Glenn Springs Holdings, Inc.
A subsidiary of Occidental Petroleum

Joe Branch
Project Manager
Direct Dial (231) 670-6809

7601 Old Channel Trail
Montague, MI 49437
Fax (231) 894-4033

July 31, 2013

Reference No. 001069

Ms. Gloria M. Sosa
USEPA
Region II, Site Investigation & Compliance Branch
290 Broadway, 20th Floor
New York, NY 10007-1866

Mr. Brian P. Sadowski
NYSDEC
270 Michigan Avenue
Buffalo, NY 14203-2999

Dear Ms. Sosa and Mr. Sadowski:

Re: **Quarterly Operations Report – Second Quarter 2013**
Hyde Park Remedial Program
Bedrock and Overburden Monitoring Programs

In accordance with the July 2006 "Performance Monitoring Plan," the following is the quarterly data report for the Hyde Park Remedial Program for the period April 1, 2013 through June 30, 2013. A total of 9.4 million gallons of aqueous phase liquid (APL) was collected, treated, and discharged in compliance with our City of Niagara Falls Publicly Owned Treatment Works (POTW) Significant Industrial Users Wastewater Discharge Permit #49. A total of 3,272 kilograms (kg) of non-aqueous phase liquid (NAPL) was shipped to Spring Grove Resource Recovery in Cincinnati, Ohio for disposal. The potentiometric contours are consistent with previous interpretations. Flow Zones 6, 7, and 9 have dewatered areas between the landfill and the gorge face. The current data continue to support the interpretation of effective hydraulic containment and inward gradients.

The performance monitoring data are presented as follows:

1. Figures 1-9: Showing groundwater contours for the flow zones and overburden
2. Figure 10: Showing continuously recorded water levels at flow zone piezometer PMW-1M-09
3. Table 1: Water Level Elevation Summary
4. Tables 2, 3, and 4: Daily, Weekly, and Quarterly Treatment System Effluent Monitoring Data
5. Attachment 1: Purge well performance graphs indicating daily level and flow information

The pumping wells are operational and functioning as designed. However, the following pumping wells have minor operational and setpoint issues that were investigated or resolved during the Second Quarter 2013:

- PW-1L: This pump was not maintaining setpoint and was replaced on April 30. It currently operates within approximately 2 feet of setpoint. When the water level in the pumping wells

reaches 2 feet above setpoint, the pump switches on. When the water level falls 2 feet below setpoint, the pump switches off. Therefore, any water level within that +/- 2 feet is within the normal operating range and is indicative of a properly functioning pump.

- PW-2UR: The pump was experiencing intermittent electrical faults. The scaling and level transmitter was calibrated on April 1, and the unit has been operating properly since that time.
- PW-3L: Once per day water level readings appeared to indicate that the well was not maintaining setpoint, but the pump was only down during the 5:00 a.m. morning reading: manual water levels indicated that setpoint was being maintained. The pump was replaced on May 29 and then again on July 11. It is currently operating within 1 foot of setpoint.
- PW-4U: This pump was not functioning properly and was replaced on April 23. The well is currently operating at setpoint.
- PW-5UR: This pumping well is located on the Tam Ceramics Property located to the south of the Site. Water level and pumping issues due to infiltration into the well and well chamber from an outside source continue to persist. The persistent infiltration causes the pump to become clogged with fines, which reduces the pumping capacity and leads to the pump burning out prematurely. The pump and motor were replaced on June 18, and it has been operating properly since that time at setpoint. The solids in the well will be analyzed in an effort to attempt to identify the source; the water infiltration will also be discussed with Tam Ceramics.
- PW-6MR: Although producing excellent flows when working, this pump was chronically being automatically shut down due to fluctuating amperage. After electrical troubleshooting/ adjustment, the pump has been functioning properly since June 24. The well is currently operating within 2 feet of setpoint.
- PW-7U: Due to continuing problems maintaining setpoint, this pump was replaced on May 16 and has been maintaining its setpoint since that time.
- PW-8M: The pump was having difficulty achieving setpoint and a blockage was suspected. On June 3, the pump was reversed to clean out the suspected blockage. This operation was successful, and the pump is currently operating at setpoint.
- Wet Well D: The pump would not start and upon inspection was found to be burned out. The pump and motor were replaced on April 22.

An evaluation of the pumping wells with persistent issues will continue to be conducted during the Third Quarter 2013.

PW-1U

As reported in previous quarters, in October 2012, this well showed decreasing flows due to possible silt infiltration into the well causing a buildup of solids in the pump. This pumping well spans two flow zones; Flow Zones 5 and 6. Inspection of the well showed that fines were likely infiltrating from Flow Zone 5: this zone is the major source of water for the well, making sealing it off an undesirable option. Instead, the well and pump were cleaned in November 2012 and its performance monitored. Flow rates began decreasing again in February and the pump was again pulled, cleaned, and replaced. Since that time, the pump has been operating at setpoint and flows have remained stable. The condition of PW-1U, with consideration to handling the infiltration of solids, will continue to be evaluated, and maintenance will be performed as required until a solution has been determined.

An electronic copy of this report is included on the attached CD as an Adobe® Acrobat® file. If you have any questions, please feel free to contact me at (231) 670-6809 or by email at joseph_branch@oxy.com.

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.

Joe Branch
Project Manager
231-670-6809 Cell

JB/adh/11
Encl.

c.c.: M. Anderson, GSH (1)
C. Babcock, GSH (1)
M. Forcucci, NYSDOH (1*)
J. Pentilchuk, CRA (1)
B. Sadowski, NYSDEC (CD Only)
G. Sosa, USEPA (4*)
J. Polovich, CRA (1)

