`

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

July 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 – Second 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 April 1, 2017 through June 30, 2017. A total of 10.3 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 second quarter of 2017:

- The water level in APW-1 exceeded setpoint range from April 7 through April 9 due to heavy rains and a leak. The water level returned to within setpoint range on April 11. The water level exceeded setpoint range again on April 21 due to heavy rains and a leak and returned within setpoint range on April 22. Water level exceeded setpoint range from May 2 to May 3 due to heavy rains, but returned

to within setpoint range on May 4. The water level exceeded setpoint range again from May 6 to May 8 due to heavy rains, but the water level returned to within setpoint range on May 9. The water level exceed setpoint range on May 25 due to heavy rains, but returned to within setpoint range on May 26.

- The water level in APW-2 exceeded setpoint range from April 7 to April 9 due to heavy rains. The water level returned to within setpoint on April 10. The water level exceeded setpoint range on April 21 due to heavy rains and returned to within setpoint range on April 22. Water level exceeded setpoint range May 6 to May 8 due to heavy rains and a leak. The water level returned to within setpoint range on May 9.
- The water level in PW-1U was above setpoint range from April 7 to April 17 due to heavy rains, a leak and low flow. The level transmitter was replaced on April 13, but the water level remained elevated. The pump was replaced on April 17 and the water level returned to within setpoint range on April 18. The water level exceeded setpoint range from May 2 to May 4 due to heavy rains. The water level returned to within setpoint on May 5. The water level exceeded setpoint range from May 6 to May 11 due to heavy rains and a pump issue. The pump was repaired on May 11 and the water level returned to within setpoint range on May 12. The water level exceeded setpoint range from May 13 to May 15 due to pump issues. The pump was repaired on May 15 and the water level returned to within setpoint range on May 16. The water levels in PW-2L, PW-2UR, PW-3L, PW-3M, PW-5UR, and PW-6UR exceeded setpoint range from April 7 to April 8 due to heavy rains. The water levels returned to within setpoint range on April 9.
- The water level in PW-3L exceeded setpoint range on May 15 and June 6 due to rain. The water level returned to within setpoint range on May 16 and June 7.

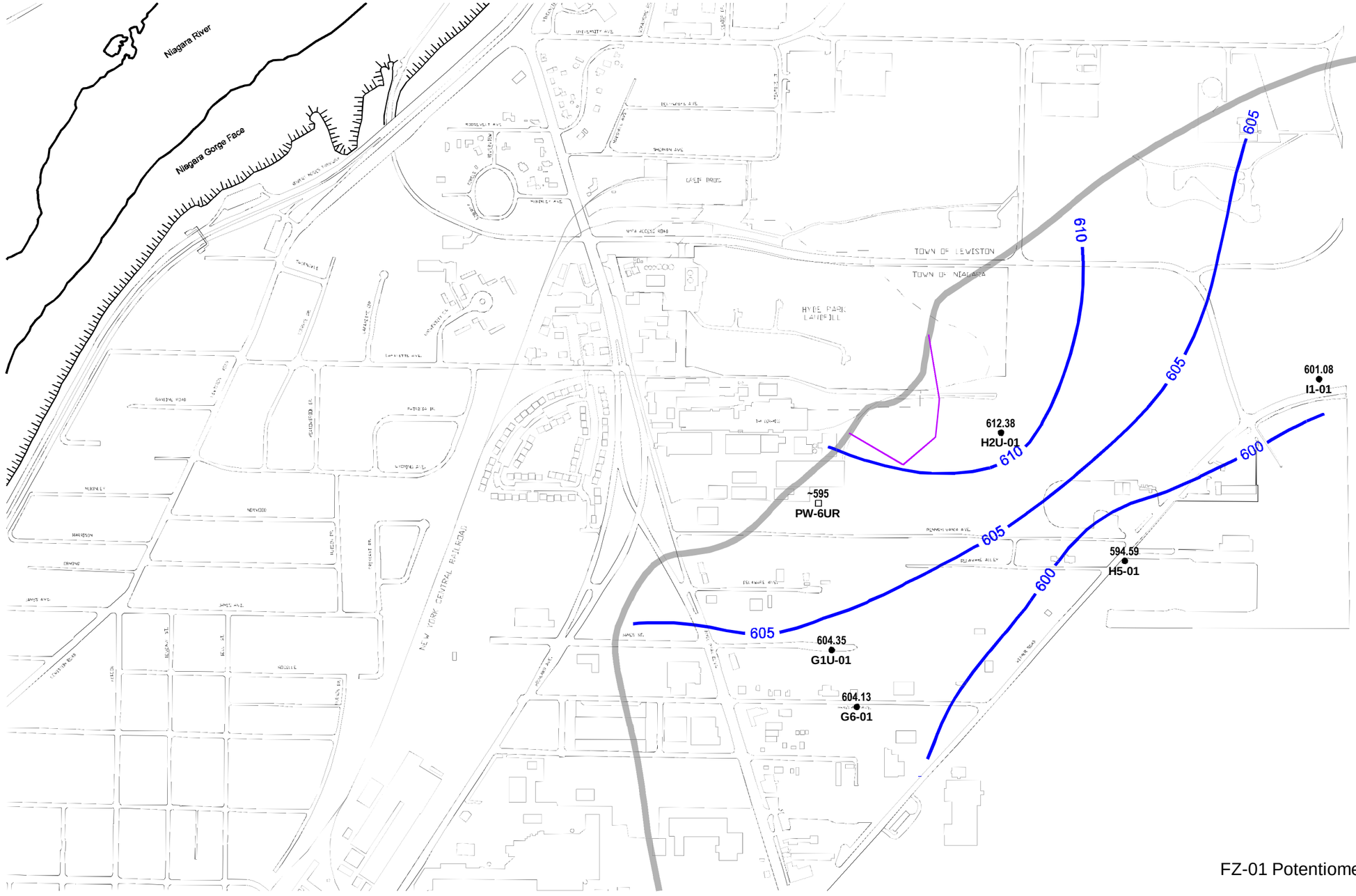
If you have any questions, please feel free to contact me at (231) 670-6809 or by email at joseph_branch@oxy.com.

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.

Joe Branch
Site Manager
231-670-6809 Cell

JB/eew/29
Encl.
cc: C. Babcock, GSH
M. Forcucci, 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
- ~ 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 1
FZ-01 Potentiometric Surface June 2017
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

