PATRICK
ENGINEERING

W-2012-00055
Midwest
Crawford

July 30, 2012

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Subject: Quarterly Groundwater Monitoring Results – First Quarter 2012 – AMENDED
Revisions to Original Report Submitted May 11, 2012
Crawford Generating Station - Ash Impoundment

Reference: Patrick Project No. 21253.028

To Whom It May Concern:

Patrick Engineering Inc. (Patrick), on behalf of Midwest Generation, LLC (MWG), is submitting an amended report, "Quarterly Groundwater Monitoring Results – First Quarter 2012", completed for MWG's Crawford Generating Station. This report was originally submitted to the Illinois Environmental Protection Agency (Illinois EPA) on May 11, 2012. The changes in the amended report are all related to corrections of various transcription errors of the laboratory data included in the original *Table 3 - Groundwater Analytical Results* of the referenced report.

Three attachments are enclosed:

Attachment A: The original *"Table 3 - Groundwater Analytical Results"* from the original report submitted on May 11, 2012.

Attachment B: The amended *"Table 3 - Groundwater Analytical Results"*, which highlights and/or footnotes the various revisions being made to the original table (included in Attachment A).

Attachment C: A complete copy of the amended report.

IEPA-DIVISION OF RECORDS MANAGEMENT
RELEASABLE

SEP 14 2016

REVIEWER: EMI

Quarterly Groundwater Monitoring Results – First Quarter 2012 - AMENDED
Crawford Generating Station- Ash Impoundment
July 30, 2012

If you have any questions regarding this amended report, please contact Maria Race, Director of Environmental Services for Midwest Generation at 630-771-7862.

Sincerely,

PATRICK ENGINEERING INC.

Richard M. Frendt, P.E
Senior Project Manager

RMF/rmf

Enclosures: Attachment A: Original Table 3
Attachment B: Amended Table 3
Attachment C: Amended First Quarter 2012 Report

cc: Maria Race, Midwest Generation
Gerald Delaney, Midwest Generation

ATTACHMENT A

ORIGINAL TABLE 3

Table 3
GROUNDWATER ANALYTICAL RESULTS
Crawford Station
Chicago, Illinois
Midwest Generation
21253.028

PATRICK ENGINEERING Chemical Name	Sample Analysis Method	Groundwater Remediation Objective (mg/L) Class I*	MW-1 (mg/L) 12/8/10	MW-1 (mg/L) 3/21/11	MW-1 (mg/L) 6/13/11	MW1 (mg/L) 9/16/11	MW1 (mg/L) 12/9/11	MW1 (mg/L) 3/19/12
Antimony	Metals 6020	0.006	ND	ND	0.004	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	0.0016	0.0046	0.0047	0.0014
Barium	Metals 6020	2.0	0.061	0.084	0.08	0.062	0.043	0.065
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0052	0.0094	0.0054	0.0037	0.0033	0.0094
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.029	**5.8**	**5.1**	**5.0**	4.6	**6.3**
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	**1.1**	**2.7**	**2.2**	**1.9**	**1.5**	**2.8**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.015	0.01	ND	0.0063	0.0074	0.01
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	**2**	0.86	0.89	1.8	ND	0.68
Sulfate	Dissolved 9038	400	**1,600**	**800**	**670**	**750**	**1000**	**810**
Chloride	Dissolved 9251	200	ND	**9,100**	**9,000**	**3,200**	**1,700**	**8,700**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	**6,800**	**18,000**	**17,000**	**11,000**	**5,900**	**15,000**
Flouride	Dissolved 4500 FC	4	0.3	0.17	0.25	0.28	0.35	0.24
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	0.065	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
mg/L-milligrams per liter

Table 3
GROUNDWATER ANALYTICAL RESULTS
Crawford Station
Chicago, Illinois
Midwest Generation
21253.028

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)
Chemical Name		Class I*	12/8/10	3/21/11	6/13/11	9/16/11	12/9/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	0.018
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.067	0.038	0.036	0.035	0.033	0.24
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	ND	0.005	0.004	0.0021	ND	ND
Copper	Metals 6020	0.65	0.0046	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	0.93	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	**1.4**	**1.2**	**1.3**	**0.65**	**0.42**	**0.31**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0095	0.014	0.014	0.011	0.015	0.017
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.4	1.9	1.9	1.9	1.2	1.7
Sulfate	Dissolved 9038	400	**950**	**1,400**	**1,000**	**1,100**	**1,900**	**1,200**
Chloride	Dissolved 9251	200	**610**	**2,000**	**2,400**	**1,500**	**2,200**	**2,200**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	**2,700**	**6,700**	**7,300**	**5,600**	**7,200**	**7,200**
Flouride	Dissolved 4500 FC	4	0.35	0.21	0.22	0.31	0.25	0.21
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	0.61	ND	ND	0.028	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	ND	ND	ND

Notes:
*Class I Groundwater Standards from 35 IAC Part 620
Bold values show exceedences of 35 IAC Part 620
ND-non detect
mg/L-milligrams per liter

ATTACHMENT B

AMENDED TABLE 3

Table 3

GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012

Crawford Station - Chicago, Illinois

Midwest Generation

21153.032

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)
Chemical Name		Class I*	12/8/10	3/21/11	6/13/11	9/16/11	12/9/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	0.004	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	0.0016	0.0046	0.0047	0.0014
Barium	Metals 6020	2.0	0.067	0.084	0.08	0.062	0.043	0.065
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0046	0.0094	0.0054	0.0037	0.0033	0.0094
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	**5.8**	**5.1**	5.0	4.6	**6.3**
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	**1.4**	**2.7**	**2.2**	**1.9**	**1.5**	**2.8**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0095	0.01	0.0074	0.0063	0.0074	0.01
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.4	0.86	0.89	1.8	0.84	0.68
Sulfate	Dissolved 9038	400	**950**	**800**	**670**	**750**	**1,000**	**810**
Chloride	Dissolved 9251	200	**610**	**9,100**	**9,000**	**3,200**	**1,700**	**8,700**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	**2,700**	**18,000**	**17,000**	**11,000**	**5,900**	**15,000**
Fluoride	Dissolved 4500 FC	4	0.35	0.17	0.25	0.28	0.35	0.24
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	0.061	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	ND	ND	ND

Notes:

*Class I Groundwater Standards from 35 IAC Part 620

Bold values show exceedences of 35 IAC Part 620

ND-non detect

mg/L-milligrams per liter

AMENDMENTS

[ ] - Value amended from original Table 3 (May 11, 2012).

[ ] - Value has not changed; font has been changed from normal to bold.

[ ] - Value has not changed; font has been changed from bold to normal.

Table 3

GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012

Crawford Station - Chicago, Illinois

Midwest Generation

21153.032

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)
Chemical Name		Class I*	12/8/10	3/21/11	6/13/11	9/16/11	12/9/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	**0.018**
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.061	0.038	0.036	0.035	0.033	0.24
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0052	0.005	0.004	0.0021	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.29	0.93	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	**1.1**	**1.2**	**1.3**	**0.65**	**0.42**	**0.31**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.015	0.014	0.014	0.011	0.015	0.017
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2	1.9	1.9	1.9	1.2	1.7
Sulfate	Dissolved 9038	400	**1,600**	**1,400**	**1,000**	**1,100**	**1,900**	**1,200**
Chloride	Dissolved 9251	200	**2,000**	**2,000**	**2,400**	**1,500**	**2,200**	**2,200**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	**6,800**	**6,700**	**7,300**	**5,600**	**7,200**	**7,200**
Fluoride	Dissolved 4500 FC	4	0.3	0.21	0.22	0.31	0.25	0.21
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	0.065	ND	ND	0.028	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	ND	ND	ND

Notes:

*Class I Groundwater Standards from 35 IAC Part 620

Bold values show exceedences of 35 IAC Part 620

ND-non detect

mg/L-milligrams per liter

AMENDMENTS

[ ] - Value amended from original Table 3 (May 11, 2012).

[ ] - Value has not changed; font has been changed from normal to bold.

[ ] - Value has not changed; font has been changed from bold to normal.