*Includes one copy on CD

FIGURES

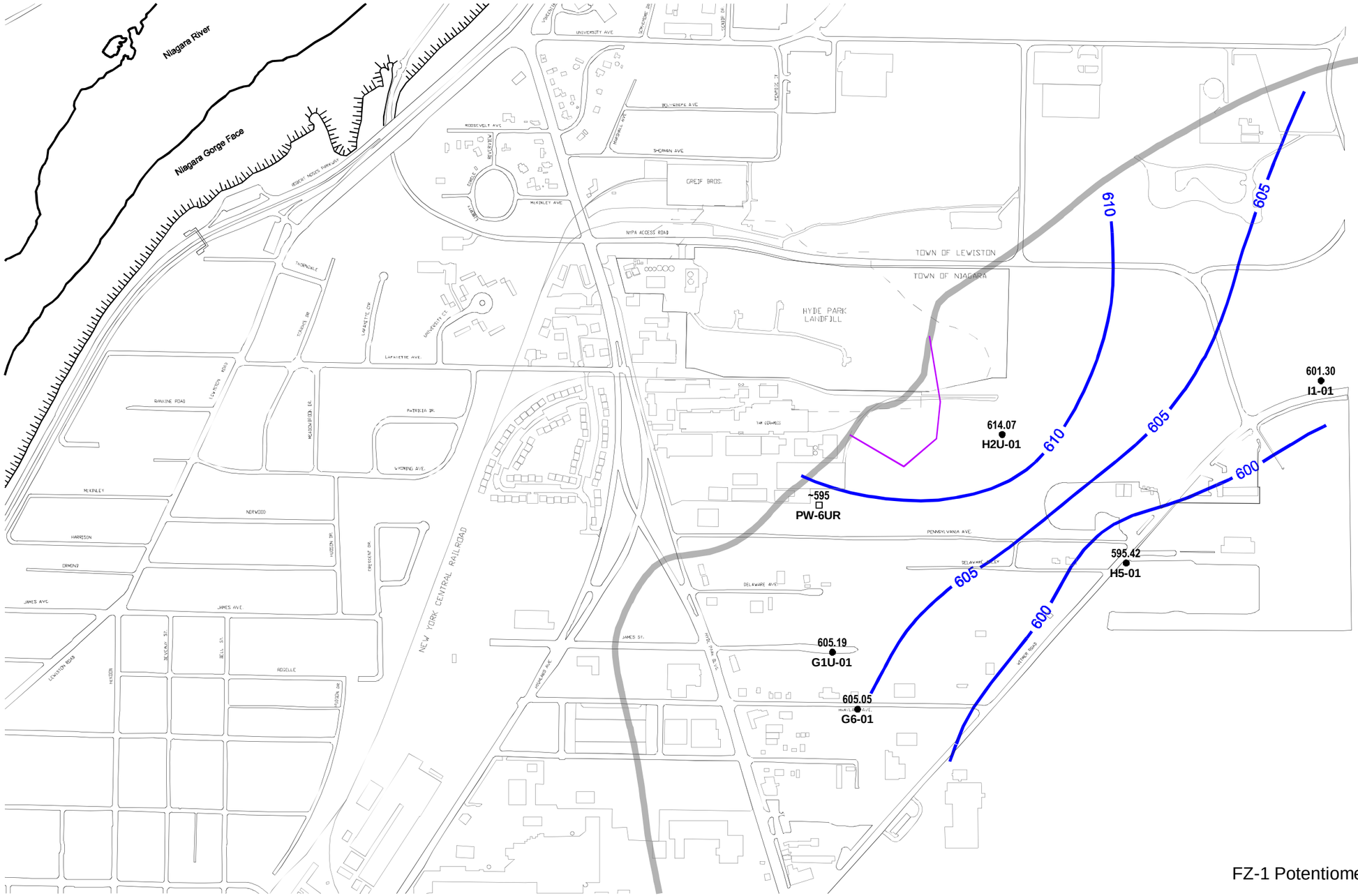
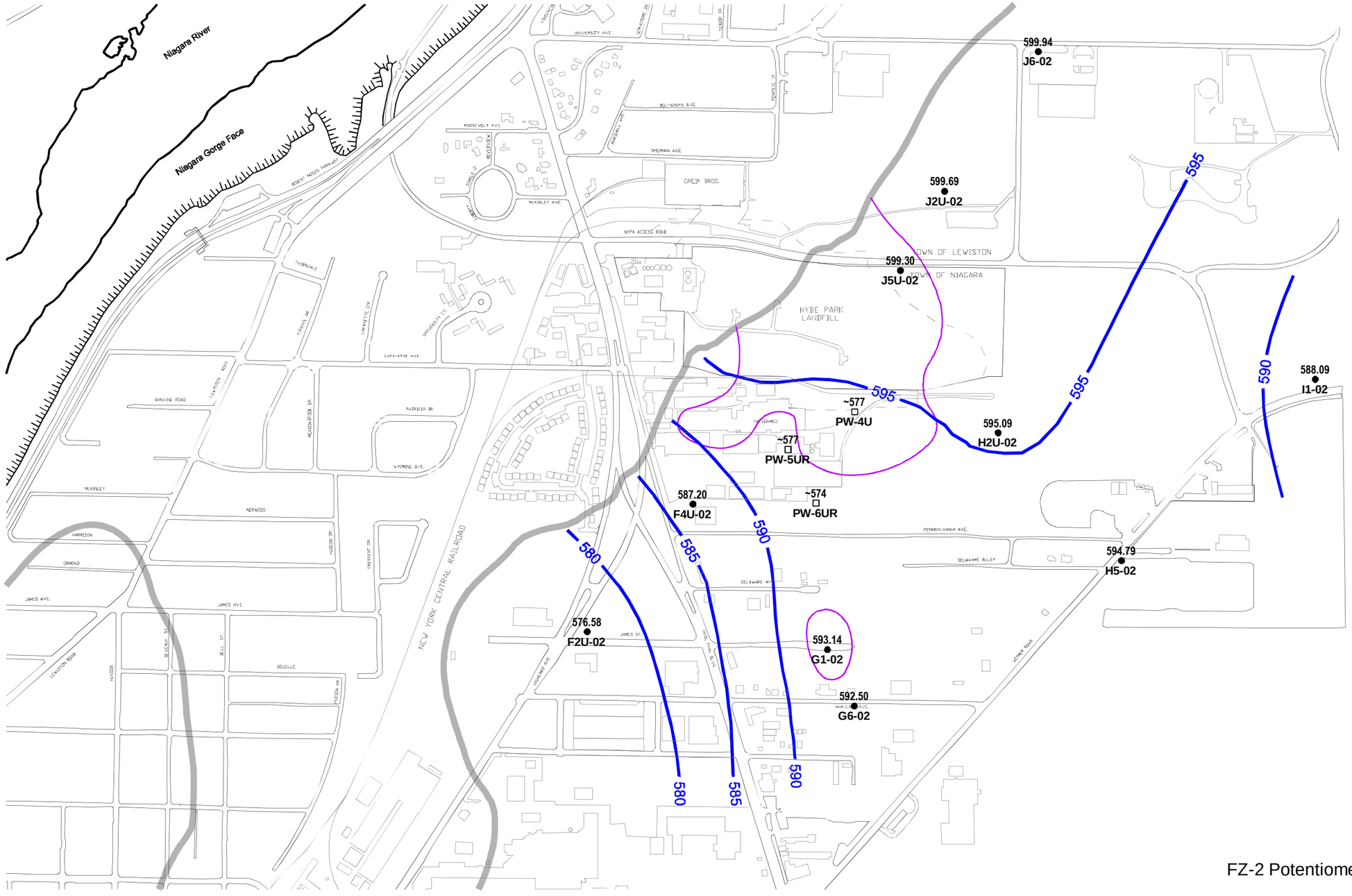


figure 1
FZ-1 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Glenn Springs Holdings, Inc.



Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- ● Piezometer used in contouring
- ○ Piezometer considered unreliable - data not used in contouring
- □ Purge Well - data not used in contouring
- ~ 525 Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

figure 2
FZ-2 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

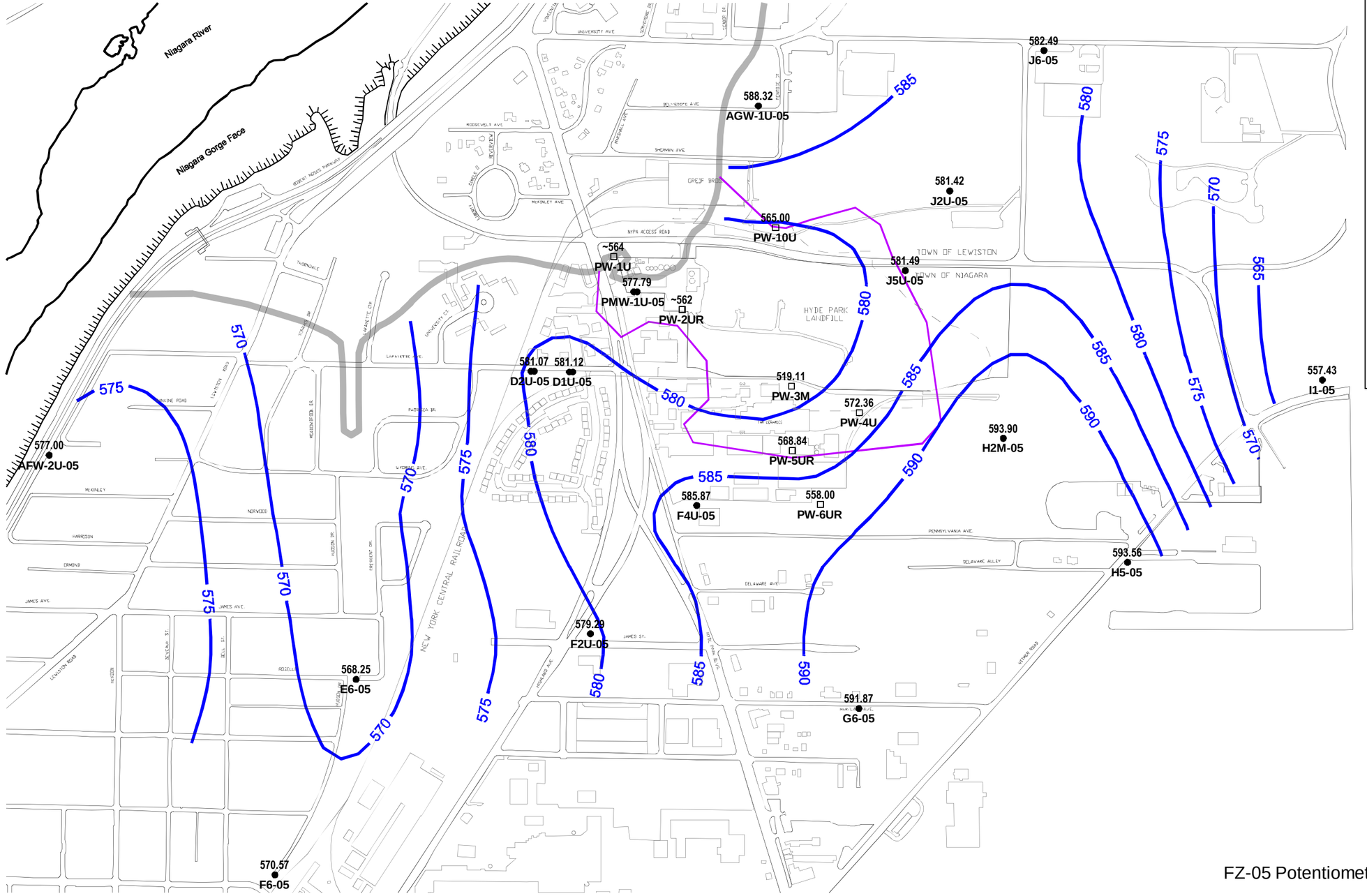
Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- ● Piezometer used in contouring
- ○ Piezometer considered unreliable - data not used in contouring
- □ Purge Well - data not used in contouring
- ~ 525 Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

