



Glenn Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

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

7601 Old Channel Trail
Montague, MI 49437

October 31, 2017

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 – Third Quarter 2017
Hyde Park Remedial Program
Bedrock and Overburden Monitoring Programs
NYSDEC Site No. 932021**

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 July 1, 2017 through September 30, 2017. A total of 5.1 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: Showing the potentiometric surface for the bedrock flow zones and overburden
- Figure 10: Showing 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 third quarter of 2017:

- The water level in PW-5UR exceeded setpoint range from July 3 to July 4 due to heavy rains. The water level returned to within setpoint range on July 5.

- 2 -

- The water level in PW-6MR exceeded setpoint range from September 1 to September 5 due to an electrical issue. The electrical breaker was reset each day between September 1 and September 4. The water level was pumped to within setpoint range on September 5. The water level exceeded setpoint range on September 12 due to an electrical issue. The electrical breaker was reset on September 12 and the water level returned to within setpoint range on September 13.
- The water level in PW-6UR exceeded setpoint range from July 15 to July 16 due to heavy rains. The water level returned to within setpoint range on July 17. The water level exceeded setpoint range from July 23 to August 3 due to a fault in the pump motor and level probe. The motor was repaired on August 2. The level probe was replaced on August 4. The water level returned to within setpoint range on August 4. The water level exceeded setpoint range from August 26 to August 27 due to a communication fault. The pump was reset on August 27 and the water level returned to within setpoint range on August 27. The water level exceeded setpoint range from September 18 to September 20 due to a fault in the pump. The pump was repaired on September 20 and the water level returned to within setpoint range on September 21.

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.

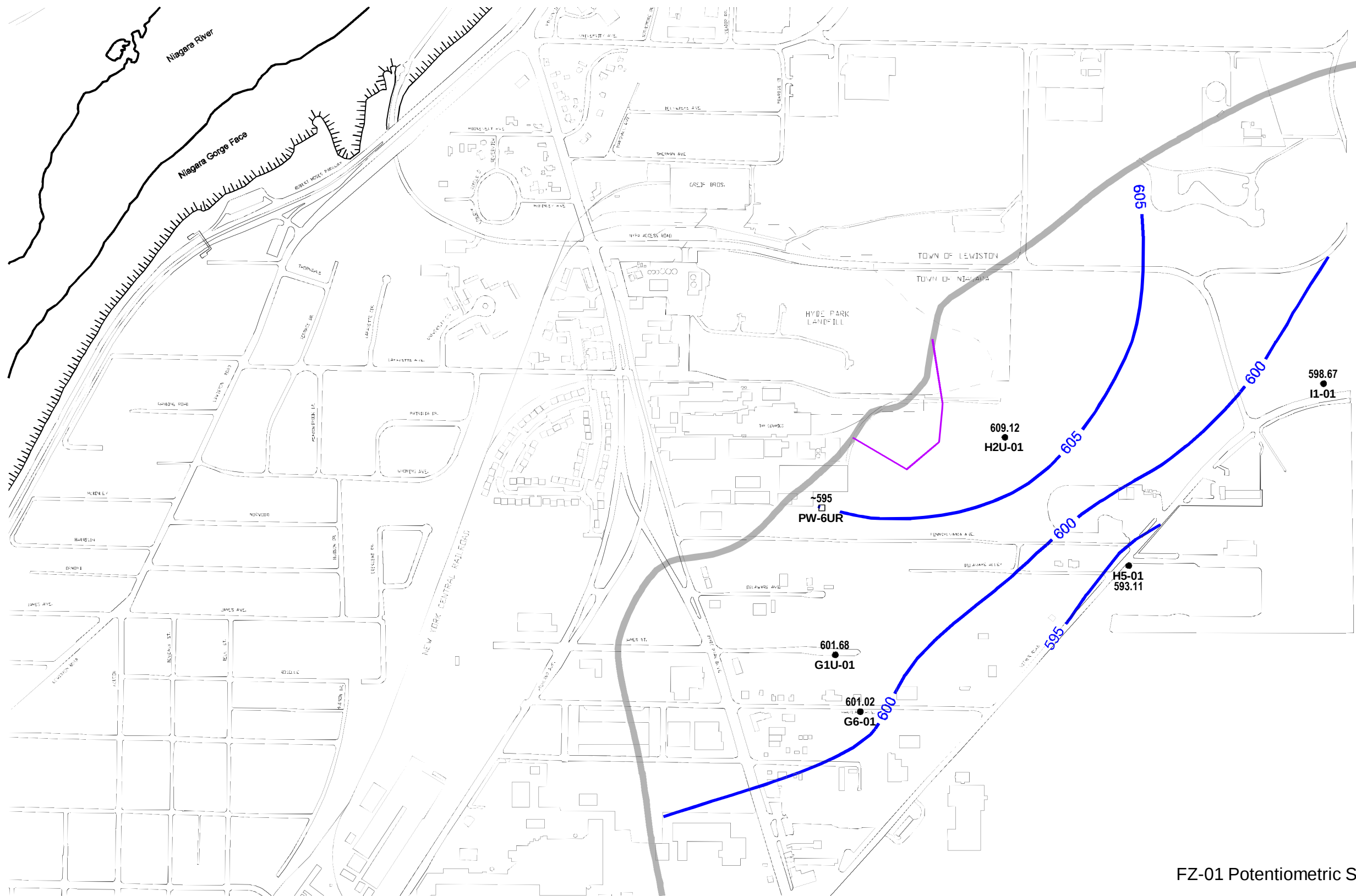


Joe Branch
Site Manager
231-670-6809 Cell

JB/eew/30
Encl.

cc: C. Babcock, GSH
D. Hettrick, NYSDOH
J. Pentilchuk, GHD

G. May, NYSDEC
D. Hoyt, GHD



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

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.

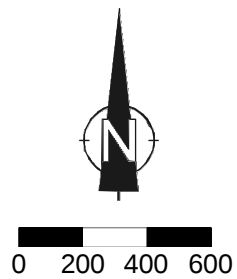
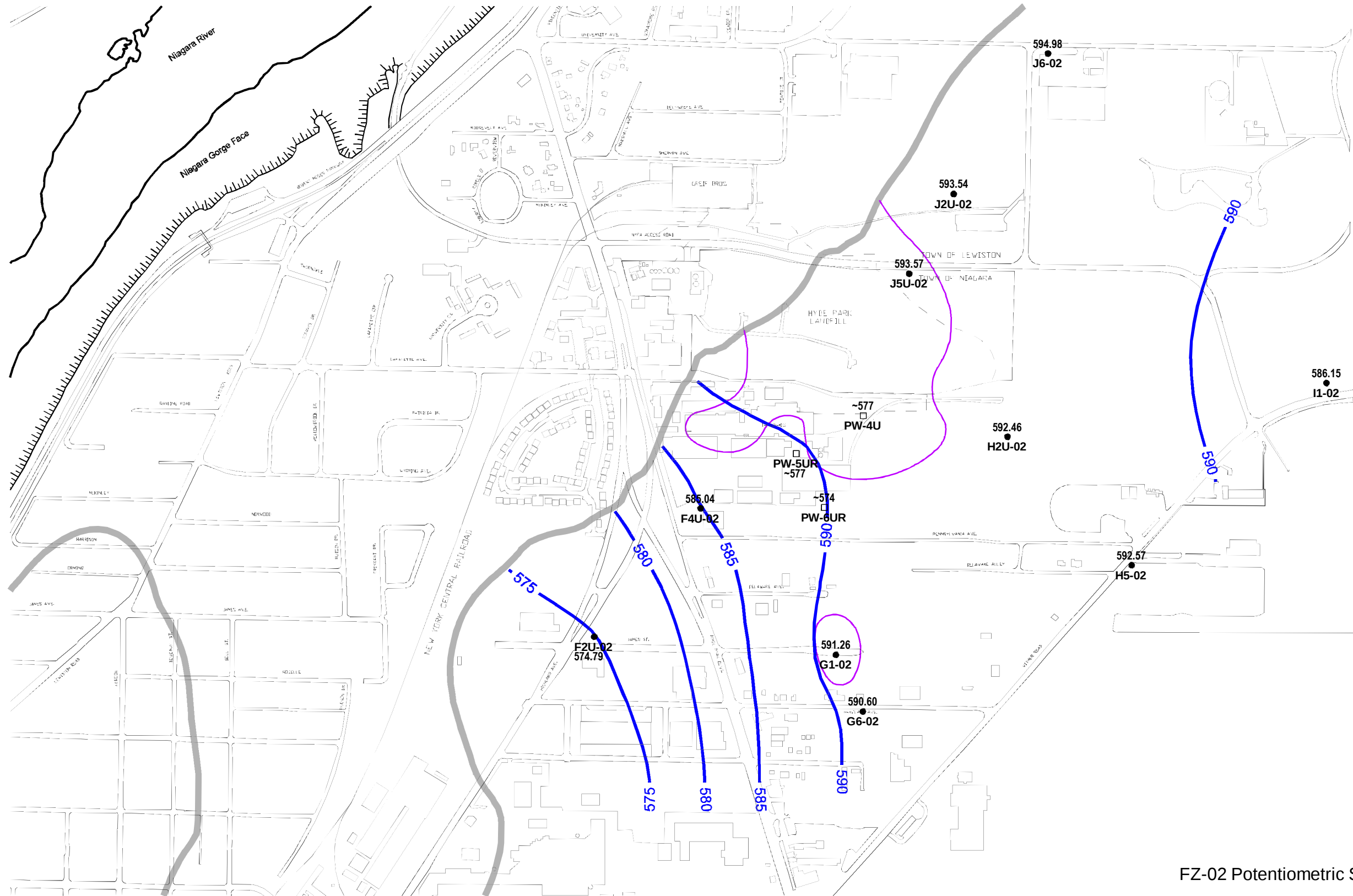


figure 1
FZ-01 Potentiometric Surface September 2017
3rd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



Legend

- Potentiometric Contour (ft AMSL)
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- Flow Zone Subcrop
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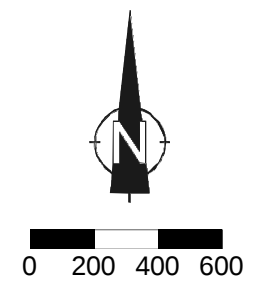
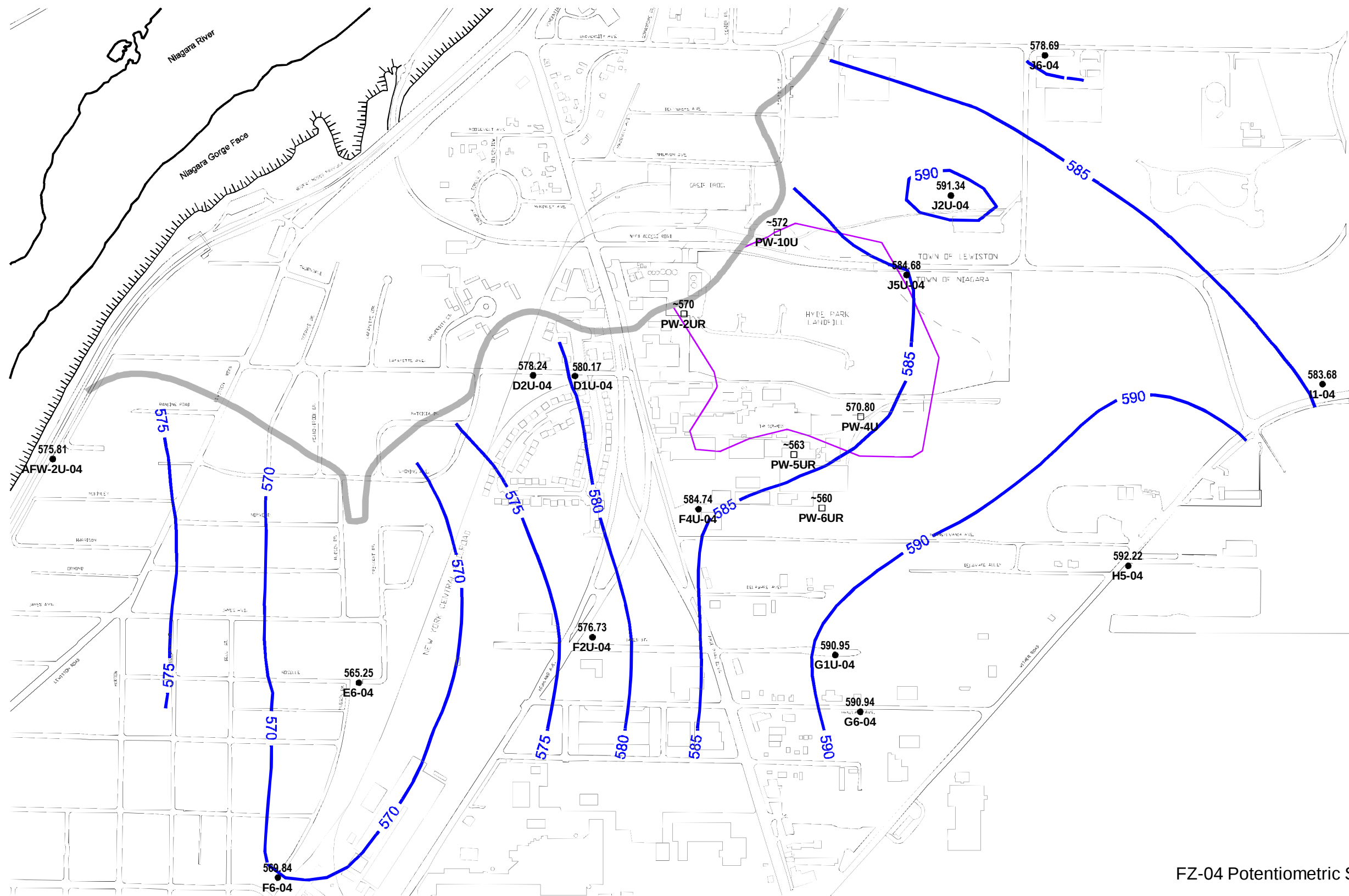


figure 2
 FZ-02 Potentiometric Surface September 2017
 3rd Quarter Report
 Hyde Park Landfill Site
 Glenn Springs Holdings, Inc.
 Niagara Falls, New York



