



# Glenn Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

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Joe Branch  
Site Manager  
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7601 Old Channel Trail  
Montague, MI 49437  
Fax (231) 894-4033

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July 31, 2015

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 2015  
Hyde Park Remedial Program  
Bedrock and Overburden Monitoring Programs**

In accordance with the July 2006 "Performance Monitoring Plan" (PMP), the following is the Quarterly Operations Report for the Hyde Park Remedial Program for the period April 1, 2015 through June 30, 2015. A total of 8.4 million gallons of aqueous phase liquid (APL) was collected, treated, and discharged in compliance with the Site's City of Niagara Falls Publicly Owned Treatment Works (POTW) Significant Industrial Users Wastewater Discharge Permit #49. No non-aqueous phase liquid (NAPL) was shipped for disposal this quarter. 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:

- Figures 1-9: Show the potentiometric surface for the bedrock flow zones and overburden
- Figure 10: Show continuously recorded water levels at flow zone 9 piezometer PMW-1M-09
- Table 1: Water level elevation summary
- Tables 2, 3, and 4: Daily, weekly, and quarterly treatment system effluent monitoring data
- Attachment A: Purge well performance graphs indicating daily level and flow information

The pumping wells are operational and functioning as designed. The pumps are operated to maintain a water level between a typical range of 2.5 feet above (pump on) and 2.5 feet below (pump off) a specific setpoint in accordance with the setpoint range defined in the Operation & Maintenance Manual. The following minor operational and setpoint issues were investigated or resolved during the Second Quarter 2015:

- A false high alarm due to a faulty level transmitter in Decanter 3 caused all site wells to be shut down on April 4. The transmitter was repaired immediately and has functioned properly since that time.
- A false high alarm in Storage Tank 4 caused all wells to shut down on June 6. The alarm was due to a communications signal error, and the system worked upon reset.

- 2 -

- The water level in APW-1 and APW-2 exceeded setpoint on April 11 and April 22 due to large rain events. In both cases, the water levels returned to setpoint within three days.
- The water level in APW-2 exceeded setpoint on June 29 due to a large rain event on June 28. The water level was still decreasing at the end of the quarter, but had not yet decreased to within setpoint range.
- On May 18 and June 2, the pump in PW-3M shut down after tripping an electrical breaker. On May 18 the pump worked upon reset, but on June 3 it was discovered that the variable speed drive had failed. The drive was bypassed on June 3, allowing the pump to work while repairs were completed on the variable speed drive. The water level returned to within setpoint range on June 4.
- On June 9, a run-feedback communications fault caused the pump in PW-6UR to shut down, likely due to interference from an electrical storm. The pump functioned properly upon reset.
- The pump in PW-8U shut down on April 14, May 8, and May 11 due to run-feedback communications faults. The pump worked upon reset.
- The water level in PW-8U exceeded setpoint on June 2, due to a large rain event. The water level returned to within setpoint range on June 5.
- The pump in PW-9U failed at the end of the last quarter (March 31) and was removed for repairs. The pump was replaced on April 8, but failed again on April 14. The pump was again pulled and repaired, and water levels returned to within setpoint range by April 16. The pump has functioned properly since that time.

An electronic copy of this report is included on the attached CD. If you have any questions, please feel free to contact me at (231) 670-6809 or by email at [joseph\\_branch@oxy.com](mailto:joseph_branch@oxy.com).

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.

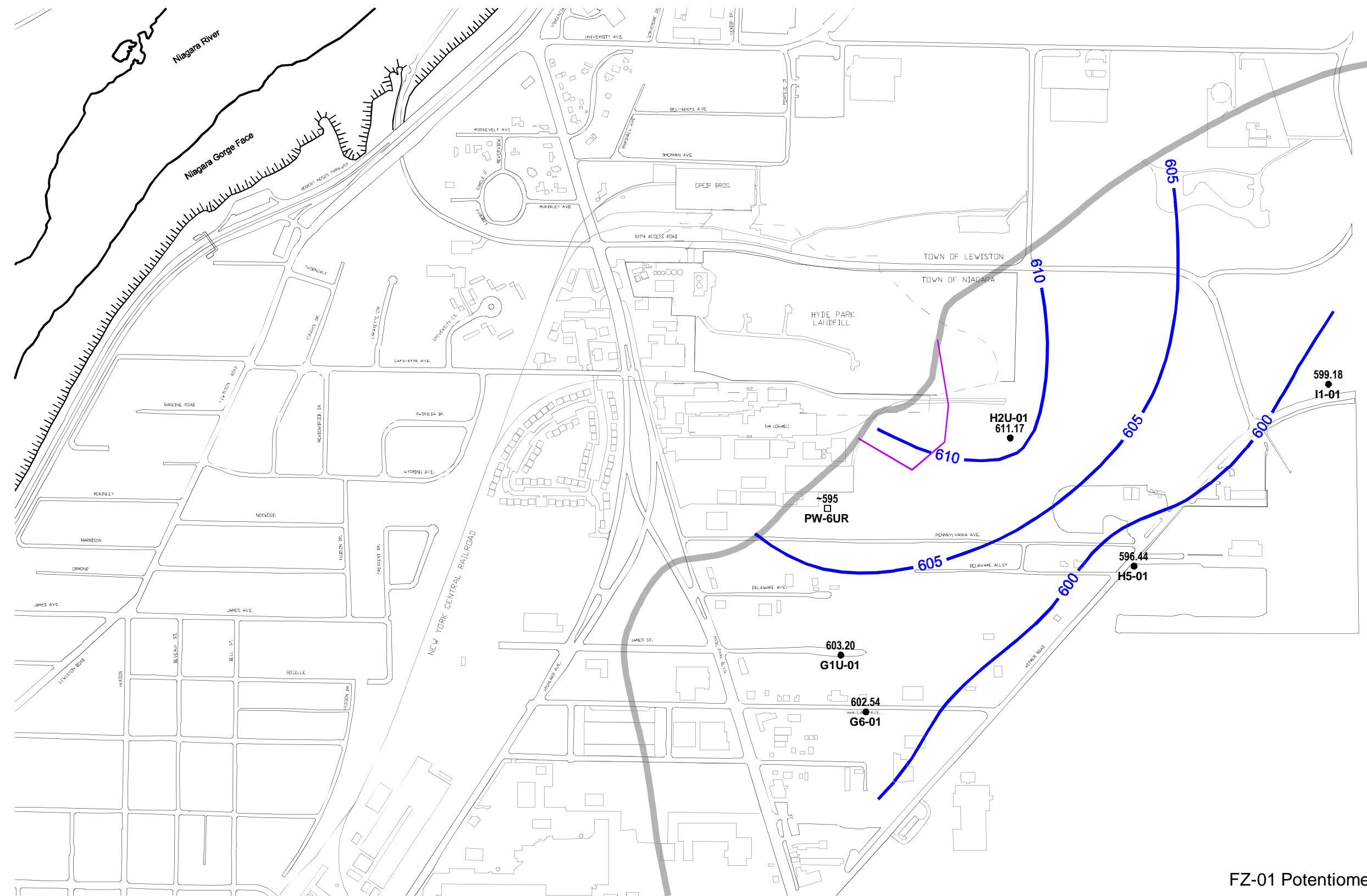


Joe Branch  
Site Manager  
231-670-6809 Cell

JB/eew/20  
Encl.

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

\*Includes one copy on CD



### 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 1  
FZ-01 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



Glenn Springs Holdings, Inc.

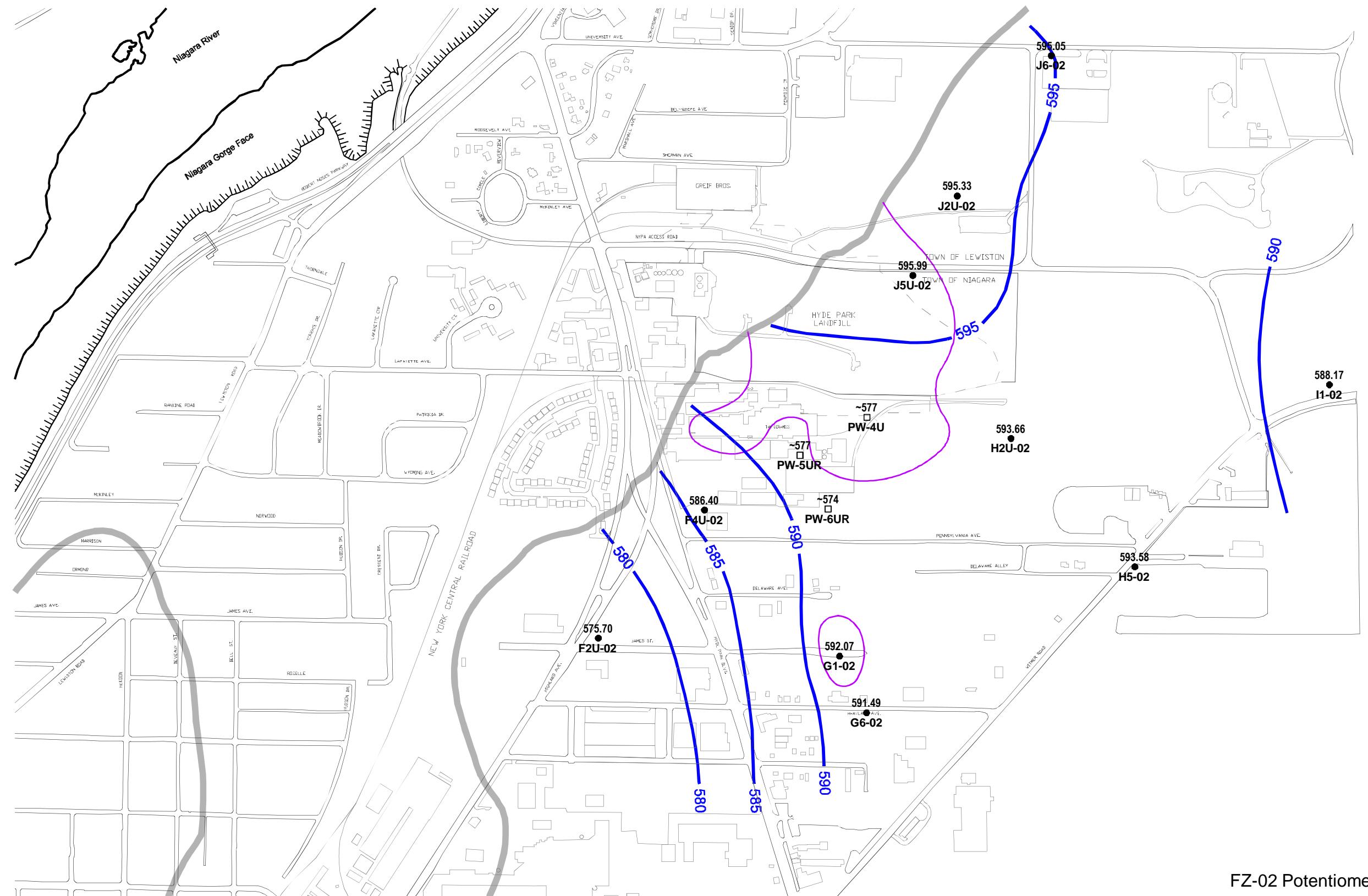
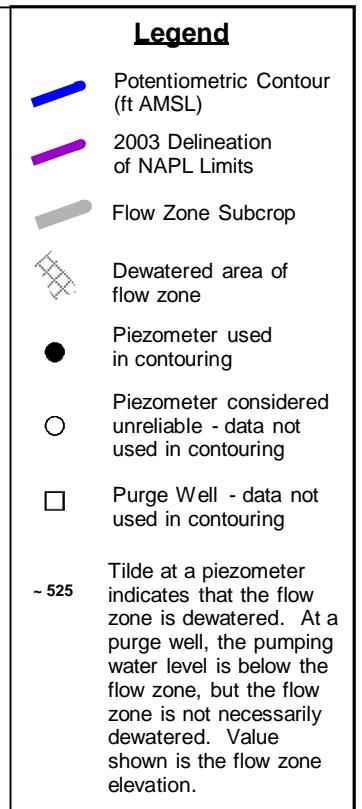


figure 2  
FZ-02 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



Glenn Springs Holdings, Inc.