ATTACHMENT C

AMENDED FIRST QUARTER 2012 REPORT

PATRICK
ENGINEERING

May 11, 2012

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Subject: Quarterly Groundwater Monitoring Results – First Quarter 2012
Crawford Generating Station- Ash Impoundment - **AMENDED JULY 2012**

Reference: Patrick Project No. 21253.027

To Whom It May Concern:

Patrick Engineering Inc. (Patrick) has prepared this letter report, on behalf of Midwest Generation, LLC, to provide groundwater monitoring results associated with the on-site ash ponds at the Crawford Generating Station located at 3501 S. Pulaski in Chicago, Illinois (Figure 1). This groundwater monitoring is being performed as part of the long-term monitoring plan described in the Hydrogeologic Assessment Report submitted to the Illinois Environmental Protection Agency (Illinois EPA) in February 2011.

SAMPLING METHODOLOGY

In accordance with the long-term monitoring plan referenced above, water samples are collected quarterly from two monitoring wells (MW-1 and MW-2) surrounding the ash impoundment at the Crawford facility. The well locations are shown on Figure 2. These wells were most recently sampled on March 21, 2012.

The groundwater elevation in each of the two wells was measured prior to sampling. Groundwater samples were collected from each well with a peristaltic pump, using established low-flow sampling techniques. Temperature, turbidity, conductivity, dissolved oxygen (DO), oxygen reduction potential (ORP), and pH measurements were taken at each of the wells using a portable meter with a flow through cell. 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. Field parameter data is provided in Table 1. Groundwater elevation data is summarized in Table 2 and shown on Figure 3.

ANALYTICAL RESULTS

After collection, all 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 Laboratories, an Illinois-EPA accredited analytical laboratory, in accordance with chain-of-custody procedures to maintain sample integrity. Analytes tested included the inorganic compounds listed in 35 Illinois

Administrative Code (IAC) 620.410(a), excluding both radium and the poly-aromatic hydrocarbons (PAHs) listed in 35 IAC 620.410(b). Analytical laboratory results are presented in Table 3 (both current and historical). The laboratory analytical reports provided by TestAmerica Laboratories are provided as Attachment A.

In accordance with the long-term monitoring plan, groundwater samples from the ash pond wells at the Crawford County facility will continue to be collected, analyzed, and reported to Illinois EPA on a quarterly basis until sufficient statistically-significant data is available to properly assess the groundwater data.

If you have any questions, please contact me at 630-795-7464.

Sincerely,

PATRICK ENGINEERING INC.

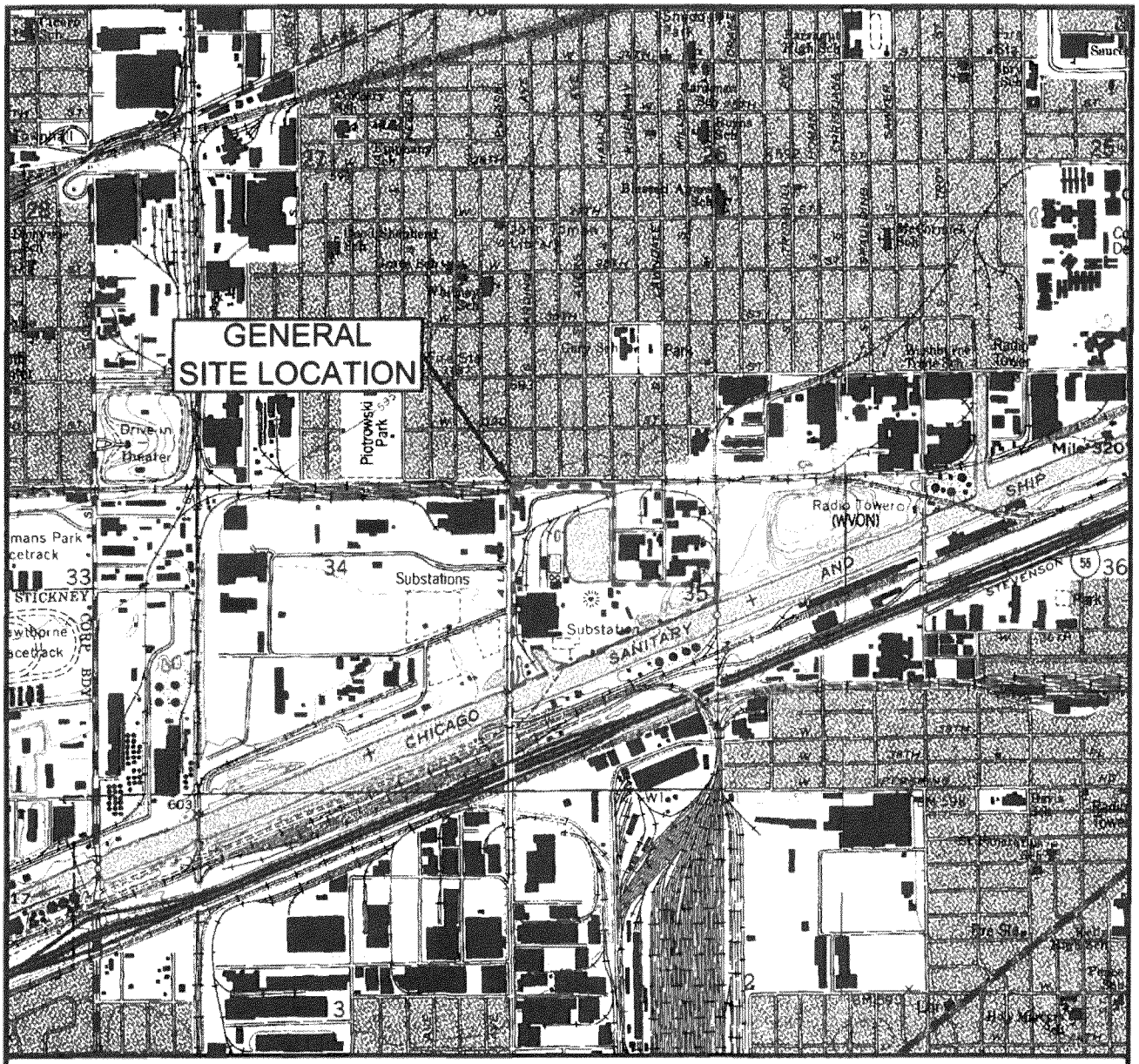
Richard M. Frendt, P.E
Senior Project Manager

RMF/dcm

Enclosures:
- Figure 1: Site Location Map
- Figure 2: Monitoring Well Location Map
- Figure 3: Groundwater Elevation Map
- Table 1: Field Parameter Data
- Table 2: Groundwater Elevation Survey Data
- Table 3: Groundwater Analytical Results
- Attachment A: Laboratory Data