0 200 400 600

figure 3
FZ-04 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

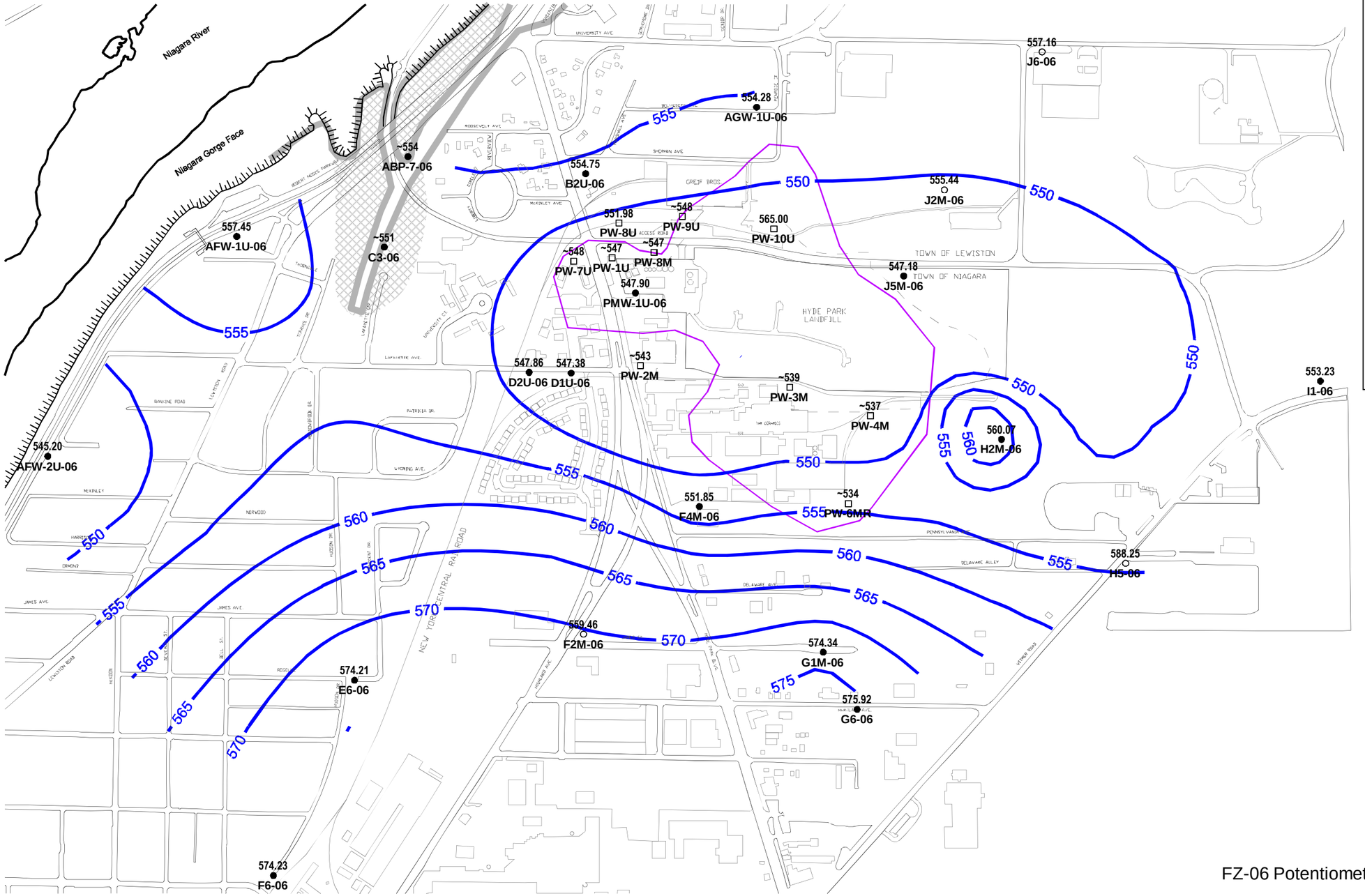
Glenn Springs Holdings, Inc.



Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- Piezometer used in contouring
- Piezometer considered unreliable - data not used in contouring
- Purge Well - data not used in contouring
- ~ 525 — Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