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
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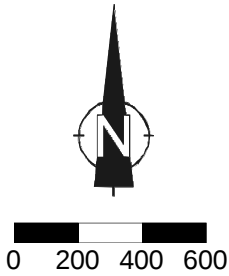
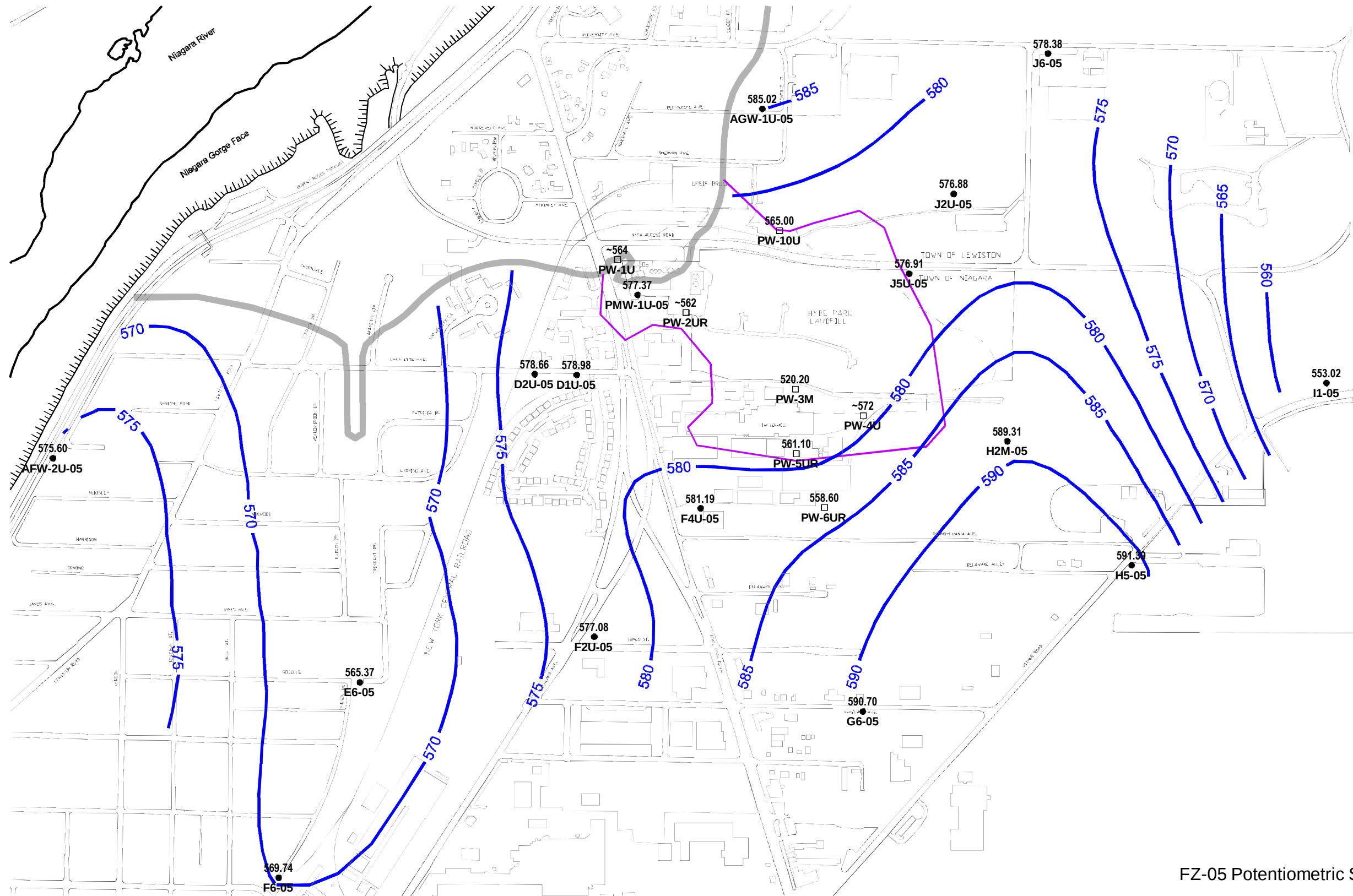


figure 3
 FZ-04 Potentiometric Surface September 2017
 3rd Quarter Report
 Hyde Park Landfill Site
 Glenn Springs Holdings, Inc.
 Niagara Falls, New York



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
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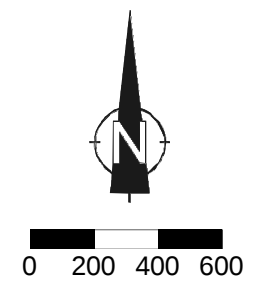
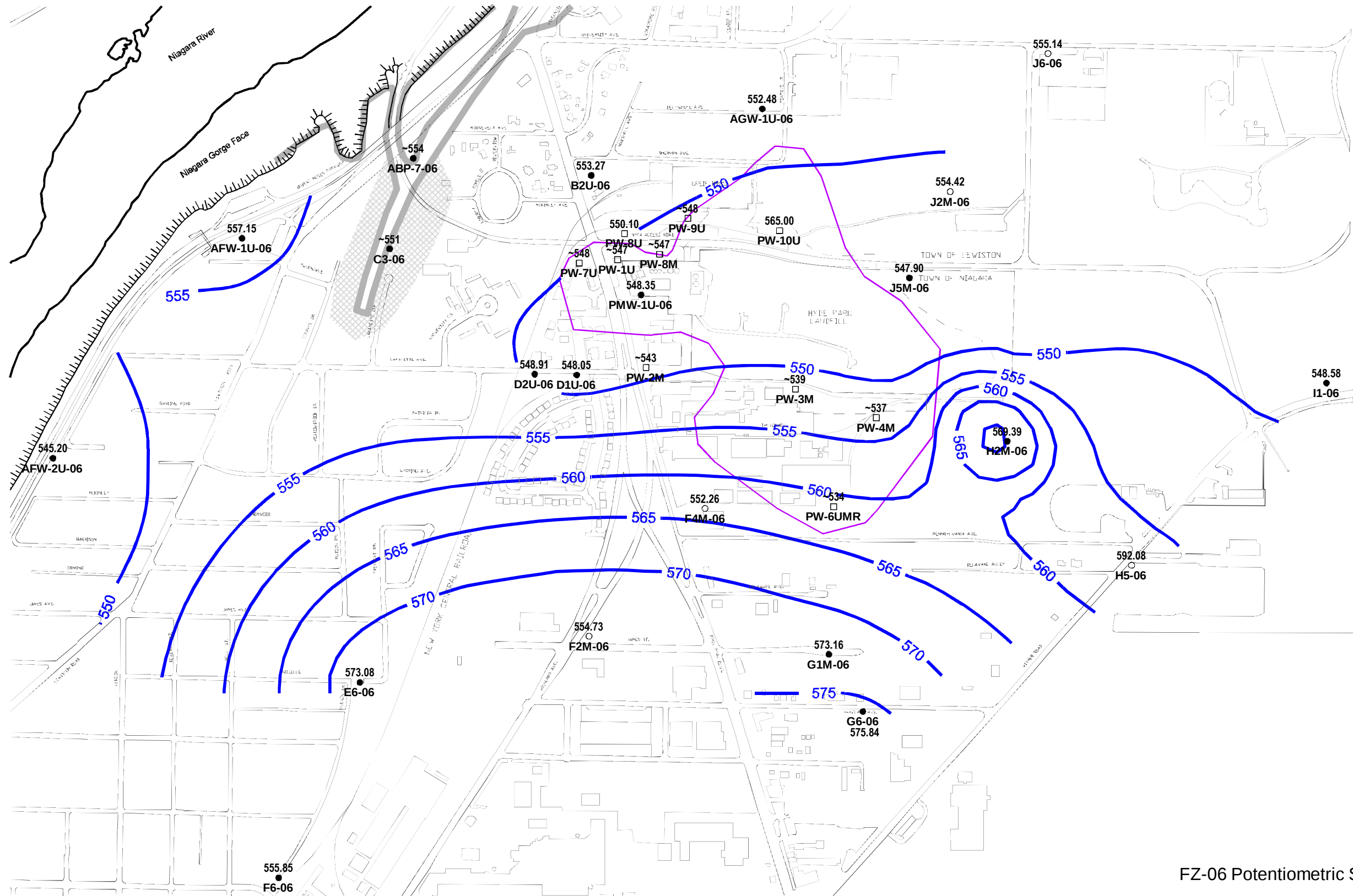


figure 4
 FZ-05 Potentiometric Surface September 2017
 3rd Quarter Report
 Hyde Park Landfill Site
 Glenn Springs Holdings, Inc.
 Niagara Falls, New York



Legend

- Potentiometric Contour (ft AMSL)
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- 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

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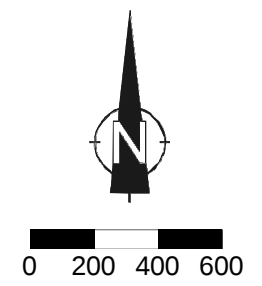
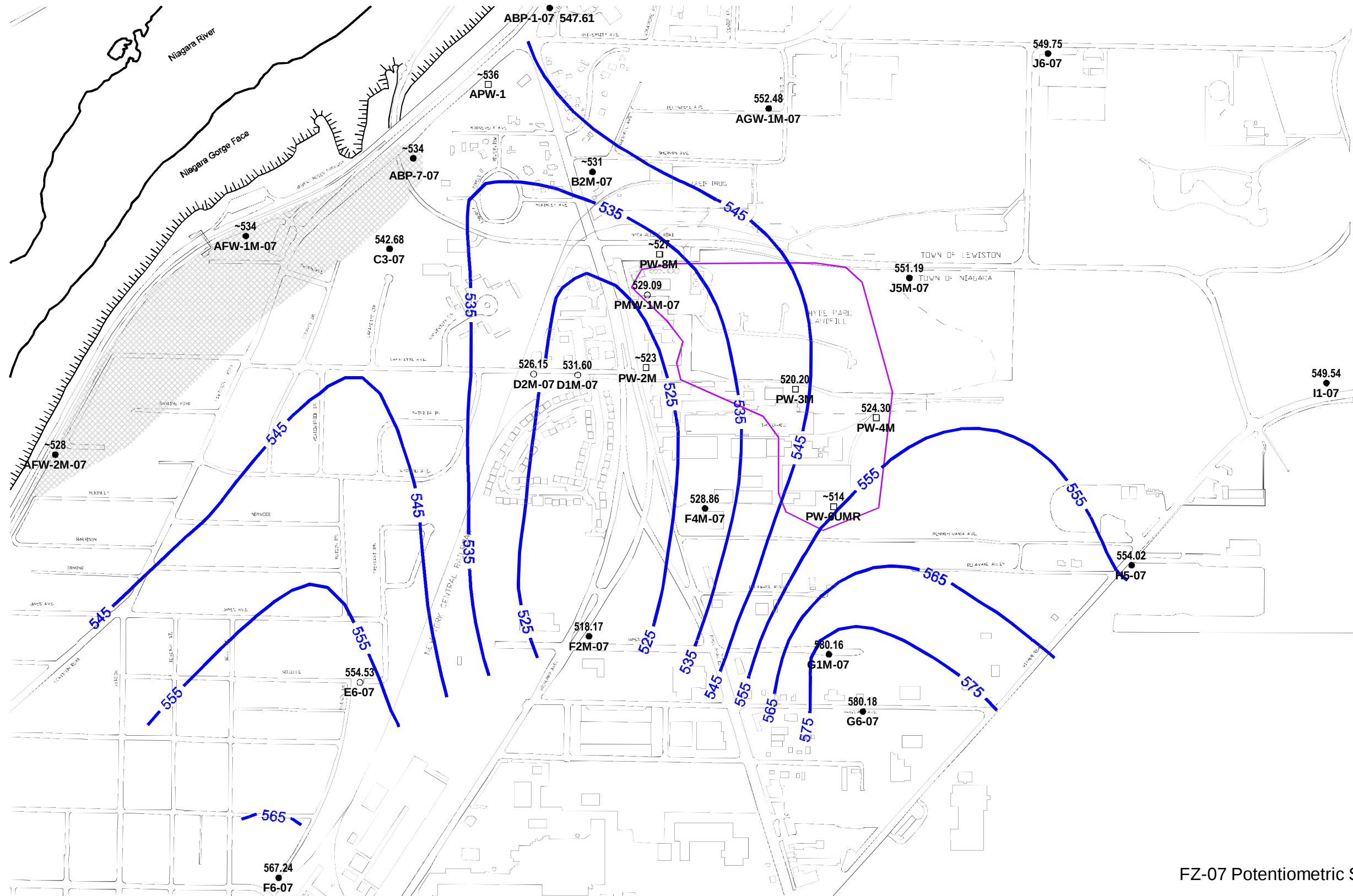


figure 5
 FZ-06 Potentiometric Surface September 2017
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Legend