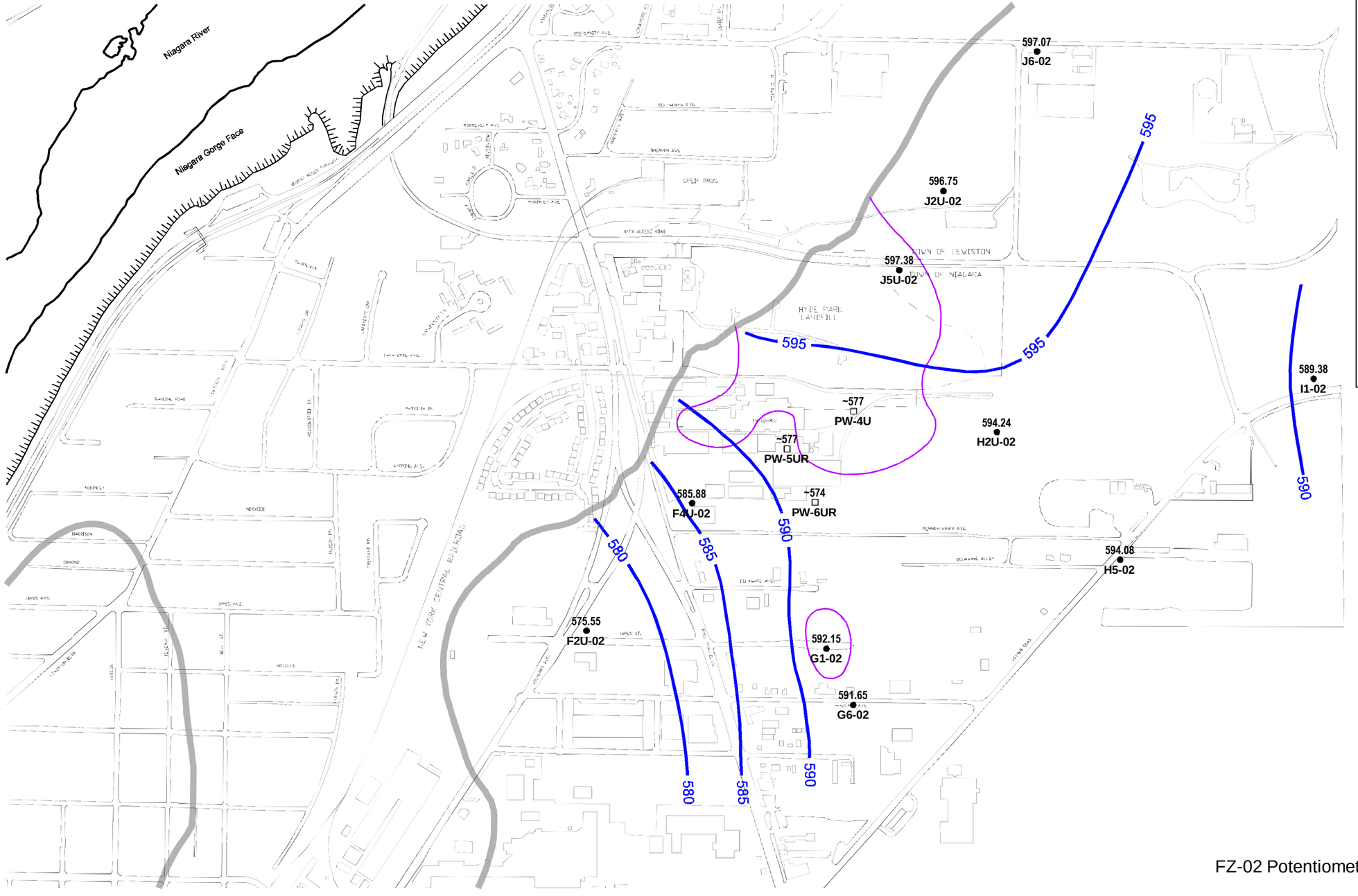
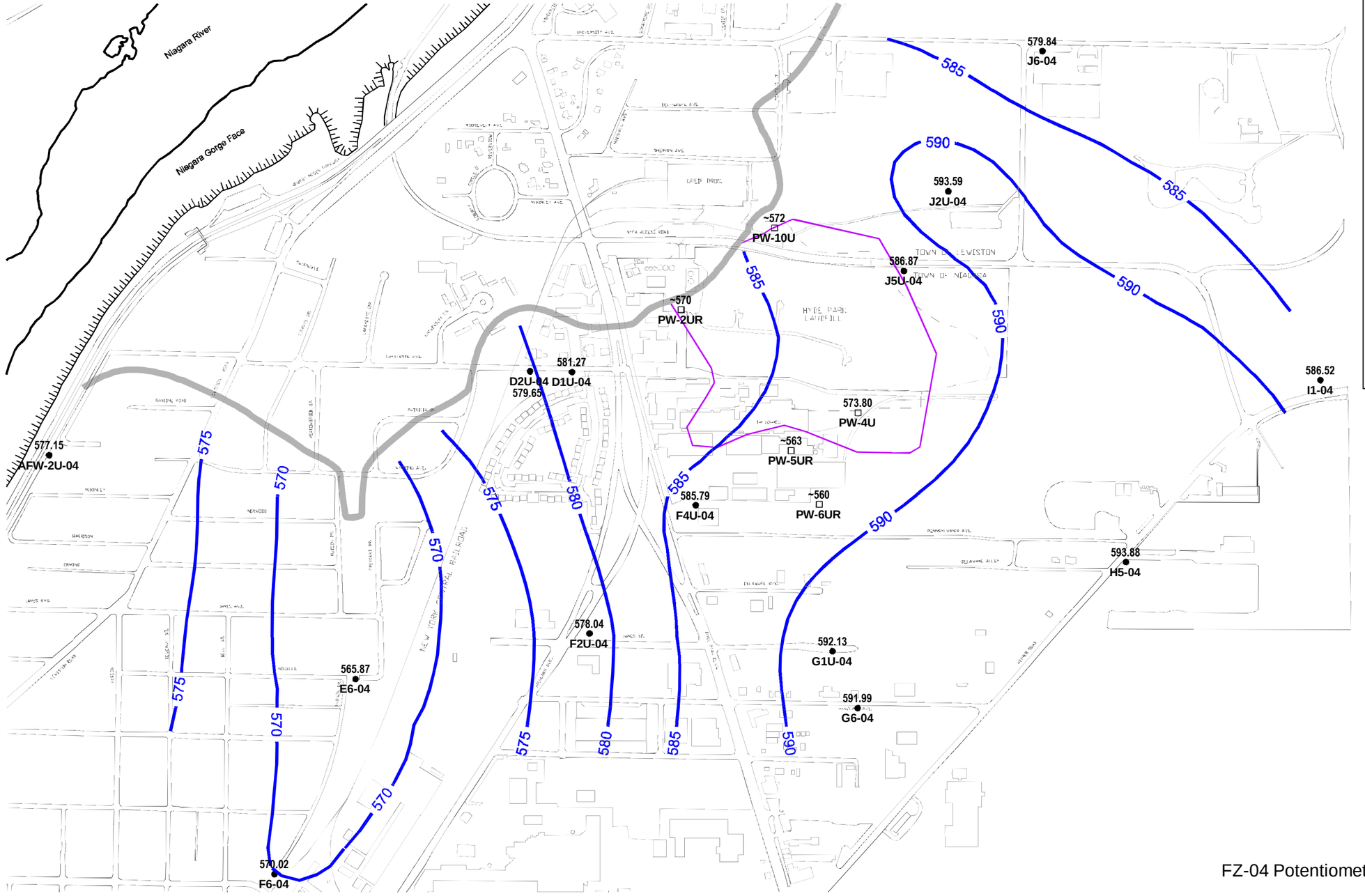


figure 2
FZ-02 Potentiometric Surface June 2017
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