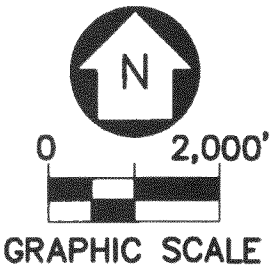
FIGURE 1

SITE LOCATION MAP



LEGEND

- - - - SITE BOUNDARY

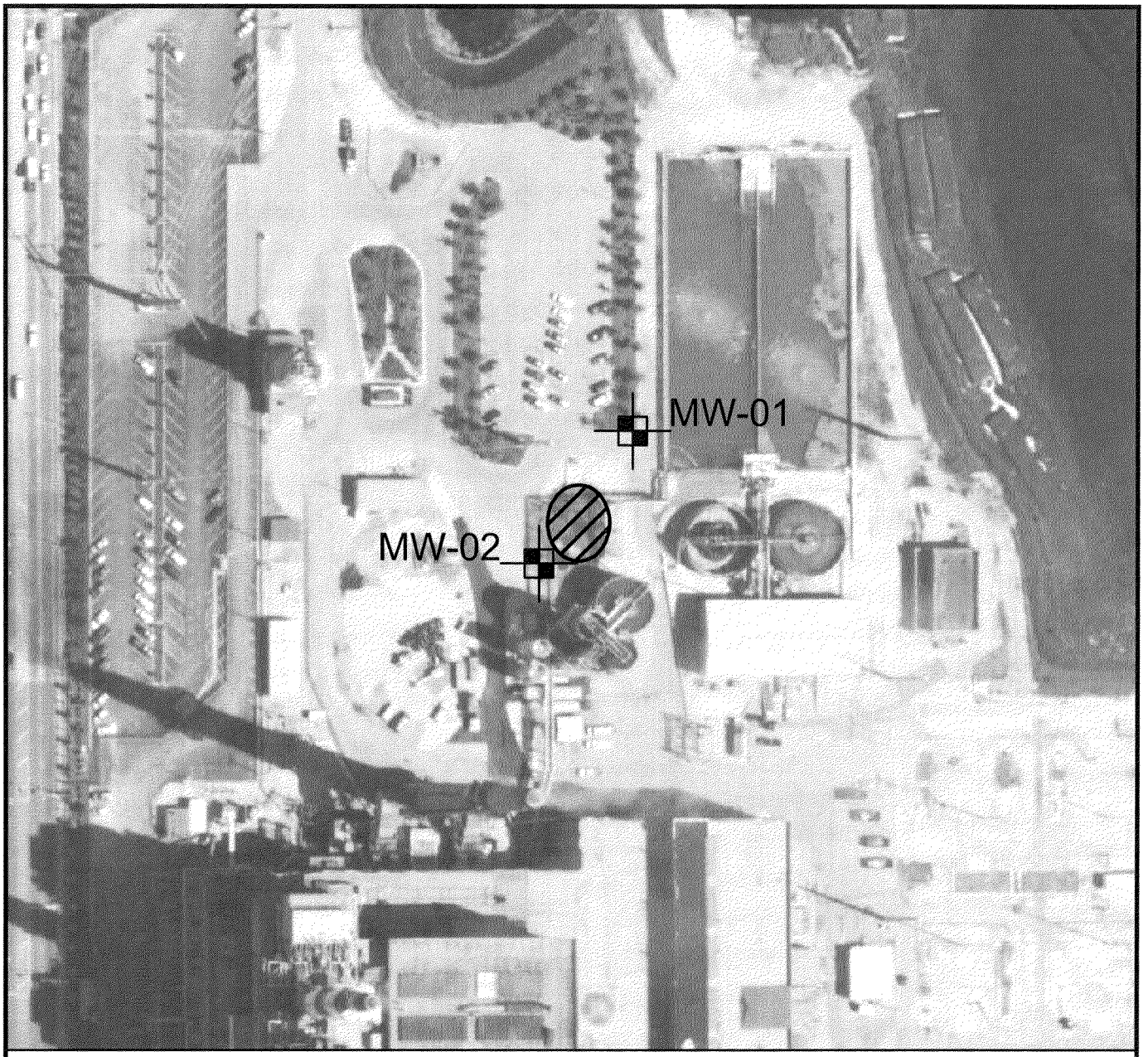


NOTE:
THIS DRAWING WAS PREPARED USING ILLINOIS' ENGLEWOOD (1993) AND BERWYN (1993) 7.5 MINUTE-SERIES TOPOGRAPHIC QUADRANGLE MAPS.

Date: MAR. 2012	FIGURE 1 SITE LOCATION MAP	**PATRICK ENGINEERING INC.**
Proj No.: 21253.027	**CRAWFORD STATION CHICAGO, 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

FIGURE 2

MONITORING WELL LOCATION MAP



LEGEND

MW-01 Monitoring Well Location

Ash Ponds

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

N

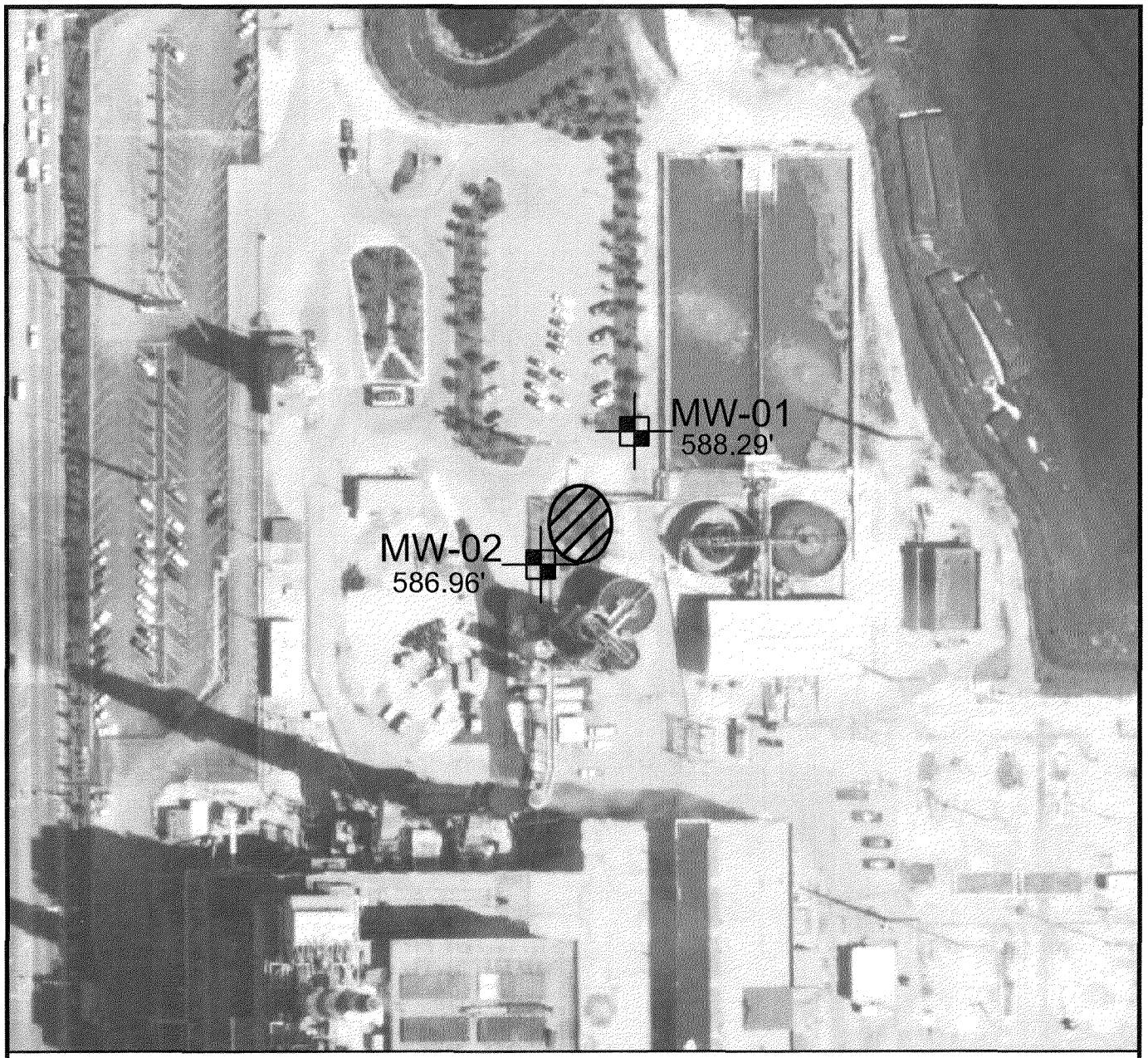
1" = 120'

Date: MAR. 2012	FIGURE 2 MONITORING WELL LOCATION MAP	**PATRICK ENGINEERING INC.**
Proj No.: 21253.027	CRAWFORD STATION CHICAGO, ILLINOIS	4970 Varsity Drive Lisle, Illinois 60532-4101
App. By: RMF		TEL. (630) 795-7200 FAX (630) 724-1681

PROFESSIONAL DESIGN FIRM LICENSE NO. 184-000409

FIGURE 3

GROUNDWATER ELEVATION MAP



LEGEND

MW-01 586.96' — MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FT./ MSL)

ASH POND

AERIAL IMAGE SOURCE:
LANDISCOR AERIAL INFORMATION INC. (2008)

N

1" = 120'

Date: MAR. 2012	FIGURE 3 GROUNDWATER ELEVATION MAP	PATRICK ENGINEERING INC.
Proj No.: 21253.027	CRAWFORD STATION CHICAGO, 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

TABLE 1

FIELD PARAMETER DATA

Table 1
Field Parameter Data
Crawford Station, Chicago, Illinois
Midwest Generation
21153.032