- Potentiometric Contour (ft AMSL)
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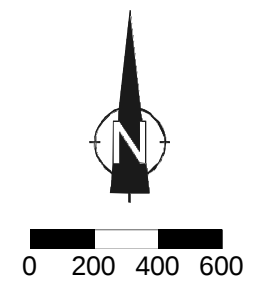
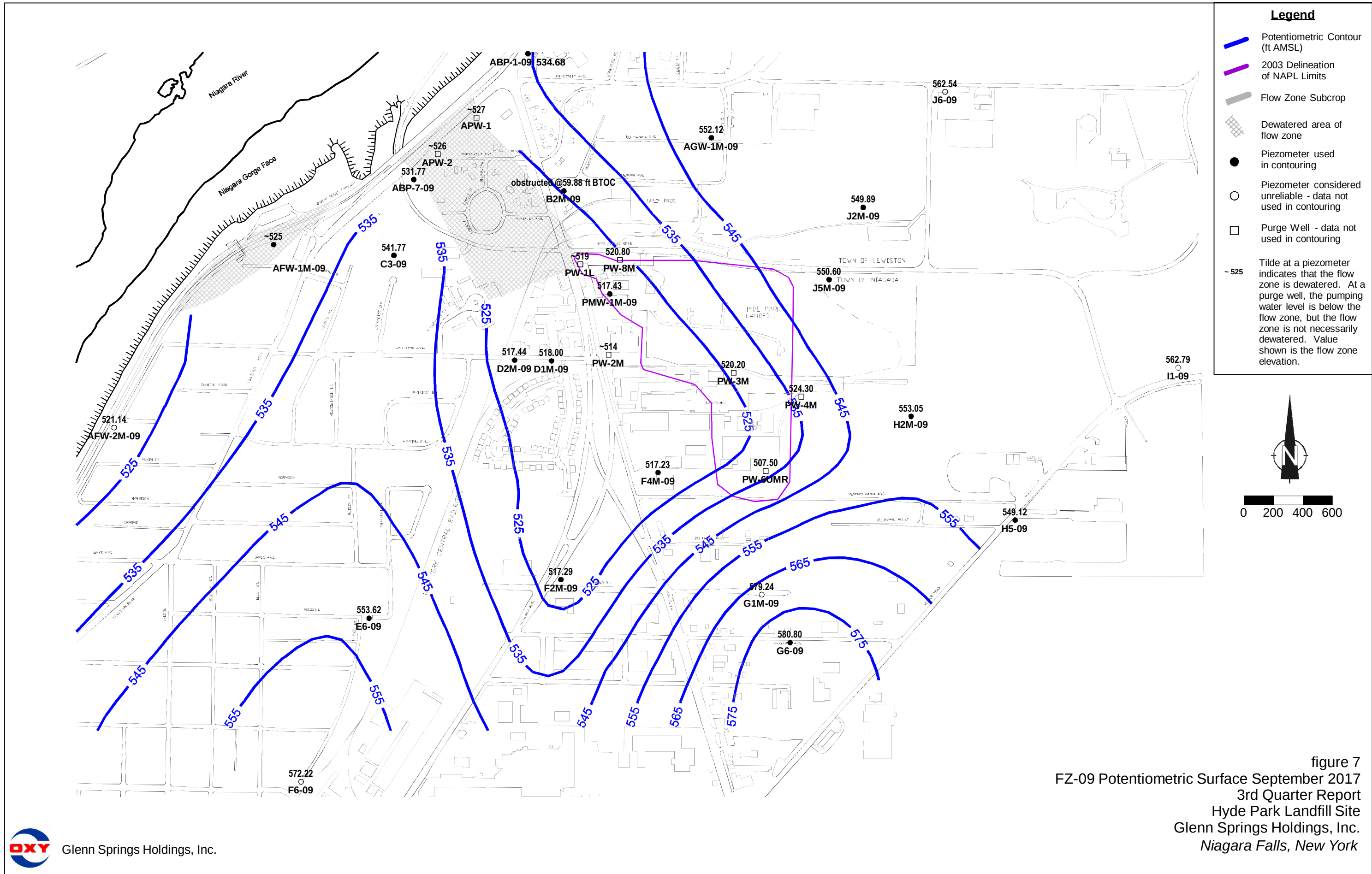
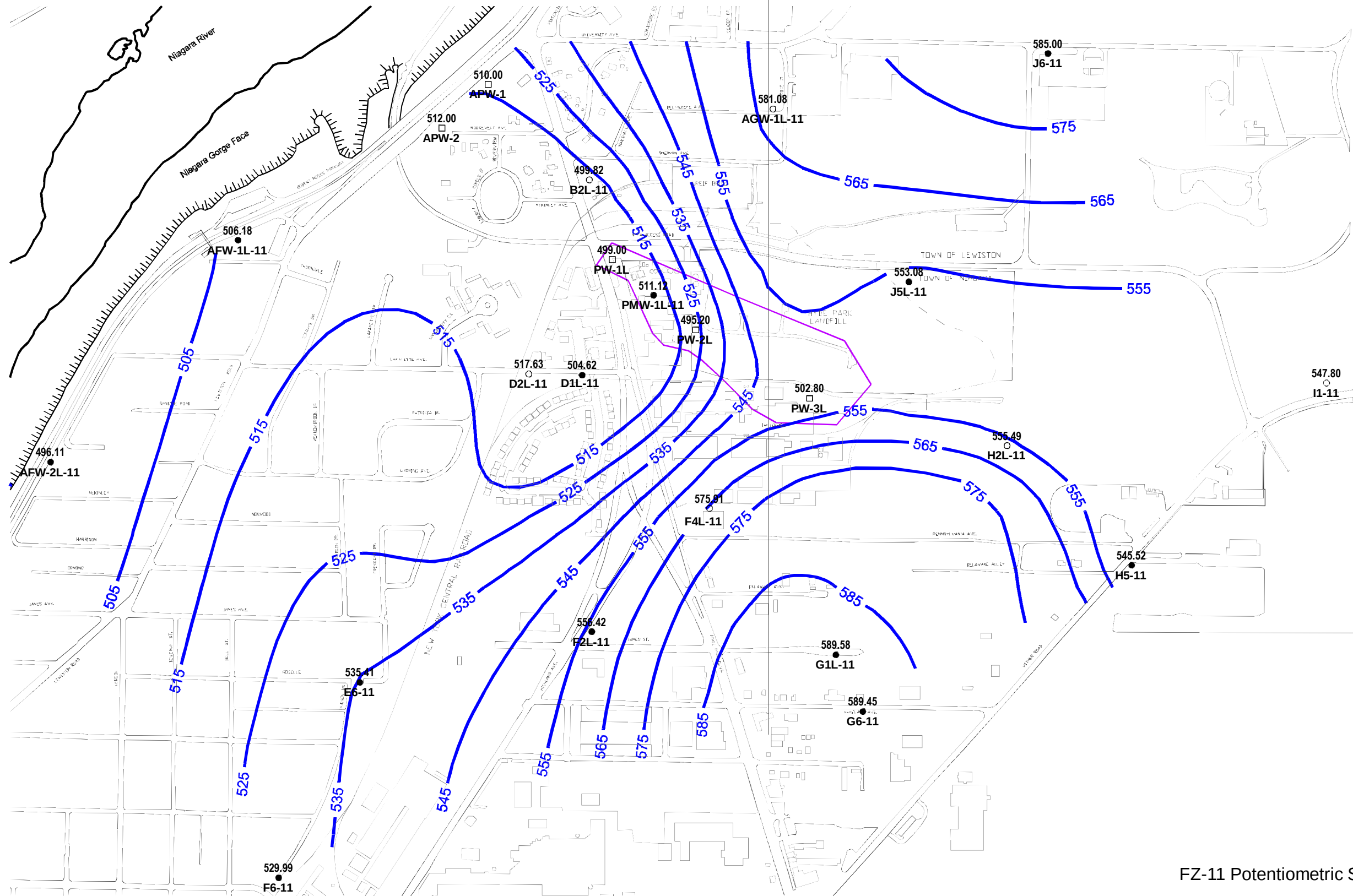


figure 6
 FZ-07 Potentiometric Surface September 2017
 3rd Quarter Report
 Hyde Park Landfill Site
 Glenn Springs Holdings, Inc.
 Niagara Falls, New York





Legend

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- 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

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.

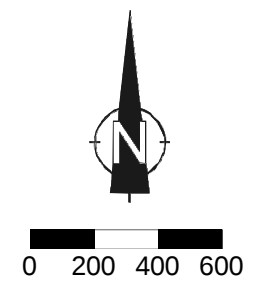
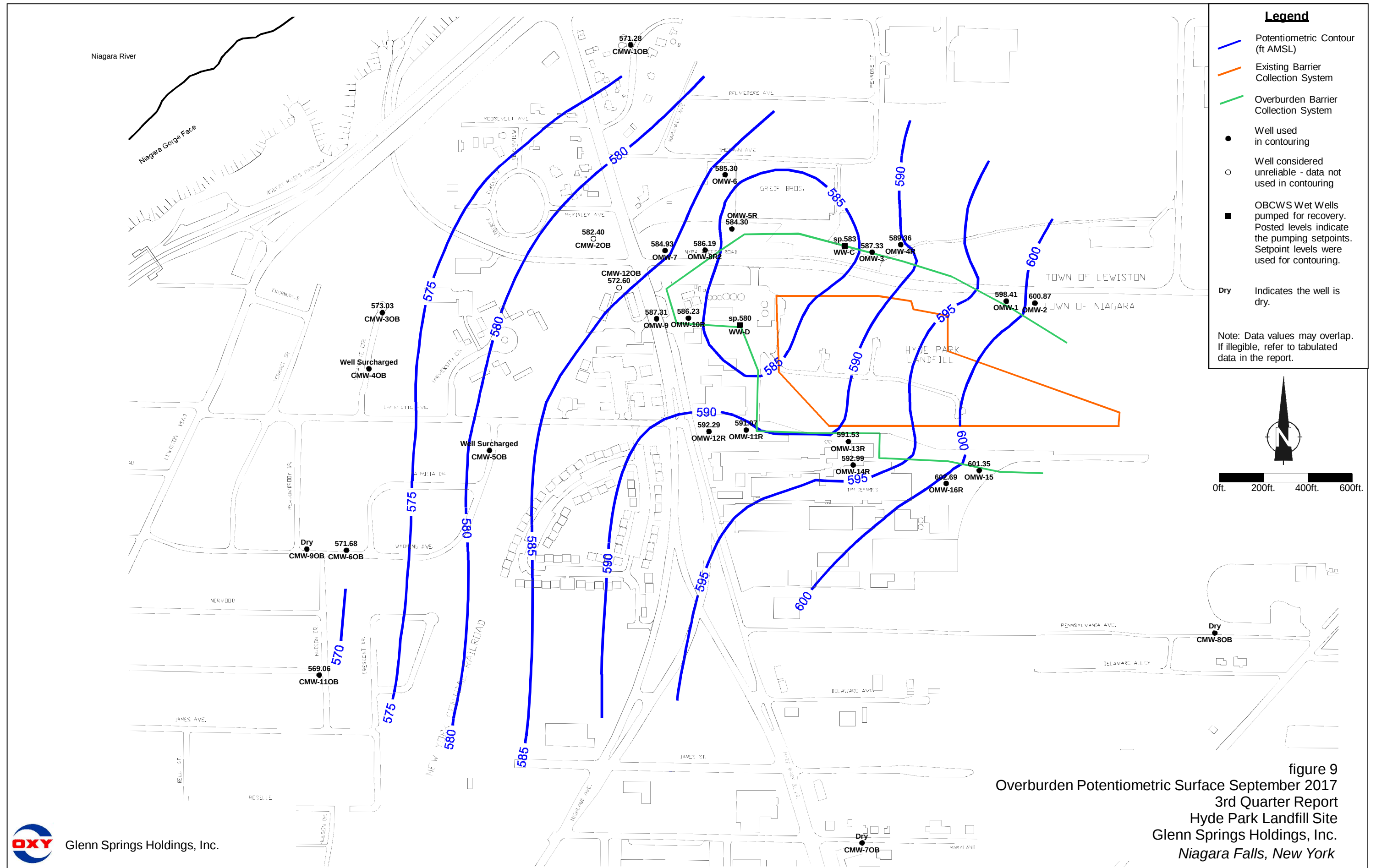


figure 8
 FZ-11 Potentiometric Surface September 2017
 3rd Quarter Report
 Hyde Park Landfill Site
 Glenn Springs Holdings, Inc.
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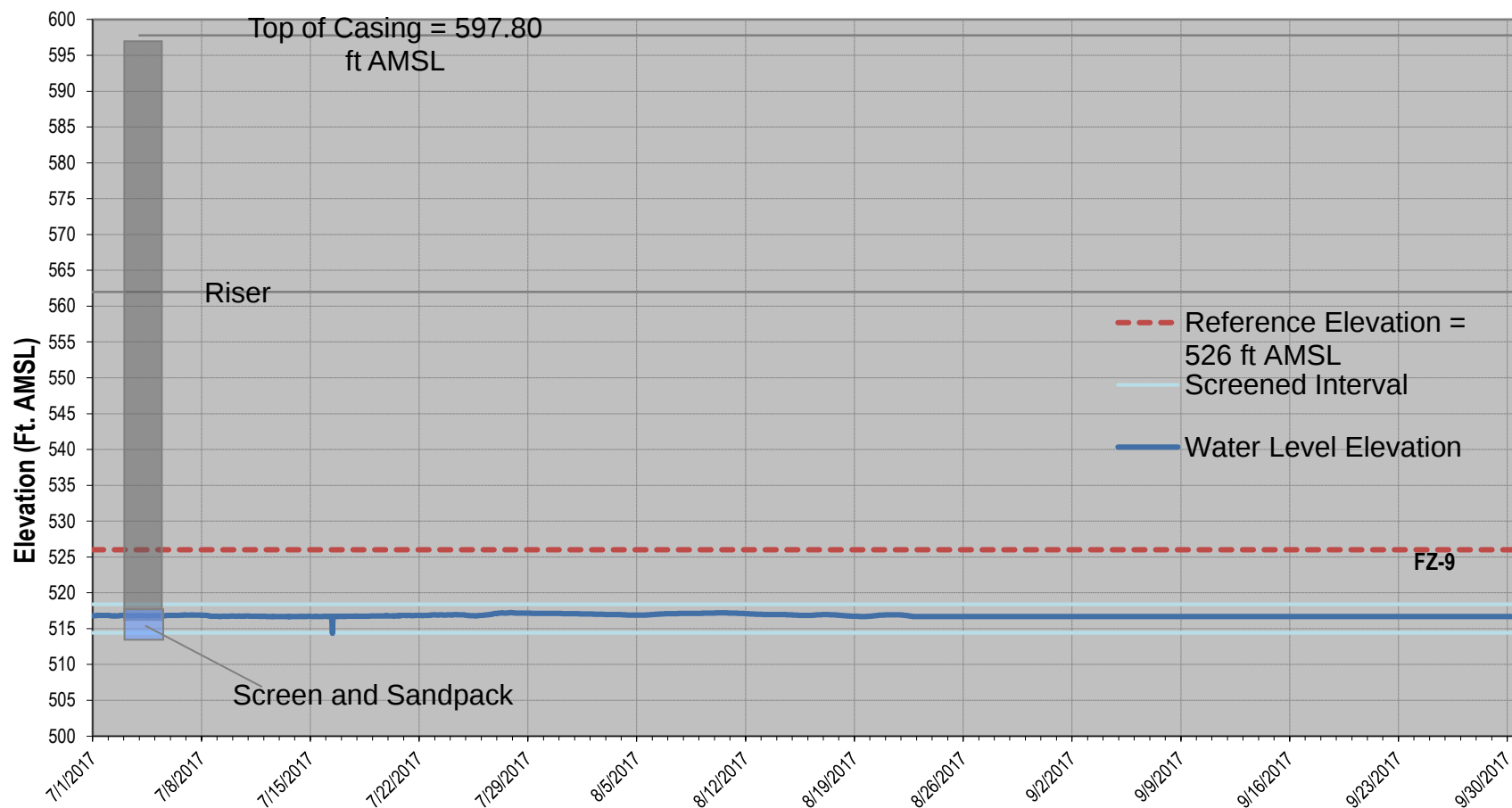


figure 10

PMW-1M-09 3rd Quarter 2017 - Hourly Water Level Elevation
 3rd Quarter Report
 Hyde Park Landfill Site
 Glenn Springs Holdings, Inc.