0 200 400 600

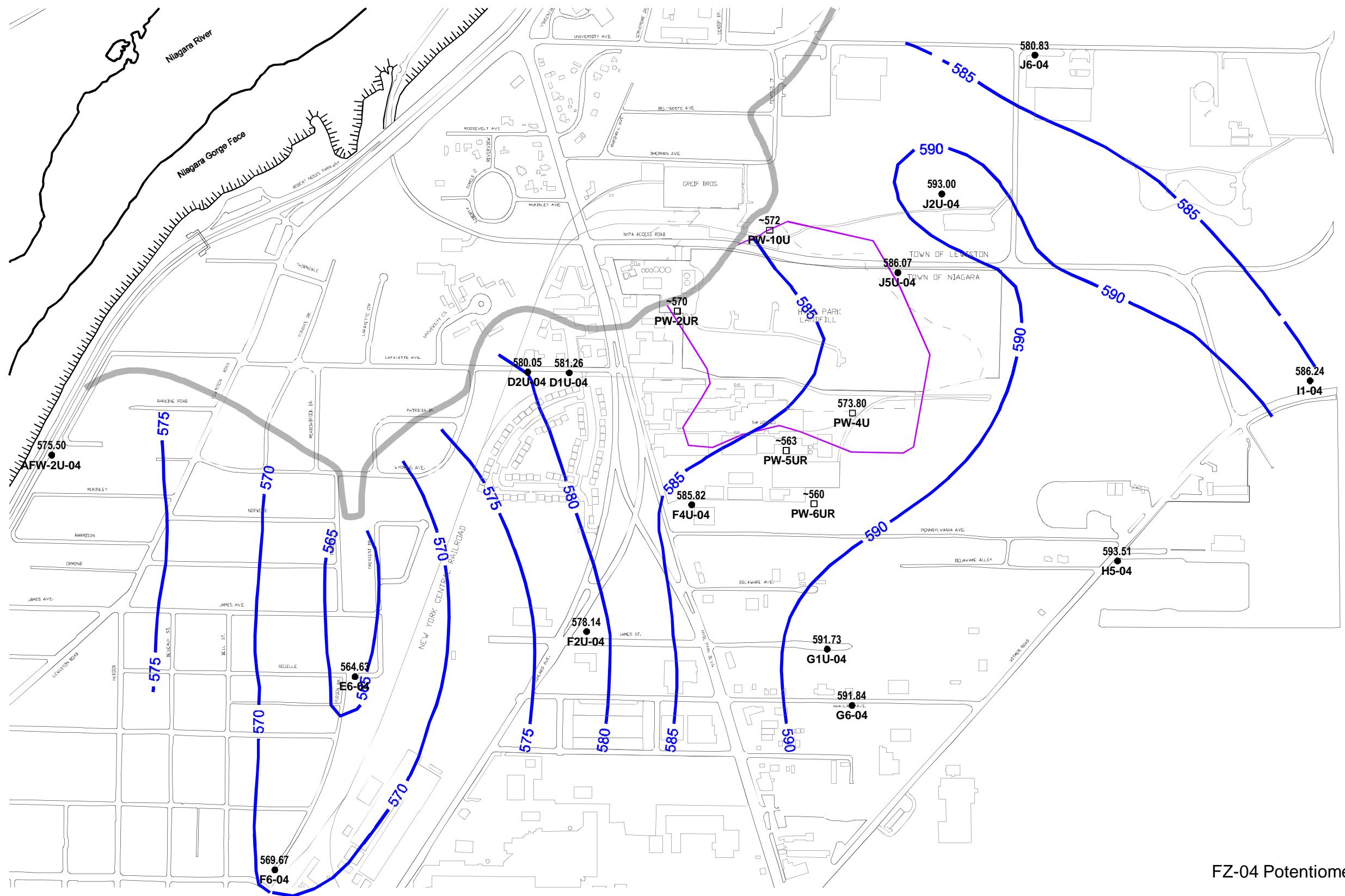
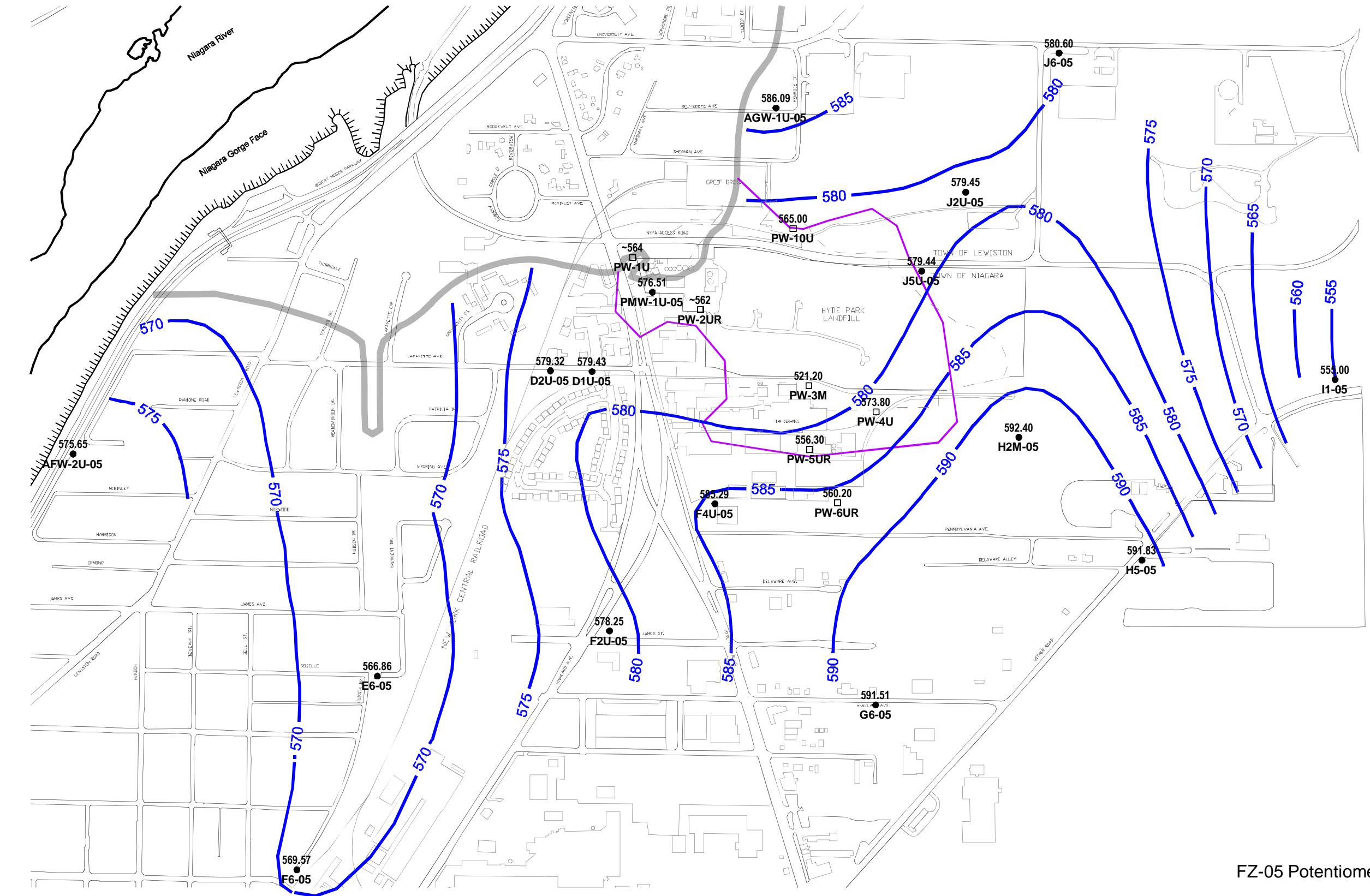


figure 3  
FZ-04 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



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.



0 200 400 600

figure 4  
FZ-05 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



Glenn Springs Holdings, Inc.

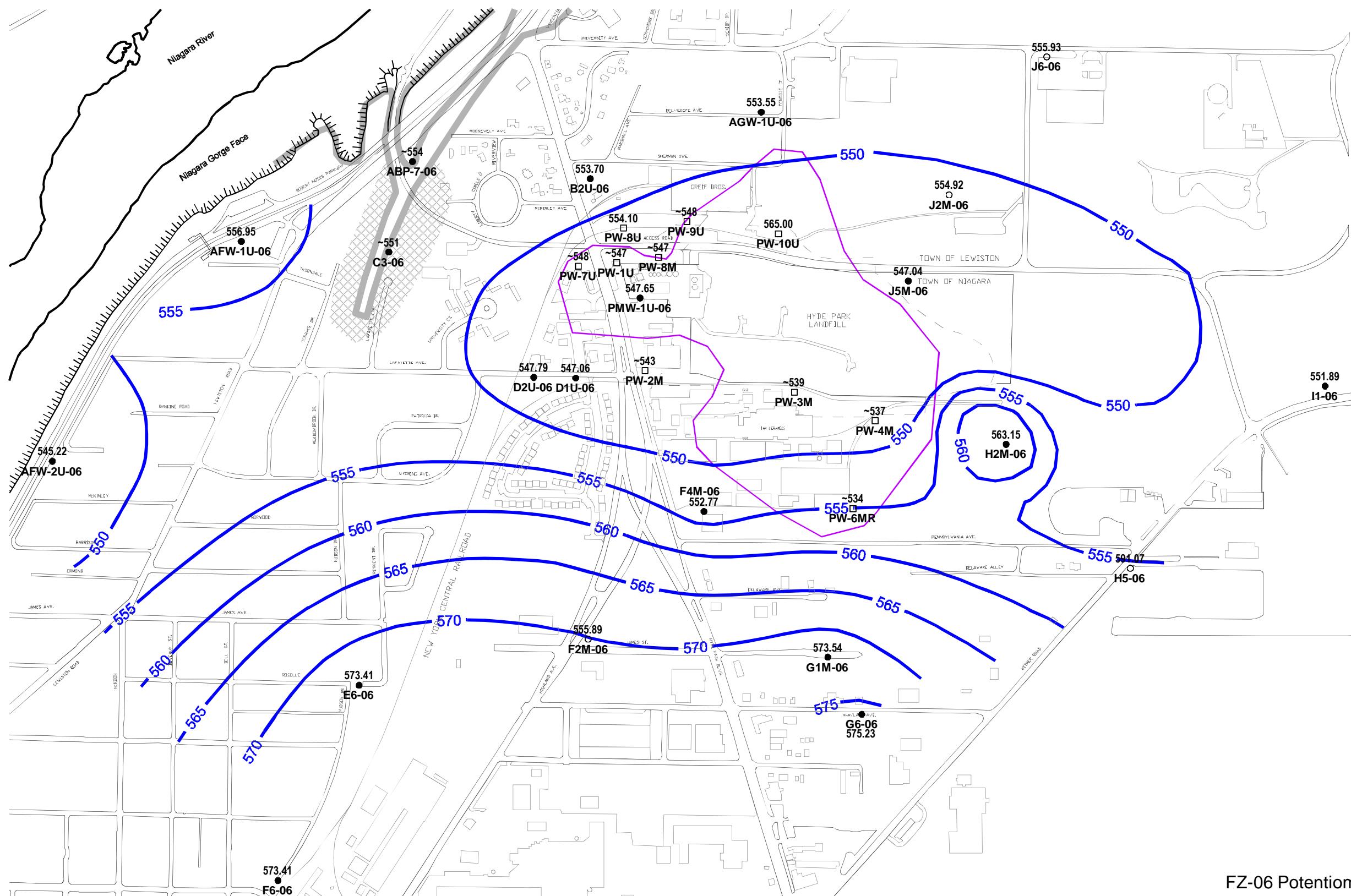
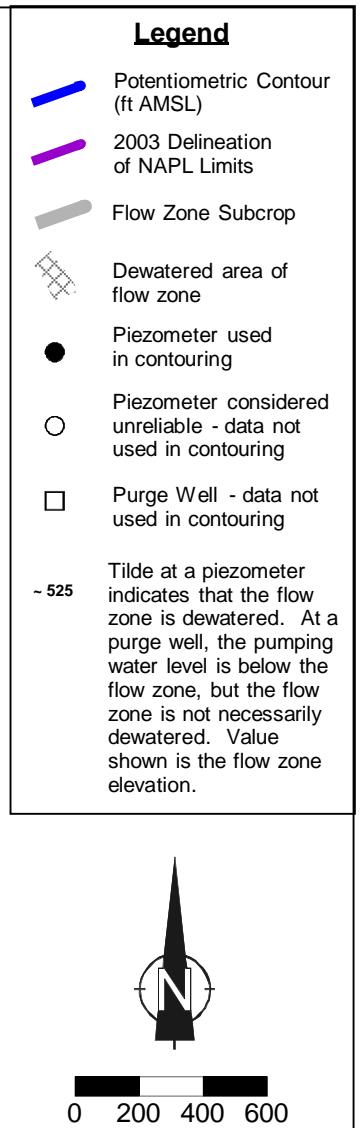