figure 4
FZ-05 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

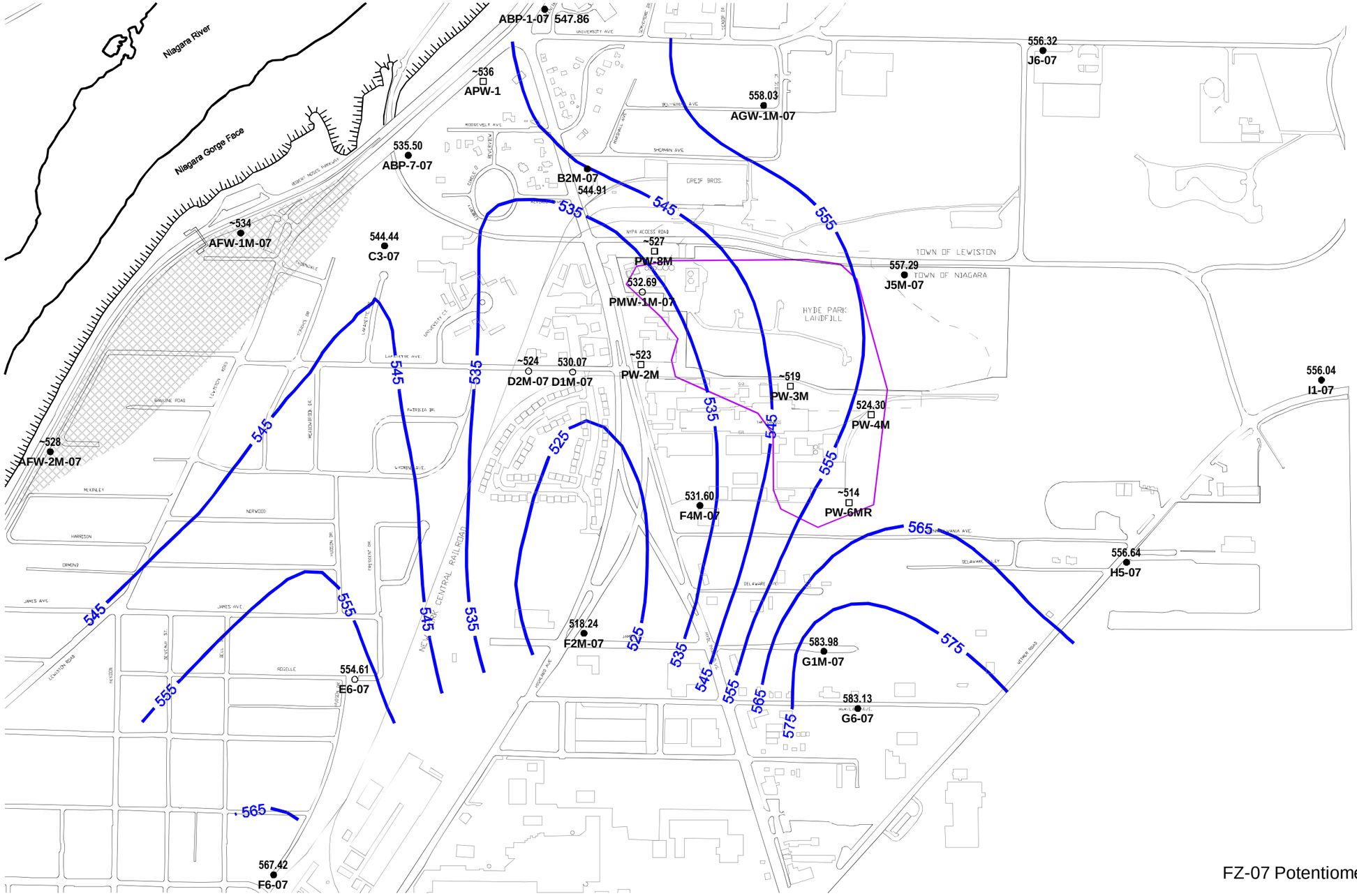


Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- ● Piezometer used in contouring
- ○ Piezometer considered unreliable - data not used in contouring
- □ Purge Well - data not used in contouring
- ~ 525 Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

figure 5
FZ-06 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

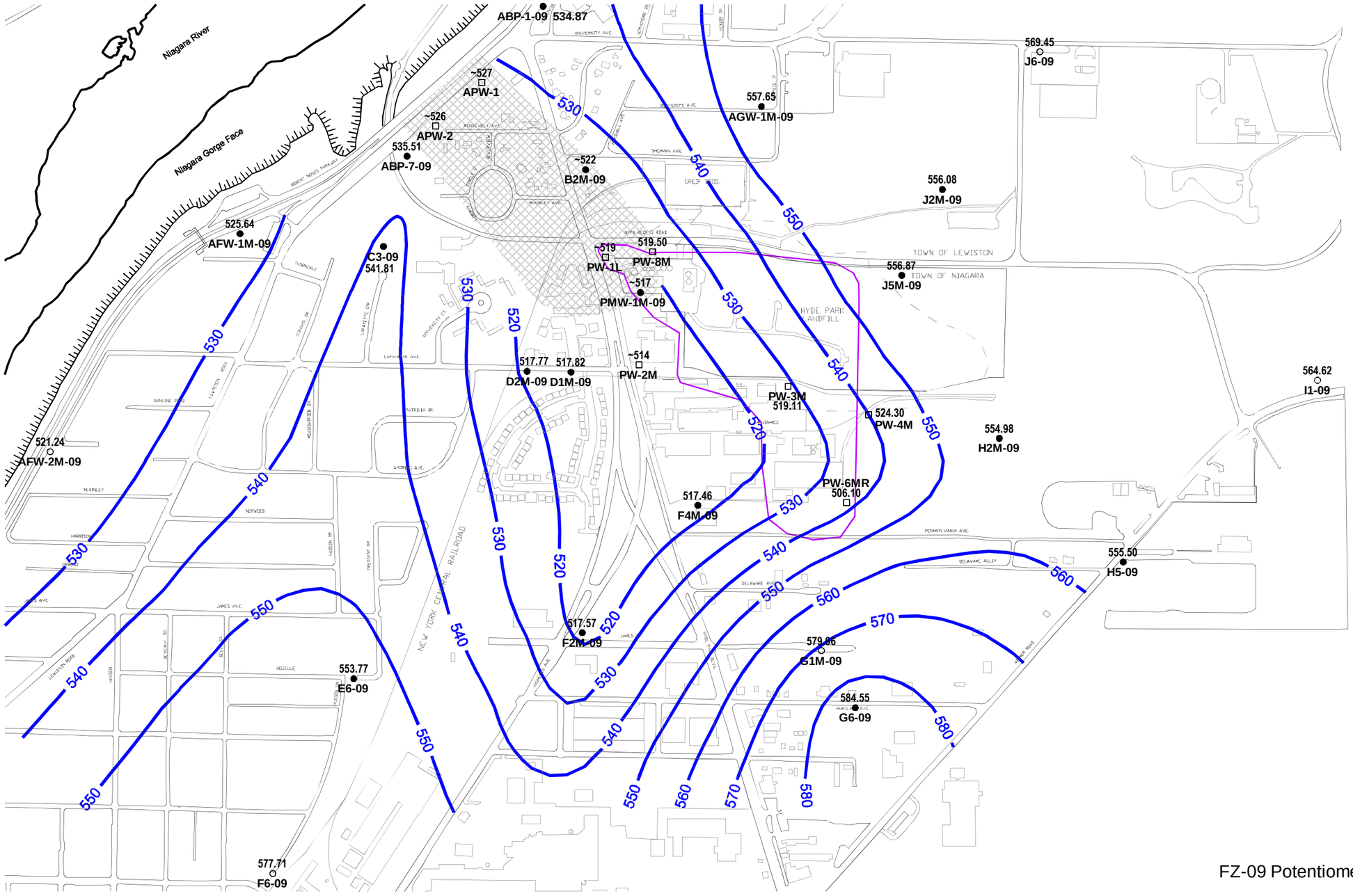
Glenn Springs Holdings, Inc.



Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- ● Piezometer used in contouring
- ○ Piezometer considered unreliable - data not used in contouring
- □ Purge Well - data not used in contouring
- ~ 525 Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

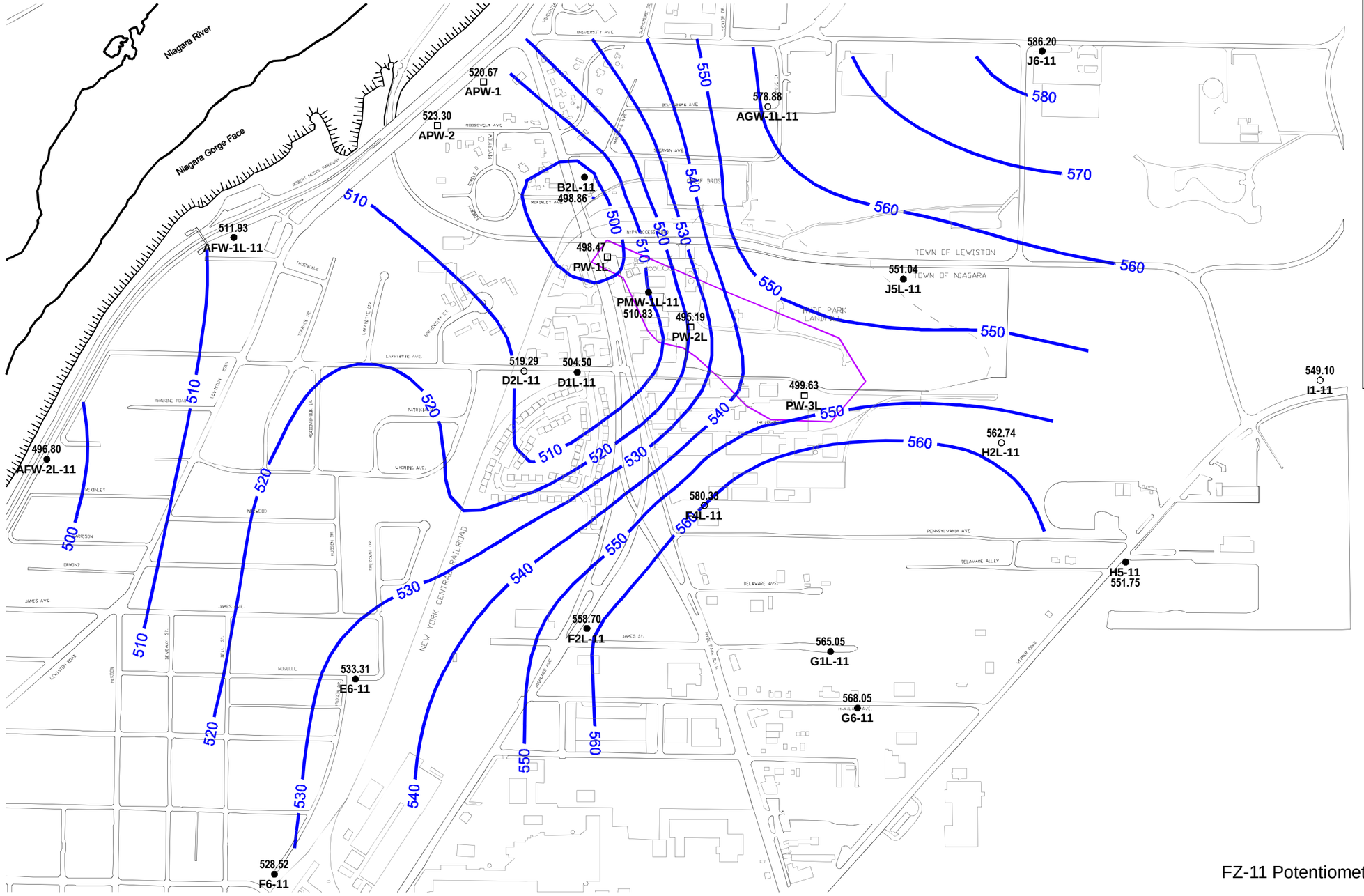
figure 6
FZ-07 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- ● Piezometer used in contouring
- ○ Piezometer considered unreliable - data not used in contouring
- □ Purge Well - data not used in contouring
- ~ 525 Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

