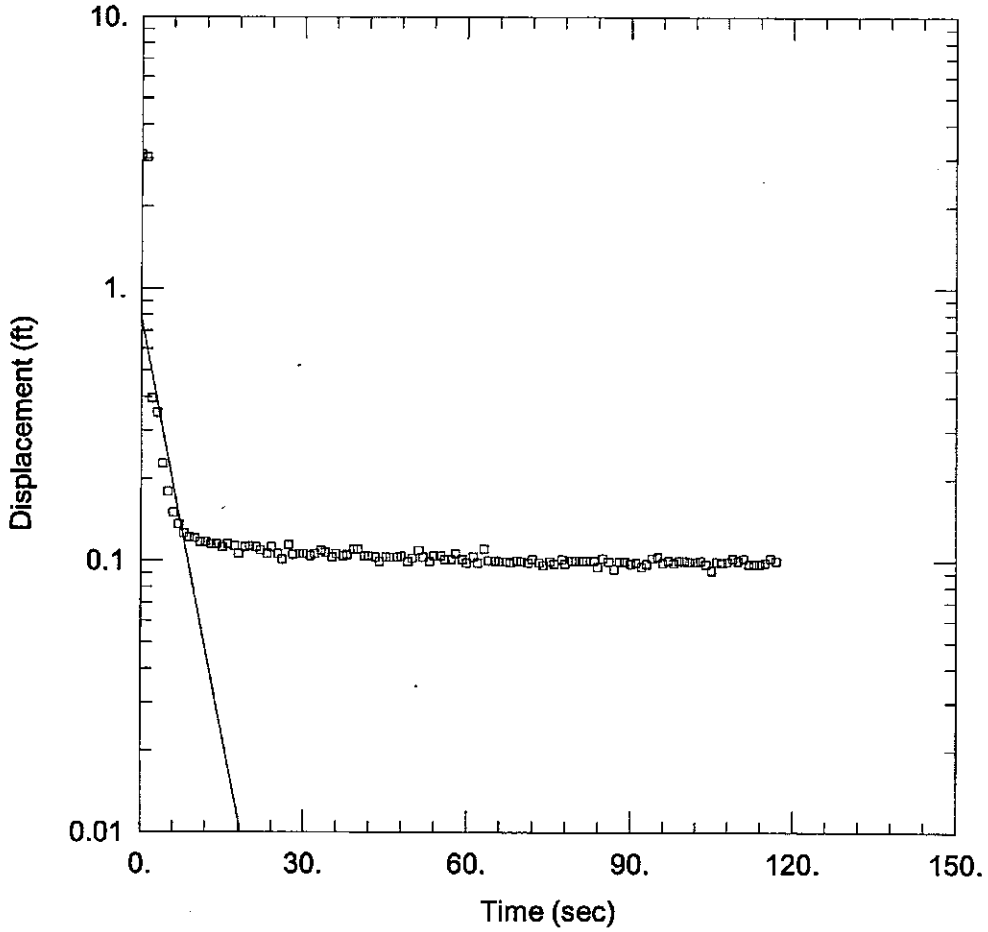
Saturated Thickness: 8.22 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-11 (d1))

Initial Displacement: 3.1 ft
Total Well Penetration Depth: 42.35 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.22 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.003131 ft/sec
y0 = 1.243 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-9 u2.aqt
Date: 02/17/11 Time: 09:10:24