Legend

- Potentiometric Contour (ft AMSL)
- 2003 Delineation of NAPL Limits
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- □ Purge Well - data not used in contouring
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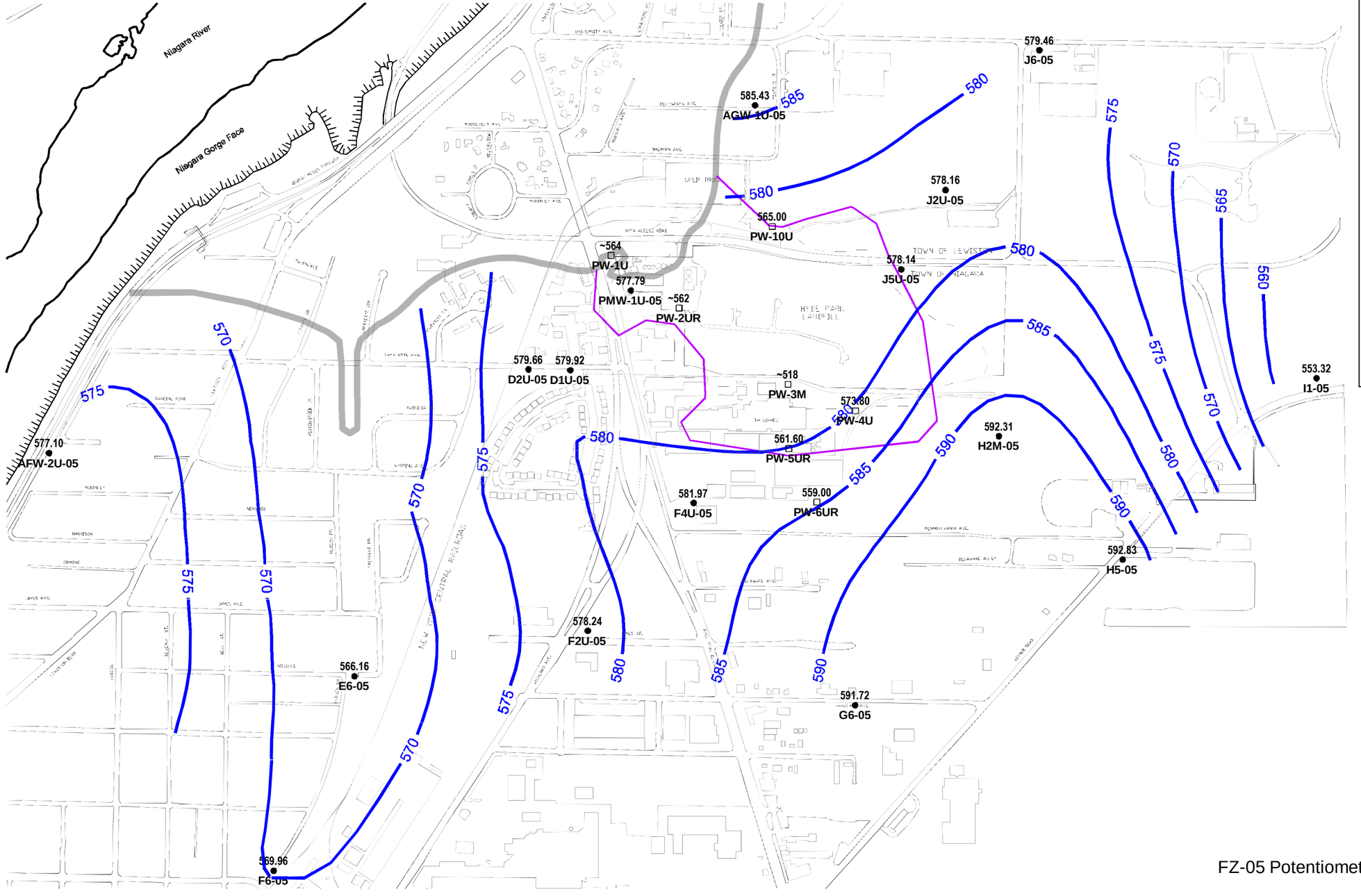
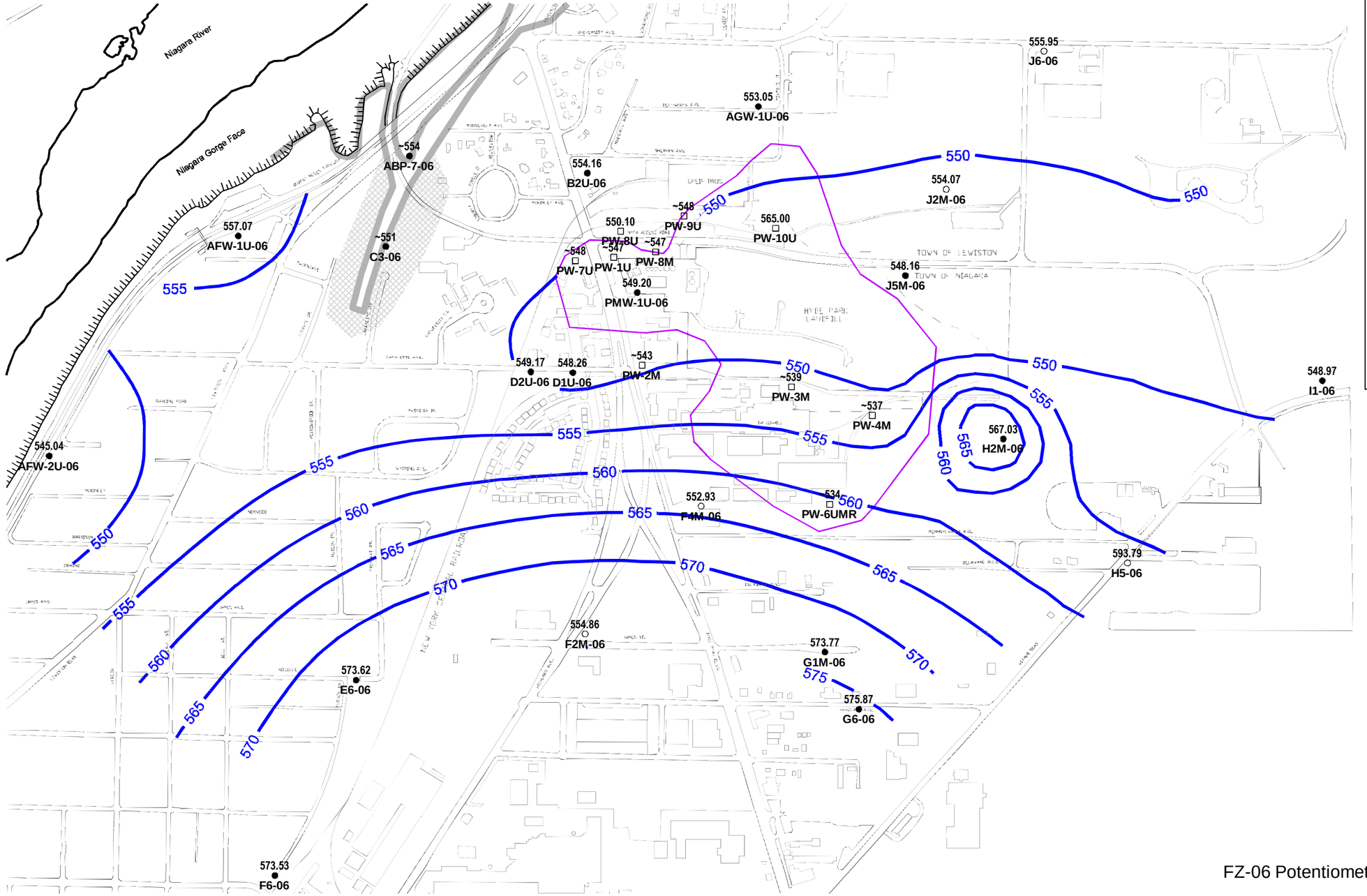
figure 3
FZ-04 Potentiometric Surface June 2017
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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.