figure 5  
FZ-06 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



Glenn Springs Holdings, Inc.

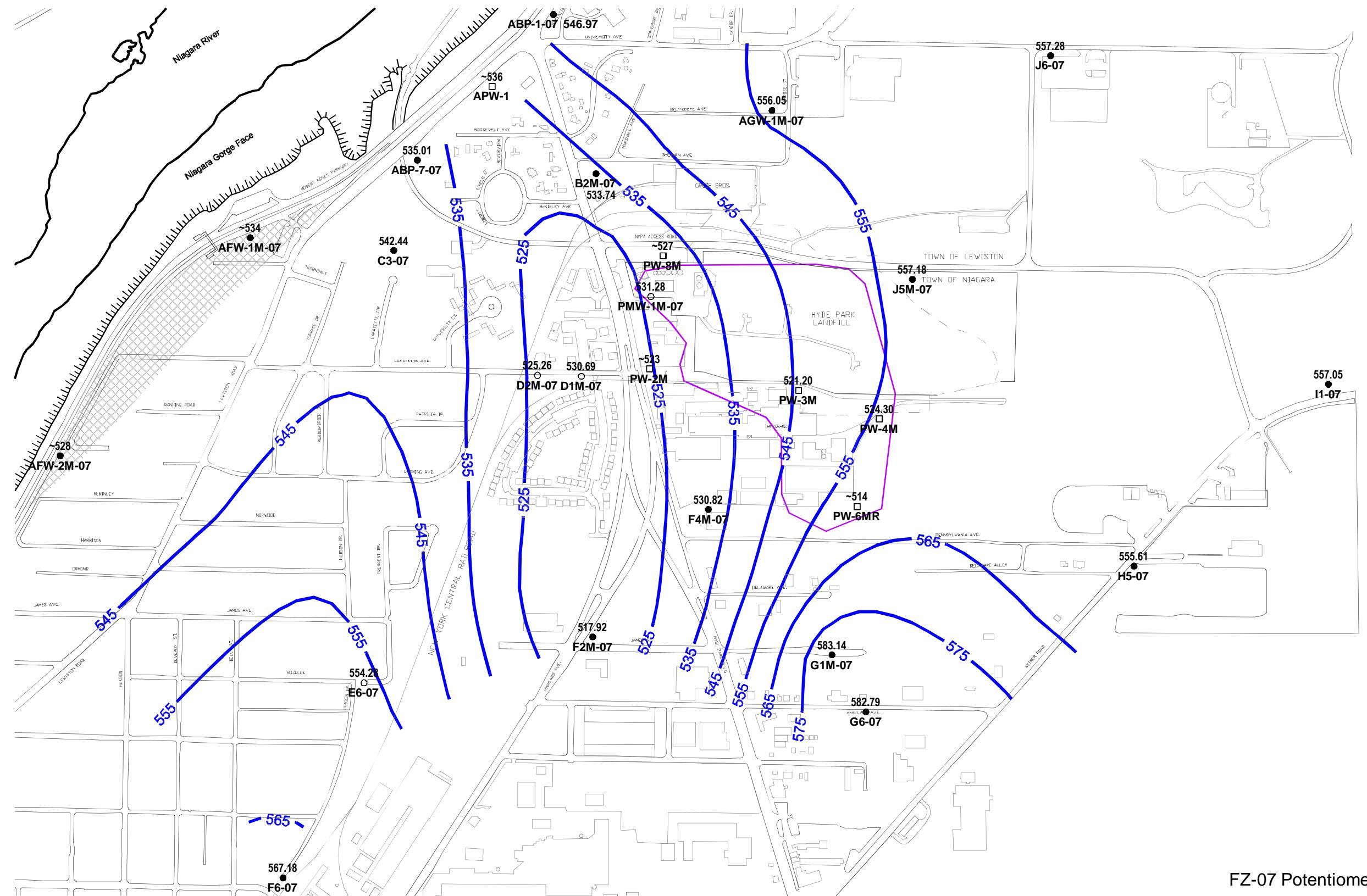
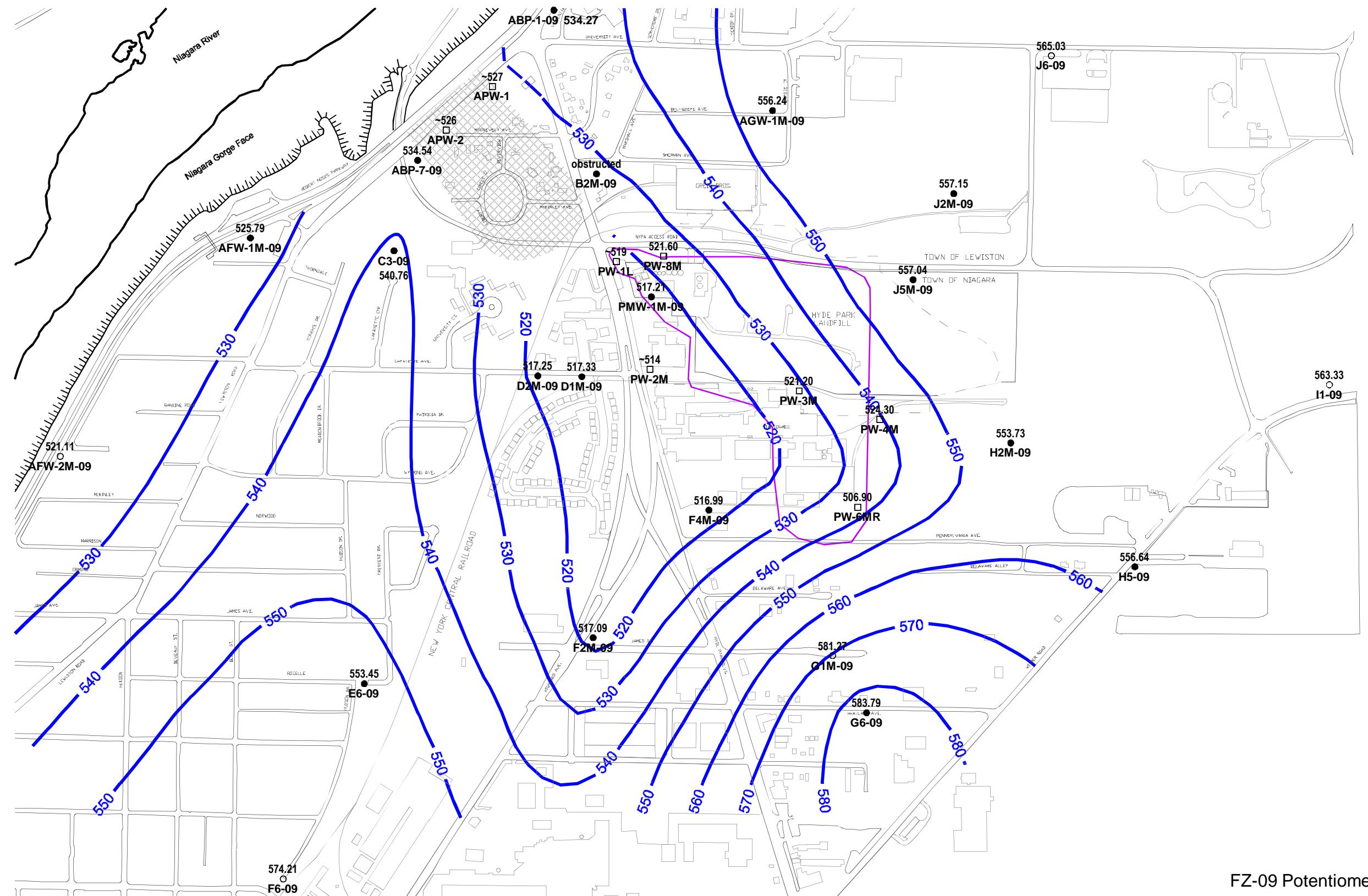


figure 6  
FZ-07 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



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.



0 200 400 600

figure 7  
FZ-09 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



Glenn Springs Holdings, Inc.