Glenn Springs Holdings, Inc.

A subsidiary of Occidental Petroleum

Table 1

**Water Level Elevation Summary
Third Quarter - 2017
Hyde Park RRT Program**

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Overburden			
CMW-2OB	590.79	8.39	582.40
CMW-3OB	582.13	9.10	573.03
CMW-4OB	574.28	Surcharged	574.28
CMW-5OB	583.43	Surcharged	583.43
CMW-6OB	571.89	0.21	571.68
CMW-7OB	611.00	Dry	Dry
CMW-8OB	616.11	Dry	Dry
CMW-9OB	571.76	Dry	Dry
CMW-1OB	576.80	5.52	571.28
CMW-11OB	572.85	3.79	569.06
CMW-12OB	594.74	22.14	572.60
MH20	605.87	4.63	601.24
MH21	599.77	6.09	593.68
MH22	593.37	7.58	585.79
MH23	587.05	12.17	574.88
MH24	582.57	7.82	574.75
MH25	583.82	7.43	576.39
MH26	584.48	Dry	Dry
MH27	586.12	10.68	575.44
MH28	585.23	15.82	569.41
MH29	604.58	14.97	589.61
MH30	599.49	10.06	589.43
MH31	590.10	9.58	580.52
MH32	592.01	9.66	582.35
MH33	592.51	8.74	583.77
MH34	598.34	7.15	591.19
MH35	605.69	7.31	598.38
MH35A	605.69	6.55	599.14
OMW-1	605.28	6.87	598.41
OMW-2	605.99	5.12	600.87
OMW-3	598.63	11.30	587.33
OMW-4R	601.17	11.81	589.36
OMW-5R	591.31	7.01	584.30
OMW-6	587.62	2.32	585.30
OMW-7	592.74	7.81	584.93
OMW-8R2	594.67	8.48	586.19
OMW-9	595.27	7.96	587.31
OMW-10R	595.13	8.90	586.23
OMW-11R	597.52	6.45	591.07
OMW-12R	597.20	4.91	592.29
OMW-13R	601.50	9.97	591.53
OMW-14R	599.64	6.65	592.99
OMW-15	607.48	6.13	601.35
OMW-16R	607.62	4.93	602.69
SC-2	625.61	22.88	602.73
SC-3	638.72	40.83	597.89
SC-4	639.35	38.95	600.40
SC-5	634.07	31.51	602.56
SC-6	631.15	22.09	609.06

Table 1

**Water Level Elevation Summary
Third Quarter - 2017
Hyde Park RRT Program**

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Shallow Bedrock			
CMW-1SH	576.11	12.19	563.92
CMW-2SH	590.51	19.29	571.22
CMW-3SH	581.91	33.50	548.41
CMW-4SH	574.16	7.62	566.54
CMW-5SH	583.36	8.53	574.83
CMW-6SH	572.05	10.18	561.87
CMW-7SH	610.58	11.92	598.66
CMW-8SH	615.95	8.94	607.01
CMW-9SH	571.96	12.00	559.96
CMW-11SH	573.21	8.67	564.54
CMW-12SH	597.02	26.92	570.10
Flow Zone 1			
G1U-01	617.08	15.40	601.68
G6-01	609.24	8.22	601.02
H2U-01	620.92	11.80	609.12
H5-01	617.61	24.50	593.11
I1-01	625.58	26.91	598.67
Flow Zone 2			
F2U-02	599.89	25.10	574.79
F4U-02	602.32	17.28	585.04
G1-02	616.86	25.60	591.26
G6-02	608.65	18.05	590.60
H2U-02	620.88	28.42	592.46
H5-02	617.47	24.90	592.57
I1-02	625.47	39.32	586.15
J2U-02	609.66	16.12	593.54
J5U-02	606.21	12.64	593.57
J6-02	609.23	14.25	594.98
Flow Zone 4			
AFW-2U-04	593.48	17.67	575.81
D1U-04	593.77	13.60	580.17
D2U-04	590.65	12.41	578.24
E6-04	578.23	12.98	565.25
F2U-04	599.76	23.03	576.73
F4U-04	602.19	17.45	584.74
F6-04	588.06	18.22	569.84
G1U-04	616.96	26.01	590.95
G6-04	609.15	18.21	590.94
H5-04	617.40	25.18	592.22
I1-04	625.30	41.62	583.68
J2U-04	609.42	18.08	591.34
J5U-04	606.05	21.37	584.68
J6-04	609.12	30.43	578.69

Table 1

**Water Level Elevation Summary
Third Quarter - 2017
Hyde Park RRT Program**

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Flow Zone 5			
AFW-2U-05	593.33	17.73	575.60
AGW-1U-05	591.80	6.78	585.02
D1U-05	593.51	14.53	578.98
D2U-05	590.56	11.90	578.66
E6-05	578.04	12.67	565.37
F2U-05	599.64	22.56	577.08
F4U-05	602.06	20.87	581.19
F6-05	587.85	18.11	569.74
G6-05	609.13	18.43	590.70
H2M-05	621.59	32.28	589.31
H5-05	617.31	25.92	591.39
I1-05	625.25	72.23	553.02
J2U-05	609.30	32.42	576.88
J5U-05	605.87	28.96	576.91
J6-05	609.02	30.64	578.38
PMW-1U-05	598.00	20.63	577.37
Flow Zone 6			
ABP-7-06	575.78	Dry	Dry
AFW-1U-06	571.83	14.68	557.15
AFW-2U-06	593.22	48.02	545.20
AGW-1U-06	591.66	39.18	552.48
B2U-06	589.29	36.02	553.27
C3-06	585.78	Dry	Dry
D1U-06	593.25	45.20	548.05
D2U-06	590.38	41.47	548.91
E6-06	577.99	4.91	573.08
F2M-06	599.06	44.33	554.73
F4M-06	602.05	49.79	552.26
F6-06	587.84	31.99	555.85
G1M-06	616.75	43.59	573.16
G6-06	609.09	33.25	575.84
H2M-06	621.42	52.03	569.39
H5-06	617.17	25.09	592.08
I1-06	625.15	76.57	548.58
J2M-06	608.94	54.52	554.42
J5M-06	606.22	58.32	547.90
J6-06	608.93	53.79	555.14
PMW-1U-06	597.92	49.57	548.35

Table 1

**Water Level Elevation Summary
Third Quarter - 2017
Hyde Park RRT Program**

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Flow Zone 7			
ABP-1-07	576.44	28.83	547.61
ABP-7-07	575.73	41.92	533.81
AFW-1M-07	571.41	Dry	Dry
AFW-2M-07	593.44	66.80	526.64
AGW-1M-07	592.91	40.43	552.48
B2M-07	589.52	Dry	Dry
C3-07	585.62	42.94	542.68
D1M-07	594.15	62.55	531.60
D2M-07	590.77	64.62	526.15
E6-07	577.91	23.38	554.53
F2M-07	598.91	80.74	518.17
F4M-07	601.91	73.05	528.86
F6-07	587.68	20.44	567.24
G1M-07	616.68	36.52	580.16
G6-07	609.06	28.88	580.18
H5-07	617.05	63.03	554.02
I1-07	625.14	75.60	549.54
J5M-07	606.07	54.88	551.19
J6-07	608.85	59.10	549.75
PMW-1M-07	598.50	69.41	529.09
Flow Zone 9			
ABP-1-09	575.49	40.81	534.68
ABP-7-09	575.67	43.90	531.77
AFW-1M-09	571.12	46.32	524.80
AFW-2M-09	593.32	72.18	521.14
AGW-1M-09	592.75	40.63	552.12
B2M-09	589.34	Obstructed	Obstructed
C3-09	585.00	43.23	541.77
D1M-09	594.02	76.02	518.00
D2M-09	590.66	73.22	517.44
E6-09	577.82	24.20	553.62
F2M-09	598.71	81.42	517.29
F4M-09	601.79	84.56	517.23
F6-09	587.53	15.31	572.22
G1M-09	616.58	37.34	579.24
G6-09	608.98	28.18	580.80
H2M-09	621.32	68.27	553.05
H5-09	616.93	67.81	549.12
I1-09	624.91	62.12	562.79
J2M-09	608.77	58.88	549.89
J5M-09	605.82	55.22	550.60
J6-09	608.76	46.22	562.54
PMW-1M-09	598.34	80.91	517.43

Table 1

**Water Level Elevation Summary
Third Quarter - 2017
Hyde Park RRT Program**

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Flow Zone 11			
AFW-1L-11	572.10	65.92	506.18
AFW-2L-11	593.43	97.32	496.11
AGW-1L-11	592.71	11.63	581.08
B2L-11	589.65	89.83	499.82
D1L-11	593.80	89.18	504.62
D2L-11	590.21	72.58	517.63
E6-11	577.72	42.31	535.41
F2L-11	598.94	42.52	556.42
F4L-11	602.22	26.31	575.91
F6-11	587.40	57.41	529.99
G1L-11	616.84	27.26	589.58
G6-11	608.89	19.44	589.45
H2L-11	620.73	65.24	555.49
H5-11	616.81	71.29	545.52
I1-11	624.75	76.95	547.80
J5L-11	607.20	54.12	553.08
J6-11	608.68	23.68	585.00
PMW-1L-11	598.84	87.72	511.12
Purge Wells			
APW-1	564.98	54.98	510.00
APW-2	569.89	57.89	512.00
PW-1L	593.16	94.16	499.00
PW-1U	593.16	46.06	547.10
PW-2L	597.29	102.09	495.20
PW-2M	596.61	84.51	512.10
PW-2UR	594.75	34.35	560.40
PW-3L	599.05	96.25	502.80
PW-3M	597.79	77.59	520.20
PW-4M	606.93	82.63	524.30
PW-4U	604.85	34.05	570.80
PW-5UR	601.31	40.21	561.10
PW-6UMR	609.31	101.81	507.50
PW-6UR	608.47	49.87	558.60
PW-7U	592.47	53.67	538.80
PW-8M	592.67	71.87	520.80
PW-8U	589.27	39.17	550.10
PW-9U	587.47	46.27	541.20
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
- Surcharge - Well surcharged
- Obstructed - Well obstructed at 59.88 ft below top of well
- * - Waterlevel could not be measured in retrofitted wells, access points to measure waterlevels were installed

Table 2

**Leachate Treatment System Daily Effluent Monitoring Data
Third Quarter - 2017
Hyde Park RRT Program**

Date	Effluent	
	pH (su)	Flow (gal)
07/01/17	--	--
07/02/17	--	--
07/03/17	6.9	123,000
07/04/17	--	--
07/05/17	6.9	124,000
07/06/17	6.9	128,000
07/07/17	6.9	85,000
07/08/17	--	--
07/09/17	--	--
07/10/17	6.9	112,000
07/11/17	6.9	69,000
07/12/17	6.9	103,000
07/13/17	6.9	50,000
07/14/17	6.9	87,000
07/15/17	--	--
07/16/17	--	--
07/17/17	6.9	102,000
07/18/17	6.8	74,000
07/19/17	6.9	103,000
07/20/17	6.8	63,000
07/21/17	--	--
07/22/17	--	--
07/23/17	--	--
07/24/17	6.8	378,000
07/25/17	6.9	101,000
07/26/17	6.9	46,000
07/27/17	6.9	68,000
07/28/17	--	--
07/29/17	--	--
07/30/17	6.9	360,000
07/31/17	--	--
08/01/17	--	--
08/02/17	6.8	66,000
08/03/17	6.8	63,000
08/04/17	--	--
08/05/17	--	--
08/06/17	--	--
08/07/17	6.9	369,000

Table 2

**Leachate Treatment System Daily Effluent Monitoring Data
Third Quarter - 2017
Hyde Park RRT Program**

Date	Effluent	
	pH (su)	Flow (gal)
08/08/17	--	--
08/09/17	6.9	65,000
08/10/17	6.9	66,000
08/11/17	--	--
08/12/17	--	--
08/13/17	--	--
08/14/17	7.0	107,000
08/15/17	7.0	106,000
08/16/17	7.0	85,000
08/17/17	7.0	60,000
08/18/17	--	--
08/19/17	--	--
08/20/17	--	--
08/21/17	7.0	109,000
08/22/17	7.0	97,000
08/23/17	7.0	101,000
08/24/17	7.0	83,000
08/25/17	--	--
08/26/17	--	--
08/27/17	--	--
08/28/17	7.0	100,000
08/29/17	7.0	94,000
08/30/17	7.0	72,000
08/31/17	7.0	40,000
09/01/17	--	--
09/02/17	--	--
09/03/17	--	--
09/04/17	--	--
09/05/17	7.0	109,000
09/06/17	7.0	118,000
09/07/17	7.0	99,000
09/08/17	--	--
09/09/17	--	--
09/10/17	--	--
09/11/17	7.0	117,000
09/12/17	2.6	95,000
09/13/17	7.0	67,000
09/14/17	--	--
09/15/17	7.0	77,000