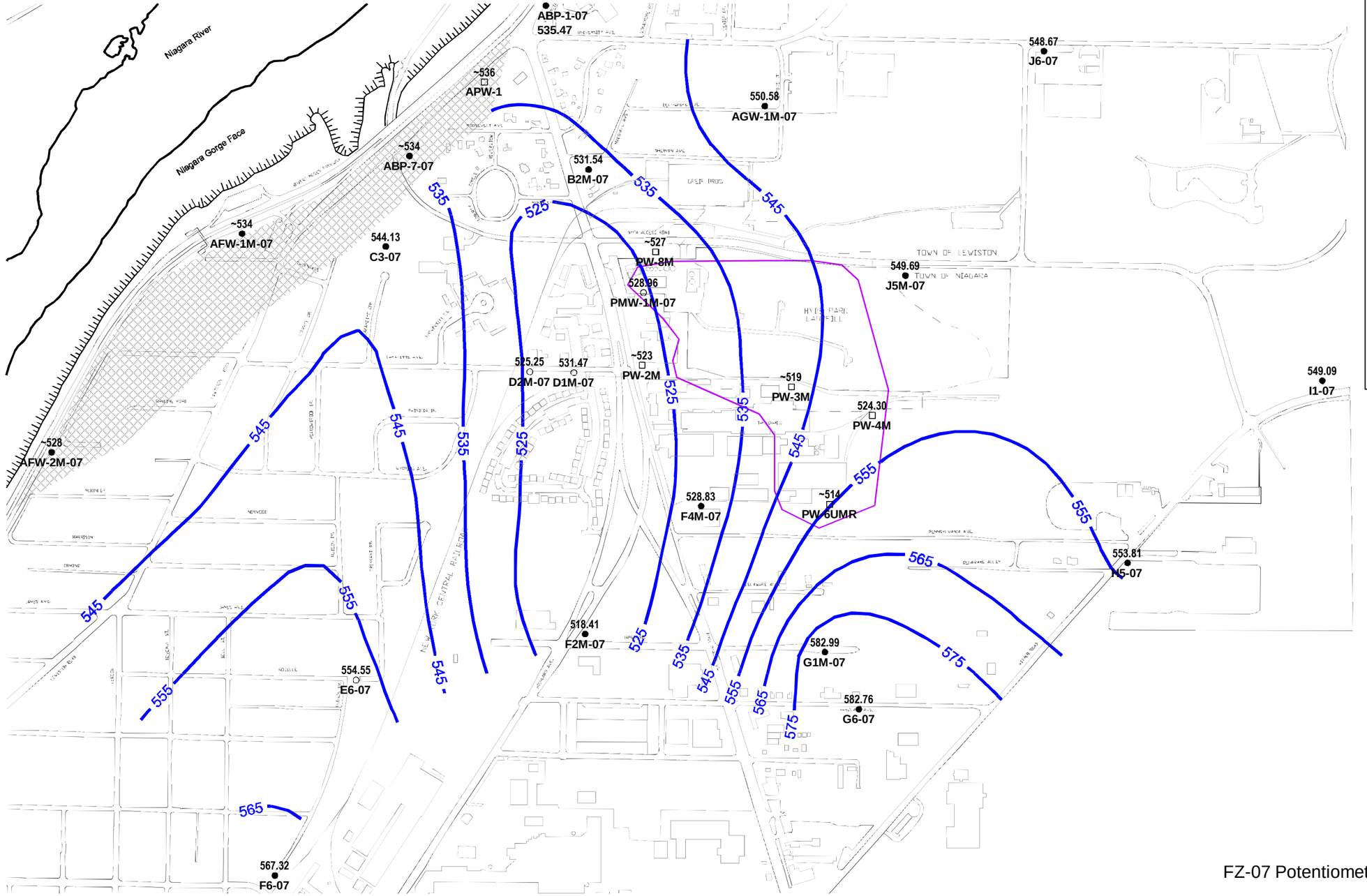
figure 4
FZ-05 Potentiometric Surface June 2017
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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 2017
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
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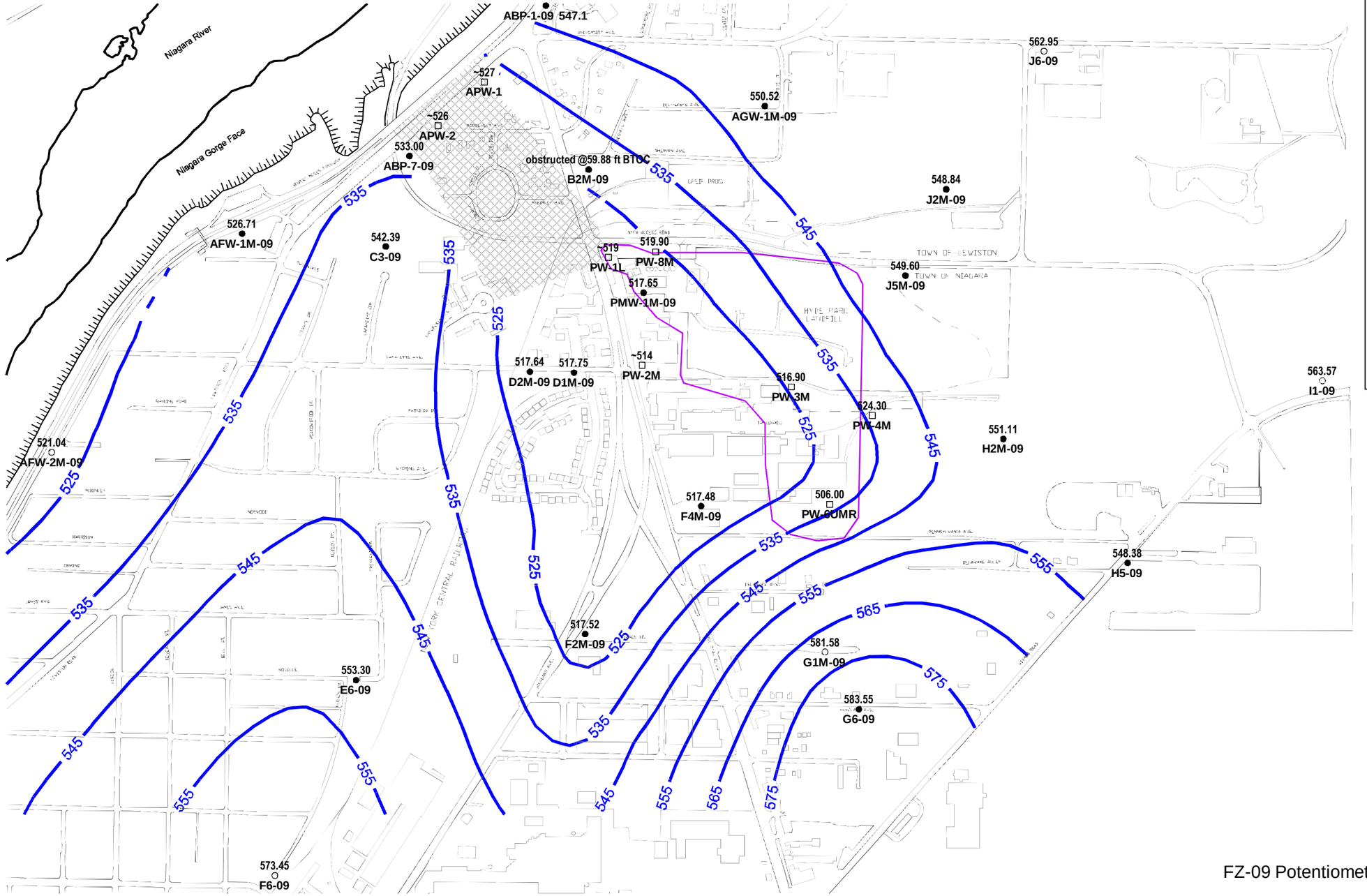
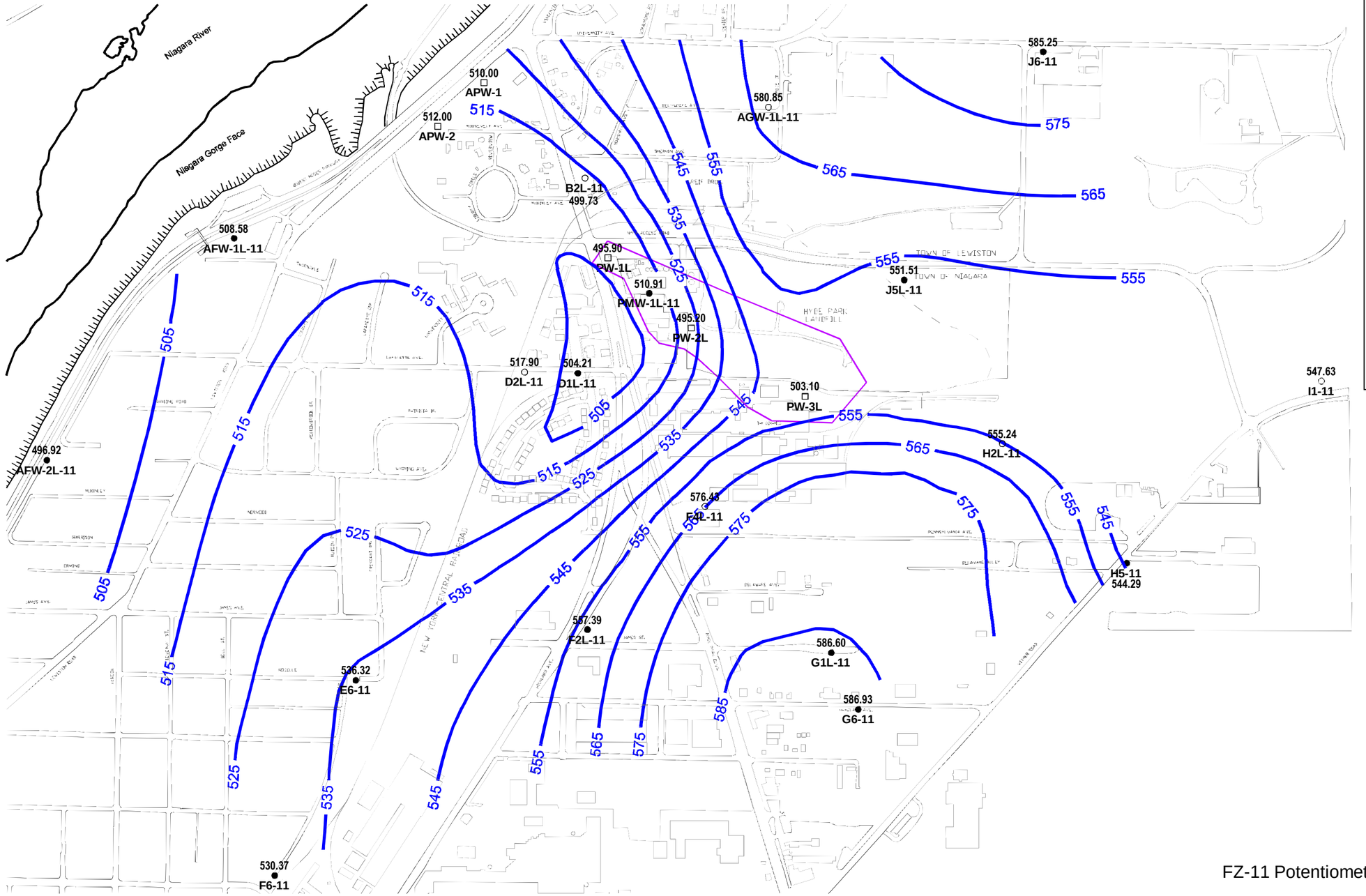
figure 6
FZ-07 Potentiometric Surface June 2017
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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 2017
2nd 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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- ● 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 2017
2nd Quarter Report
Hyde Park Landfill Site
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Niagara Falls, New York

Glenn Springs Holdings, Inc.