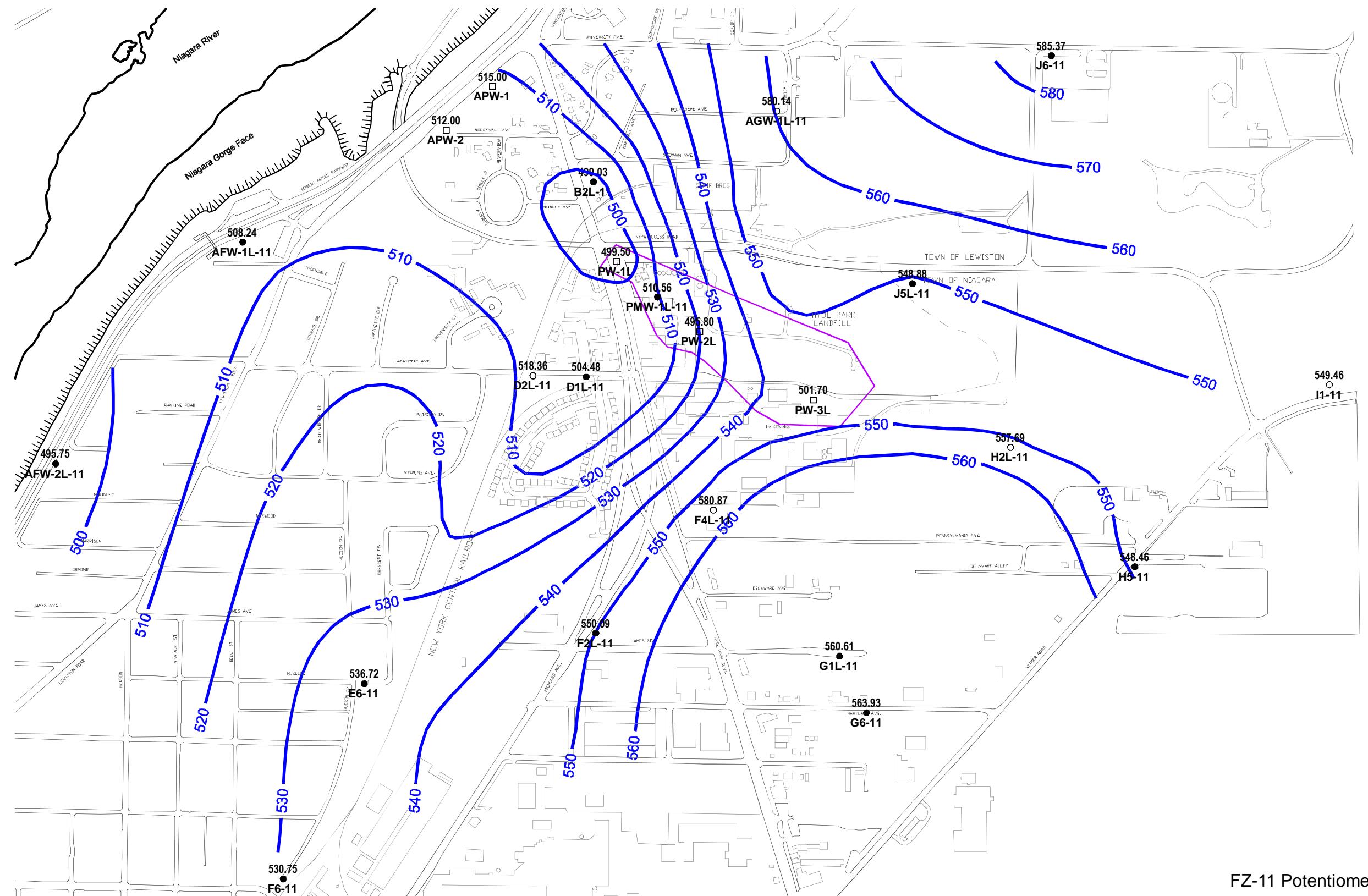


figure 8  
FZ-11 Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
Niagara Falls, New York



Glenn Springs Holdings, Inc.

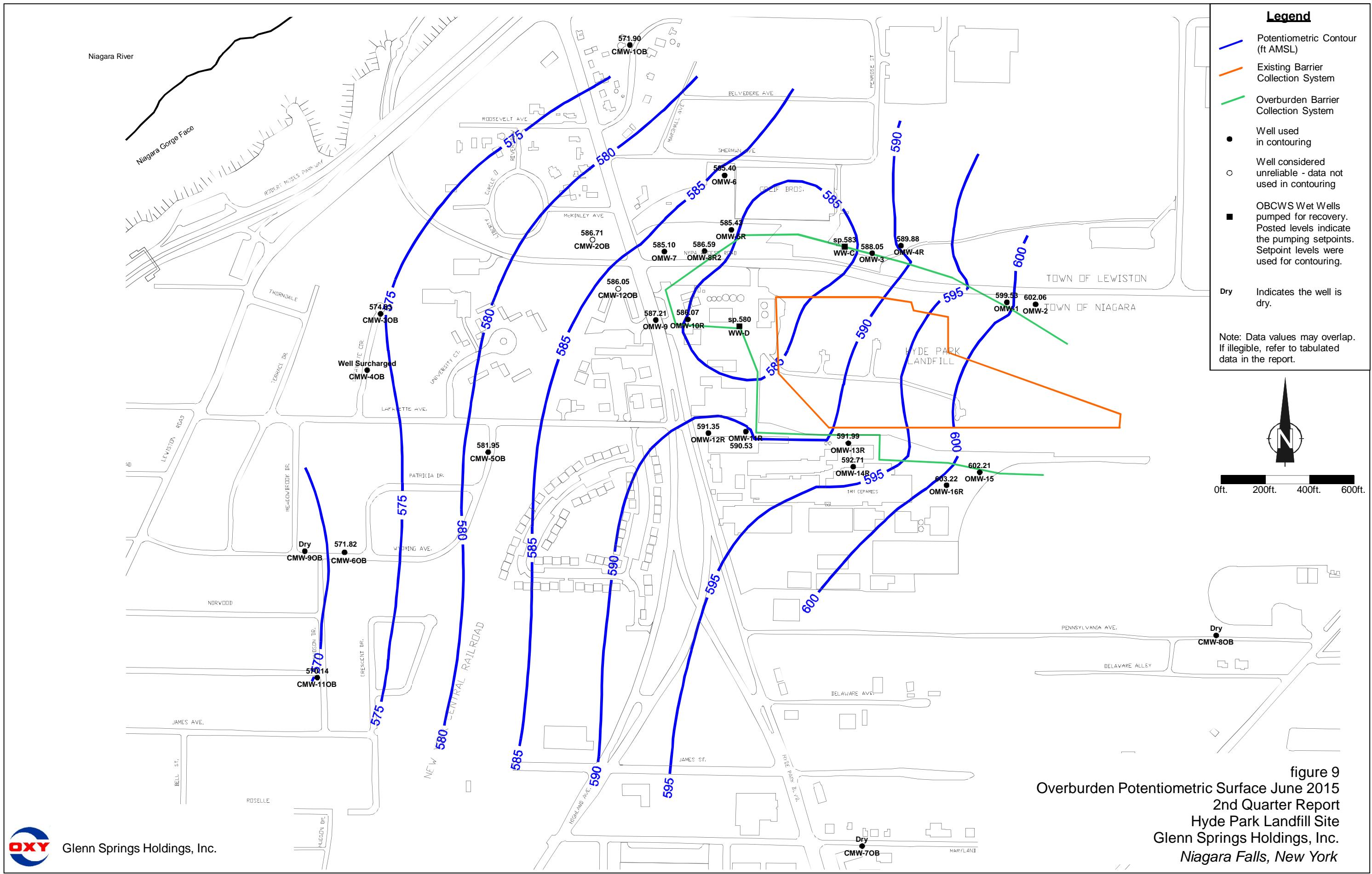


figure 9

Overburden Potentiometric Surface June 2015  
2nd Quarter Report  
Hyde Park Landfill Site  
Glenn Springs Holdings, Inc.  
*Niagara Falls, New York*

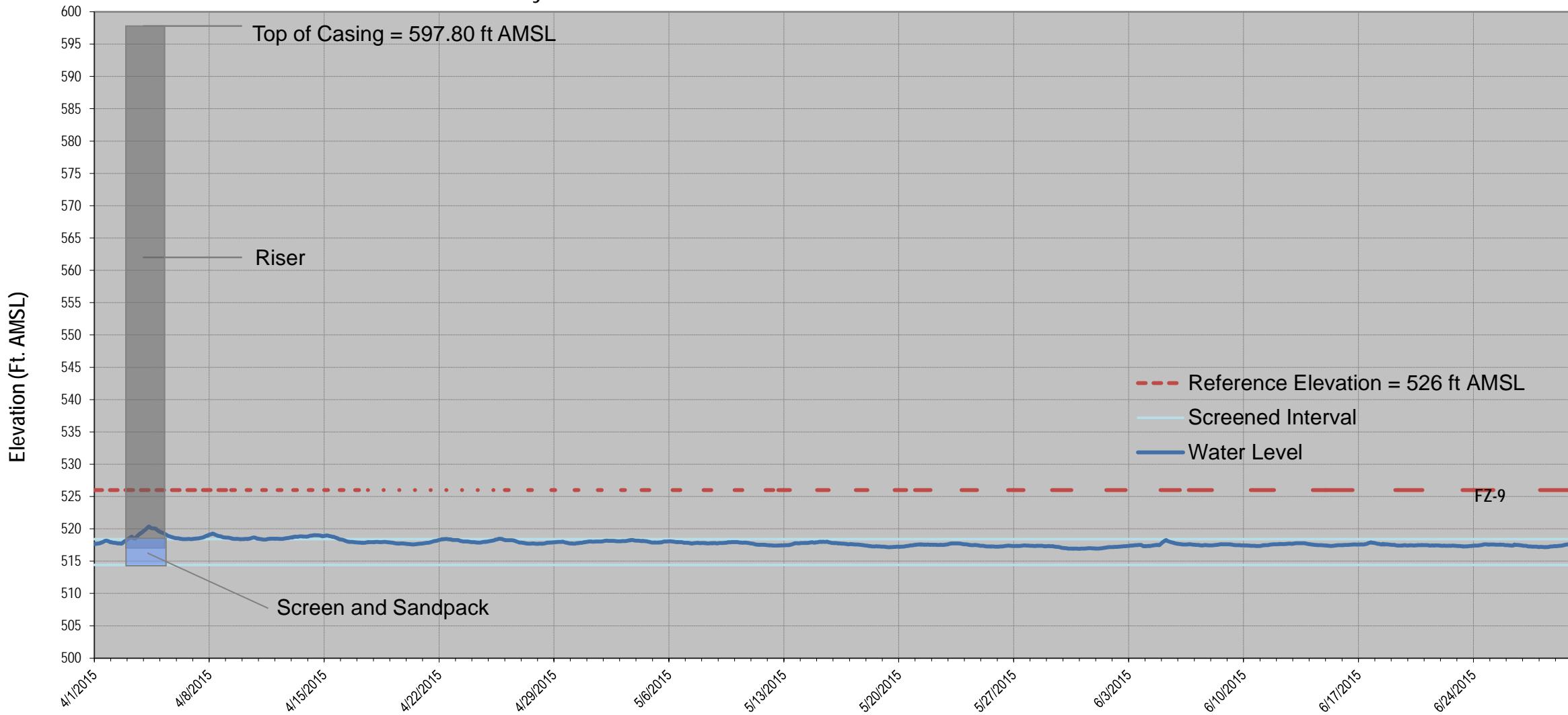


## Glenn Springs Holdings, Inc.



**Glenn Springs Holdings, Inc.**  
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## PMW-1M-09 2nd Quarter 2015 - Hourly Water Level Elevation



**figure 10**

**Table 1**

**Water Level Elevation Summary  
Second Quarter - 2015  
Hyde Park RRT Program**

<b>Well</b>	<b>Reference Elevation (ft AMSL)</b>	<b>Depth to Water (ft)</b>	<b>Water Level Elevation (ft AMSL)</b>
<b>Overburden</b>			
CMW-2OB	590.79	4.08	586.71
CMW-3OB	582.13	7.30	574.83
CMW-4OB	574.28	Surcharged	-
CMW-5OB	583.43	1.48	581.95
CMW-6OB	571.89	Surcharged	-
CMW-7OB	611.00	Dry	-
CMW-8OB	616.11	Dry	-
CMW-9OB	571.76	Dry	-
CMW-1OB	576.80	4.90	571.90
CMW-11OB	572.85	2.71	570.14
CMW-12OB	594.74	8.69	586.05
OMW-1	605.28	5.75	599.53
OMW-2	605.99	3.93	602.06
OMW-3	598.63	10.58	588.05
OMW-4R	601.17	11.29	589.88
OMW-5R	591.31	5.88	585.43
OMW-6	587.62	2.22	585.40
OMW-7	592.74	7.64	585.10
OMW-8R2	594.67	8.08	586.59
OMW-9	595.27	8.06	587.21
OMW-10R	595.13	9.06	586.07
OMW-11R	597.52	6.99	590.53
OMW-12R	597.20	5.85	591.35
OMW-13R	601.50	9.51	591.99
OMW-14R	599.64	6.93	592.71
OMW-15	607.48	5.27	602.21
OMW-16R	607.62	4.40	603.22
SC-2	625.61	30.71	594.90
SC-3	638.72	41.02	597.70
SC-4	639.35	30.75	608.60
SC-5	634.07	28.37	605.70
SC-6	631.15	52.95	578.20
<b>Shallow Bedrock</b>			
CMW-1SH	576.11	12.36	563.75
CMW-2SH	590.51	19.39	571.12
CMW-3SH	581.91	33.48	548.43
CMW-4SH	574.16	7.50	566.66
CMW-5SH	583.36	7.31	576.05
CMW-6SH	572.05	9.71	562.34
CMW-7SH	610.58	11.22	599.36
CMW-8SH	615.95	7.49	608.46
CMW-9SH	571.96	11.84	560.12
CMW-11SH	573.21	8.05	565.16
CMW-12SH	597.02	27.88	569.14