Field Parameter Data -Crawford Station

Monitoring Well	Date	Time	Temperature (°C)	Conductivity (ms/cm^c)	Turbidity (NTU)	pH	DO (mg/L)	ORP (mV)
MW-1	3/21/2011	11:12	7.96	32.89	10.8	7.18	2.26	55.5
		11:14	7.77	32.97	8.6	7.09	0.59	50.5
		11:16	7.71	32.66	7.5	7.05	0.34	47
		11:18	7.72	32.00	6.6	7.02	0.18	45.7
		11:20	7.68	31.40	5.2	7.02	0.27	44.4
		11:22	7.63	31.05	5.5	7.02	0.10	43.5
MW-1	6/13/2011	14:11	15.00	28.05	6.71	7.03	1.37	40.1
		14:13	14.79	27.36	6.22	6.83	1.03	31.4
		14:15	14.84	26.98	5.73	6.78	0.85	28.7
		14:17	14.75	26.67	5.44	6.75	0.68	27.9
		14:19	14.84	26.18	5.85	6.74	0.61	27.1
		14:21	14.84	25.67	5.71	6.73	0.53	25.8
MW-1	9/16/2011	9:44	18.80	15.67	52.00	6.69	0.35	-124
		9:46	19.97	15.38	8.22	6.67	0.13	-167
		9:48	19.07	15.05	5.63	6.67	0.08	-190
		9:50	19.06	14.53	3.55	6.67	0.06	-207
		9:52	19.16	14.12	4.82	6.67	0.04	-220
		9:54	19.09	13.70	5.19	6.67	0.03	-230
MW-1	12/9/2011	10:06	11.65	7.85	14.07	6.17	3.29	-105
		10:08	12.03	7.74	23.72	6.19	0.73	-75
		10:10	12.10	7.55	52.80	6.20	0.45	-73
		10:12	12.06	7.36	60.61	6.20	0.33	-73
		10:14	12.05	7.05	109.00	6.20	0.28	-73
		10:16	11.96	6.83	200.90	6.20	0.24	-74
MW-1	3/21/2012	9:53	12.89	16.49	61.06	7.17	1.65	-46
		9:55	11.60	15.98	26.64	6.98	0.22	-25
		9:57	11.15	15.79	15.47	6.93	0.08	-20
		9:59	11.05	15.72	17.11	6.90	0.04	-19
		10:01	11.05	15.70	11.19	6.88	0.02	-18
		10:03	11.01	15.65	11.31	6.85	0.01	-18
MW-2	3/21/2011	10:28	8.22	9.66	11.9	7.09	2.62	108.3
		10:30	7.85	9.61	6.7	7.09	1.23	96
		10:32	7.78	9.57	3.8	7.09	0.82	90.4
		10:34	7.71	9.55	13.8	7.09	1.02	87.2
		10:36	7.62	9.60	10.4	7.10	0.75	83.2
		10:38	7.54	9.65	8.5	7.11	0.86	82.2
MW-2	6/13/2011	13:28	9.52	13.57	1.22	7.07	2.82	137.7
		13:30	9.42	13.09	1.40	6.72	1.34	117.7
		13:32	9.44	12.97	1.46	6.61	1.11	105.6
		13:34	9.37	12.79	1.87	6.57	0.80	97.5
		13:36	9.28	12.63	1.99	6.55	0.59	97
		13:38	9.23	12.51	1.88	6.54	0.51	100.6
MW-2	9/16/2011	9:04	14.88	34.32	6.75	6.83	0.40	-135
		9:06	14.79	122.80	6.65	6.84	0.62	-164
		9:08	14.78	103.80	6.65	6.84	0.96	-133
		9:10	14.66	21.59	6.54	6.84	2.03	-92
MW-2	12/9/2011	9:20	10.90	6.65	54.28	6.32	4.81	31
		9:22	12.30	6.84	249.90	6.14	0.84	41
		9:24	12.48	6.85	606.20	6.01	0.41	48
		9:26	12.58	6.87	752.30	5.97	0.28	52
		9:28	12.71	6.93	188.10	5.96	0.21	54
		9:30	12.98	6.99	151.10	5.95	0.18	56
MW-2	3/21/2012	9:10	11.80	6.87	89.48	7.16	2.35	174
		9:12	11.05	6.78	201.30	6.96	0.47	142
		9:14	10.80	6.75	920.10	6.93	0.24	137
		9:16	10.86	6.80	783.90	6.91	0.17	131
		9:18	11.06	6.85	60.04	6.90	0.13	129
		9:20	11.22	6.87	344.80	6.89	0.11	124

Notes:

°C	degrees Celcius
ms/cm^c	Microsiemens/Centimeters
NTU	Nephelometric Turbidity Units
mg/L	milligrams/Liter
mV	milliVolts

TABLE 2

GROUNDWATER ELEVATION SURVEY DATA

Table 2

Groundwater Elevation Survey Data

Crawford Station, Chicago, Illinois

Midwest Generation

21253.027

PATRICK ENGINEERING	Date	Water Elevation	Depth to Water Pre-Purge	Depth to Water Pre-Sampling	Water Elevation Pre-Sampling	Depth to Bottom of Well	Bottom of Well Elevation	Ground Elevation	Top of Riser Elevation
MONITORING WELLS									
MW-1	3/21/2011	588.851	4.60	4.61	588.841	17.64	575.811	590.312	593.451
	6/13/2011	589.451	4.00	4.02	589.431				
	9/16/2011	587.301	6.15	6.17	587.281				
	12/9/2011	588.491	4.96	4.98	588.471				
	3/21/2012	588.291	5.16	5.17	588.281				
MW-2	3/21/2011	587.294	5.77	13.50	579.564	21.44	571.624	589.666	593.064
	6/13/2011	587.414	5.65	15.26	577.804				
	9/16/2011	586.434	6.63	20.81	572.254				
	12/9/2011	586.894	6.17	17.52	575.544				
	3/21/2011	586.964	6.10	21.44	571.624				

Notes- Elevations are leveled from site control points per Ridgeline Consultants Drawing "Crawford Generating Station Control Exhibit" revised 4/2/2009

- Elevations are shown in feet

TABLE 3

GROUNDWATER ANALYTICAL RESULTS

Table 3

GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012

Crawford Station - Chicago, Illinois

Midwest Generation

21153.032

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)	MW-1 (mg/L)
Chemical Name		Class I*	12/8/10	3/21/11	6/13/11	9/16/11	12/9/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	0.004	ND	ND	ND
Arsenic	Metals 6020	0.05	ND	ND	0.0016	0.0046	0.0047	0.0014
Barium	Metals 6020	2.0	0.067	0.084	0.08	0.062	0.043	0.065
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0046	0.0094	0.0054	0.0037	0.0033	0.0094
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	ND	**5.8**	**5.1**	5.0	4.6	**6.3**
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	**1.4**	**2.7**	**2.2**	**1.9**	**1.5**	**2.8**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.0095	0.01	0.0074	0.0063	0.0074	0.01
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	1.4	0.86	0.89	1.8	0.84	0.68
Sulfate	Dissolved 9038	400	**950**	**800**	**670**	**750**	**1,000**	**810**
Chloride	Dissolved 9251	200	**610**	**9,100**	**9,000**	**3,200**	**1,700**	**8,700**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	**2,700**	**18,000**	**17,000**	**11,000**	**5,900**	**15,000**
Fluoride	Dissolved 4500 FC	4	0.35	0.17	0.25	0.28	0.35	0.24
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	0.061	ND	ND	ND	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	ND	ND	ND

Notes:

*Class I Groundwater Standards from 35 IAC Part 620

Bold values show exceedences of 35 IAC Part 620

ND-non detect

mg/L-milligrams per liter

Table 3

GROUNDWATER ANALYTICAL RESULTS - AMENDED JULY 2012

Crawford Station - Chicago, Illinois

Midwest Generation

21153.032

PATRICK ENGINEERING	Sample Analysis Method	Groundwater Remediation Objective (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)	MW-2 (mg/L)
Chemical Name		Class I*	12/8/10	3/21/11	6/13/11	9/16/11	12/9/11	3/19/12
Antimony	Metals 6020	0.006	ND	ND	ND	ND	ND	**0.018**
Arsenic	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Barium	Metals 6020	2.0	0.061	0.038	0.036	0.035	0.033	0.24
Beryllium	Metals 6020	0.004	ND	ND	ND	ND	ND	ND
Cadmium	Metals 6020	0.005	ND	ND	ND	ND	ND	ND
Chromium	Metals 6020	0.1	ND	ND	ND	ND	ND	ND
Cobalt	Metals 6020	1.0	0.0052	0.005	0.004	0.0021	ND	ND
Copper	Metals 6020	0.65	ND	ND	ND	ND	ND	ND
Cyanide	Dissolved 9014	0.2	ND	ND	ND	ND	ND	ND
Iron	Metals 6020	5.0	0.29	0.93	ND	ND	ND	ND
Lead	Metals 6020	0.0075	ND	ND	ND	ND	ND	ND
Manganese	Metals 6020	0.15	**1.1**	**1.2**	**1.3**	**0.65**	**0.42**	**0.31**
Mercury	Mercury 7470A	0.002	ND	ND	ND	ND	ND	ND
Nickel	Metals 6020	0.1	0.015	0.014	0.014	0.011	0.015	0.017
Selenium	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Silver	Metals 6020	0.05	ND	ND	ND	ND	ND	ND
Thallium	Metals 6020	0.002	ND	ND	ND	ND	ND	ND
Zinc	Metals 6020	5.0	ND	ND	ND	ND	ND	ND
Boron	Metals 6020	2	2	1.9	1.9	1.9	1.2	1.7
Sulfate	Dissolved 9038	400	**1,600**	**1,400**	**1,000**	**1,100**	**1,900**	**1,200**
Chloride	Dissolved 9251	200	**2,000**	**2,000**	**2,400**	**1,500**	**2,200**	**2,200**
Nitrogen/Nitrate	Nitrogen By calc	10	ND	ND	ND	ND	ND	ND
Total Dissolved Solids	Dissolved 2540C	1,200	**6,800**	**6,700**	**7,300**	**5,600**	**7,200**	**7,200**
Fluoride	Dissolved 4500 FC	4	0.3	0.21	0.22	0.31	0.25	0.21
Nitrogen/Nitrite	Dissolved 4500 NO2	NA	0.065	ND	ND	0.028	ND	ND
Nitrogen/Nitrate/Nitrite	Dissolved 4500 NO3	NA	ND	ND	ND	ND	ND	ND

Notes:

*Class I Groundwater Standards from 35 IAC Part 620

Bold values show exceedences of 35 IAC Part 620

ND-non detect

mg/L-milligrams per liter

ATTACHMENT A

LABORATORY DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-44978-1
Client Project/Site: Midwest Generation Crawford Groundwater

For:
Midwest Generation EME LLC
3501 South Pulaski Road
Chicago, Illinois 60623-4987

Attn: Elizabeth Alvarez

Authorized for release by:
4/4/2012 4:31:27 PM

Bonnie Stadelmann
Project Manager II
bonnie.stadelmann@testamericainc.com

LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Case Narrative

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Job ID: 500-44978-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-44978-1

Comments
No additional comments.

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

Metals
Method(s) 6020: Due to sample matrix effect on the internal standard (ISTD), a dilution was required for the following samples 500-44978-1 and 500-44978-2.

Method(s) 6020: The matrix spike (MS) recovery for sample 500-44978-1 was outside control limits for Zn. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method(s) 6020: The initial calibration verification (ICV) for AD batcch 145039 recovered slightly below control limits for Co (87%). All continuing calibration verifications (CCV's) were within control limits and the samples were reported.

No other analytical or quality issues were noted.

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

General Chemistry
No analytical or quality issues were noted.

Detection Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Client Sample ID: MW-1 — Lab Sample ID: 500-44978-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0014		0.0010		mg/L	1		6020	Dissolved
Barium	0.065		0.0025		mg/L	1		6020	Dissolved
Boron	0.68		0.050		mg/L	1		6020	Dissolved
Cobalt	0.0094	^	0.0010		mg/L	1		6020	Dissolved
Iron	6.3		0.10		mg/L	1		6020	Dissolved
Manganese	2.8		0.0025		mg/L	1		6020	Dissolved
Nickel	0.010		0.0020		mg/L	1		6020	Dissolved
Sulfate	810		250		mg/L	50		9038	Dissolved
Chloride	8700		2000		mg/L	1000		9251	Dissolved
Total Dissolved Solids	15000		50		mg/L	1		SM 2540C	Dissolved
Fluoride	0.24		0.10		mg/L	1		SM 4500 F C	Dissolved

Client Sample ID: MW-2 — Lab Sample ID: 500-44978-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.018		0.015		mg/L	5		6020	Dissolved
Barium	0.024		0.0025		mg/L	1		6020	Dissolved
Boron	1.7		0.050		mg/L	1		6020	Dissolved
Manganese	0.31		0.013		mg/L	5		6020	Dissolved
Nickel	0.017		0.010		mg/L	5		6020	Dissolved
Sulfate	1200		500		mg/L	100		9038	Dissolved
Chloride	2200		2000		mg/L	1000		9251	Dissolved
Total Dissolved Solids	7200		25		mg/L	1		SM 2540C	Dissolved
Fluoride	0.21		0.10		mg/L	1		SM 4500 F C	Dissolved

Method Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
9014	Cyanide	SW846	TAL CHI
9038	Sulfate, Turbidimetric	SW846	TAL CHI
9251	Chloride	SW846	TAL CHI
Nitrate by calc	Nitrogen, Nitrate-Nitrite	SM	TAL CHI
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL CHI
SM 4500 F C	Fluoride	SM	TAL CHI
SM 4500 NO2 B	Nitrogen, Nitrite	SM	TAL CHI
SM 4500 NO3 F	Nitrogen, Nitrate	SM	TAL CHI

Protocol 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.

Laboratory References:

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

Sample Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-44978-1	MW-1	Water	03/21/12 10:05	03/21/12 11:10
500-44978-2	MW-2	Water	03/21/12 09:20	03/21/12 11:10

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Client Sample ID: MW-1
Date Collected: 03/21/12 10:05
Date Received: 03/21/12 11:10

Lab Sample ID: 500-44978-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.015		0.015		mg/L		03/30/12 09:54	04/03/12 16:11	5
Arsenic	**0.0014**		0.0010		mg/L		03/30/12 09:54	03/30/12 13:17	1
Barium	**0.065**		0.0025		mg/L		03/30/12 09:54	03/30/12 13:17	1
Beryllium	<0.0010		0.0010		mg/L		03/30/12 09:54	04/03/12 11:03	1
Boron	**0.68**		0.050		mg/L		03/30/12 09:54	04/03/12 11:03	1
Cadmium	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:17	1
Chromium	<0.0050		0.0050		mg/L		03/30/12 09:54	04/02/12 11:02	1
Cobalt	**0.0094**	^	0.0010		mg/L		03/30/12 09:54	03/30/12 13:17	1
Copper	<0.0020		0.0020		mg/L		03/30/12 09:54	03/30/12 13:17	1
Iron	**6.3**		0.10		mg/L		03/30/12 09:54	04/02/12 11:02	1
Lead	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:17	1
Manganese	**2.8**		0.0025		mg/L		03/30/12 09:54	04/02/12 11:02	1
Nickel	**0.010**		0.0020		mg/L		03/30/12 09:54	04/02/12 11:02	1
Selenium	<0.0025		0.0025		mg/L		03/30/12 09:54	03/30/12 13:17	1
Silver	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:17	1
Thallium	<0.0020		0.0020		mg/L		03/30/12 09:54	03/30/12 13:17	1
Zinc	<0.020		0.020		mg/L		03/30/12 09:54	03/30/12 13:17	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/27/12 13:10	03/28/12 10:59	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		03/22/12 17:25	03/22/12 21:44	1
Sulfate	**810**		250		mg/L			04/04/12 04:40	50
Chloride	**8700**		2000		mg/L			04/04/12 11:36	1000
Nitrogen, Nitrate	<0.10		0.10		mg/L			04/02/12 11:34	1
Total Dissolved Solids	**15000**		50		mg/L			03/27/12 02:10	1
Fluoride	**0.24**		0.10		mg/L			03/27/12 11:00	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			03/21/12 15:03	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			04/02/12 10:58	1