figure 7
FZ-09 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
- Flow Zone Subcrop
- Dewatered area of flow zone
- ● Piezometer used in contouring
- ○ Piezometer considered unreliable - data not used in contouring
- □ Purge Well - data not used in contouring
- ~ 525 Tilde at a piezometer indicates that the flow zone is dewatered. At a purge well, the pumping water level is below the flow zone, but the flow zone is not necessarily dewatered. Value shown is the flow zone elevation.

figure 8
FZ-11 Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

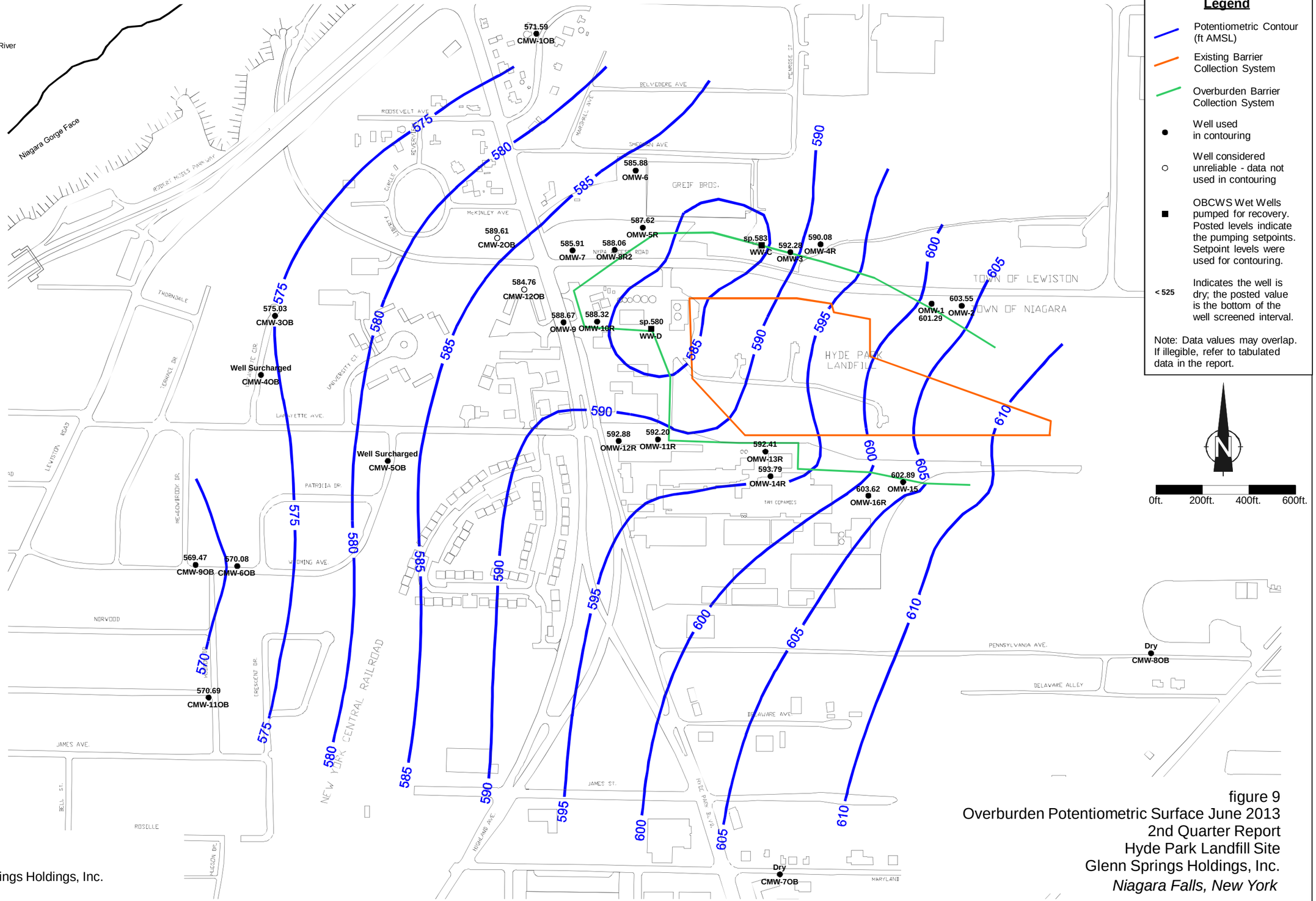


figure 9
Overburden Potentiometric Surface June 2013
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Glenn Springs Holdings, Inc.