**Table 1**

**Water Level Elevation Summary  
Second Quarter - 2015  
Hyde Park RRT Program**

<b>Well</b>	<b>Reference Elevation (ft AMSL)</b>	<b>Depth to Water (ft)</b>	<b>Water Level Elevation (ft AMSL)</b>
<b>Flow Zone 1</b>			
G1U-01	617.08	13.88	603.20
G6-01	609.24	6.70	602.54
H2U-01	620.92	9.75	611.17
H5-01	617.61	21.17	596.44
I1-01	625.58	26.40	599.18
<b>Flow Zone 2</b>			
F2U-02	599.89	24.19	575.70
F4U-02	602.32	15.92	586.40
G1-02	616.86	24.79	592.07
G6-02	608.65	17.16	591.49
H2U-02	620.88	27.22	593.66
H5-02	617.47	23.89	593.58
I1-02	625.47	37.30	588.17
J2U-02	609.66	14.33	595.33
J5U-02	606.21	10.22	595.99
J6-02	609.23	14.18	595.05
<b>Flow Zone 4</b>			
AFW-2U-04	593.48	17.98	575.50
D1U-04	593.77	12.51	581.26
D2U-04	590.65	10.60	580.05
E6-04	578.23	13.60	564.63
F2U-04	599.76	21.62	578.14
F4U-04	602.19	16.37	585.82
F6-04	588.06	18.39	569.67
G1U-04	616.96	25.23	591.73
G6-04	609.15	17.31	591.84
H5-04	617.40	23.89	593.51
I1-04	625.30	39.06	586.24
J2U-04	609.42	16.42	593.00
J5U-04	606.05	19.98	586.07
J6-04	609.12	28.29	580.83
<b>Flow Zone 5</b>			
AFW-2U-05	593.33	17.68	575.65
AGW-1U-05	591.80	5.71	586.09
D1U-05	593.51	14.08	579.43
D2U-05	590.56	11.24	579.32
E6-05	578.04	11.18	566.86
F2U-05	599.64	21.39	578.25
F4U-05	602.06	16.77	585.29
F6-05	587.85	18.28	569.57
G6-05	609.13	17.62	591.51
H2M-05	621.59	29.19	592.40
H5-05	617.31	25.48	591.83
I1-05	625.25	70.25	555.00
J2U-05	609.30	29.85	579.45
J5U-05	605.87	26.43	579.44
J6-05	609.02	28.42	580.60
PMW-1U-05	598.00	21.49	576.51

Table 1

**Water Level Elevation Summary  
Second Quarter - 2015  
Hyde Park RRT Program**

<b>Well</b>	<b>Reference Elevation (ft AMSL)</b>	<b>Depth to Water (ft)</b>	<b>Water Level Elevation (ft AMSL)</b>
<b>Flow Zone 6</b>			
ABP-7-06	575.78	Dry	-
AFW-1U-06	571.83	14.88	556.95
AFW-2U-06	593.22	48.00	545.22
AGW-1U-06	591.66	38.11	553.55
B2U-06	589.29	35.59	553.70
C3-06	585.78	Dry	-
D1U-06	593.25	46.19	547.06
D2U-06	590.38	42.59	547.79
E6-06	577.99	4.58	573.41
F2M-06	599.06	43.17	555.89
F4M-06	602.05	49.28	552.77
F6-06	587.84	14.43	573.41
G1M-06	616.75	43.21	573.54
G6-06	609.09	33.86	575.23
H2M-06	621.42	58.27	563.15
H5-06	617.17	26.10	591.07
I1-06	625.15	73.26	551.89
J2M-06	608.94	54.02	554.92
J5M-06	606.22	59.18	547.04
J6-06	608.93	53.00	555.93
PMW-1U-06	597.92	50.27	547.65
<b>Flow Zone 7</b>			
ABP-1-07	576.44	29.47	546.97
ABP-7-07	575.73	40.72	535.01
AFW-1M-07	571.41	Dry	-
AFW-2M-07	593.44	66.81	526.63
AGW-1M-07	592.91	36.86	556.05
B2M-07	589.52	55.78	533.74
C3-07	585.62	43.18	542.44
D1M-07	594.15	63.46	530.69
D2M-07	590.77	65.51	525.26
E6-07	577.91	23.63	554.28
F2M-07	598.91	80.99	517.92
F4M-07	601.91	71.09	530.82
F6-07	587.68	20.50	567.18
G1M-07	616.68	33.54	583.14
G6-07	609.06	26.27	582.79
H5-07	617.05	61.44	555.61
I1-07	625.14	68.09	557.05
J5M-07	606.07	48.89	557.18
J6-07	608.85	51.57	557.28
PMW-1M-07	598.50	67.22	531.28

**Table 1**

**Water Level Elevation Summary  
Second Quarter - 2015  
Hyde Park RRT Program**

<b>Well</b>	<b>Reference Elevation (ft AMSL)</b>	<b>Depth to Water (ft)</b>	<b>Water Level Elevation (ft AMSL)</b>
<b>Flow Zone 9</b>			
ABP-1-09	575.49	41.22	534.27
ABP-7-09	575.67	41.13	534.54
AFW-1M-09	571.12	45.33	525.79
AFW-2M-09	593.32	72.21	521.11
AGW-1M-09	592.75	36.51	556.24
B2M-09	589.34	-	-
C3-09	585.00	44.24	540.76
D1M-09	594.02	76.69	517.33
D2M-09	590.66	73.41	517.25
E6-09	577.82	24.37	553.45
F2M-09	598.71	81.62	517.09
F4M-09	601.79	84.80	516.99
F6-09	587.53	13.32	574.21
G1M-09	616.58	35.31	581.27
G6-09	608.98	25.19	583.79
H2M-09	621.32	67.59	553.73
H5-09	616.93	60.29	556.64
I1-09	624.91	61.58	563.33
J2M-09	608.77	51.62	557.15
J5M-09	605.82	48.78	557.04
J6-09	608.76	43.73	565.03
PMW-1M-09	598.34	81.13	517.21
<b>Flow Zone 11</b>			
AFW-1L-11	572.10	63.86	508.24
AFW-2L-11	593.43	97.68	495.75
AGW-1L-11	592.71	12.57	580.14
B2L-11	589.65	90.62	499.03
D1L-11	593.80	89.32	504.48
D2L-11	590.21	71.85	518.36
E6-11	577.72	41.00	536.72
F2L-11	598.94	48.85	550.09
F4L-11	602.22	21.35	580.87
F6-11	587.40	56.65	530.75
G1L-11	616.84	56.23	560.61
G6-11	608.89	44.96	563.93
H2L-11	620.73	63.04	557.69
H5-11	616.81	68.35	548.46
I1-11	624.75	75.29	549.46
J5L-11	607.20	58.32	548.88
J6-11	608.68	23.31	585.37
PMW-1L-11	598.84	88.28	510.56

**Table 1**

**Water Level Elevation Summary  
Second Quarter - 2015  
Hyde Park RRT Program**

<b>Well</b>	<b>Reference Elevation (ft AMSL)</b>	<b>Depth to Water (ft)</b>	<b>Water Level Elevation (ft AMSL)</b>
<b>Purge Wells</b>			
APW-1	564.98	49.98	515.00
APW-2	569.89	57.89	512.00
PW-1L	593.16	93.66	499.50
PW-1U	593.16	47.16	546.00
PW-2L	597.29	101.49	495.80
PW-2M	596.61	84.51	512.10
PW-2UR	594.75	35.05	559.70
PW-3L	599.05	97.35	501.70
PW-3M	597.79	76.59	521.20
PW-4M	606.93	82.63	524.30
PW-4U	604.85	31.05	573.80
PW-5UR	601.31	45.01	556.30
PW-6UMR	609.31	102.41	506.90
PW-6UR	608.47	48.27	560.20
PW-7U	592.47	50.87	541.60
PW-8M	592.67	71.07	521.60
PW-8U	589.27	35.17	554.10
PW-9U	587.47	48.17	539.30
PW-10U	593.54	28.54	565.00

**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/not applicable

**Table 2**

**Leachate Treatment System Daily Effluent Monitoring Data**  
**Second Quarter - 2015**  
**Hyde Park RRT Program**

<b>Date</b>	<b>Effluent</b>			<b>Comments</b>
	<b>Phenol (mg/L)</b>	<b>pH (su)</b>	<b>Flow (gal)</b>	
04/01/15	0.010 U	7.0	71,000	
04/02/15	-	7.0	103,000	
04/03/15	-	-	-	
04/04/15	-	-	-	
04/05/15	-	-	-	
04/06/15	-	7.0	465,000	
04/07/15	-	7.0	129,000	
04/08/15	-	7.0	115,000	
04/09/15	0.010 U	7.0	339,000	
04/10/15	-	7.0	65,000	
04/11/15	-	-	-	
04/12/15	-	7.0	362,000	
04/13/15	-	7.0	110,000	
04/14/15	-	7.1	124,000	
04/15/15	0.010 U	7.1	294,000	
04/16/15	-	7.1	53,000	
04/17/15	-	7.1	93,000	
04/18/15	-	-	-	
04/19/15	-	-	-	
04/20/15	-	7.0	403,000	
04/21/15	-	7.0	134,000	
04/22/15	0.020	7.0	166,000	
04/23/15	-	7.0	123,000	
04/24/15	-	7.0	115,000	
04/25/15	-	-	-	
04/26/15	-	-	-	
04/27/15	-	7.0	462,000	
04/28/15	-	-	-	
04/29/15	0.011	7.0	101,000	
04/30/15	-	7.0	86,000	

**Table 2**

**Leachate Treatment System Daily Effluent Monitoring Data**  
**Second Quarter - 2015**  
**Hyde Park RRT Program**

<b>Date</b>	<b>Effluent</b>			<b>Comments</b>
	<b>Phenol (mg/L)</b>	<b>pH (su)</b>	<b>Flow (gal)</b>	
05/01/15	-	7.0	39,000	
05/02/15	-	-	-	
05/03/15	-	-	-	
05/04/15	-	-	-	
05/05/15	-	7.0	142,000	
05/06/15	0.020 U	7.0	131,000	
05/07/15	-	7.0	143,000	
05/08/15	-	7.0	96,000	
05/09/15	-	-	-	
05/10/15	-	-	-	
05/11/15	-	-	-	
05/12/15	0.026	7.0	137,000	
05/13/15	-	7.1	132,000	
05/14/15	-	7.0	68,000	
05/15/15	-	-	-	
05/16/15	-	-	-	
05/17/15	-	-	-	
05/18/15	-	7.0	114,000	
05/19/15	-	7.0	167,000	
05/20/15	0.029	7.0	124,000	
05/21/15	-	7.0	73,000	
05/22/15	-	-	-	
05/23/15	-	-	-	
05/24/15	-	-	-	
05/25/15	-	-	-	
05/26/15	-	7.0	130,000	
05/27/15	0.010 U	7.0	117,000	
05/28/15	-	7.0	126,000	
05/29/15	-	-	-	
05/30/15	-	-	-	
05/31/15	-	-	-	