Client Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Client Sample ID: MW-2
Date Collected: 03/21/12 09:20
Date Received: 03/21/12 11:10

Lab Sample ID: 500-44978-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.018**		0.015		mg/L		03/30/12 09:54	04/03/12 15:53	5
Arsenic	<0.0010		0.0010		mg/L		03/30/12 09:54	03/30/12 13:35	1
Barium	**0.024**		0.0025		mg/L		03/30/12 09:54	03/30/12 13:35	1
Beryllium	<0.0010		0.0010		mg/L		03/30/12 09:54	04/03/12 11:08	1
Boron	**1.7**		0.050		mg/L		03/30/12 09:54	04/03/12 11:08	1
Cadmium	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:35	1
Chromium	<0.025		0.025		mg/L		03/30/12 09:54	04/02/12 11:59	5
Cobalt	<0.0010	^	0.0010		mg/L		03/30/12 09:54	03/30/12 13:35	1
Copper	<0.0020		0.0020		mg/L		03/30/12 09:54	03/30/12 13:35	1
Iron	<0.50		0.50		mg/L		03/30/12 09:54	04/02/12 11:59	5
Lead	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:35	1
Manganese	**0.31**		0.013		mg/L		03/30/12 09:54	04/02/12 11:59	5
Nickel	**0.017**		0.010		mg/L		03/30/12 09:54	04/02/12 11:59	5
Selenium	<0.0025		0.0025		mg/L		03/30/12 09:54	03/30/12 13:35	1
Silver	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:35	1
Thallium	<0.0020		0.0020		mg/L		03/30/12 09:54	03/30/12 13:35	1
Zinc	<0.020		0.020		mg/L		03/30/12 09:54	03/30/12 13:35	1

Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/27/12 13:10	03/28/12 11:01	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		03/22/12 17:25	03/22/12 21:45	1
Sulfate	**1200**		500		mg/L			04/04/12 04:41	100
Chloride	**2200**		2000		mg/L			04/04/12 11:37	1000
Nitrogen, Nitrate	<0.10		0.10		mg/L			04/02/12 11:34	1
Total Dissolved Solids	**7200**		25		mg/L			03/27/12 02:14	1
Fluoride	**0.21**		0.10		mg/L			03/27/12 11:03	1
Nitrogen, Nitrite	<0.020		0.020		mg/L			03/21/12 15:05	1
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			04/02/12 11:00	1

Definitions/Glossary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
F	MS or MSD exceeds the control limits
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Metals

Prep Batch: 144498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	7470A	
500-44978-2	MW-2	Dissolved	Water	7470A	
LCS 500-144498/8-A	Lab Control Sample	Total/NA	Water	7470A	
MB 500-144498/7-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 144647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	7470A	144498
500-44978-2	MW-2	Dissolved	Water	7470A	144498
LCS 500-144498/8-A	Lab Control Sample	Total/NA	Water	7470A	144498
MB 500-144498/7-A	Method Blank	Total/NA	Water	7470A	144498

Prep Batch: 144897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	Soluble Metals	
500-44978-1 DU	MW-1	Dissolved	Water	Soluble Metals	
500-44978-1 MS	MW-1	Dissolved	Water	Soluble Metals	
500-44978-1 MSD	MW-1	Dissolved	Water	Soluble Metals	
500-44978-2	MW-2	Dissolved	Water	Soluble Metals	
LCS 500-144897/2-A	Lab Control Sample	Soluble	Water	Soluble Metals	
MB 500-144897/1-A	Method Blank	Soluble	Water	Soluble Metals	

Analysis Batch: 145039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	6020	144897
500-44978-1 DU	MW-1	Dissolved	Water	6020	144897
500-44978-1 MS	MW-1	Dissolved	Water	6020	144897
500-44978-1 MSD	MW-1	Dissolved	Water	6020	144897
500-44978-2	MW-2	Dissolved	Water	6020	144897
LCS 500-144897/2-A	Lab Control Sample	Soluble	Water	6020	144897
MB 500-144897/1-A	Method Blank	Soluble	Water	6020	144897

Analysis Batch: 145159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	6020	144897
500-44978-1 DU	MW-1	Dissolved	Water	6020	144897
500-44978-1 MS	MW-1	Dissolved	Water	6020	144897
500-44978-1 MSD	MW-1	Dissolved	Water	6020	144897
500-44978-2	MW-2	Dissolved	Water	6020	144897
LCS 500-144897/2-A	Lab Control Sample	Soluble	Water	6020	144897
MB 500-144897/1-A	Method Blank	Soluble	Water	6020	144897

Analysis Batch: 145191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	6020	144897
500-44978-1 DU	MW-1	Dissolved	Water	6020	144897
500-44978-1 MS	MW-1	Dissolved	Water	6020	144897
500-44978-1 MSD	MW-1	Dissolved	Water	6020	144897
500-44978-2	MW-2	Dissolved	Water	6020	144897
LCS 500-144897/2-A	Lab Control Sample	Soluble	Water	6020	144897
MB 500-144897/1-A	Method Blank	Soluble	Water	6020	144897

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Metals (Continued)

Analysis Batch: 145279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	6020	144897
500-44978-1 DU	MW-1	Dissolved	Water	6020	144897
500-44978-1 MS	MW-1	Dissolved	Water	6020	144897
500-44978-1 MSD	MW-1	Dissolved	Water	6020	144897
500-44978-2	MW-2	Dissolved	Water	6020	144897
LCS 500-144897/2-A	Lab Control Sample	Soluble	Water	6020	144897
MB 500-144897/1-A	Method Blank	Soluble	Water	6020	144897

General Chemistry

Analysis Batch: 143973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	SM 4500 NO2 B	
500-44978-1 MS	MW-1	Dissolved	Water	SM 4500 NO2 B	
500-44978-1 MSD	MW-1	Dissolved	Water	SM 4500 NO2 B	
500-44978-2	MW-2	Dissolved	Water	SM 4500 NO2 B	
LCS 500-143973/4	Lab Control Sample	Total/NA	Water	SM 4500 NO2 B	
MB 500-143973/3	Method Blank	Total/NA	Water	SM 4500 NO2 B	

Prep Batch: 144115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	9010B	
500-44978-2	MW-2	Dissolved	Water	9010B	
HLCS 500-144115/3-A	Lab Control Sample	Total/NA	Water	9010B	
LCS 500-144115/2-A	Lab Control Sample	Total/NA	Water	9010B	
LLCS 500-144115/4-A	Lab Control Sample	Total/NA	Water	9010B	
MB 500-144115/1-A	Method Blank	Total/NA	Water	9010B	

Analysis Batch: 144127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	9014	144115
500-44978-2	MW-2	Dissolved	Water	9014	144115
HLCS 500-144115/3-A	Lab Control Sample	Total/NA	Water	9014	144115
LCS 500-144115/2-A	Lab Control Sample	Total/NA	Water	9014	144115
LLCS 500-144115/4-A	Lab Control Sample	Total/NA	Water	9014	144115
MB 500-144115/1-A	Method Blank	Total/NA	Water	9014	144115

Analysis Batch: 144421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	SM 2540C	
500-44978-2	MW-2	Dissolved	Water	SM 2540C	
LCS 500-144421/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 500-144421/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 144487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	SM 4500 F C	
500-44978-2	MW-2	Dissolved	Water	SM 4500 F C	

Analysis Batch: 145071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	Nitrate by calc	

QC Association Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

General Chemistry (Continued)

Analysis Batch: 145071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-2	MW-2	Dissolved	Water	Nitrate by calc	

Analysis Batch: 145087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	SM 4500 NO3 F	
500-44978-2	MW-2	Dissolved	Water	SM 4500 NO3 F	
LCS 500-145087/43	Lab Control Sample	Total/NA	Water	SM 4500 NO3 F	
MB 500-145087/42	Method Blank	Total/NA	Water	SM 4500 NO3 F	

Analysis Batch: 145290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	9038	
500-44978-2	MW-2	Dissolved	Water	9038	
LCS 500-145290/4	Lab Control Sample	Total/NA	Water	9038	
MB 500-145290/3	Method Blank	Total/NA	Water	9038	

Analysis Batch: 145337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-44978-1	MW-1	Dissolved	Water	9251	
500-44978-2	MW-2	Dissolved	Water	9251	
LCS 500-145337/122	Lab Control Sample	Total/NA	Water	9251	
MB 500-145337/121	Method Blank	Total/NA	Water	9251	