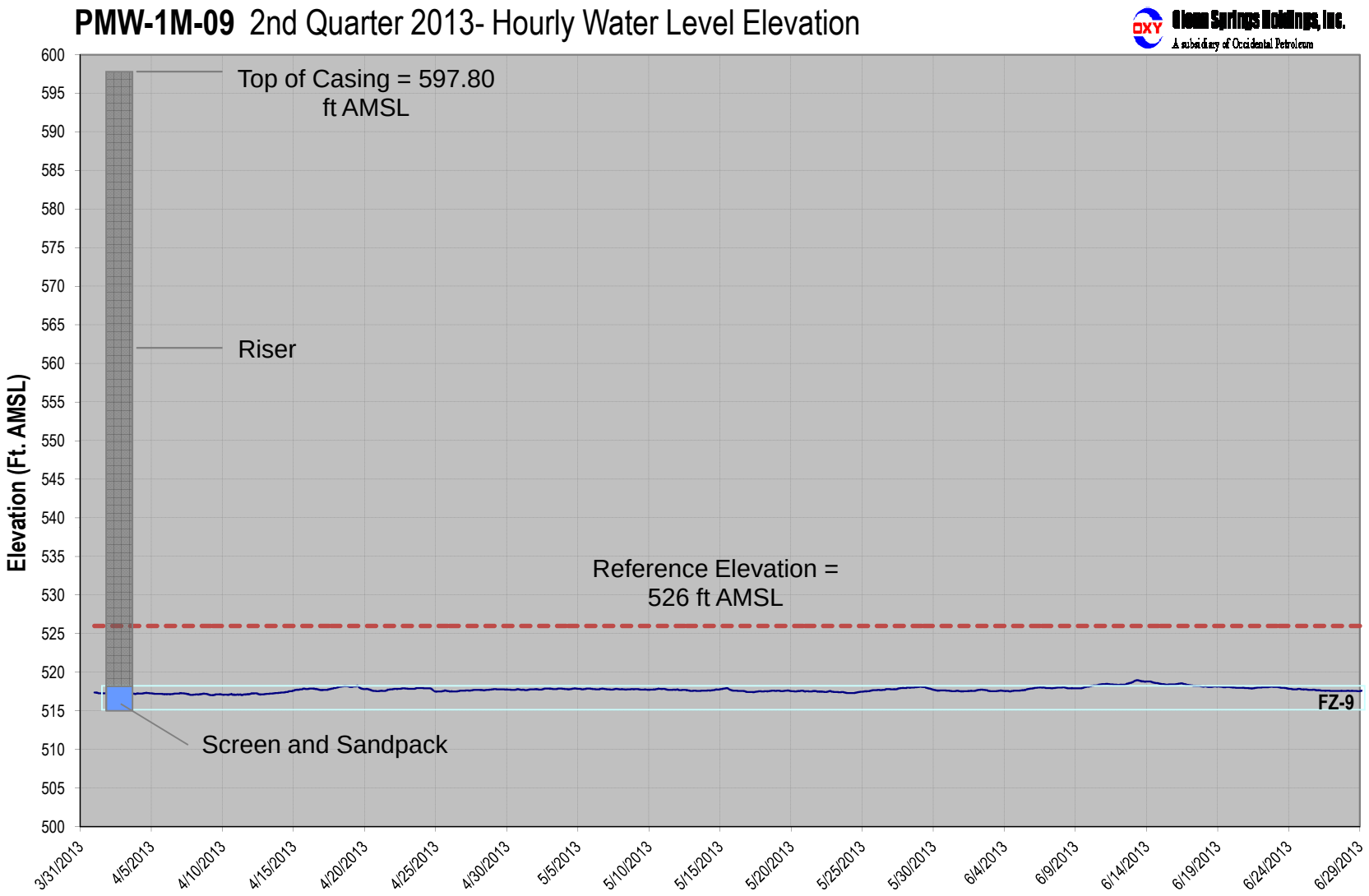

PMW-1M-09 2nd Quarter 2013- Hourly Water Level Elevation
Occidental Petroleum
A subsidiary of Occidental Petroleum
Top of Casing = 597.80 ft AMSL
Riser
Reference Elevation = 526 ft AMSL
Screen and Sandpack
FZ-9
Elevation (Ft. AMSL)
600
595
590
585
580
575
570
565
560
555
550
545
540
535
530
525
520
515
510
505
500
3/31/2013
4/5/2013
4/10/2013
4/15/2013
4/20/2013
4/25/2013
4/30/2013
5/5/2013
5/10/2013
5/15/2013
5/20/2013
5/25/2013
5/30/2013
6/4/2013
6/9/2013
6/14/2013
6/19/2013
6/24/2013
6/29/2013

figure 10

TABLES

TABLE 1

WATER LEVEL ELEVATION SUMMARY
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM
JUNE 3, 2013

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Overburden			
CMW-2OB	590.79	1.18	589.61
CMW-3OB	582.13	7.10	575.03
CMW-4OB	574.28	Surcharged	574.28
CMW-5OB	583.43	Surcharged	583.43
CMW-6OB	571.89	1.81	570.08
CMW-7OB	611.00	Dry	-
CMW-8OB	616.11	Dry	-
CMW-9OB	571.76	2.29	569.47
CMW-1OB	576.80	5.21	571.59
CMW-11OB	572.85	2.16	570.69
CMW-12OB	594.74	9.98	584.76
OMW-1	605.28	3.99	601.29
OMW-2	605.99	2.44	603.55
OMW-3	598.63	6.35	592.28
OMW-4R	601.17	11.09	590.08
OMW-5R	591.31	3.69	587.62
OMW-6	587.62	1.74	585.88
OMW-7	592.74	6.83	585.91
OMW-8R2	594.67	6.61	588.06
OMW-9	595.52	6.85	588.67
OMW-10R	595.13	6.81	588.32
OMW-11R	597.52	5.32	592.20
OMW-12R	596.79	3.91	592.88
OMW-13R	601.50	9.09	592.41
OMW-14R	599.64	5.85	593.79
OMW-15	607.48	4.59	602.89
OMW-16R	607.62	4.00	603.62
SC-2	625.61	22.32	603.29
SC-3	638.72	40.15	598.57
SC-4	639.35	38.29	601.06
SC-5	634.07	- [1]	-
SC-6	631.15	16.81	614.34
Shallow Bedrock			
CMW-1SH	576.11	11.50	564.61
CMW-2SH	590.51	18.52	571.99
CMW-3SH	581.91	32.41	549.50
CMW-4SH	574.16	7.13	567.03
CMW-5SH	583.36	5.71	577.65
CMW-6SH	572.05	9.02	563.03
CMW-7SH	610.58	9.21	601.37
CMW-8SH	615.95	4.46	611.49
CMW-9SH	571.96	11.39	560.57
CMW-11SH	573.21	7.90	565.31
CMW-12SH	597.02	26.23	570.79

TABLE 1

WATER LEVEL ELEVATION SUMMARY
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM
JUNE 3, 2013

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 1			
G1U-01	617.08	11.89	605.19
G6-01	609.24	4.19	605.05
H2U-01	620.92	6.85	614.07
H5-01	617.61	22.19	595.42
I1-01	625.58	24.28	601.30
Flow Zone 2			
F2U-02	599.89	23.31	576.58
F4U-02	602.32	15.12	587.20
G1-02	616.86	23.72	593.14
G6-02	608.65	16.15	592.50
H2U-02	620.88	25.79	595.09
H5-02	617.47	22.68	594.79
I1-02	625.47	37.38	588.09
J2U-02	609.66	9.97	599.69
J5U-02	606.21	6.91	599.30
J6-02	609.23	9.29	599.94
Flow Zone 4			
AFW-2U-04	593.48	16.58	576.90
D1U-04	593.77	10.61	583.16
D2U-04	590.65	7.77	582.88
E6-04	578.23	12.31	565.92
F2U-04	599.76	20.62	579.14
F4U-04	602.19	15.46	586.73
F6-04	588.06	17.38	570.68
G1U-04	616.96	24.43	592.53
G6-04	609.15	16.32	592.83
H5-04	617.40	22.68	594.72
I1-04	625.30	38.79	586.51
J2U-04	609.42	12.87	596.55
J5U-04	606.05	17.73	588.32
J6-04	609.12	26.15	582.97

TABLE 1

WATER LEVEL ELEVATION SUMMARY
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM
JUNE 3, 2013

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 5			
AFW-2U-05	593.33	16.33	577.00
AGW-1U-05	591.80	3.48	588.32
D1U-05	593.51	12.39	581.12
D2U-05	590.56	9.49	581.07
E6-05	578.04	9.79	568.25
F2U-05	599.64	20.35	579.29
F4U-05	602.06	16.19	585.87
F6-05	587.85	17.28	570.57
G6-05	609.13	17.26	591.87
H2M-05	621.59	27.69	593.90
H5-05	617.31	23.75	593.56
I1-05	625.25	67.82	557.43
J2U-05	609.30	27.88	581.42
J5U-05	605.87	24.38	581.49
J6-05	609.02	26.53	582.49
PMW-1U-05	598.00	20.21	577.79
Flow Zone 6			
ABP-7-06	575.78	Dry	-
AFW-1U-06	571.83	14.38	557.45
AFW-2U-06	593.22	48.02	545.20
AGW-1U-06	591.66	37.38	554.28
B2U-06	589.29	34.54	554.75
C3-06	585.78	Dry	-
D1U-06	593.25	45.87	547.38
D2U-06	590.38	42.52	547.86
E6-06	577.99	3.78	574.21
F2M-06	599.06	39.60	559.46
F4M-06	602.05	50.20	551.85
F6-06	587.84	13.61	574.23
G1M-06	616.75	42.41	574.34
G6-06	609.09	33.17	575.92
H2M-06	621.42	61.35	560.07
H5-06	617.17	28.92	588.25
I1-06	625.15	71.92	553.23
J2M-06	608.94	53.50	555.44
J5M-06	606.22	59.04	547.18
J6-06	608.93	51.77	557.16
PMW-1U-06	597.92	50.02	547.90