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-9 (u2)
Test Date: 12/22/10

AQUIFER DATA

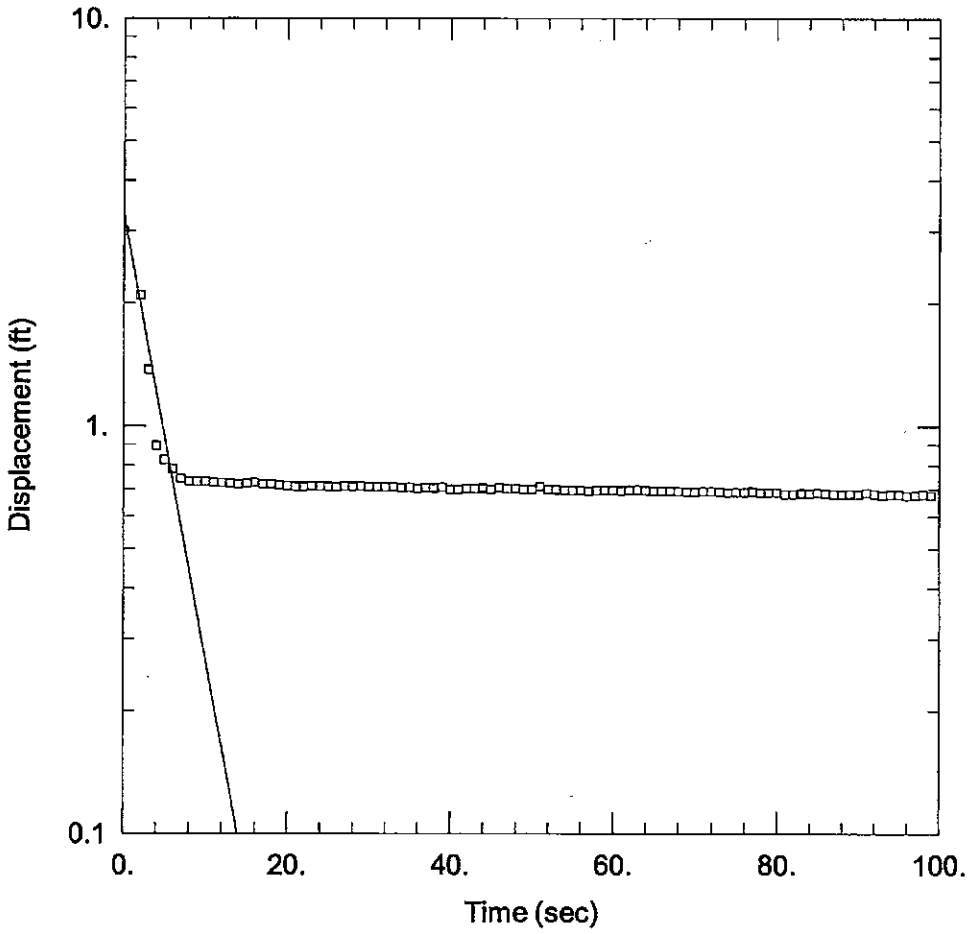
Saturated Thickness: 8.22 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9 (u2))

Initial Displacement: 3.1 ft
Total Well Penetration Depth: 42.35 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.22 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001948 ft/sec
y0 = 0.787 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-9 d1.aqt
Date: 02/17/11 Time: 09:10:52

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet#29
Test Well: MW-9 (d1)
Test Date: 12/22/10

AQUIFER DATA

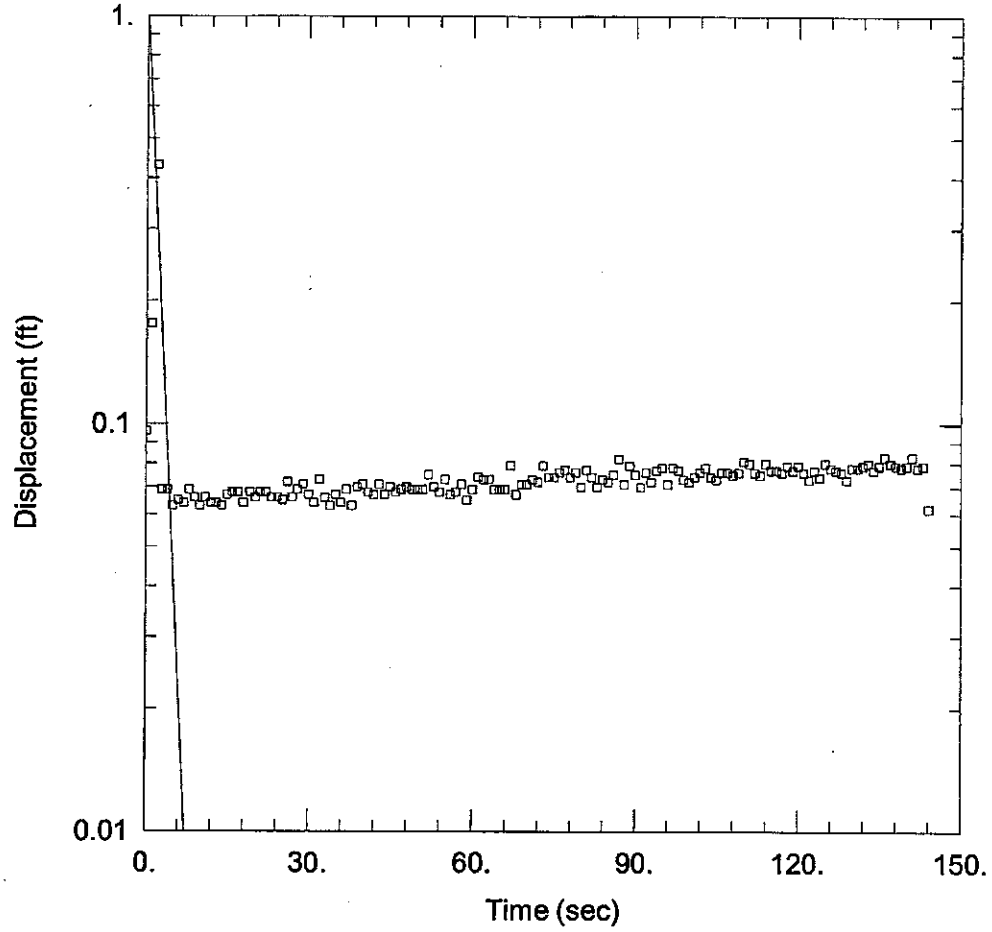
Saturated Thickness: 8.7 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-9 (d1))