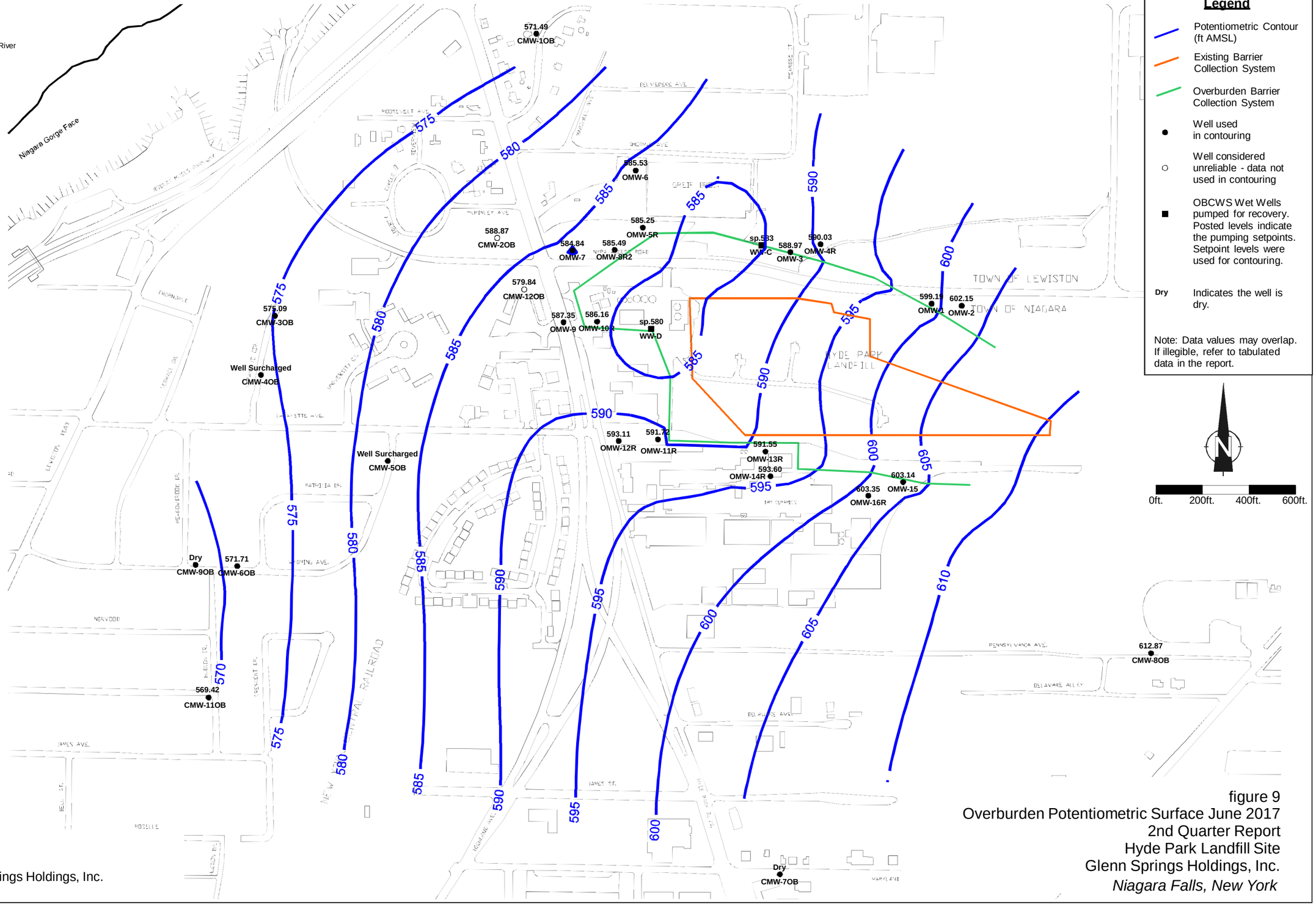


figure 9
Overburden Potentiometric Surface June 2017
2nd Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Glenn Springs Holdings, Inc.

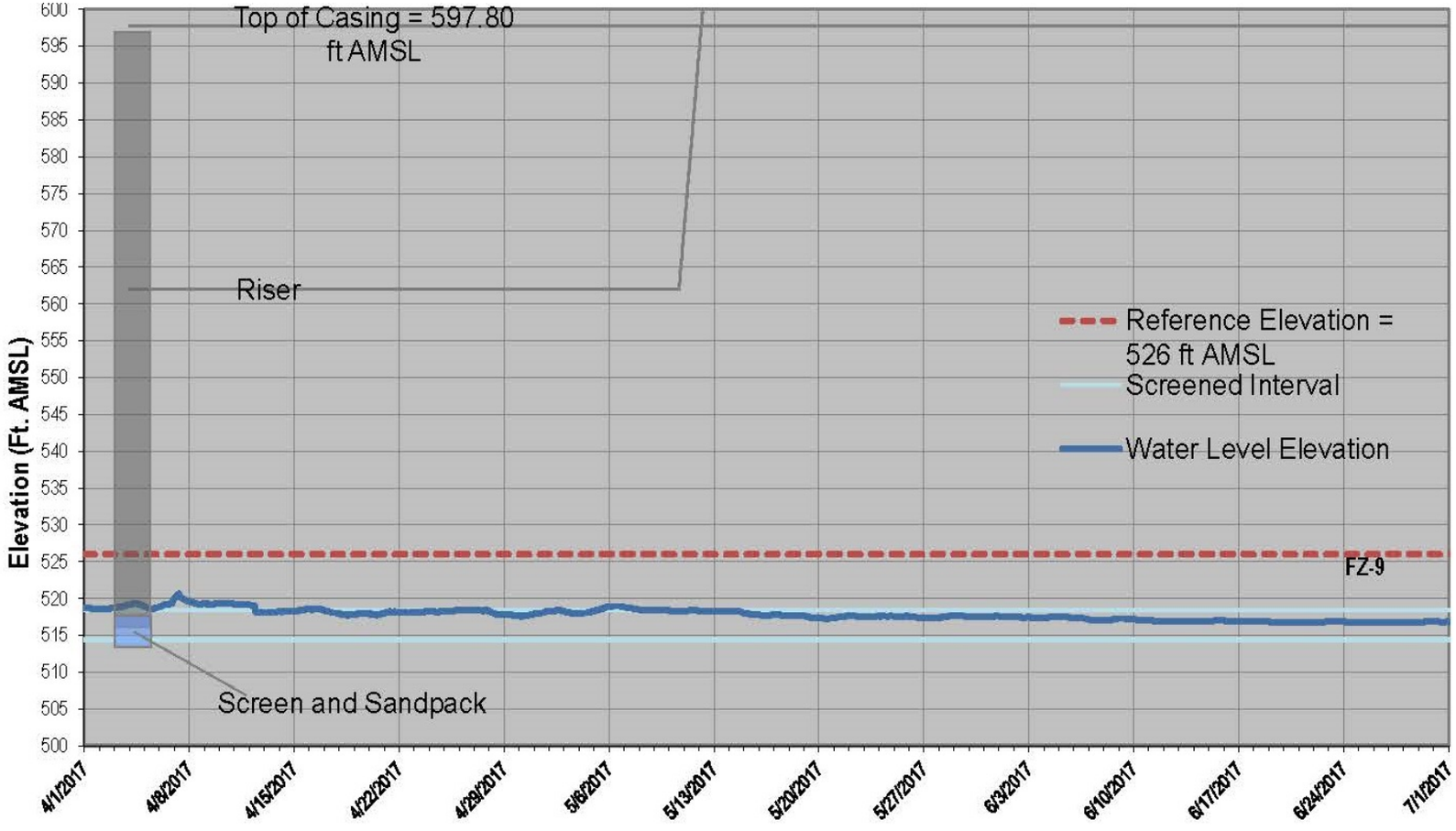


figure 10

PMW-1M-09 2nd Quarter 2017 - Hourly Water Level Elevation
2nd 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
Second 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	1.92	588.87
CMW-3OB	582.13	7.04	575.09
CMW-4OB	574.28	Surcharged	Surcharged
CMW-5OB	583.43	Surcharged	Surcharged
CMW-6OB	571.89	0.18	571.71
CMW-7OB	611.00	Dry	Dry
CMW-8OB	616.11	3.24	612.87
CMW-9OB	571.76	Dry	Dry
CMW-1OB	576.80	5.31	571.49
CMW-11OB	572.85	3.43	569.42
CMW-12OB	594.74	14.90	579.84
MH20	605.87	4.66	601.21
MH21	599.77	6.09	593.68
MH22	593.37	6.80	586.57
MH23	587.05	12.14	574.91
MH24	582.57	7.20	575.37
MH25	583.82	6.81	577.01
MH26	584.48	8.29	576.19
MH27	586.12	10.69	575.43
MH28	585.23	16.11	569.12
MH29	604.58	15.93	588.65
MH30	599.49	10.10	589.39
MH31	590.10	9.59	580.51
MH32	592.01	9.64	582.37
MH33	592.51	8.70	583.81
MH34	598.34	7.11	591.23
MH35	605.69	6.54	599.15
MH35A	605.69	7.16	598.53
OMW-1	605.28	6.09	599.19
OMW-2	605.99	3.84	602.15
OMW-3	598.63	9.66	588.97
OMW-4R	601.17	11.14	590.03
OMW-5R	591.31	6.06	585.25
OMW-6	587.62	2.09	585.53
OMW-7	592.74	7.90	584.84
OMW-8R2	594.67	9.18	585.49
OMW-9	595.27	7.92	587.35
OMW-10R	595.13	8.97	586.16
OMW-11R	597.52	5.80	591.72
OMW-12R	597.20	4.09	593.11
OMW-13R	601.50	9.95	591.55
OMW-14R	599.64	6.04	593.60
OMW-15	607.48	4.34	603.14
OMW-16R	607.62	4.27	603.35
SC-2	625.61	*	*
SC-3	638.72	*	*
SC-4	639.35	*	*
SC-5	634.07	*	*
SC-6	631.15	22.42	608.73