TABLE 1

WATER LEVEL ELEVATION SUMMARY
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM
JUNE 3, 2013

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 7			
ABP-1-07	576.44	28.58	547.86
ABP-7-07	575.73	40.23	535.50
AFW-1M-07	571.41	Dry	-
AFW-2M-07	593.44	66.75	526.69
AGW-1M-07	592.91	34.88	558.03
B2M-07	589.52	44.61	544.91
C3-07	585.62	41.18	544.44
D1M-07	594.15	64.08	530.07
D2M-07	590.77	66.76	524.01
E6-07	577.91	23.30	554.61
F2M-07	598.91	80.67	518.24
F4M-07	601.91	70.31	531.60
F6-07	587.68	20.26	567.42
G1M-07	616.68	32.70	583.98
G6-07	609.06	25.93	583.13
H5-07	617.05	60.41	556.64
I1-07	625.14	69.10	556.04
J5M-07	606.07	48.78	557.29
J6-07	608.85	52.53	556.32
PMW-1M-07	598.50	65.81	532.69
Flow Zone 9			
ABP-1-09	575.49	40.62	534.87
ABP-7-09	575.67	40.16	535.51
AFW-1M-09	571.12	45.48	525.64
AFW-2M-09	593.32	72.08	521.24
AGW-1M-09	592.75	35.10	557.65
B2M-09	589.34	68.56	520.78
C3-09	585.00	43.19	541.81
D1M-09	594.02	76.20	517.82
D2M-09	590.66	72.89	517.77
E6-09	577.82	24.05	553.77
F2M-09	598.71	81.14	517.57
F4M-09	601.79	84.33	517.46
F6-09	587.53	9.82	577.71
G1M-09	616.58	36.62	579.96
G6-09	608.98	24.43	584.55
H2M-09	621.32	66.34	554.98
H5-09	616.93	61.43	555.50
I1-09	624.91	60.29	564.62
J2M-09	608.77	52.69	556.08
J5M-09	605.82	48.95	556.87
J6-09	608.76	39.31	569.45
PMW-1M-09	598.34	81.63	516.71

TABLE 1

WATER LEVEL ELEVATION SUMMARY
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM
JUNE 3, 2013

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 11			
AFW-1L-11	572.10	60.17	511.93
AFW-2L-11	593.43	96.63	496.80
AGW-1L-11	592.71	13.83	578.88
B2L-11	589.65	90.79	498.86
D1L-11	593.80	89.30	504.50
D2L-11	590.21	70.92	519.29
E6-11	577.72	44.41	533.31
F2L-11	598.94	40.24	558.70
F4L-11	602.22	21.89	580.33
F6-11	587.40	58.88	528.52
G1L-11	616.84	51.79	565.05
G6-11	608.89	40.84	568.05
H2L-11	620.73	57.99	562.74
H5-11	616.81	65.06	551.75
I1-11	624.75	75.65	549.10
J5L-11	607.20	56.16	551.04
J6-11	608.68	22.48	586.20
PMW-1L-11	598.84	88.01	510.83

Notes:

ft AMSL	Feet Above Mean Sea Level.
Dry	No water present at the time of measurement.
Surcharged	Well full of water to top of casing.
-	Not available.
1	Well obstructed, could not get measurement tape past 20.50 feet.

TABLE 2

LEACHATE TREATMENT SYSTEM DAILY EFFLUENT MONITORING DATA
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM

	Effluent		
Date	*Phenol (mg/L)*	*pH (su)*	*Flow (gal)*
04/01/13	-	6.9	159,000
04/02/13	-	6.9	169,000
04/03/13	0.010 U	6.9	135,000
04/04/13	-	6.9	61,000
04/05/13	-	6.9	57,000
04/08/13	-	6.9	137,000
04/09/13	-	6.8	109,000
04/10/13	0.010 U	6.9	134,000
04/11/13	-	6.9	133,000
04/12/13	-	6.9	347,000
04/15/13	-	6.9	347,000
04/16/13	-	6.9	122,000
04/17/13	0.010 U	6.9	129,000
04/18/13	-	6.9	294,000
04/19/13	-	7.0	81,000
04/22/13	-	6.9	371,000
04/23/13	-	6.9	111,000
04/24/13	0.019	6.9	118,000
04/25/13	-	6.9	142,000
04/26/13	-	7.0	121,000
04/29/13	-	7.0	125,000
04/30/13	-	7.0	136,000
05/01/13	0.010 U	7.0	131,000
05/02/13	-	7.1	108,000
05/03/13	-	7.0	52,000
05/06/13	-	7.0	136,000
05/07/13	-	7.1	128,000
05/08/13	0.010 U	7.0	102,000
05/09/13	-	7.1	98,000
05/13/13	-	7.1	145,000
05/14/13	-	7.0	130,000
05/15/13	0.010 U	7.0	112,000
05/16/13	-	7.0	68,000
05/17/13	-	6.8	58,000
05/20/13	-	7.1	106,000
05/21/13	-	7.0	112,000
05/22/13	0.0067 J	7.1	75,000
05/23/13	-	7.0	63,000
05/24/13	-	7.2	62,000
05/28/13	-	7.0	146,000
05/29/13	0.010 U	7.1	140,000
05/30/13	-	7.0	134,000
05/31/13	-	7.1	200,000
06/03/13	-	7.0	382,000
06/04/13	-	7.0	136,000
06/05/13	0.010 U	7.1	361,000
06/07/13	-	7.0	121,000
06/10/13	-	7.0	324,000
06/11/13	-	7.1	131,000
06/12/13	0.010 U	6.8	133,000
06/13/13	-	6.5	410,000
06/17/13	-	7.0	389,000
06/18/13	-	6.5	373,000
06/19/13	0.010 U	-	-
06/20/13	-	6.1	121000
06/21/13	-	6.3	71000
06/24/13	-	6.5	135000
06/25/13	-	6.7	133000
06/26/13	0.063 J	6.9	60000
06/27/13	-	7.3	215000
06/28/13	-	7.0	66000

Notes:

gal	Gallons.
mg/L	Milligram per liter.
su	Standard Unit.
U	Non-detect at associated value.
-	Not available.
J	Result is less than the reporting limit but greater than or equal to the method detection limit, and the concentration is an approximate value.

TABLE 3

ANALYTICAL RESULTS SUMMARY
WEEKLY SAMPLING - LEACHATE TREATMENT SYSTEM
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM

Effluent

Parameter	*Units*	*04/03/13*	*04/10/13*	*04/17/13*	*04/24/13*	*05/01/13*	*05/08/13*	*05/15/13*	*05/22/13*
Volatiles									
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	0.55 J	0.63 J	0.48 J	0.43 J	0.55 J	0.58 J	0.69 J	0.61 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	4.1	6.9	4.5	4.3	5.2	6.5	5.9	8.8
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
WEEKLY SAMPLING - LEACHATE TREATMENT SYSTEM
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM

Effluent

Parameter	*Units*	*05/29/13*	*06/05/13*	*06/12/13*	*06/19/13*	*06/26/13*
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	0.65 J	0.53 J	0.57 J	1.0 U	0.54 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	9.2	9.0	9.4	7.8	12
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes:

-	Not available/not applicable.
J	Estimated at associated value.
U	Non-detect at associated value.
µg/L	Microgram per liter.