Initial Displacement: 3. ft
Total Well Penetration Depth: 38. ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.7 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.001934 ft/sec
y0 = 3.316 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-6 u1.aqt
Date: 02/17/11 Time: 09:11:59

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-6 (u1)
Test Date: 12/22/10

AQUIFER DATA

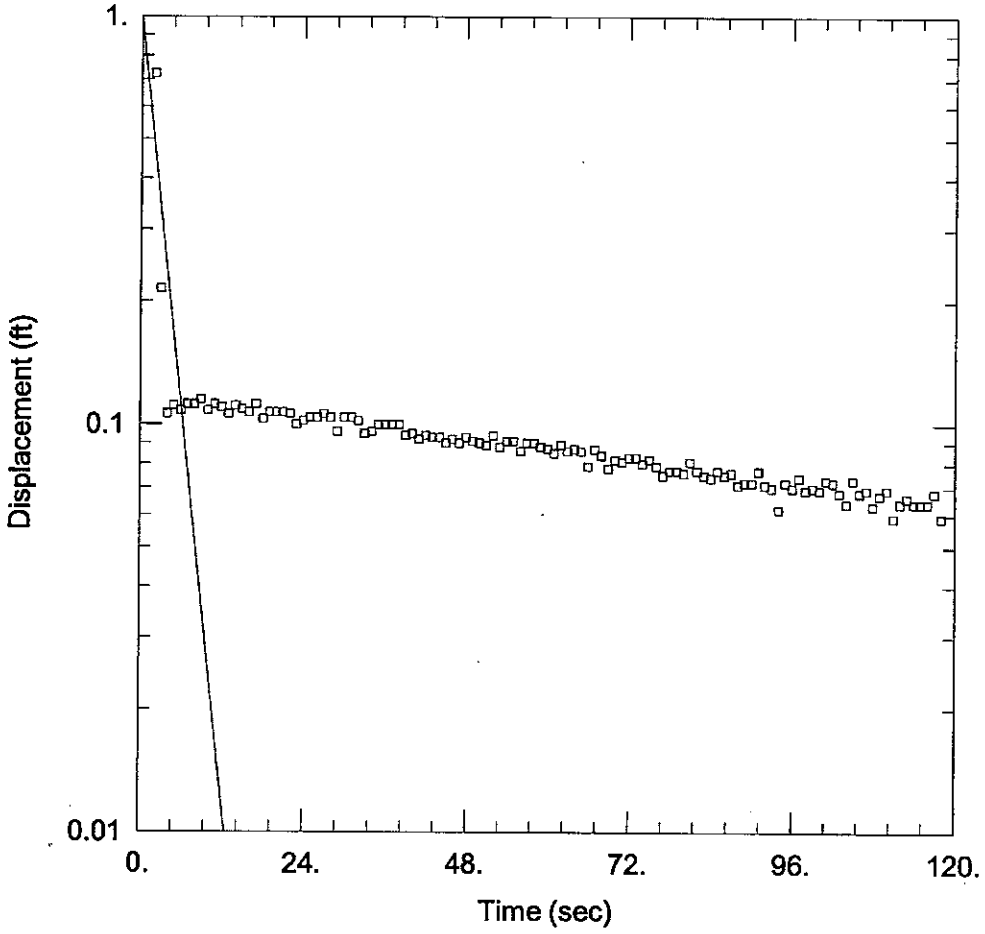
Saturated Thickness: 8.22 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6 (u1))