Table 2

**Leachate Treatment System Daily Effluent Monitoring Data
Third Quarter - 2017
Hyde Park RRT Program**

Date	Effluent	
	pH (su)	Flow (gal)
09/16/17	--	--
09/17/17	--	--
09/18/17	7.0	113,000
09/19/17	7.0	80,000
09/20/17	7.0	31,000
09/21/17	--	--
09/22/17	--	--
09/23/17	--	--
09/24/17	--	--
09/25/17	7.0	108,000
09/26/17	7.0	96,000
09/27/17	7.1	60,000
09/28/17	7.0	29,000
09/29/17	--	--
09/30/17	--	--
	Total	5,058,000

Notes:

--" - Not measured-no flow
su - Standard Unit
gal - Gallons

Table 3

Analytical Results Summary
Weekly Sampling - Leachate Treatment System
Third Quarter - 2017
Hyde Park RRT Program

Effluent	Parameter	Units	07/05/17	07/12/17	07/19/17	07/26/17	08/02/17	08/10/17	08/16/17
Volatiles									
	1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Benzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Carbon disulfide	µg/L	2.0 U	7.5	5.7	2.0 U	6.8	2.0 U	6.6
	Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	m&p-Xylenes	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
	Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	o-Xylene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Toluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
	Vinyl chloride	µg/L	300	290	280	250	320	210	270
	Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
General Chemistry									
	Phenolics (total)	mg/L	0.0143	0.0114	0.0113	0.0084	0.0117	0.0102	0.0131

Notes:

J - Estimated concentration

U - Not detected at the associated reporting limit

µg/L - Microgram per liter

Analytical Results Summary
Weekly Sampling - Leachate Treatment System
Third Quarter - 2017
Hyde Park RRT Program

Effluent	Parameter	Units	08/23/17	8/30/2017	9/6/2017	9/13/2017	9/20/2017	9/27/2017
Volatiles								
	1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1,2,2-Tetrachloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1,2-Trichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Benzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Carbon disulfide	µg/L	8.1	2.0 U	9.0	7.3	2.0	8.4
	Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	cis-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	m&p-Xylenes	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
	Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	o-Xylene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Toluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Trichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
	Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
	Vinyl chloride	µg/L	270	260	270	240	270	280
	Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U	6.0 U
General Chemistry								
	Phenolics (total)	mg/L	0.0148	0.0121	0.0118	0.0041 J	0.0069	0.0150

Notes:

J - Estimated concentration

U - Not detected at the associated reporting limit

µg/L - Microgram per liter

**Analytical Results Summary
Quarterly Sampling - Leachate Treatment System
Third Quarter - 2017
Hyde Park RRT Program**

Sample Location:	EFFLUENT	EFFLUENT
Sample ID:	HP EFF 92817	HP EFF 92817
Sample Date:	9/28/2017	9/28/2017

Parameters	Units		
Volatile Organic Compounds			
Vinyl chloride	µg/L	240	--
General Chemistry			
Phosphorus	mg/L	--	0.168

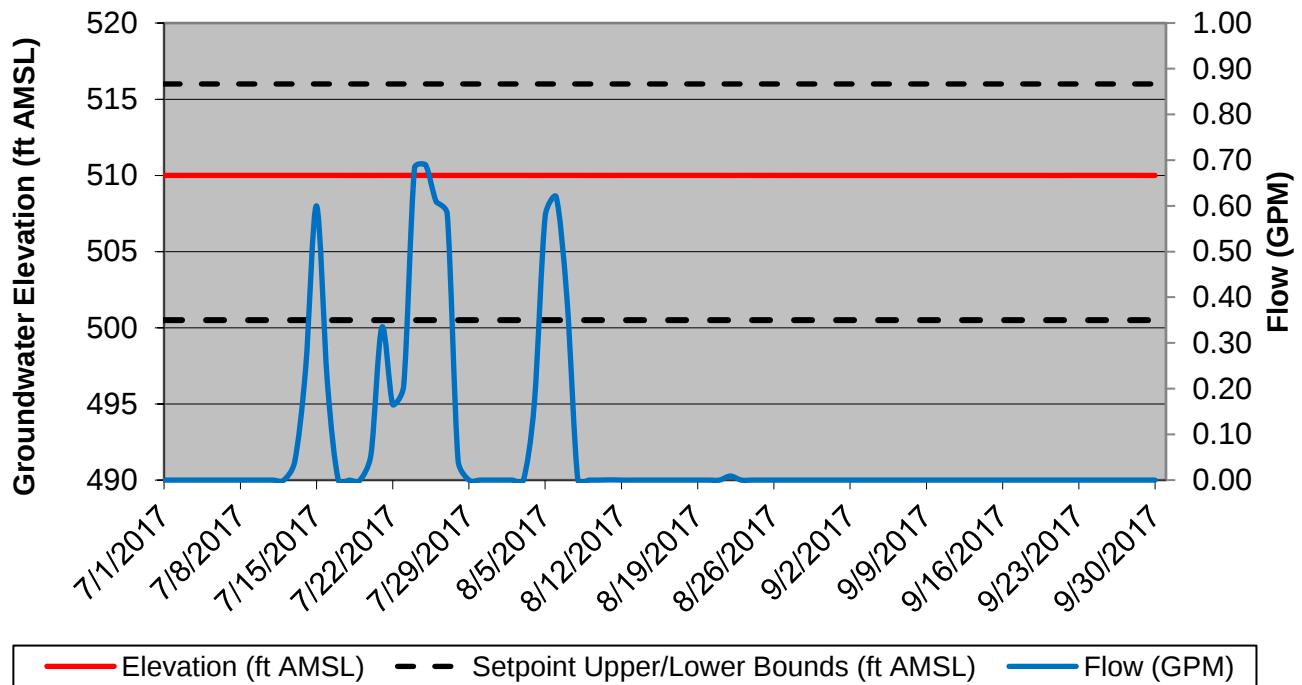
Notes:

"--" - Not applicable

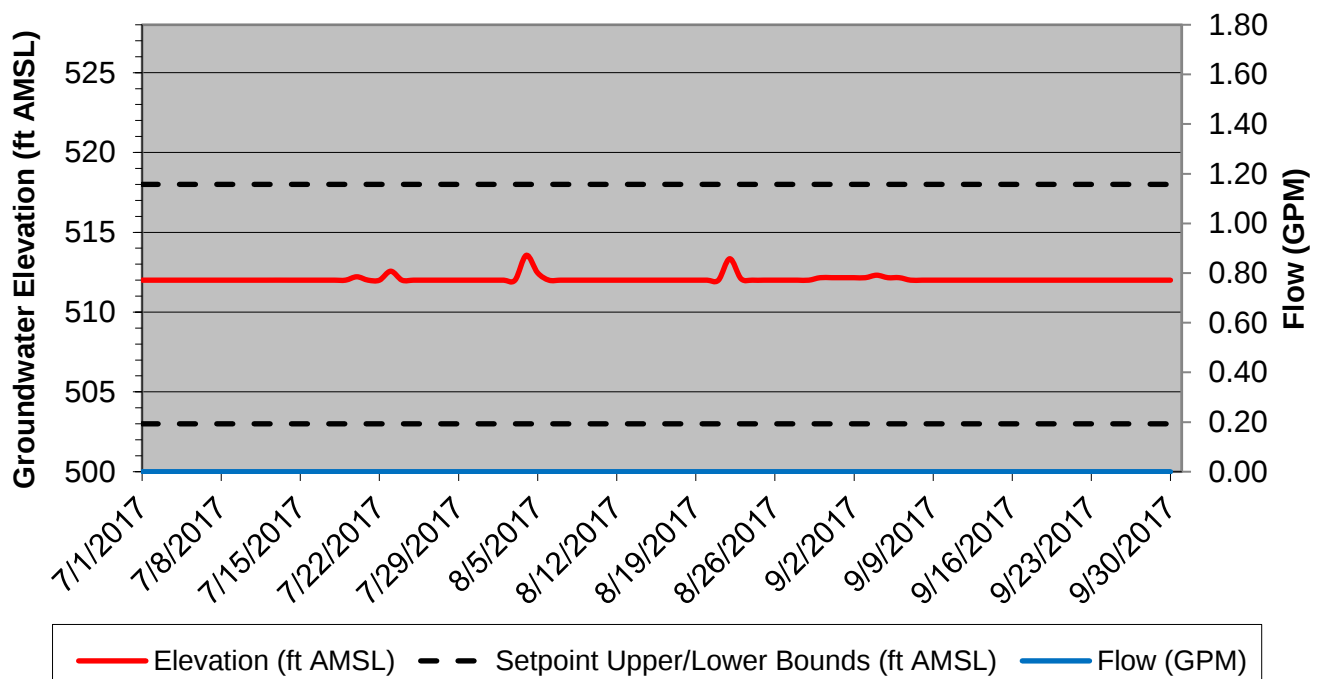
Attachment A

THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well APW-1

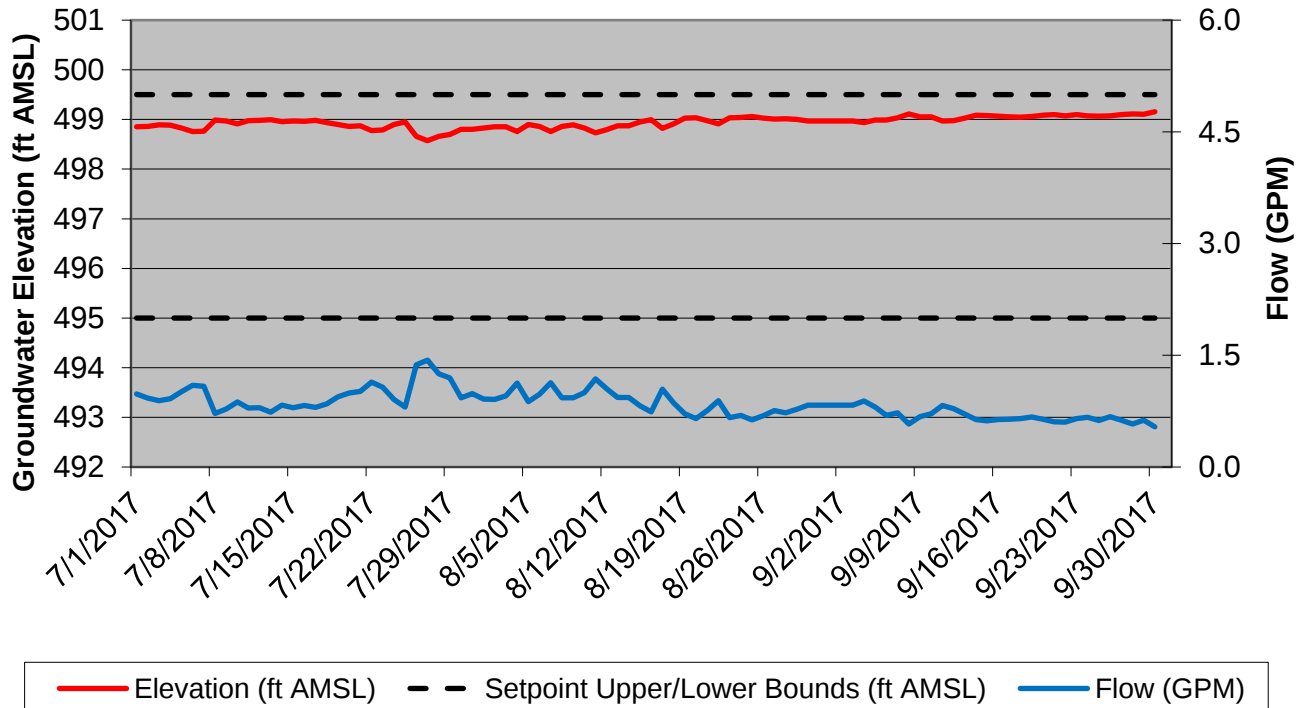


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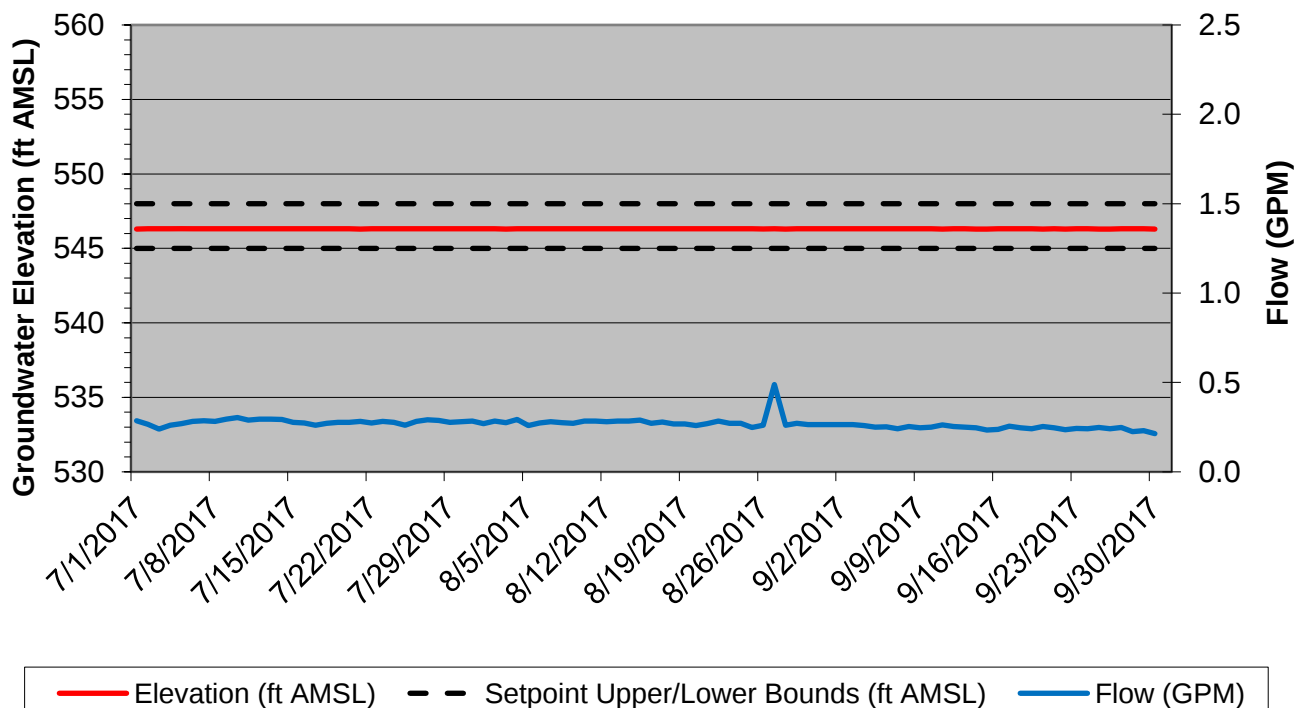