**Table 2**

**Leachate Treatment System Daily Effluent Monitoring Data**  
**Second Quarter - 2015**  
**Hyde Park RRT Program**

<b>Date</b>	<b>Effluent</b>			<b>Comments</b>
	<b>Phenol (mg/L)</b>	<b>pH (su)</b>	<b>Flow (gal)</b>	
06/01/15	-	7.0	128,000	
06/02/15	-	7.1	134,000	
06/03/15	0.016	7.0	150,000	
06/04/15	-	7.0	124,000	
06/05/15	-	7.0	62,000	
06/06/15	-	-	-	
06/07/15	-	-	-	
06/08/15	-	7.0	126,000	
06/09/15	-	7.0	131,000	
06/10/15	0.0093 J	7.0	132,000	
06/11/15	-	7.0	129,000	
06/12/15	-	7.0	74,000	
06/13/15	-	-	-	
06/14/15	-	-	-	
06/15/15	-	7.0	144,000	
06/16/15	-	7.0	144,000	
06/17/15	0.017	7.0	115,000	
06/18/15	-	7.0	113,000	
06/19/15	-	7.0	84,000	
06/20/15	-	-	-	
06/21/15	-	-	-	
06/22/15	-	7.0	121,000	
06/23/15	-	7.0	142,000	
06/24/15	0.017 UJ	7.0	119,000	
06/25/15	-	7.0	60,000	
06/26/15	-	7.0	96,000	
06/27/15	-	-	-	
06/28/15	-	-	-	
06/29/15	-	7.0	324,000	
06/30/15	-	7.0	123,000	
<b>TOTAL</b>			<b>8,427,000</b>	

**Notes:**

- mg/L Milligram per liter
- su Standard unit
- gal Gallons
- Not available
- U Non-detect at associated value
- J Estimated concentration
- UJ Non-detect, with associated reporting limit estimated

Table 3

**Analytical Results Summary**  
**Weekly Sampling - Leachate Treatment System**  
**Second Quarter - 2015**  
**Hyde Park RRT Program**

**Effluent**

Parameter	Units	04/01/15	04/09/15	04/15/15	04/22/15	04/29/15	05/06/15	05/12/15	05/20/15
<b>Volatiles</b>									
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,1-Dichloroethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,1-Dichloroethene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,2-Dichloroethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,2-Dichloropropane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
2-Chlorotoluene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
3-Chlorotoluene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
4-Chlorotoluene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Benzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Bromodichloromethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Bromoform	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Bromomethane (Methyl Bromide)	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Carbon disulfide	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Carbon tetrachloride	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Chlorobenzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Chloroethane	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Chloromethane (Methyl Chloride)	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Ethylbenzene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Methylene chloride	µg/L	1.0 U	1.0 UJ	0.89 J	1.0 U				
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Styrene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Tetrachloroethene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Toluene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Trichloroethene	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Vinyl acetate	µg/L	1.0 U	1.0 UJ	1.0 U	1.0 U				
Vinyl chloride	µg/L	21	25	22	51	44	55	84	89
Xylenes (total)	µg/L	3.0 U	3.0 UJ	3.0 U	3.0 U				

Table 3

**Analytical Results Summary**  
**Weekly Sampling - Leachate Treatment System**  
**Second Quarter - 2015**  
**Hyde Park RRT Program**

**Effluent**

Parameter	Units	05/27/15	06/03/2015	06/10/2015	06/17/2015	06/24/2015
<b>Volatiles</b>						
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	0.23 J	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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
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	83	76	90	130	140
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

## Notes:

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 - 2015**  
**Hyde Park RRT Program**

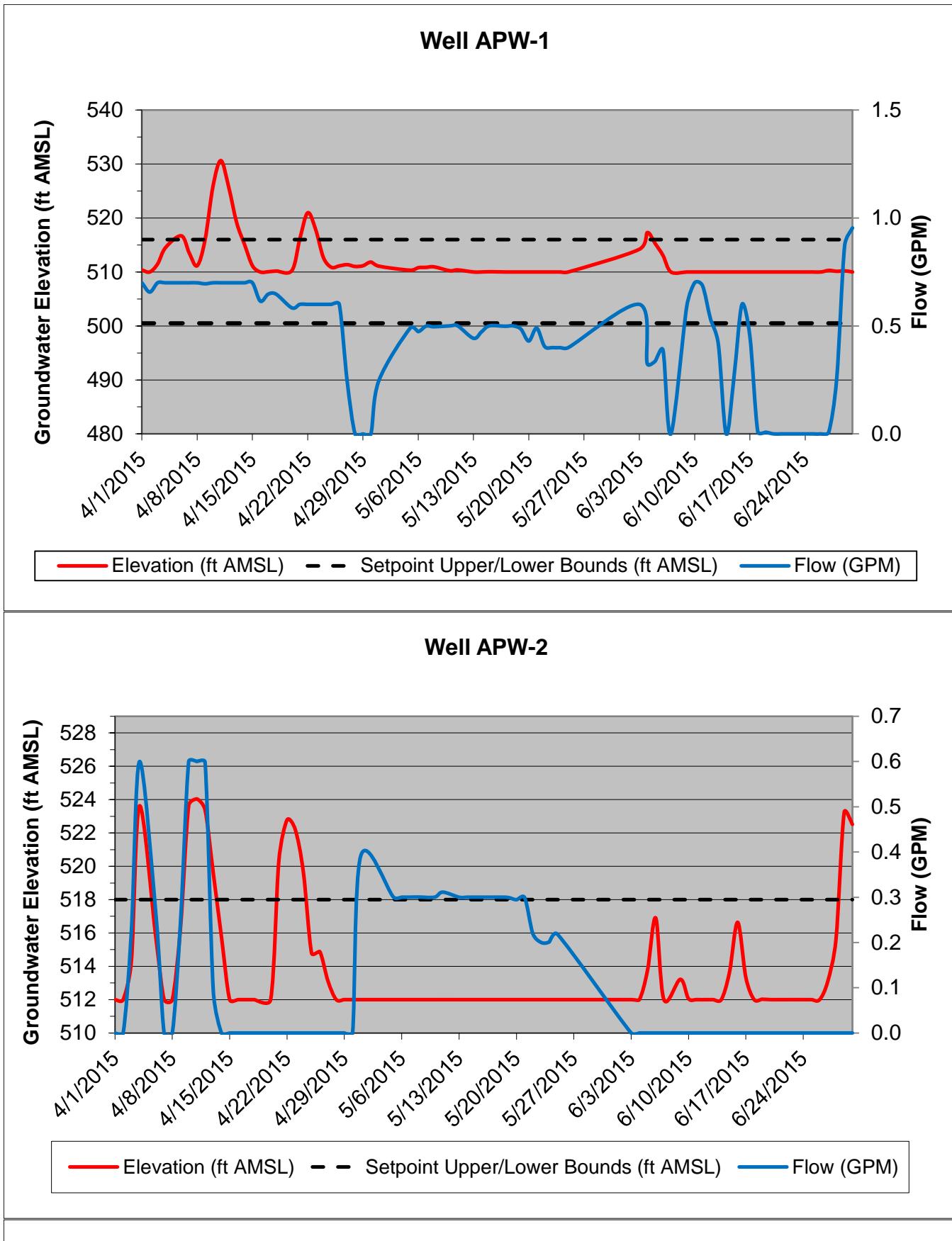
<b>Sample Location:</b>	<b>EFFLUENT</b>	<b>EFFLUENT</b>
<b>Sample ID:</b>	<b>HP32415 EFF ABCD</b>	<b>HP32515 EFF (effluent)</b>
<b>Sample Date:</b>	<b>06/16/2015</b>	<b>06/16/2015</b>
<b>Parameters</b>		<b>Units</b>
<b>Volatile Organic Compounds</b>		
Vinyl chloride	µg/L	110
		--
<b>General Chemistry</b>		
Phosphorus	mg/L	--
		0.27

Notes:

µg/L Microgram per liter  
 mg/L Milligram per liter

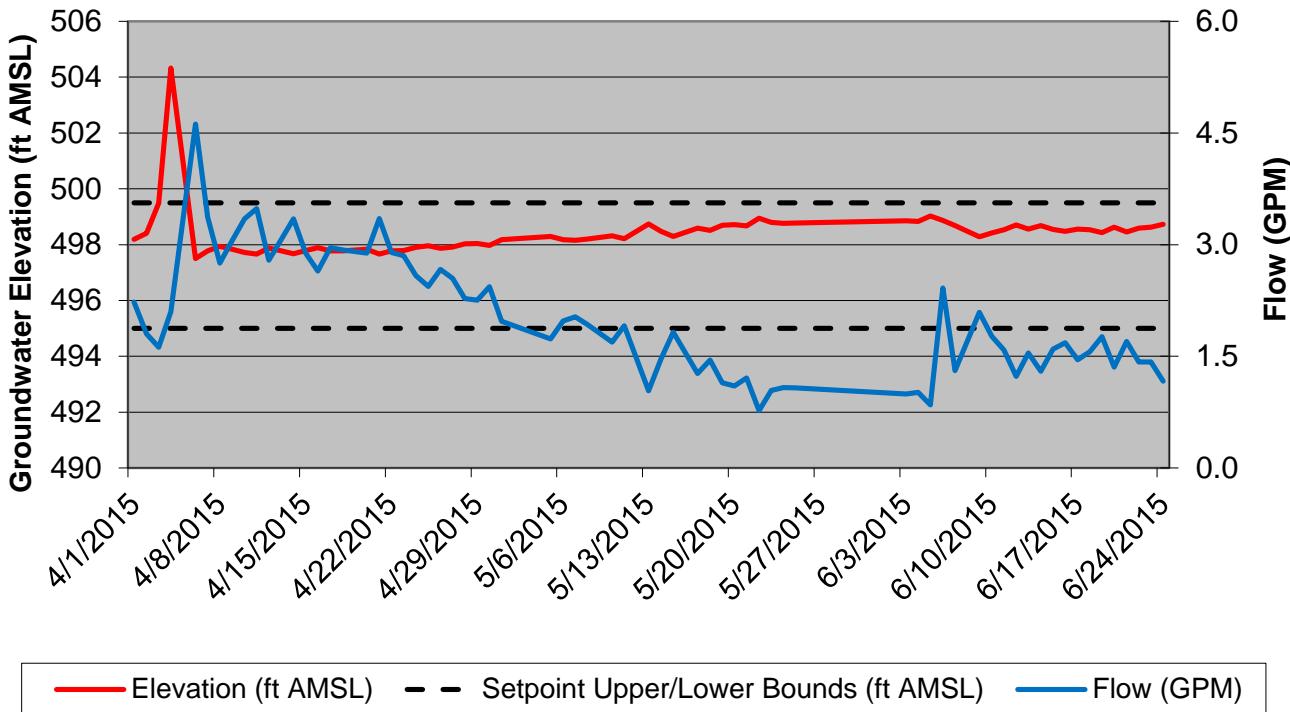
## **Attachment A**

SECOND QUARTER 2015 - PUMPING WELL PERFORMANCE GRAPHS  
HYDE PARK

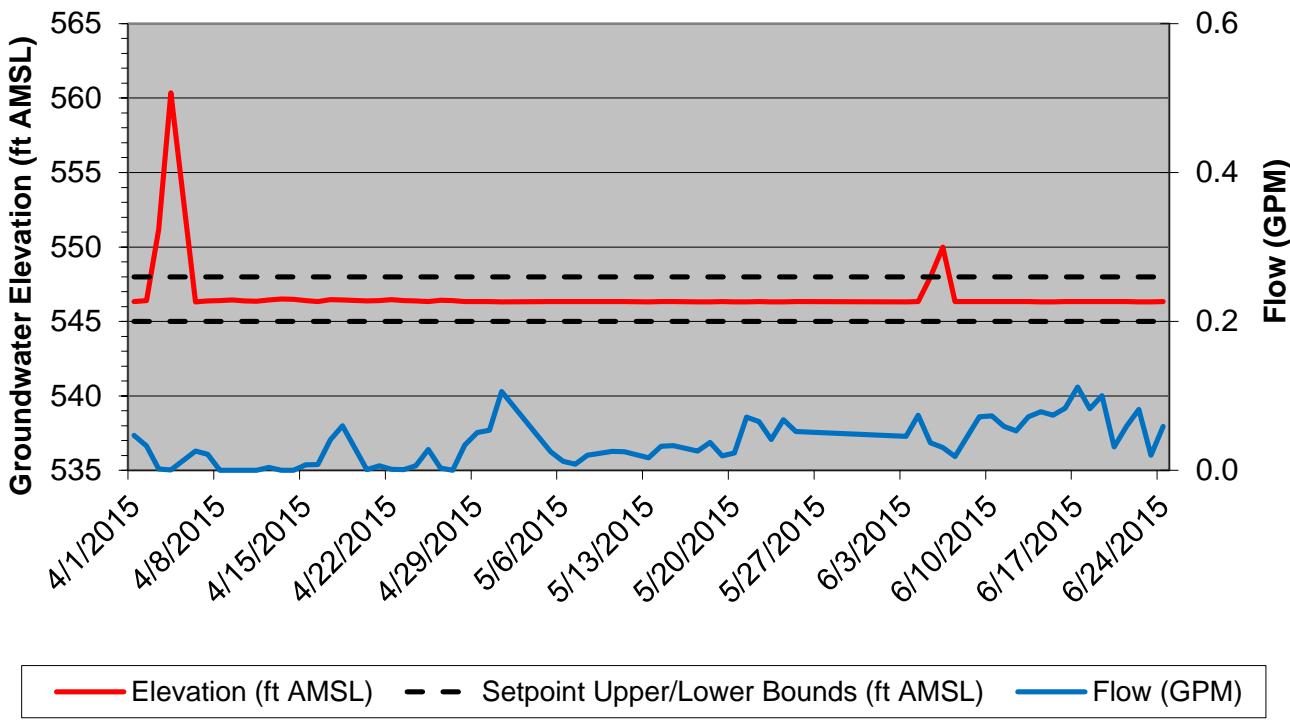


SECOND QUARTER 2015 - PUMPING WELL PERFORMANCE GRAPHS  
HYDE PARK

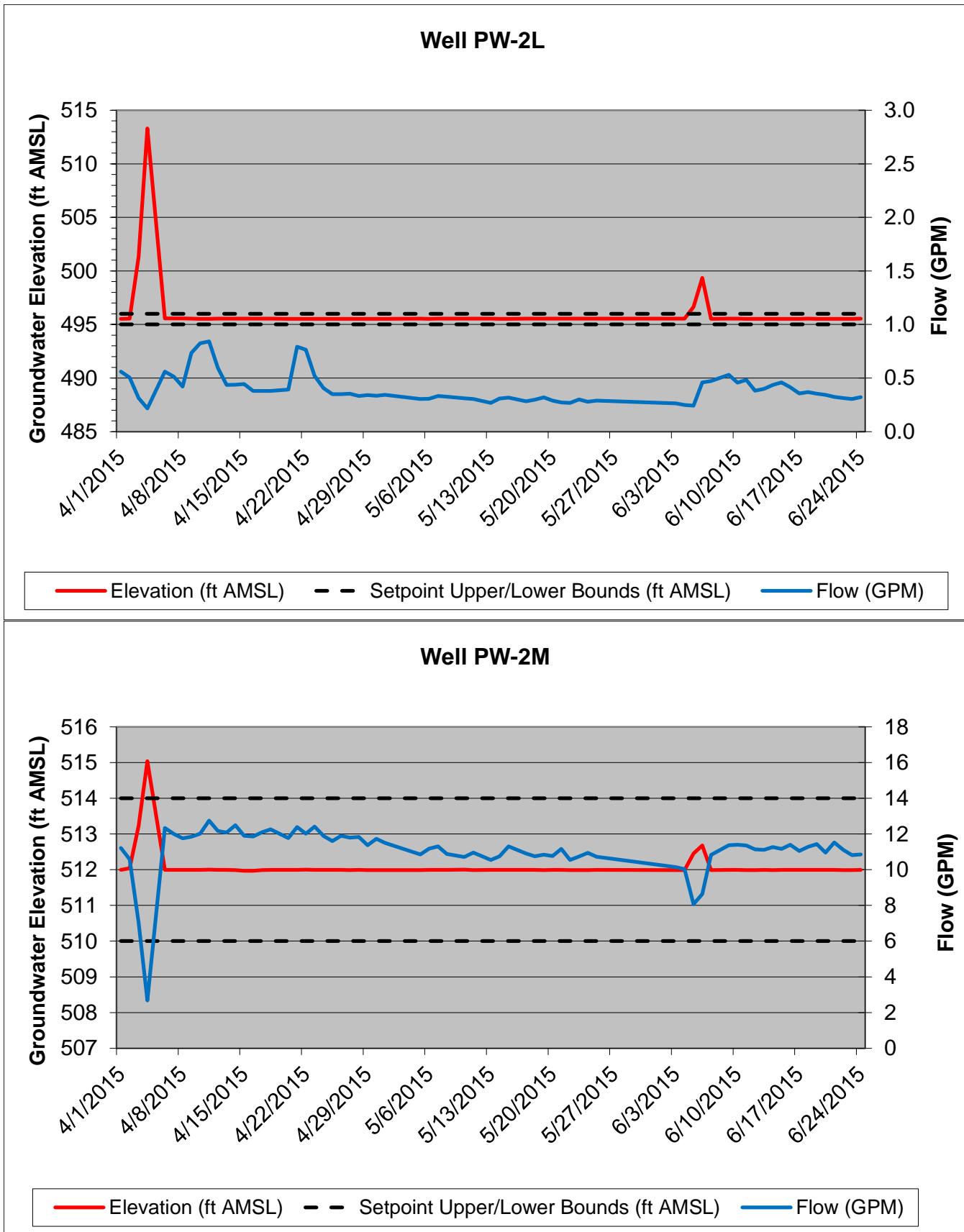
Well PW-1L



Well PW-1U

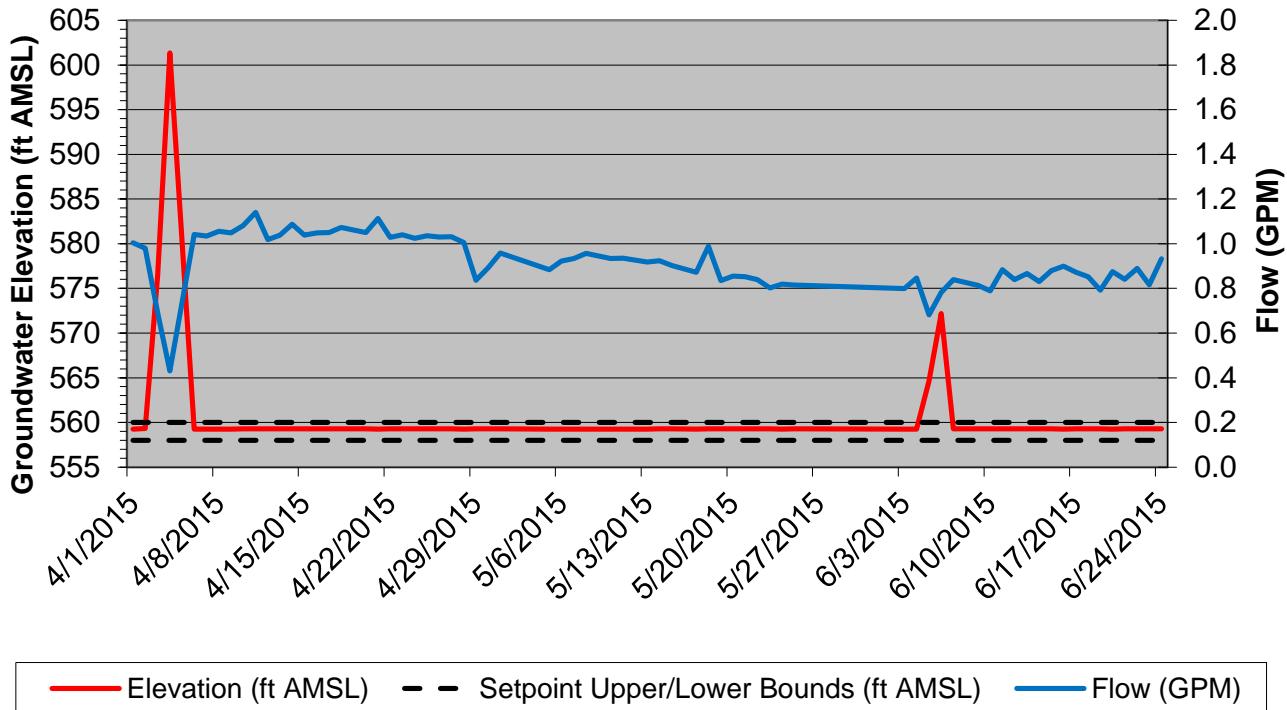


SECOND QUARTER 2015 - PUMPING WELL PERFORMANCE GRAPHS  
HYDE PARK

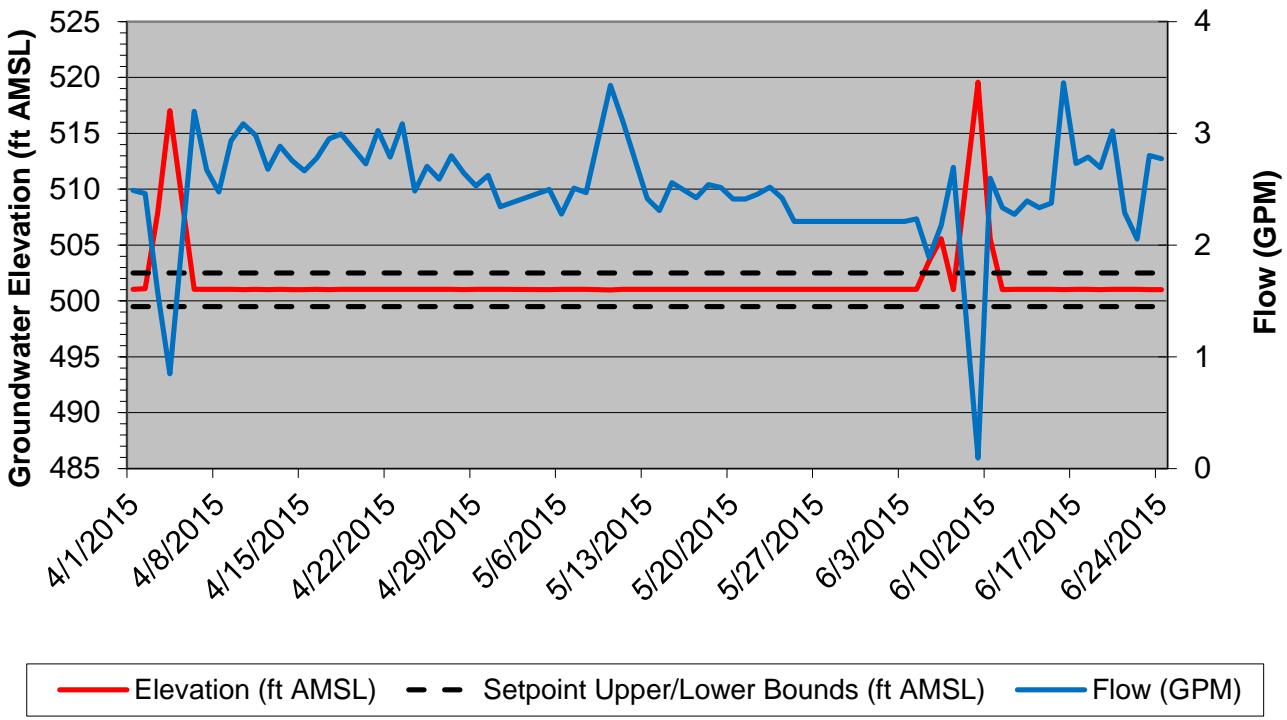