Table 1

Water Level Elevation Summary
Second 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	12.42	563.69
CMW-2SH	590.51	19.41	571.10
CMW-3SH	581.91	33.47	548.44
CMW-4SH	574.16	10.55	563.61
CMW-5SH	583.36	6.97	576.39
CMW-6SH	572.05	10.20	561.85
CMW-7SH	610.58	10.08	600.50
CMW-8SH	615.95	5.02	610.93
CMW-9SH	571.96	12.01	559.95
CMW-11SH	573.21	8.30	564.91
CMW-12SH	597.02	26.83	570.19
Flow Zone 1			
G1U-01	617.08	12.73	604.35
G6-01	609.24	5.11	604.13
H2U-01	620.92	8.54	612.38
H5-01	617.61	23.02	594.59
I1-01	625.58	24.50	601.08
Flow Zone 2			
F2U-02	599.89	24.34	575.55
F4U-02	602.32	16.44	585.88
G1-02	616.86	24.71	592.15
G6-02	608.65	17.00	591.65
H2U-02	620.88	26.64	594.24
H5-02	617.47	23.39	594.08
I1-02	625.47	36.09	589.38
J2U-02	609.66	12.91	596.75
J5U-02	606.21	8.83	597.38
J6-02	609.23	12.16	597.07
Flow Zone 4			
AFW-2U-04	593.48	16.33	577.15
D1U-04	593.77	12.50	581.27
D2U-04	590.65	11.00	579.65
E6-04	578.23	12.36	565.87
F2U-04	599.76	21.72	578.04
F4U-04	602.19	16.40	585.79
F6-04	588.06	18.04	570.02
G1U-04	616.96	24.83	592.13
G6-04	609.15	17.16	591.99
H5-04	617.40	23.52	593.88
I1-04	625.30	38.78	586.52
J2U-04	609.42	15.83	593.59
J5U-04	606.05	19.18	586.87
J6-04	609.12	29.28	579.84

Table 1

Water Level Elevation Summary
Second 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	16.23	577.10
AGW-1U-05	591.80	6.37	585.43
D1U-05	593.51	13.59	579.92
D2U-05	590.56	10.90	579.66
E6-05	578.04	11.88	566.16
F2U-05	599.64	21.40	578.24
F4U-05	602.06	20.09	581.97
F6-05	587.85	17.89	569.96
G6-05	609.13	17.41	591.72
H2M-05	621.59	29.28	592.31
H5-05	617.31	24.48	592.83
I1-05	625.25	71.93	553.32
J2U-05	609.30	31.14	578.16
J5U-05	605.87	27.73	578.14
J6-05	609.02	29.56	579.46
PMW-1U-05	598.00	20.21	577.79
Flow Zone 6			
ABP-7-06	575.78	Dry	Dry
AFW-1U-06	571.83	14.76	557.07
AFW-2U-06	593.22	48.18	545.04
AGW-1U-06	591.66	38.61	553.05
B2U-06	589.29	35.13	554.16
C3-06	585.78	37.41	548.37
D1U-06	593.25	44.99	548.26
D2U-06	590.38	41.21	549.17
E6-06	577.99	4.37	573.62
F2M-06	599.06	44.20	554.86
F4M-06	602.05	49.12	552.93
F6-06	587.84	14.31	573.53
G1M-06	616.75	42.98	573.77
G6-06	609.09	33.22	575.87
H2M-06	621.42	54.39	567.03
H5-06	617.17	23.38	593.79
I1-06	625.15	76.18	548.97
J2M-06	608.94	54.87	554.07
J5M-06	606.22	58.06	548.16
J6-06	608.93	52.98	555.95
PMW-1U-06	597.92	48.72	549.20

Table 1

Water Level Elevation Summary
Second 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	40.97	535.47
ABP-7-07	575.73	41.88	533.85
AFW-1M-07	571.41	Dry	Dry
AFW-2M-07	593.44	66.82	526.62
AGW-1M-07	592.91	42.33	550.58
B2M-07	589.52	57.98	531.54
C3-07	585.62	41.49	544.13
D1M-07	594.15	62.68	531.47
D2M-07	590.77	65.52	525.25
E6-07	577.91	23.36	554.55
F2M-07	598.91	80.50	518.41
F4M-07	601.91	73.08	528.83
F6-07	587.68	20.36	567.32
G1M-07	616.68	33.69	582.99
G6-07	609.06	26.30	582.76
H5-07	617.05	63.24	553.81
I1-07	625.14	76.05	549.09
J5M-07	606.07	56.38	549.69
J6-07	608.85	60.18	548.67
PMW-1M-07	598.50	69.54	528.96
Flow Zone 9			
ABP-1-09	575.49	28.39	547.10
ABP-7-09	575.67	42.67	533.00
AFW-1M-09	571.12	44.41	526.71
AFW-2M-09	593.32	72.28	521.04
AGW-1M-09	592.75	42.23	550.52
B2M-09	589.34	Obstructed	Obstructed
C3-09	585.00	42.61	542.39
D1M-09	594.02	76.27	517.75
D2M-09	590.66	73.02	517.64
E6-09	577.82	24.52	553.30
F2M-09	598.71	81.19	517.52
F4M-09	601.79	84.31	517.48
F6-09	587.53	14.08	573.45
G1M-09	616.58	35.00	581.58
G6-09	608.98	25.43	583.55
H2M-09	621.32	70.21	551.11
H5-09	616.93	68.55	548.38
I1-09	624.91	61.34	563.57
J2M-09	608.77	59.93	548.84
J5M-09	605.82	56.22	549.60
J6-09	608.76	45.81	562.95
PMW-1M-09	598.34	80.69	517.65

Table 1

Water Level Elevation Summary
Second 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	63.52	508.58
AFW-2L-11	593.43	96.51	496.92
AGW-1L-11	592.71	11.86	580.85
B2L-11	589.65	89.92	499.73
D1L-11	593.80	89.59	504.21
D2L-11	590.21	72.31	517.90
E6-11	577.72	41.40	536.32
F2L-11	598.94	41.55	557.39
F4L-11	602.22	25.79	576.43
F6-11	587.40	57.03	530.37
G1L-11	616.84	30.24	586.60
G6-11	608.89	21.96	586.93
H2L-11	620.73	65.49	555.24
H5-11	616.81	72.52	544.29
I1-11	624.75	77.12	547.63
J5L-11	607.20	55.69	551.51
J6-11	608.68	23.43	585.25
PMW-1L-11	598.84	87.93	510.91
Purge Wells			
APW-1	564.98	54.98	510.00
APW-2	569.89	57.89	512.00
PW-1L	593.16	97.26	495.90
PW-1U	593.16	46.16	547.00
PW-2L	597.29	102.09	495.20
PW-2M	596.61	84.51	512.10
PW-2UR	594.75	34.55	560.20
PW-3L	599.05	95.95	503.10
PW-3M	597.79	80.89	516.90
PW-4M	606.93	82.63	524.30
PW-4U	604.85	31.05	573.80
PW-5UR	601.31	39.71	561.60
PW-6UMR	609.31	103.31	506.00
PW-6UR	608.47	49.47	559.00
PW-7U	592.47	53.87	538.60
PW-8M	592.67	72.77	519.90
PW-8U	589.27	39.17	550.10
PW-9U	587.47	45.57	541.90
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 59.90 ft below top of well
*	- Waterlevel could not be measured in retrofitted wells, access points to measure waterlevels were install