Initial Displacement: 3. ft
Total Well Penetration Depth: 42.2 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.22 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.005274 ft/sec
y0 = 1.109 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-6 d2.aqt
Date: 02/17/11 Time: 09:13:14

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-6 (d2)
Test Date: 12/22/10

AQUIFER DATA

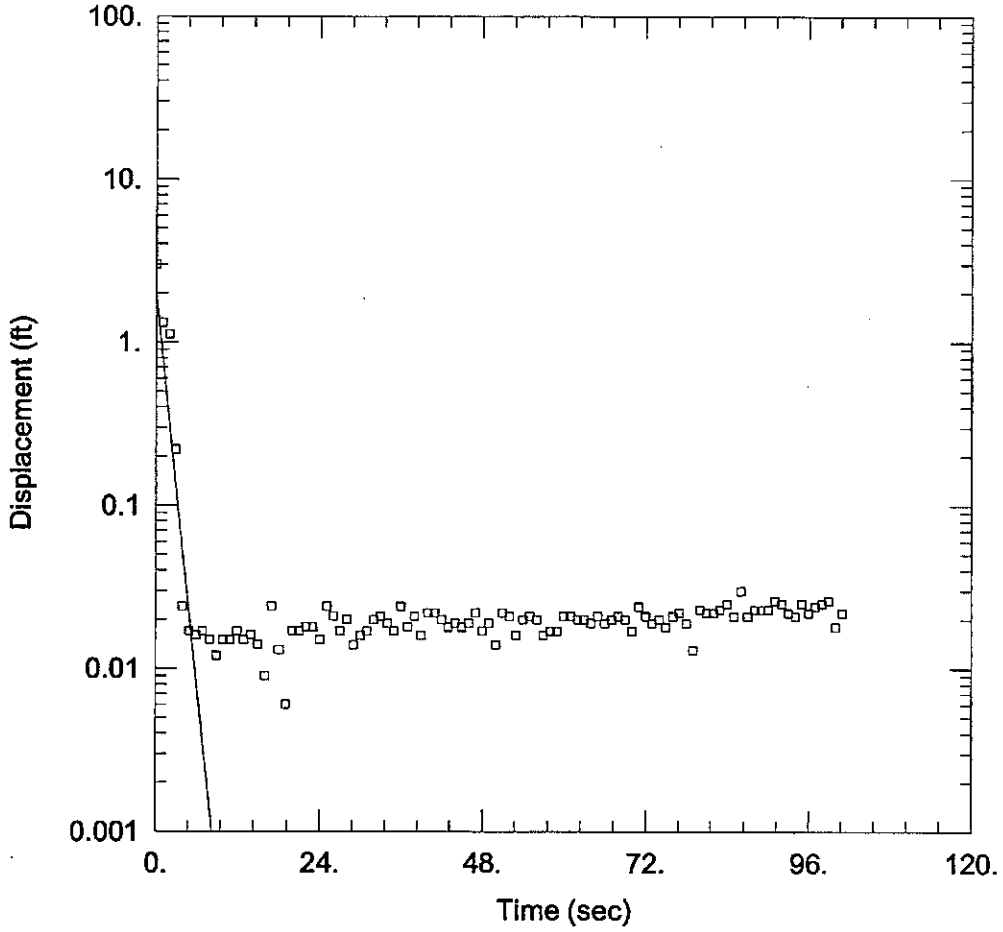
Saturated Thickness: 8.22 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-6 (d2))

Initial Displacement: 3. ft
Total Well Penetration Depth: 42.2 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.22 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.002987 ft/sec
y0 = 0.9913 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-4 u2.aqt
Date: 02/17/11 Time: 09:47:55