SECOND QUARTER 2015 - PUMPING WELL PERFORMANCE GRAPHS  
HYDE PARK

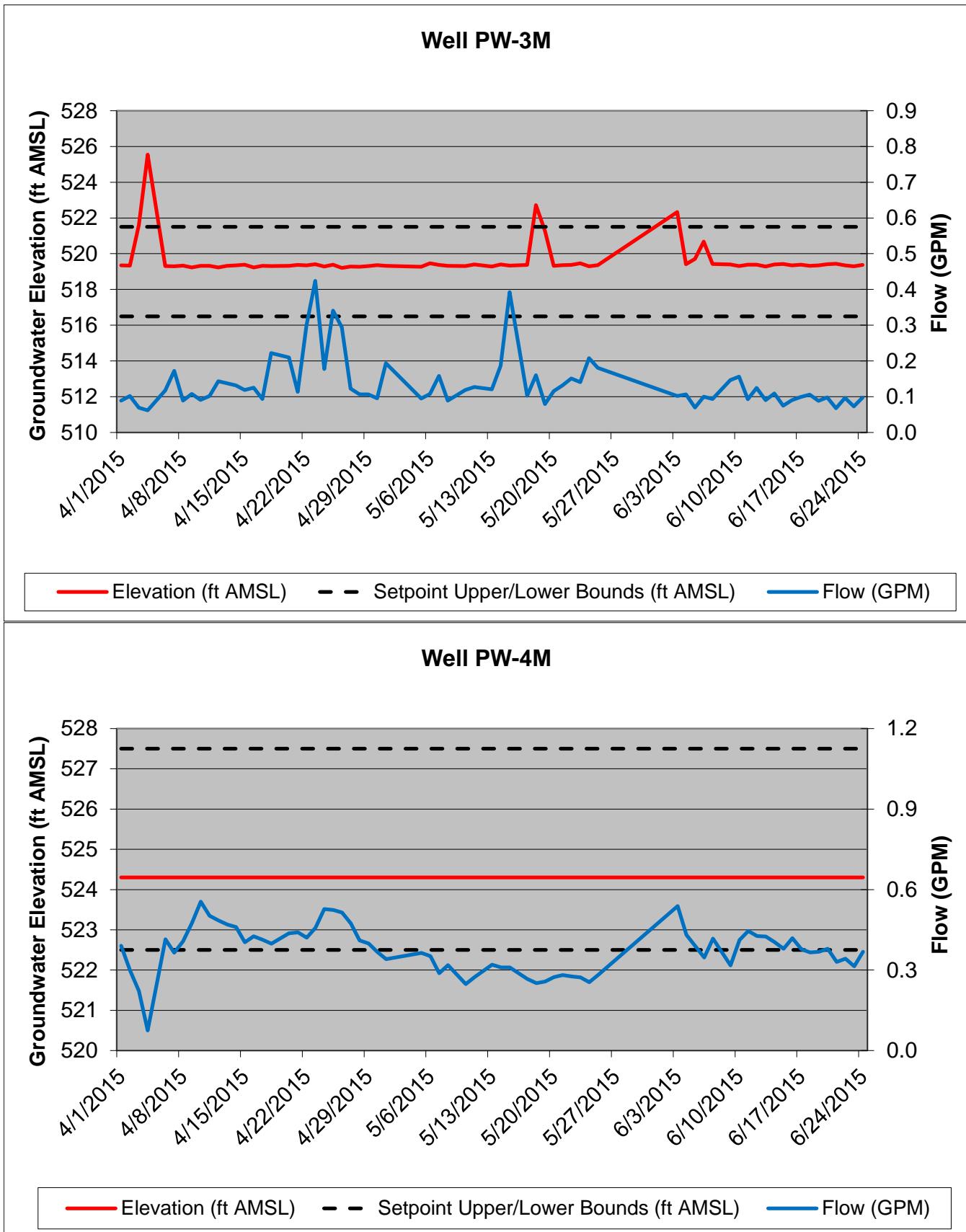
**Well PW-2UR**



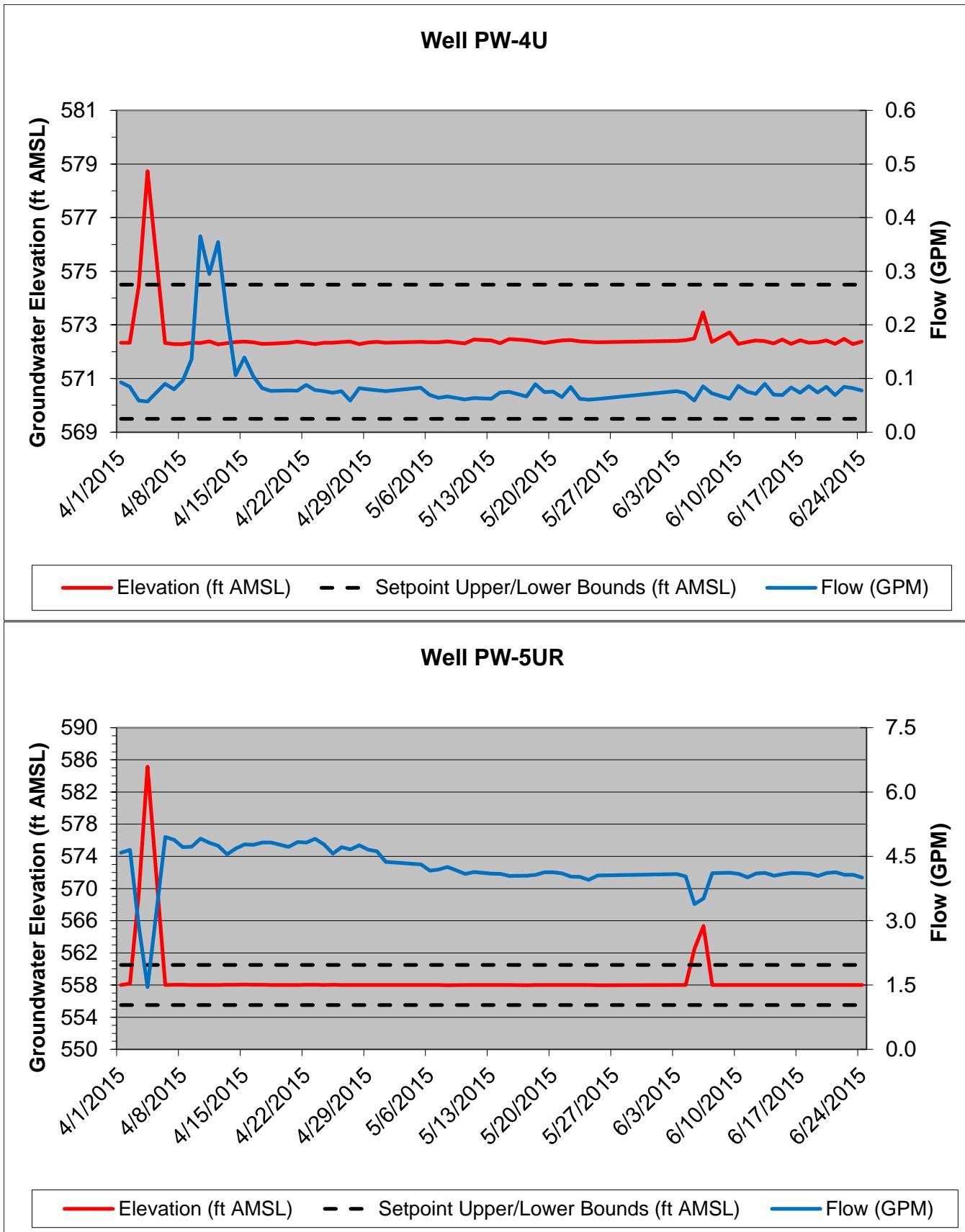
**Well PW-3L**



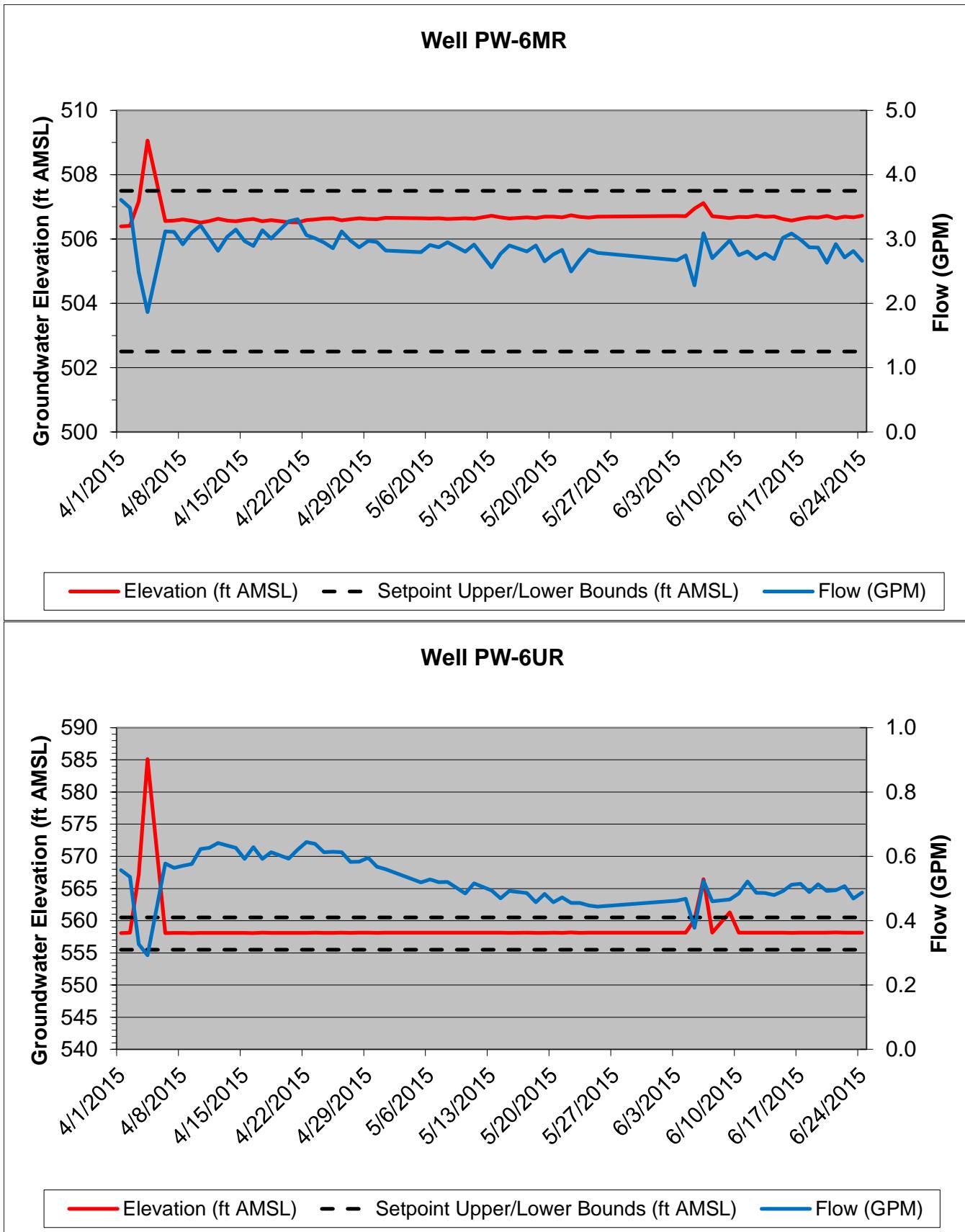
SECOND QUARTER 2015 - PUMPING WELL PERFORMANCE GRAPHS  
HYDE PARK



SECOND QUARTER 2015 - PUMPING WELL PERFORMANCE GRAPHS  
HYDE PARK



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HYDE PARK



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HYDE PARK