Table 2

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

	Effluent	
Date	**pH**	**Flow**
	(su)	(gal)
04/01/17	--	--
04/02/17	--	--
04/03/17	7.0	129,000
04/04/17	7.0	364,000
04/05/17	7.0	86,000
04/06/17	7.1	115,000
04/07/17	7.0	100,000
04/08/17	--	--
04/09/17	7.0	373,000
04/10/17	7.0	113,000
04/11/17	7.0	387,000
04/12/17	--	--
04/13/17	7.0	119,000
04/14/17	7.0	66,000
04/15/17	--	--
04/16/17	7.0	345,000
04/17/17	7.0	115,000
04/18/17	7.0	117,000
04/19/17	7.0	106,000
04/20/17	7.1	337,000
04/21/17	7.1	56,000
04/22/17	--	--
04/23/17	--	--
04/24/17	7.0	352,000
04/25/17	7.0	75,000
04/26/17	7.0	104,000
04/27/17	7.0	368,000
04/28/17	7.0	48,000
04/29/17	--	--
04/30/17	--	--
05/01/17	7.0	392,000
05/02/17	7.0	100,000
05/03/17	7.0	102,000
05/04/17	7.0	348,000
05/05/17	7.0	50,000
05/06/17	--	--
05/07/17	7.0	365,000
05/08/17	7.0	115,000

Table 2

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

	Effluent	
Date	**pH**	**Flow**
	(su)	(gal)
05/09/17	7.1	101,000
05/10/17	7.1	108,000
05/11/17	7.1	301,000
05/12/17	7.1	59,000
05/13/17	--	--
05/14/17	--	--
05/15/17	7.0	401,000
05/16/17	7.0	116,000
05/17/17	7.0	119,000
05/18/17	7.0	384,000
05/19/17	--	--
05/20/17	--	--
05/21/17	--	--
05/22/17	7.0	107,000
05/23/17	7.0	328,000
05/24/17	--	--
05/25/17	7.0	113,000
05/26/17	7.0	99,000
05/27/17	--	--
05/28/17	7.0	407,000
05/29/17	--	--
05/30/17	7.0	109,000
05/31/17	7.0	104,000
06/01/17	7.0	344,000
06/02/17	--	--
06/03/17	--	--
06/04/17	--	--
06/05/17	7.0	116,000
06/06/17	7.0	125,000
06/07/17	7.0	114,000
06/08/17	7.0	118,000
06/09/17	--	--
06/10/17	--	--
06/11/17	--	--
06/12/17	7.0	118,000
06/13/17	7.0	106,000
06/14/17	7.1	69,000
06/15/17	7.1	109,000
06/16/17	7.0	78,000

Table 2

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

	Effluent	
Date	**pH**	**Flow**
	(su)	(gal)
06/17/17	--	--
06/18/17	--	--
06/19/17	7.0	110,000
06/20/17	7.0	104,000
06/21/17	7.0	79,000
06/22/17	7.1	56,000
06/23/17	--	--
06/24/17	--	--
06/25/17	--	--
06/26/17	7.1	118,000
06/27/17	7.1	108,000
06/28/17	7.1	106,000
06/29/17	7.1	88,000
06/30/17	--	--

Notes:

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

Table 3

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

Effluent

Parameter	Units	04/05/17	04/12/17	04/19/17	04/26/17	05/03/17	05/10/17	05/17/17
Volatiles								
1,1,1-Trichloroethane	µg/L					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
1,1,2-Trichloroethane	µg/L					2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	µg/L					2.0 U	2.0 U	2.0 U
1,1-Dichloroethene	µg/L					2.0 U	2.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L					2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	µg/L					2.0 U	2.0 U	2.0 U
1,2-Dichloroethane	µg/L					2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	µg/L					2.0 U	2.0 U	2.0 U
1,3-Dichlorobenzene	µg/L					2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	µg/L					2.0 U	2.0 U	2.0 U
2-Chlorotoluene	µg/L					2.0 U	2.0 U	2.0 U
3-Chlorotoluene	µg/L					2.0 U	2.0 U	2.0 U
4-Chlorotoluene	µg/L					2.0 U	2.0 U	2.0 U
Benzene	µg/L					2.0 U	2.0 U	2.0 U
Bromodichloromethane	µg/L					2.0 U	2.0 U	2.0 U
Bromoform	µg/L					2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L					2.0 U	2.0 U	2.0 U
Carbon disulfide	µg/L					4.8	2.0 U	3.8
Carbon tetrachloride	µg/L					2.0 U	2.0 U	2.0 U
Chlorobenzene	µg/L					2.0 U	2.0 U	2.0 U
Chloroethane	µg/L					2.0 U	2.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L					2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L					2.0 U	2.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L					2.0 U	2.0 U	2.0 U
cis-1,3-Dichloropropene	µg/L					2.0 U	2.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L					2.0 U	2.0 U	2.0 U
Ethylbenzene	µg/L					2.0 U	2.0 U	2.0 U
m&p-Xylenes	µg/L					4.0 U	4.0 U	4.0 U
Methylene chloride	µg/L					2.0 U	2.0 U	2.0 U
m-Monochlorobenzotrifluoride	µg/L					2.0 U	2.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L					2.0 U	2.0 U	2.0 U
o-Xylene	µg/L					2.0 U	2.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L					2.0 U	2.0 U	2.0 U
Styrene	µg/L					2.0 U	2.0 U	2.0 U
Tetrachloroethene	µg/L					2.0 U	2.0 U	2.0 U
Toluene	µg/L					2.0 U	2.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L					2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L					2.0 U	2.0 U	2.0 U
Trichloroethene	µg/L					2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L					2.0 U	2.0 U	2.0 U
Vinyl acetate	µg/L					4.0 U	4.0 U	4.0 U
Vinyl chloride	µg/L					300	250	300
Xylenes (total)	µg/L					6.0 U	6.0 U	6.0 U
General Chemistry								
Phenolics (total)	mg/L					0.0094	0.0114	0.0129

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

Effluent

Parameter	Units	05/24/17	5/31/2017	6/7/2017	6/14/2017	6/21/2017	6/28/2017
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	5	2.0 U	8.6	0.60 J	5.0	2.0 U
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	0.60 J	2.0 U	2.0 U	2.0 U	0.54 J
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	280	300	250	290	260	300
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	0.0131	0.0138	0.0110	0.0099	0.0112	0.0152

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
Second Quarter - 2017
Hyde Park RRT Program

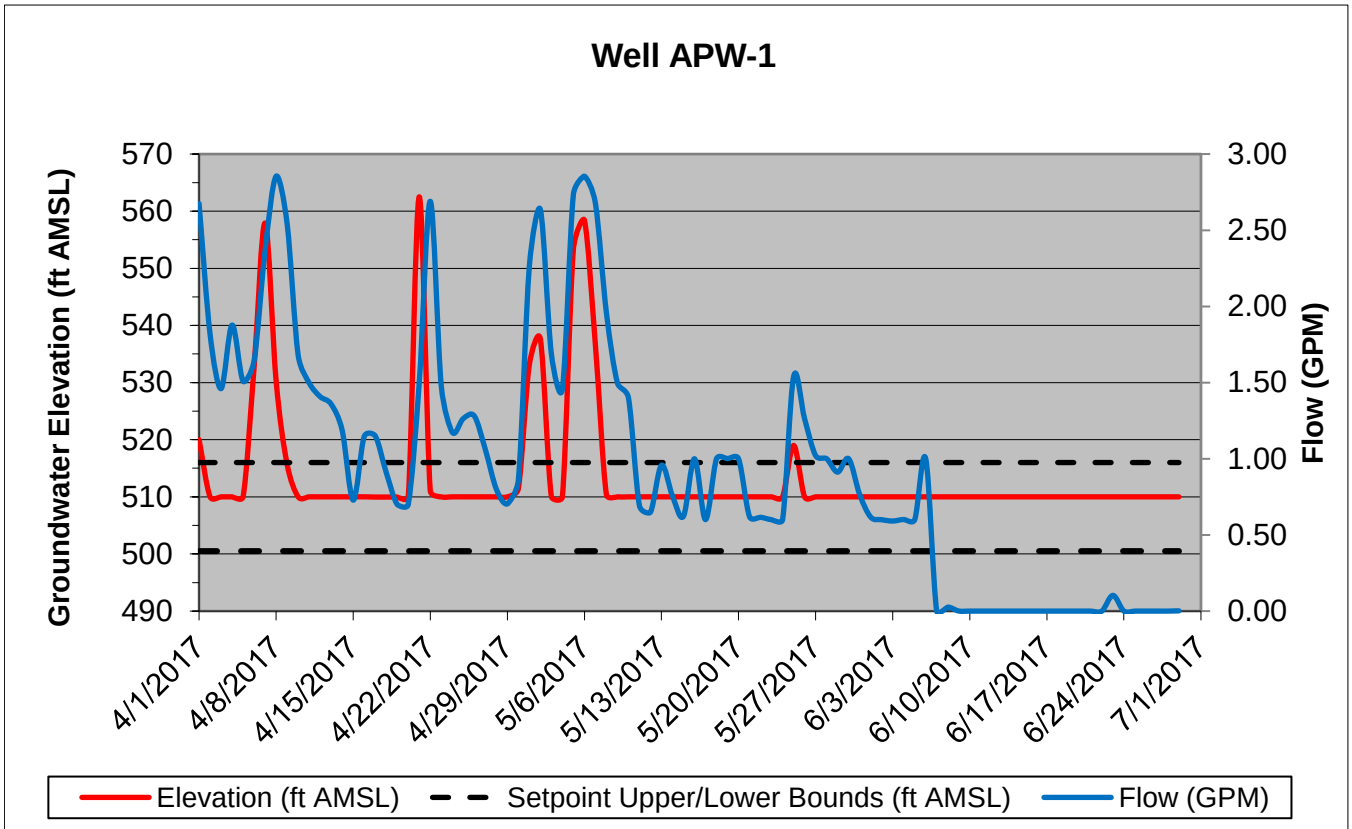
Sample Location:		**EFFLUENT**	**EFFLUENT**
Sample ID:		**HP EFF 62117**	**HP EFF 62117**
Sample Date:		**6/21/2017**	**6/21/2017**
Parameters	**Units**		
Volatile Organic Compounds			
Vinyl chloride	µg/L	300	--
General Chemistry			
Phosphorus	mg/L	--	0.198