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-1L

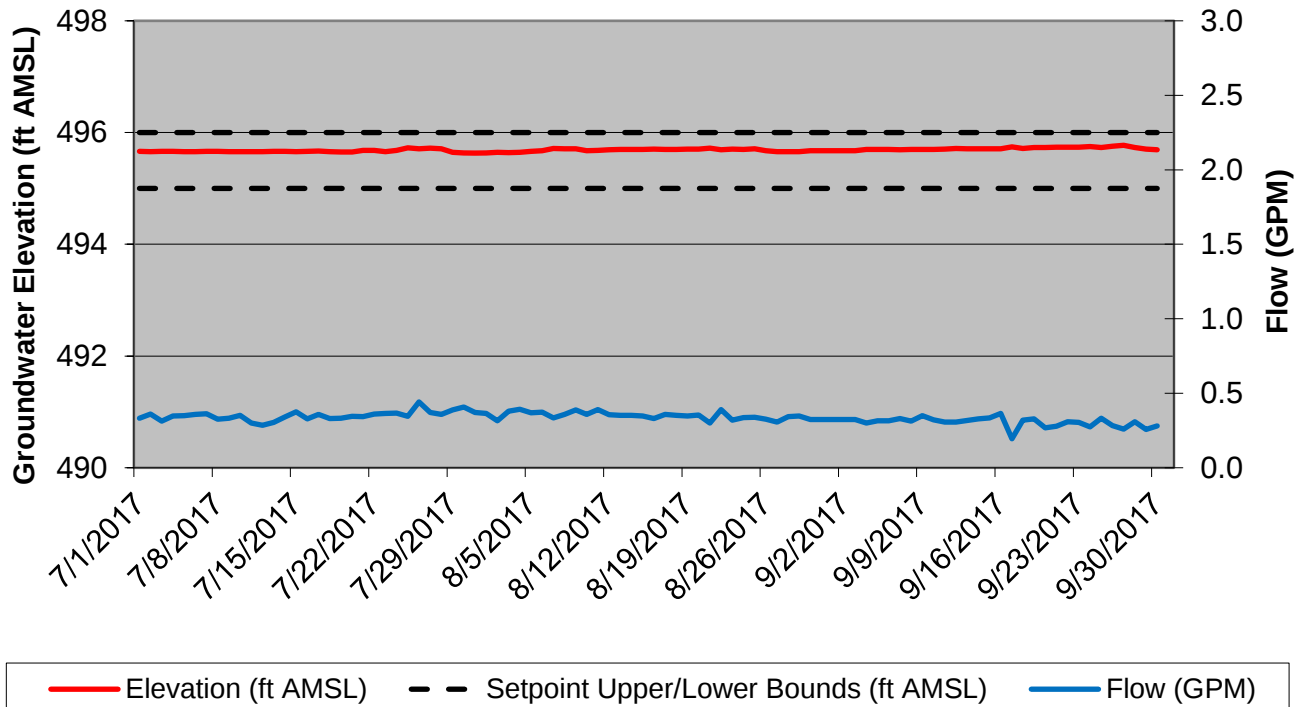


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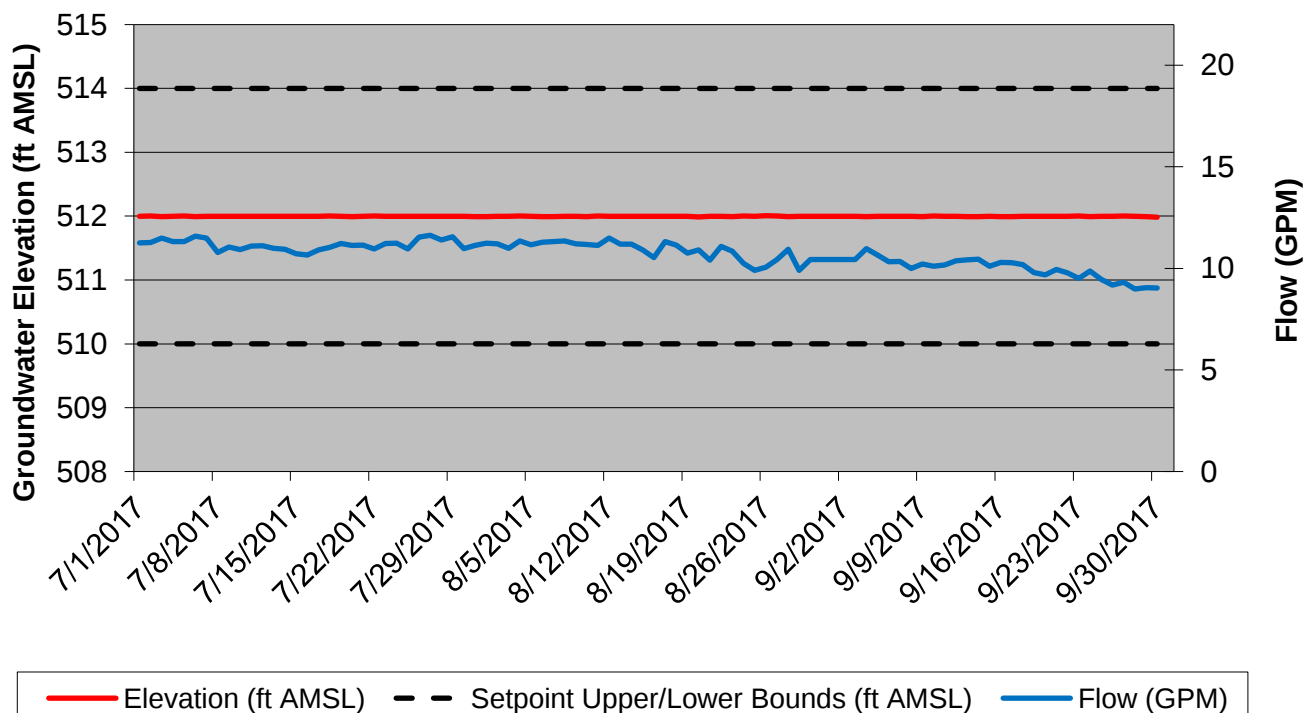