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-4 (u2)
Test Date: 12/22/10

AQUIFER DATA

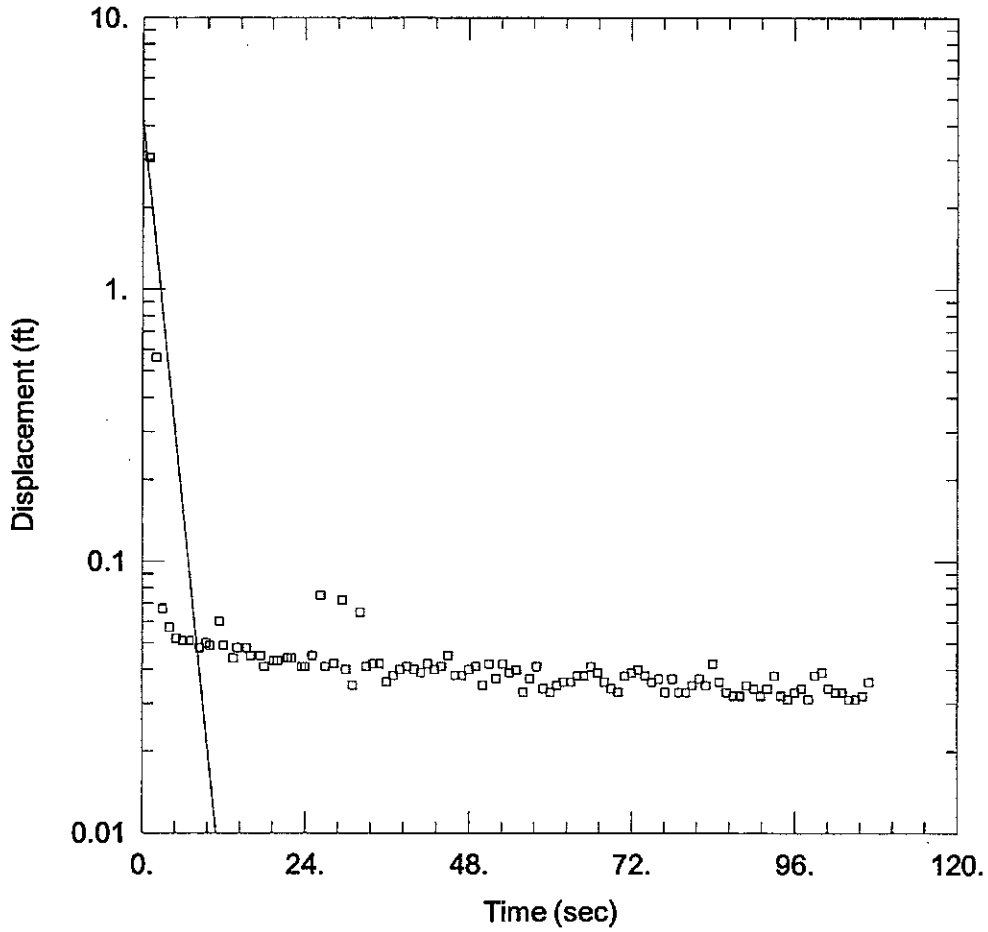
Saturated Thickness: 8.86 ft Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-4 (u2))

Initial Displacement: 3. ft
Total Well Penetration Depth: 42.9 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.86 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice
K = 0.006949 ft/sec y0 = 1.978 ft



WELL TEST ANALYSIS

Data Set: P:\...\Joliet 29 mw-4 d1.aqt
Date: 02/17/11 Time: 09:13:56

PROJECT INFORMATION

Company: Patrick Engineering
Client: Midwest Generation
Project: 21053.070
Location: Joliet #29
Test Well: MW-4 (d1)
Test Date: 12/22/10

AQUIFER DATA

Saturated Thickness: 8.86 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-4 (d1))

Initial Displacement: 3.1 ft
Total Well Penetration Depth: 42.9 ft
Casing Radius: 0.2 ft
Static Water Column Height: 8.86 ft
Screen Length: 10. ft
Well Radius: 0.085 ft
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.004267 ft/sec
y0 = 4.312 ft

MWG13-15 7080