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: 500-44978-1 MS
Matrix: Water
Analysis Batch: 145039

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 144897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.0014		0.100	0.0986		mg/L		97	75 - 125
Barium	0.065		0.500	0.569		mg/L		101	75 - 125
Cadmium	<0.00050		0.0500	0.0409		mg/L		82	75 - 125
Cobalt	0.0094	^	0.500	0.400	^	mg/L		78	75 - 125
Copper	<0.0020		0.250	0.237		mg/L		95	75 - 125
Lead	<0.00050		0.100	0.105		mg/L		105	75 - 125
Selenium	<0.0025		0.100	0.0949		mg/L		94	75 - 125
Silver	<0.00050		0.0500	0.0391		mg/L		78	75 - 125
Thallium	<0.0020		0.100	0.114		mg/L		114	75 - 125
Zinc	<0.020		0.500	0.381	F	mg/L		73	75 - 125

Lab Sample ID: 500-44978-1 MS
Matrix: Water
Analysis Batch: 145159

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 144897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	<0.0050		0.200	0.174		mg/L		87	75 - 125
Iron	6.3		1.00	6.73	4	mg/L		45	75 - 125
Manganese	2.8		0.500	3.07	4	mg/L		54	75 - 125
Nickel	0.010		0.500	0.386		mg/L		75	75 - 125

Lab Sample ID: 500-44978-1 MS
Matrix: Water
Analysis Batch: 145191

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 144897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	<0.0010		0.0500	0.0466		mg/L		93	75 - 125
Boron	0.68		1.00	1.50		mg/L		82	75 - 125

Lab Sample ID: 500-44978-1 MS
Matrix: Water
Analysis Batch: 145279

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 144897

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.015		0.500	0.417		mg/L		83	75 - 125

Lab Sample ID: 500-44978-1 MSD
Matrix: Water
Analysis Batch: 145039

Client Sample ID: MW-1
Prep Type: Dissolved
Prep Batch: 144897

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.0014		0.100	0.100		mg/L		99	75 - 125	2	20
Barium	0.065		0.500	0.573		mg/L		102	75 - 125	1	20
Cadmium	<0.00050		0.0500	0.0409		mg/L		82	75 - 125	0	20
Cobalt	0.0094	^	0.500	0.386	^	mg/L		75	75 - 125	4	20
Copper	<0.0020		0.250	0.241		mg/L		96	75 - 125	2	20
Lead	<0.00050		0.100	0.106		mg/L		106	75 - 125	0	20
Selenium	<0.0025		0.100	0.0957		mg/L		95	75 - 125	1	20
Silver	<0.00050		0.0500	0.0393		mg/L		79	75 - 125	1	20
Thallium	<0.0020		0.100	0.115		mg/L		114	75 - 125	0	20

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

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

Lab Sample ID: 500-44978-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145039 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	<0.020		0.500	0.387		mg/L		75	75 - 125	2	20

Lab Sample ID: 500-44978-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145159 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	<0.0050		0.200	0.179		mg/L		90	75 - 125	3	20
Iron	5.9		1.00	6.96	4	mg/L		68	75 - 125	3	20
Manganese	2.7		0.500	3.17	4	mg/L		73	75 - 125	3	20
Nickel	0.0084		0.500	0.397		mg/L		77	75 - 125	3	20

Lab Sample ID: 500-44978-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145191 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	<0.0010		0.0500	0.0481		mg/L		96	75 - 125	3	20
Boron	0.68		1.00	1.53		mg/L		85	75 - 125	2	20

Lab Sample ID: 500-44978-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145279 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.015		0.500	0.430		mg/L		86	75 - 125	3	20

Lab Sample ID: 500-44978-1 DU — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145039 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.0014		0.00144		mg/L		0.07	20
Barium	0.065		0.0641		mg/L		1	20
Cadmium	<0.00050		<0.00050		mg/L		NC	20
Cobalt	0.0094	^	0.00973	^	mg/L		3	20
Copper	<0.0020		<0.0020		mg/L		NC	20
Lead	<0.00050		<0.00050		mg/L		NC	20
Selenium	<0.0025		<0.0025		mg/L		NC	20
Silver	<0.00050		<0.00050		mg/L		NC	20
Thallium	<0.0020		<0.0020		mg/L		NC	20
Zinc	<0.020		<0.020		mg/L		NC	20

Lab Sample ID: 500-44978-1 DU — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145159 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chromium	<0.0050		<0.0050		mg/L		NC	20
Iron	6.3		5.94		mg/L		6	20
Manganese	2.8		2.69		mg/L		4	20

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

Lab Sample ID: 500-44978-1 DU — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145159 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nickel	0.010		0.00964		mg/L		5	20

Lab Sample ID: 500-44978-1 DU — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145191 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Beryllium	<0.0010		<0.0010		mg/L		NC	20
Boron	0.68		0.673		mg/L		1	20

Lab Sample ID: 500-44978-1 DU — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 145279 — **Prep Batch: 144897**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	<0.015		<0.015		mg/L		NC	20

Lab Sample ID: MB 500-144897/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145039 — **Prep Batch: 144897**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.0010		0.0010		mg/L		03/30/12 09:54	03/30/12 13:12	1
Barium	<0.0025		0.0025		mg/L		03/30/12 09:54	03/30/12 13:12	1
Cadmium	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:12	1
Cobalt	<0.0010	^	0.0010		mg/L		03/30/12 09:54	03/30/12 13:12	1
Copper	<0.0020		0.0020		mg/L		03/30/12 09:54	03/30/12 13:12	1
Lead	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:12	1
Selenium	<0.0025		0.0025		mg/L		03/30/12 09:54	03/30/12 13:12	1
Silver	<0.00050		0.00050		mg/L		03/30/12 09:54	03/30/12 13:12	1
Thallium	<0.0020		0.0020		mg/L		03/30/12 09:54	03/30/12 13:12	1
Zinc	<0.020		0.020		mg/L		03/30/12 09:54	03/30/12 13:12	1

Lab Sample ID: MB 500-144897/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145159 — **Prep Batch: 144897**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	<0.0050		0.0050		mg/L		03/30/12 09:54	04/02/12 10:56	1
Iron	<0.10		0.10		mg/L		03/30/12 09:54	04/02/12 10:56	1
Manganese	<0.0025		0.0025		mg/L		03/30/12 09:54	04/02/12 10:56	1
Nickel	<0.0020		0.0020		mg/L		03/30/12 09:54	04/02/12 10:56	1

Lab Sample ID: MB 500-144897/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145191 — **Prep Batch: 144897**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.0010		0.0010		mg/L		03/30/12 09:54	04/03/12 11:01	1
Boron	<0.050		0.050		mg/L		03/30/12 09:54	04/03/12 11:01	1

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

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

Lab Sample ID: MB 500-144897/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145279 — **Prep Batch: 144897**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030		mg/L		03/30/12 09:54	04/03/12 15:42	1

Lab Sample ID: LCS 500-144897/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145039 — **Prep Batch: 144897**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.100	0.104		mg/L		104	80 - 120
Barium	0.500	0.481		mg/L		96	80 - 120
Cadmium	0.0500	0.0524		mg/L		105	80 - 120
Cobalt	0.500	0.472	^	mg/L		94	80 - 120
Copper	0.250	0.252		mg/L		101	80 - 120
Lead	0.100	0.0973		mg/L		97	80 - 120
Selenium	0.100	0.107		mg/L		107	80 - 120
Silver	0.0500	0.0508		mg/L		102	80 - 120
Thallium	0.100	0.101		mg/L		101	80 - 120
Zinc	0.500	0.548		mg/L		110	80 - 120

Lab Sample ID: LCS 500-144897/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145159 — **Prep Batch: 144897**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.200	0.200		mg/L		100	80 - 120
Iron	1.00	1.01		mg/L		101	80 - 120
Manganese	0.500	0.502		mg/L		100	80 - 120
Nickel	0.500	0.518		mg/L		104	80 - 120

Lab Sample ID: LCS 500-144897/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145191 — **Prep Batch: 144897**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0500	0.0493		mg/L		99	80 - 120
Boron	1.00	0.972		mg/L		97	80 - 120