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-2L

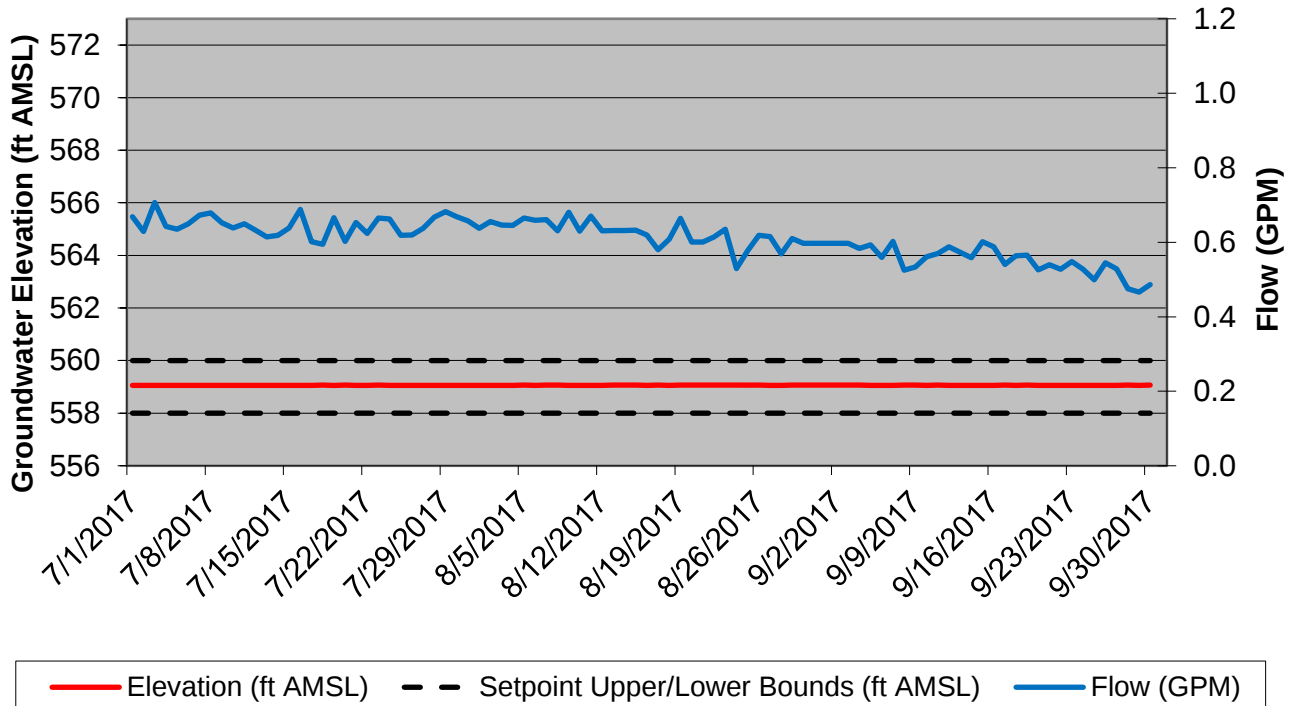


Well PW-2M

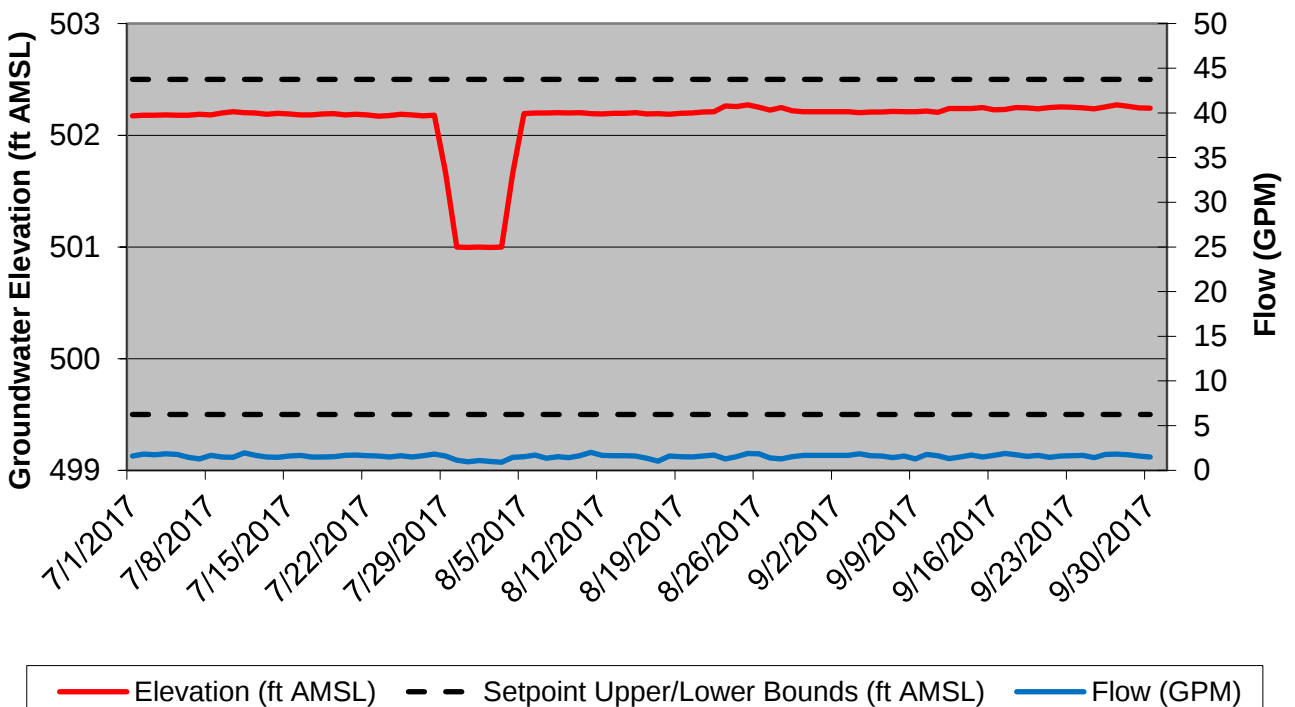


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-2UR

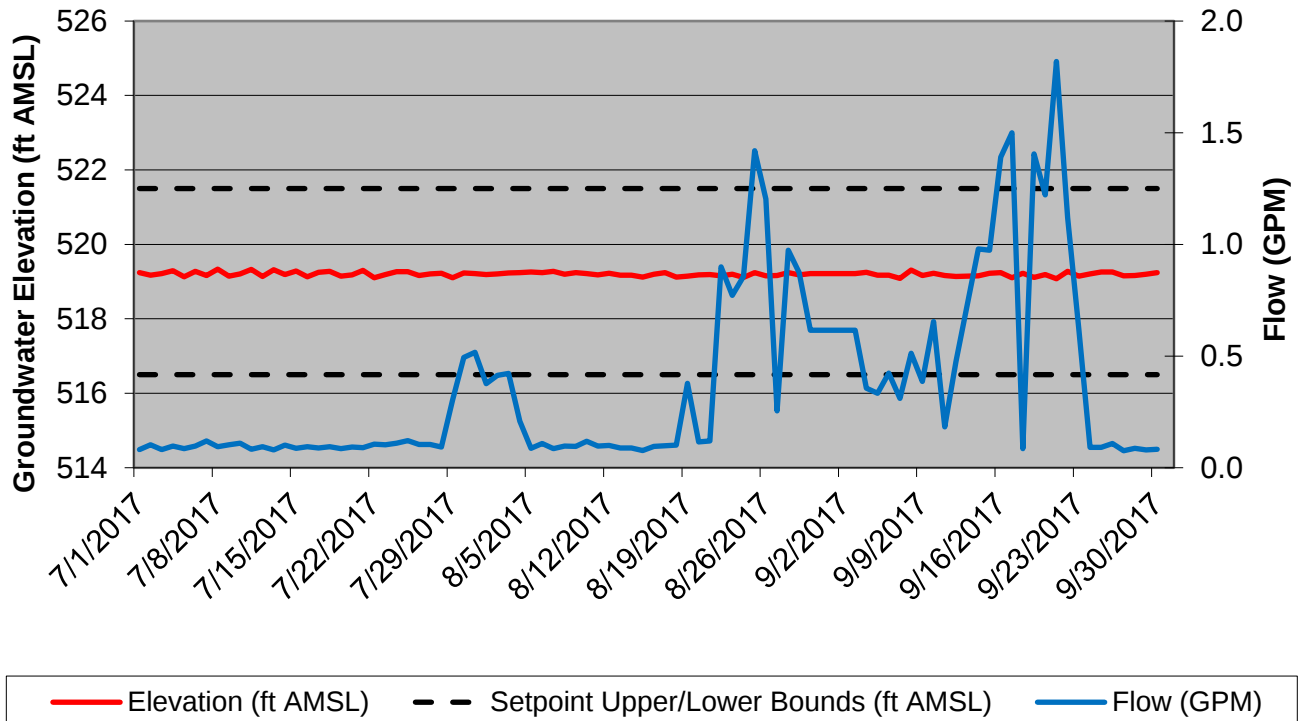


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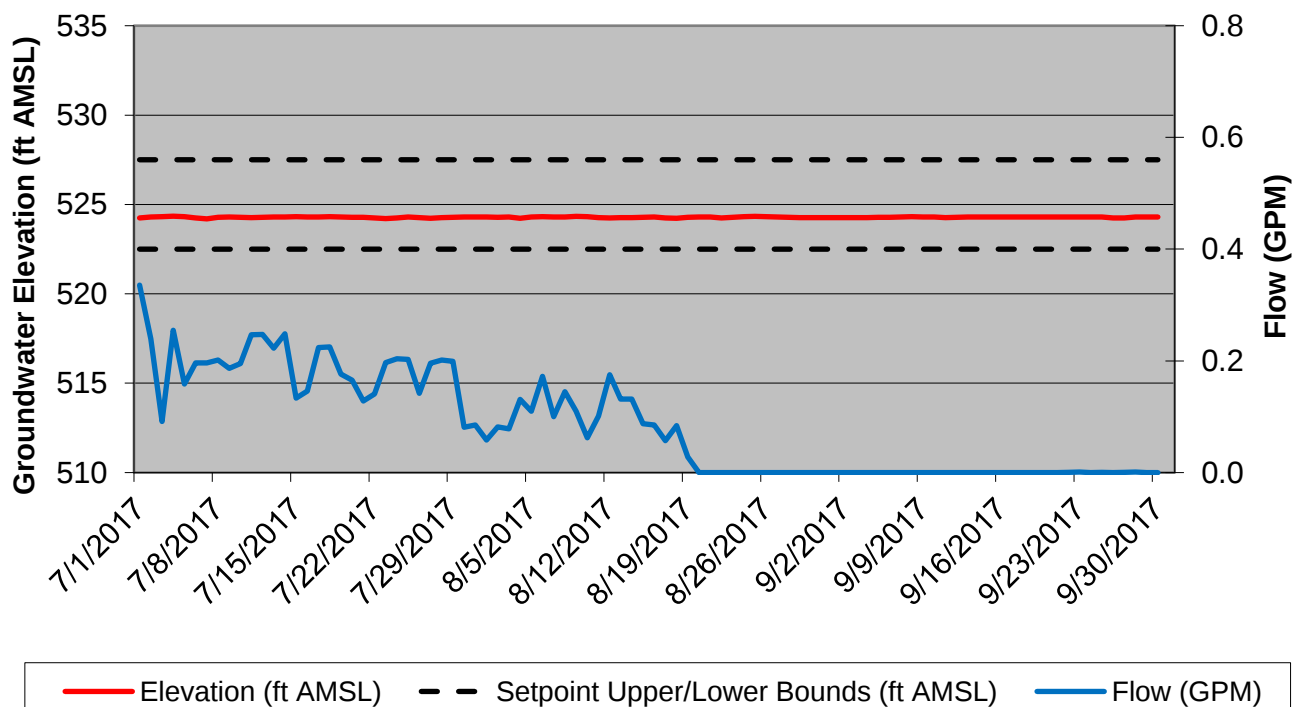


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-3M

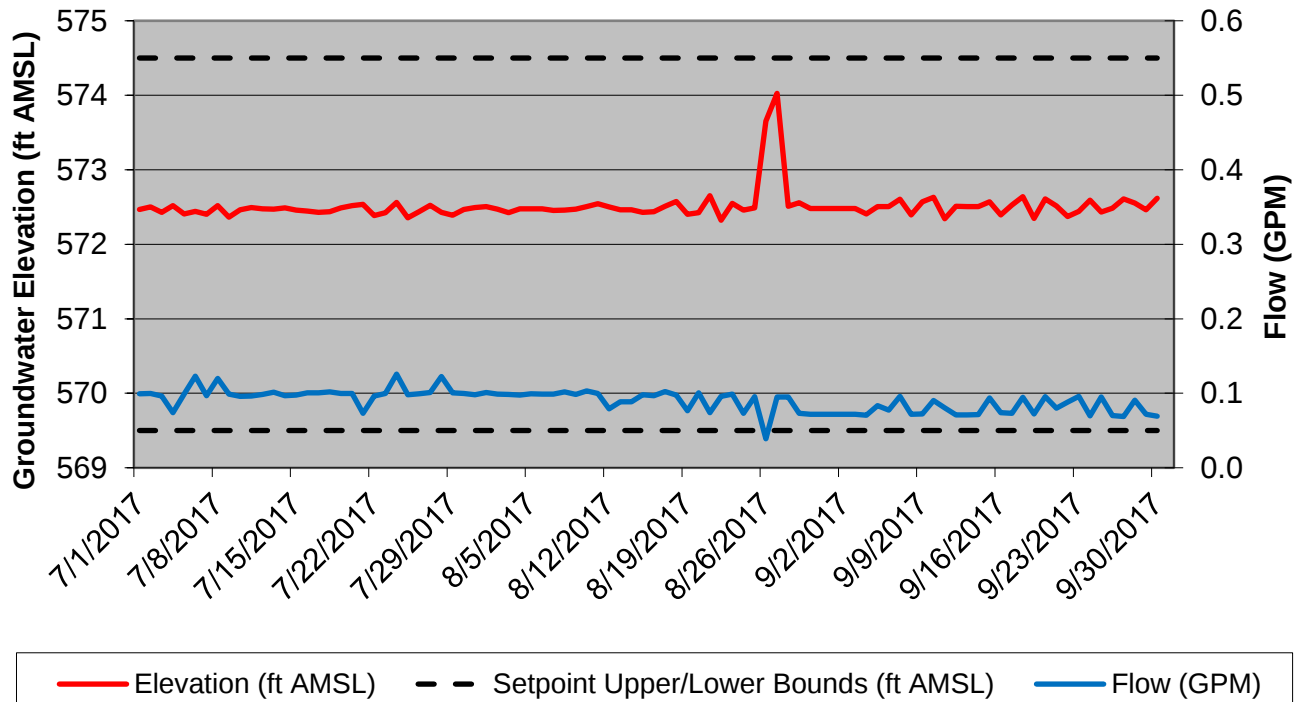


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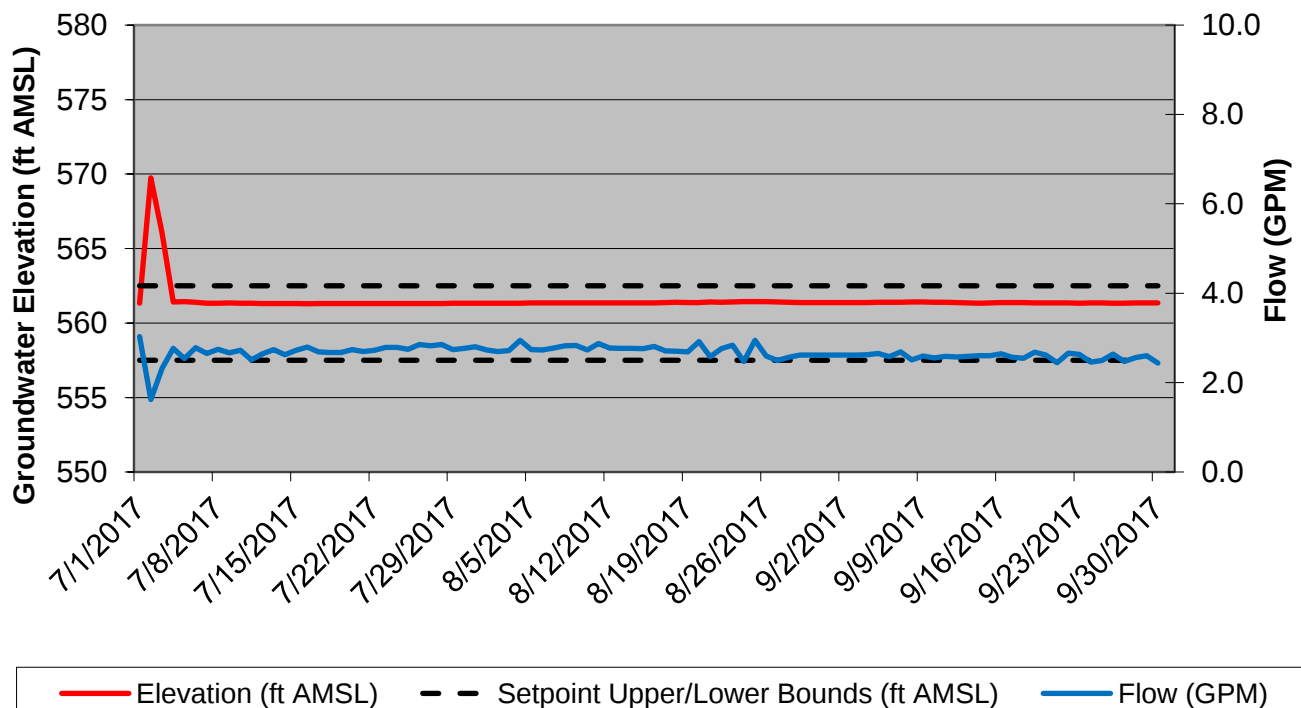


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-4U

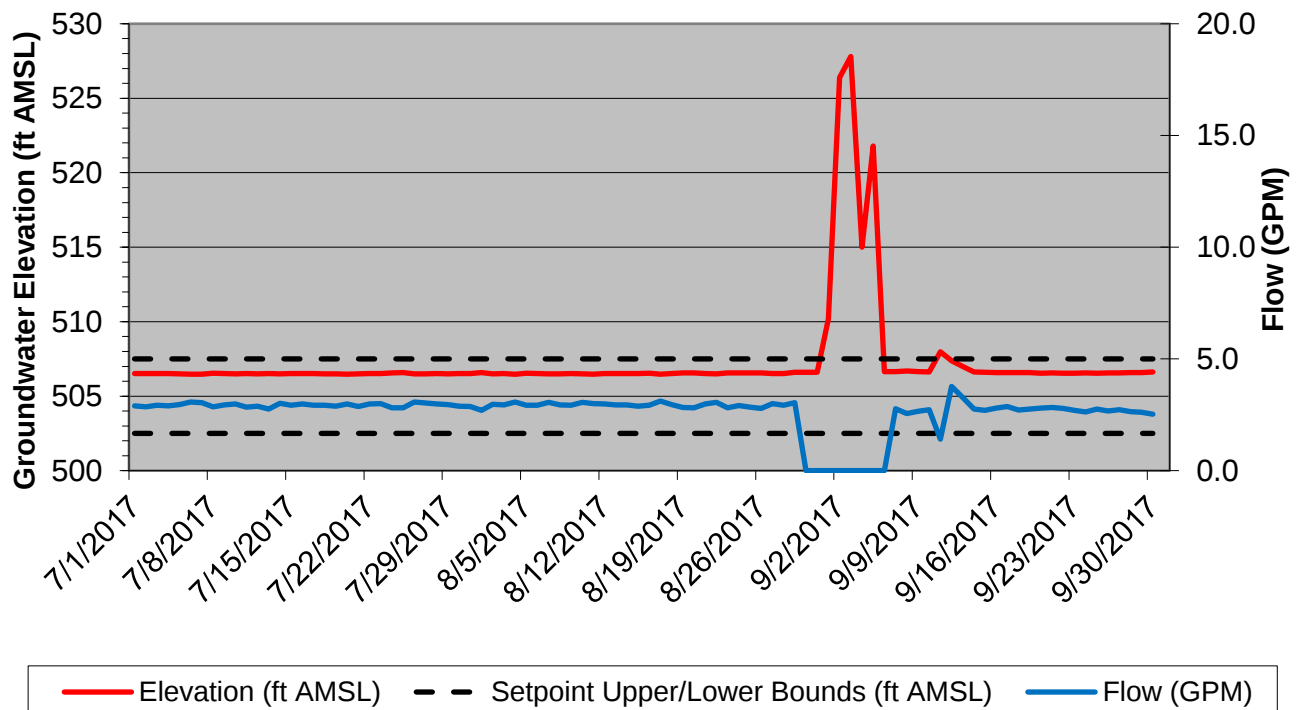


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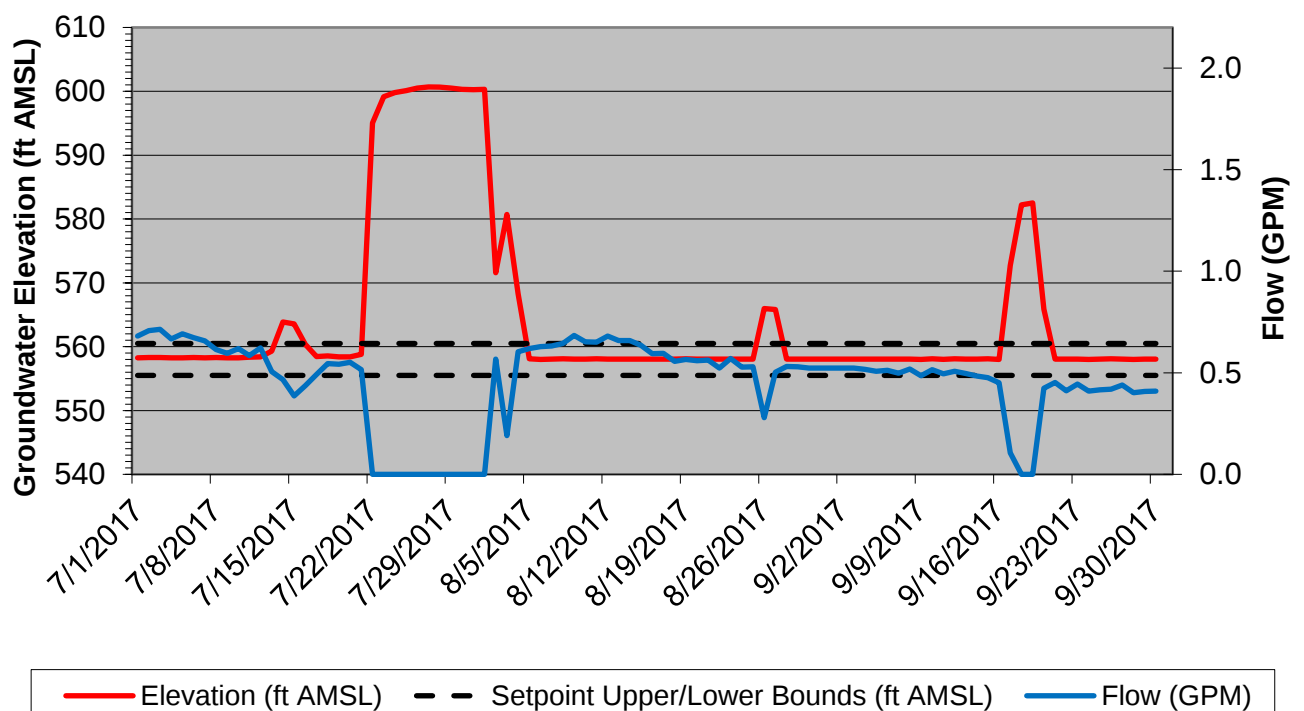