TABLE 4

ANALYTICAL RESULTS SUMMARY
QUARTERLY SAMPLING - LEACHATE TREATMENT SYSTEM
SECOND QUARTER - 2013
HYDE PARK RRT PROGRAM

Effluent

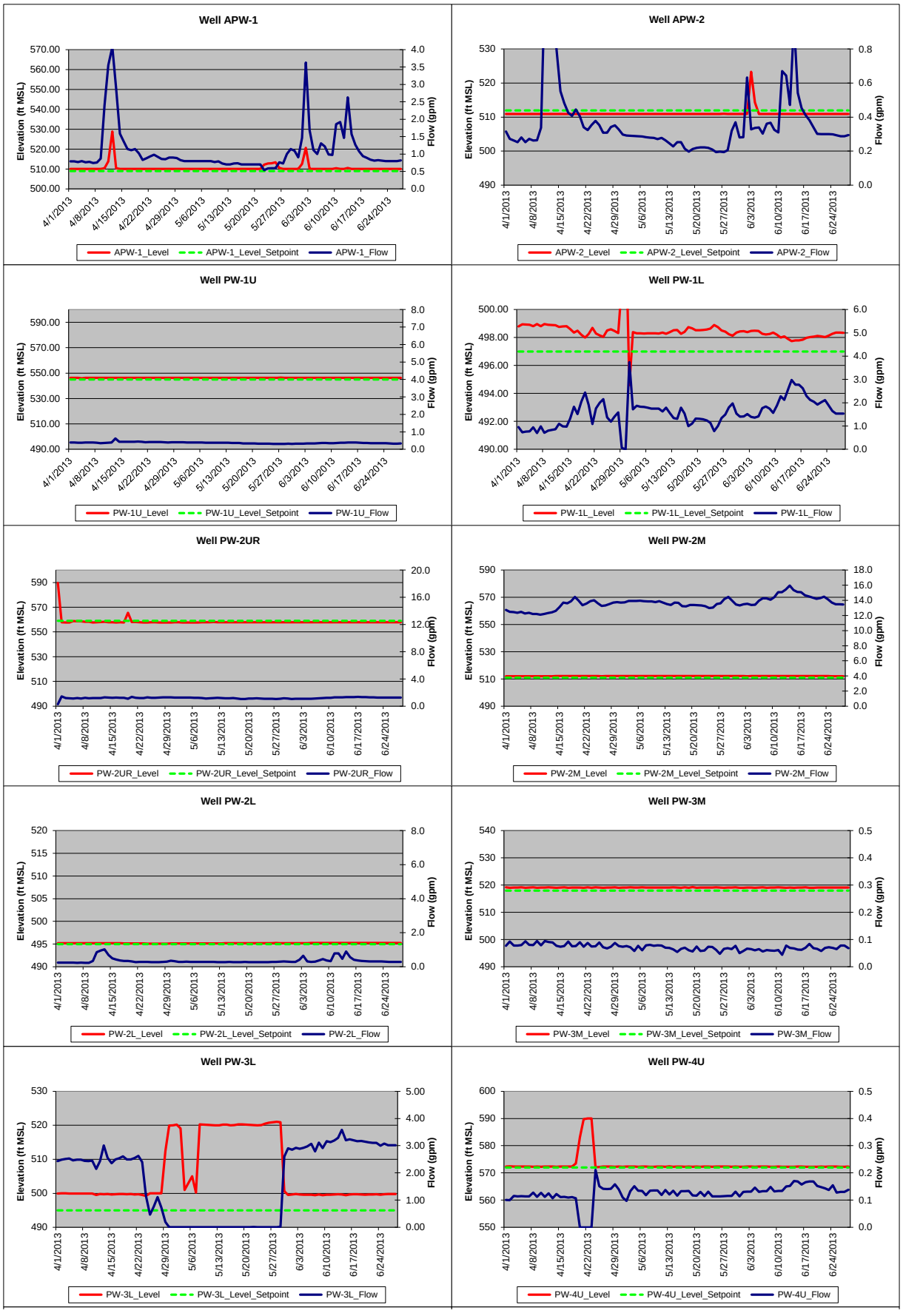
	Sample ID:	***HP31313 EFF***
	Sample Date:	***6/12/2013***
Parameter	***Units***	
Phosphorus, Total	mg/L	0.24
Vinyl chloride	µg/L	8.4

Notes:
mg/L Milligrams per liter.
µg/L Micrograms per liter.

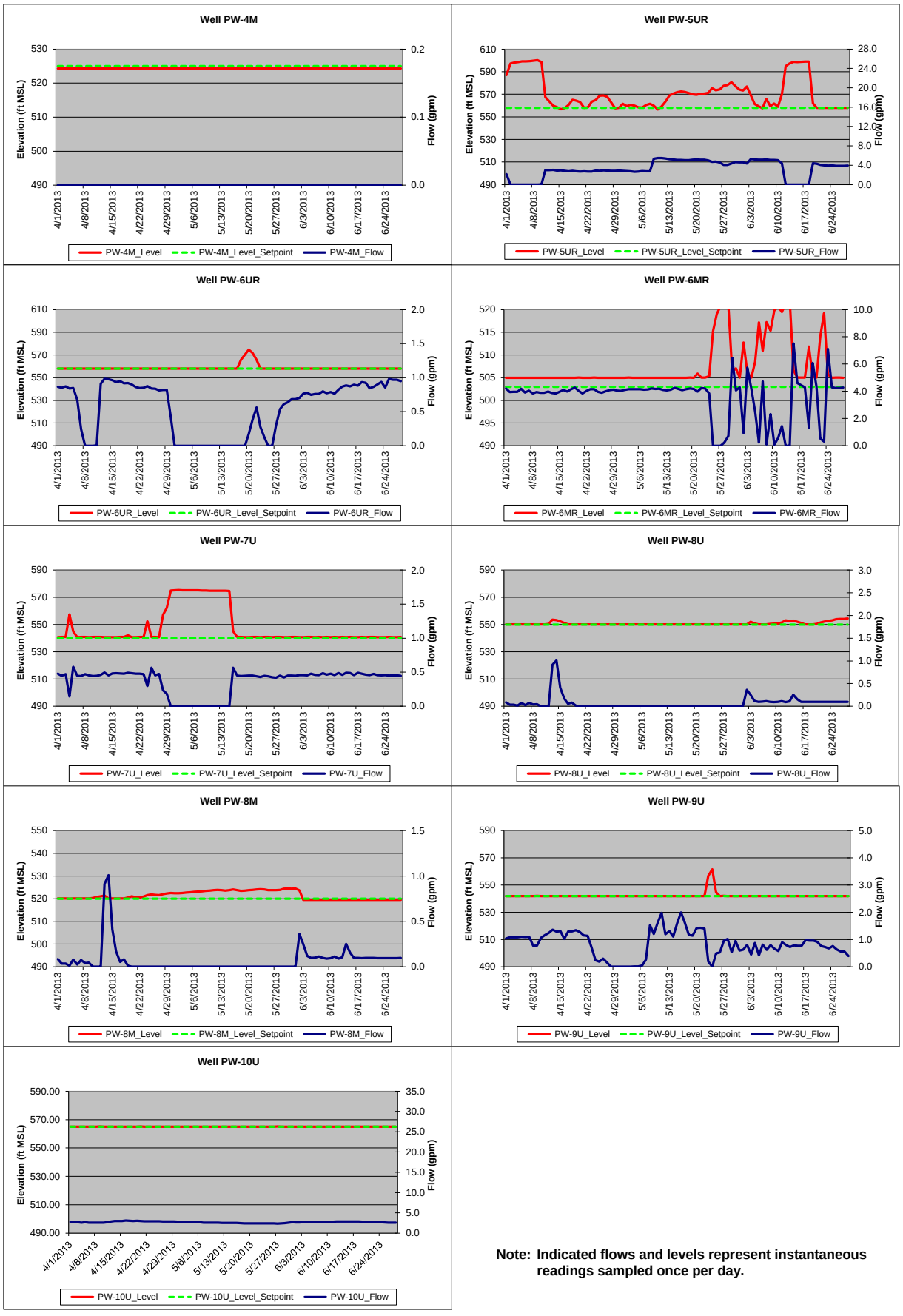
ATTACHMENT 1

PURGE WELL GRAPHS

Attachment 1
2nd Quarter 2013 - Pumping levels and Flows
Hyde Park



Attachment 1
2nd Quarter 2013 - Pumping levels and Flows
Hyde Park



Note: Indicated flows and levels represent instantaneous readings sampled once per day.