Lab Sample ID: LCS 500-144897/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Soluble**
Analysis Batch: 145279 — **Prep Batch: 144897**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.449		mg/L		90	80 - 120

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 500-144498/7-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144647 — **Prep Batch: 144498**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020		mg/L		03/27/12 13:10	03/28/12 09:55	1

Lab Sample ID: LCS 500-144498/8-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144647 — **Prep Batch: 144498**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00193		mg/L		97	80 - 120

Method: 9014 - Cyanide

Lab Sample ID: MB 500-144115/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144127 — **Prep Batch: 144115**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	<0.010		0.010		mg/L		03/22/12 17:25	03/22/12 21:41	1

Lab Sample ID: HLCS 500-144115/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144127 — **Prep Batch: 144115**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.400	0.401		mg/L		100	90 - 110

Lab Sample ID: LCS 500-144115/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144127 — **Prep Batch: 144115**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.0978		mg/L		98	80 - 120

Lab Sample ID: LLCS 500-144115/4-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144127 — **Prep Batch: 144115**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.0400	0.0443		mg/L		111	75 - 125

Method: 9038 - Sulfate, Turbidimetric

Lab Sample ID: MB 500-145290/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 145290

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<5.0		5.0		mg/L			04/04/12 04:32	1

Method: 9038 - Sulfate, Turbidimetric (Continued)

Lab Sample ID: LCS 500-145290/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 145290

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	20.0	20.4		mg/L		102	80 - 120

Method: 9251 - Chloride

Lab Sample ID: MB 500-145337/121 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 145337

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<2.0		2.0		mg/L			04/04/12 10:47	1

Lab Sample ID: LCS 500-145337/122 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 145337

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.7		mg/L		97	80 - 120

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 500-144421/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144421

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<10		10		mg/L			03/27/12 01:00	1

Lab Sample ID: LCS 500-144421/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 144421

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	250	282		mg/L		113	80 - 120

Method: SM 4500 NO2 B - Nitrogen, Nitrite

Lab Sample ID: MB 500-143973/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 143973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrite	<0.020		0.020		mg/L			03/21/12 15:01	1

Lab Sample ID: LCS 500-143973/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 143973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrogen, Nitrite	0.100	0.0907		mg/L		91	80 - 120

QC Sample Results

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Method: SM 4500 NO2 B - Nitrogen, Nitrite (Continued)

Lab Sample ID: 500-44978-1 MS — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 143973

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Nitrite	<0.020		0.100	0.0993		mg/L		97	75 - 125		

Lab Sample ID: 500-44978-1 MSD — **Client Sample ID: MW-1**
Matrix: Water — **Prep Type: Dissolved**
Analysis Batch: 143973

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrogen, Nitrite	<0.020		0.100	0.0993		mg/L		97	75 - 125	0	20

Method: SM 4500 NO3 F - Nitrogen, Nitrate

Lab Sample ID: MB 500-145087/42 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 145087

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrogen, Nitrate Nitrite	<0.10		0.10		mg/L			04/02/12 10:45	1

Lab Sample ID: LCS 500-145087/43 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 145087

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrogen, Nitrate Nitrite			1.00	0.962		mg/L		96	80 - 120		

Certification Summary

Client: Midwest Generation EME LLC
Project/Site: Midwest Generation Crawford Groundwater

TestAmerica Job ID: 500-44978-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Chicago	Alabama	State Program	4	40461
TestAmerica Chicago	California	NELAC	9	01132CA
TestAmerica Chicago	Florida	NELAC	4	E871072
TestAmerica Chicago	Georgia	State Program	4	939
TestAmerica Chicago	Georgia	State Program	4	N/A
TestAmerica Chicago	Hawaii	State Program	9	N/A
TestAmerica Chicago	Illinois	NELAC	5	100201
TestAmerica Chicago	Indiana	State Program	5	C-IL-02
TestAmerica Chicago	Iowa	State Program	7	82
TestAmerica Chicago	Kansas	NELAC	7	E-10161
TestAmerica Chicago	Kentucky	State Program	4	90023
TestAmerica Chicago	Kentucky (UST)	State Program	4	66
TestAmerica Chicago	L-A-B	DoD ELAP		L2304
TestAmerica Chicago	L-A-B	ISO/IEC 17025		L2304
TestAmerica Chicago	Louisiana	NELAC	6	30720
TestAmerica Chicago	Massachusetts	State Program	1	M-IL035
TestAmerica Chicago	Mississippi	State Program	4	N/A
TestAmerica Chicago	North Carolina DENR	State Program	4	291
TestAmerica Chicago	Oklahoma	State Program	6	8908
TestAmerica Chicago	South Carolina	State Program	4	77001
TestAmerica Chicago	Texas	NELAC	6	T104704252-09-TX
TestAmerica Chicago	USDA	Federal		P330-12-00038
TestAmerica Chicago	Virginia	NELAC Secondary AB	3	460142
TestAmerica Chicago	Wisconsin	State Program	5	999580010
TestAmerica Chicago	Wyoming	State Program	8	8TMS-Q

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

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 #: 500-44978

Chain of Custody Number:

Page ____ of ____

Temperature °C of Cooler: 3.6

Report To (optional)
Contact: Dave McCoy
Company: Patrick Engineering
Address: 4985 Varsity Dr.
Address: Lisle, IL 60532
Phone: (630) 427-7400
Fax: (630) 434-8300
E-Mail:

Bill To (optional)
Contact:
Company:
Address:
Address:
Phone:
Fax:
PO#/Reference#

Client: Patrick Engineering
Client Project #: 21153.032
Project Name: MWG - Crawford
Project Location/State: Chicago, IL
Lab Project #:
Sampler: JLJ
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	7470A - Mercury	6020 - TCLP Metals Hg	9251 - Chloride	2540C - TDS, Diss. Solids	9038 - Sulfate	4500 - F - C - Fluoride	NO2 - B - Nitrogen, Nitrite	NO3 - F - Nitrogen, Nitrate, Nitrite	9014 - Cyanide	Comments
1		MW-2	3/21/12	1005	5	W	X	X	X	X	X					
2		MW-2	↓	0920	↓	↓	X	X	X	X	X					

Turnaround Time Required (Business Days)
___ 1 Day ___ 2 Days ___ 5 Days ___ 7 Days ✓ 10 Days ___ 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
[signature]	PEI	3/21/12	1110	[signature]	TestAmerica	03/21/12	1110
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: PEI

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

Client Comments

Lab Comments:

TAL-4124-500 (1209)
4/4/2012

Login Sample Receipt Checklist

Client: Midwest Generation EME LLC

Job Number: 500-44978-1

Login Number: 44978
List Number: 1
Creator: Lunt, Jeff T

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	3.6
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	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ORIGIN ID: CHIA (312) 853-3500
SHIPPING
MERCURY BUSINESS SERVICES
29 S LASALLE
STE 006
CHICAGO, IL 60603
UNITED STATES US

SHIP DATE: 30JUL12
ACTWGT: 4.0 LB MAN
CAD: 691166/CAFE2511

BILL SENDER

TO DIVISION OF WATER POLLUTION CONTROL
IL ENVIRONMENTAL PROTECTION AGENCY
1021 N. GRAND AVENUE EAST
COMPLIANCE ASSURANCE SECTION
SPRINGFIELD IL 62794

(000) 000-0000
DEPT: EARLY
INV: SUE CHARPIE

REF: 71124 / 107 01 - 2040 WRTM
PO: 7112428120730161407001

580C1/A278/1B3C

FedEx Express

J1113118658125

TRK# 0201 5360 6238 2550

TUE - 31 JUL A4
FIRST OVERNIGHT

N1 SPIA

62794
IL-US STL

Part # 156149-434 RIT2 08/11

ORIGIN ID: CHIA (312)
SHIPPING
MERCURY BUSINESS SERV
29 S LASALLE
STE 006
CHICAGO, IL 60603
UNITED STATES US

TO DIVISION OF WATI
IL ENVIRONMENTA
1021 N. GRAND A
COMPLIANCE ASSU
SPRINGFIELD, IL 6

Trk# 5360 6

FIRST OVEF

1021 N. GRAND AVENU

Part # 156149-434 RIT2 08/11

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