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-6MR

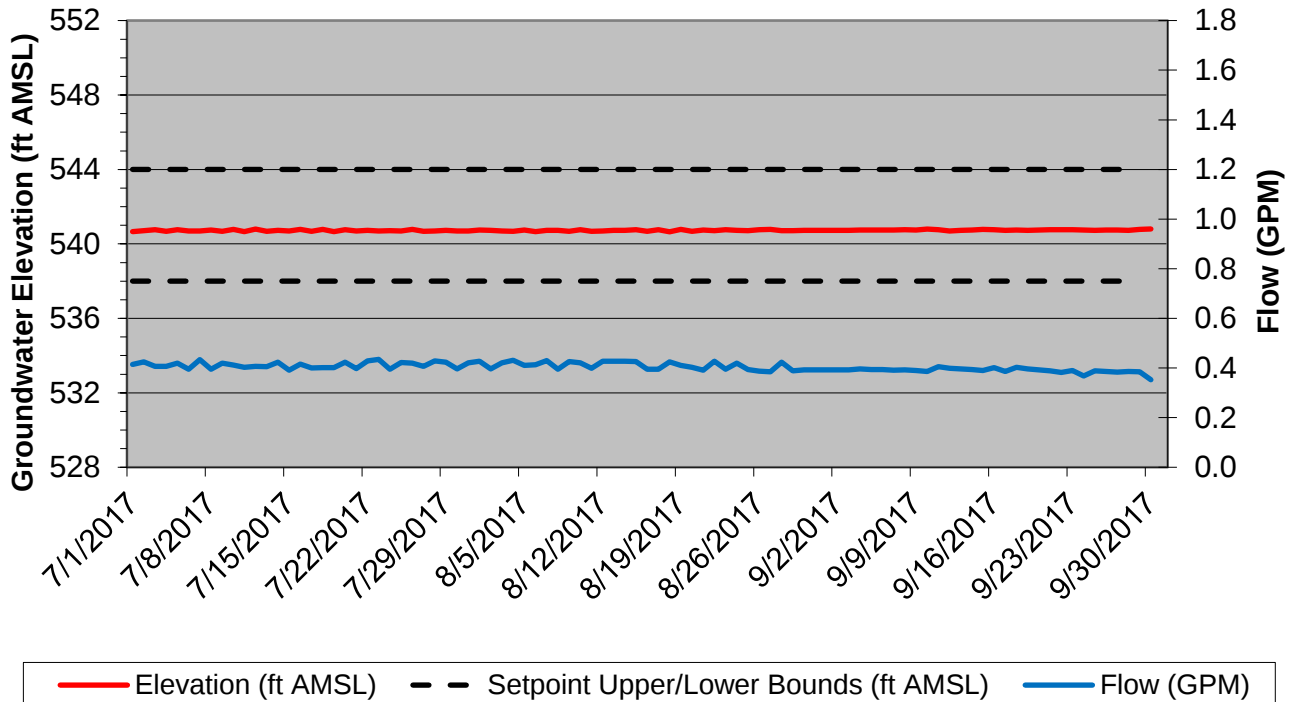


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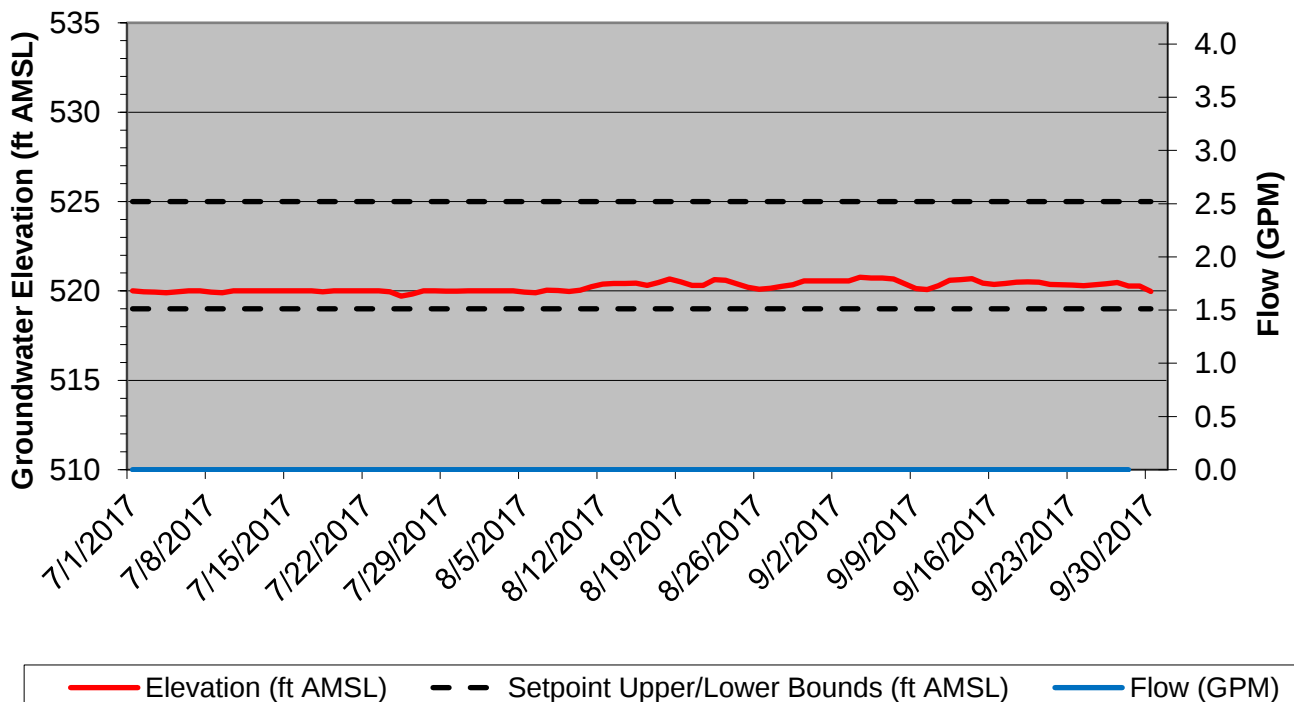


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-7U

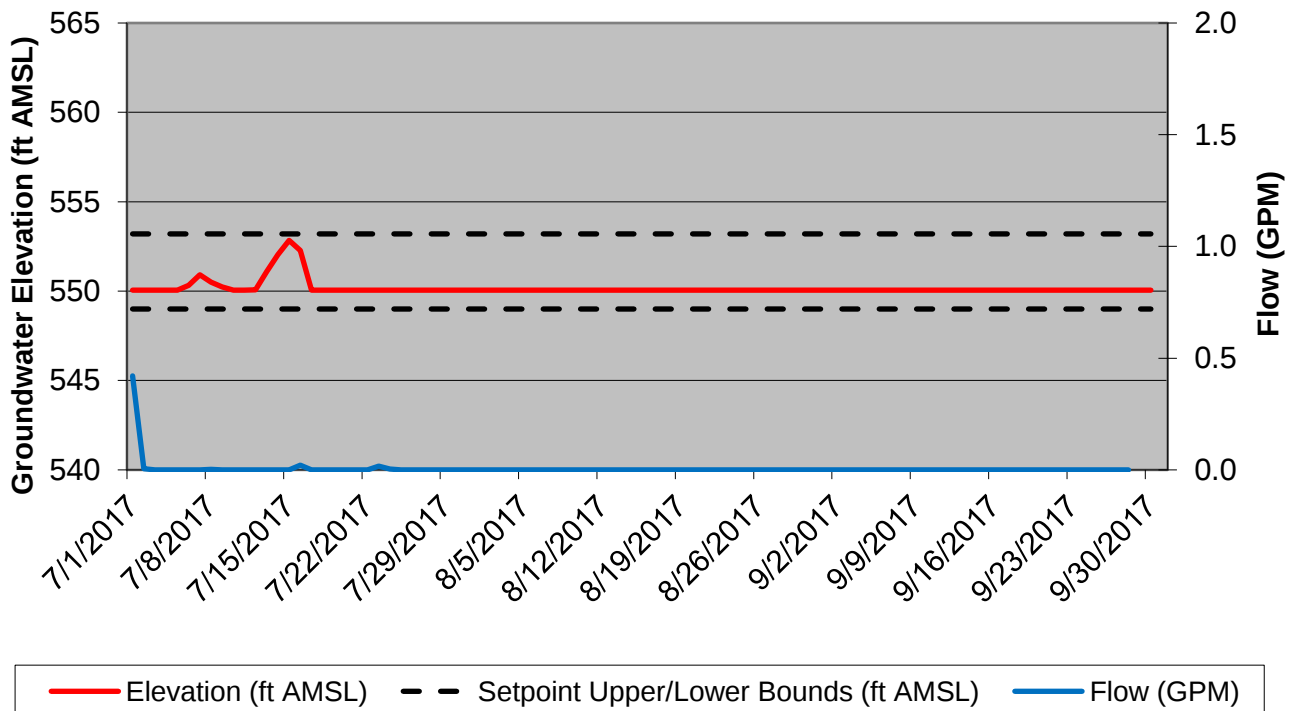


Well PW-8M

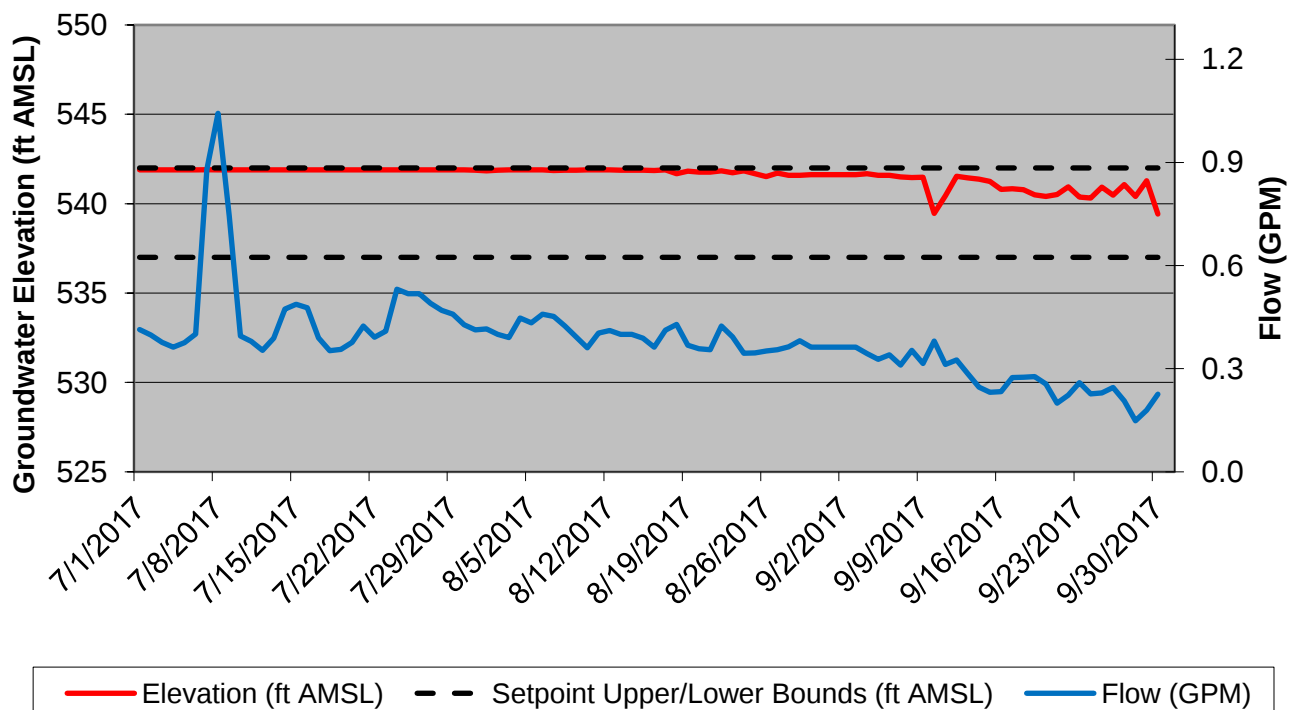


THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

Well PW-8U



Well PW-9U



THIRD QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK