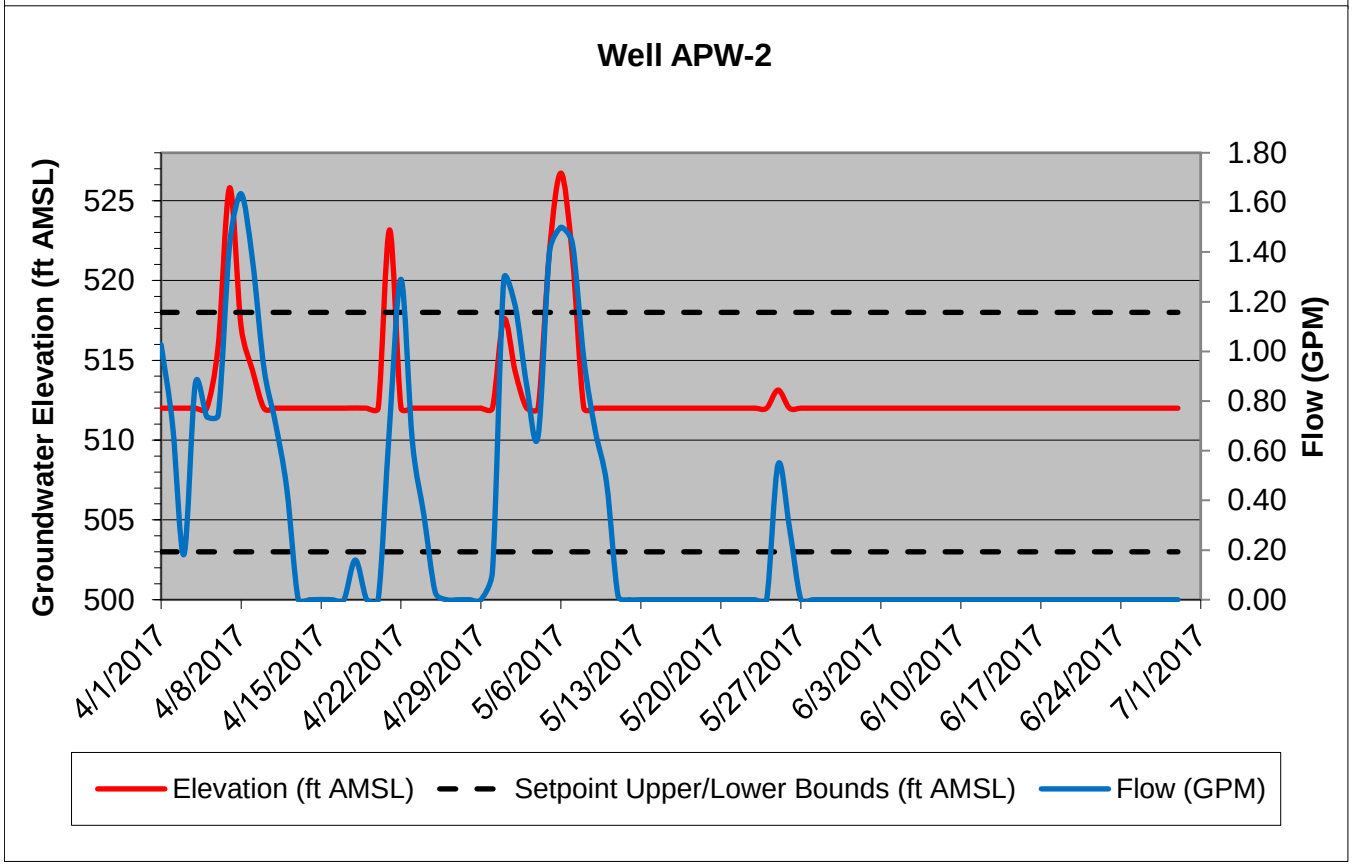
Notes:

"--" - Not applicable

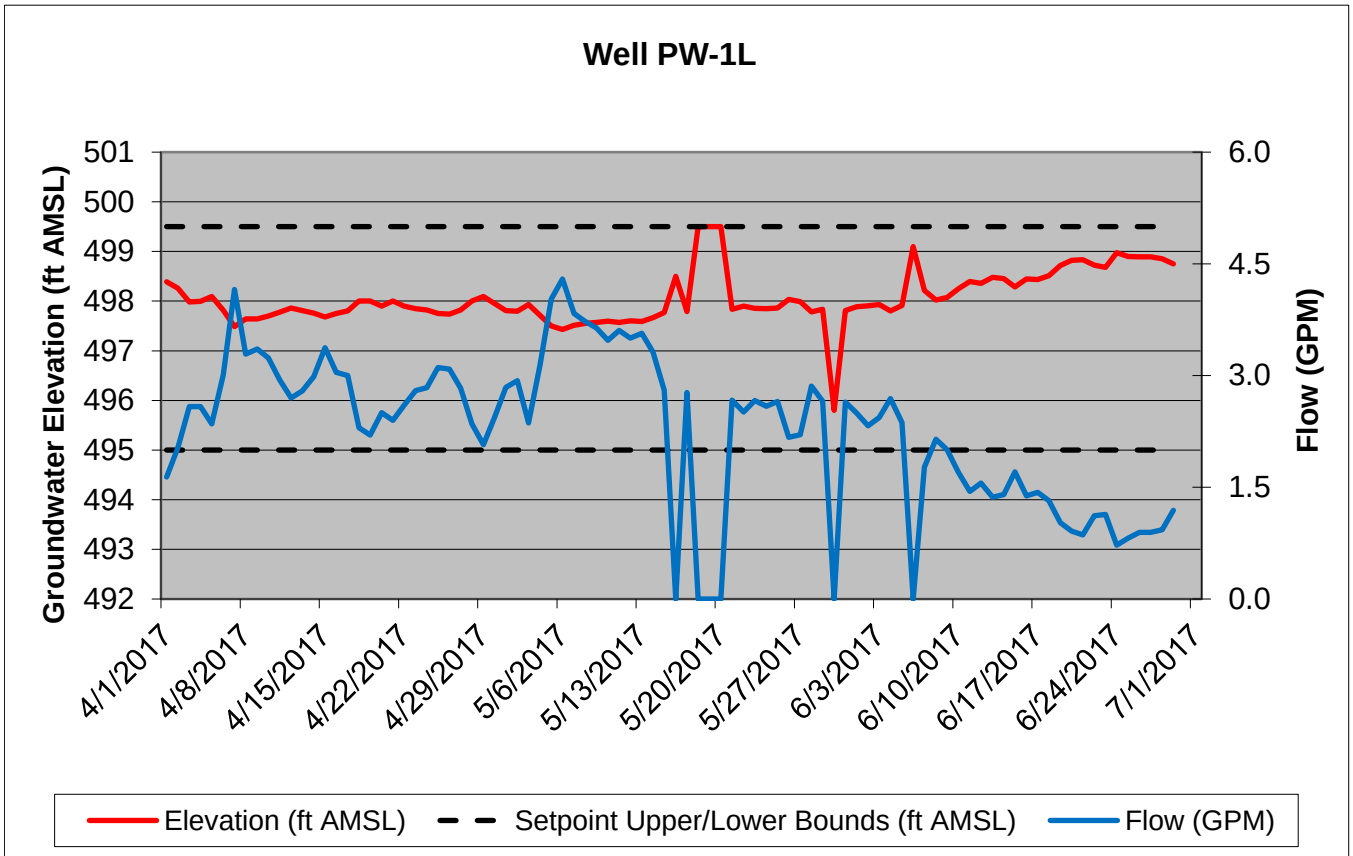
Attachment A

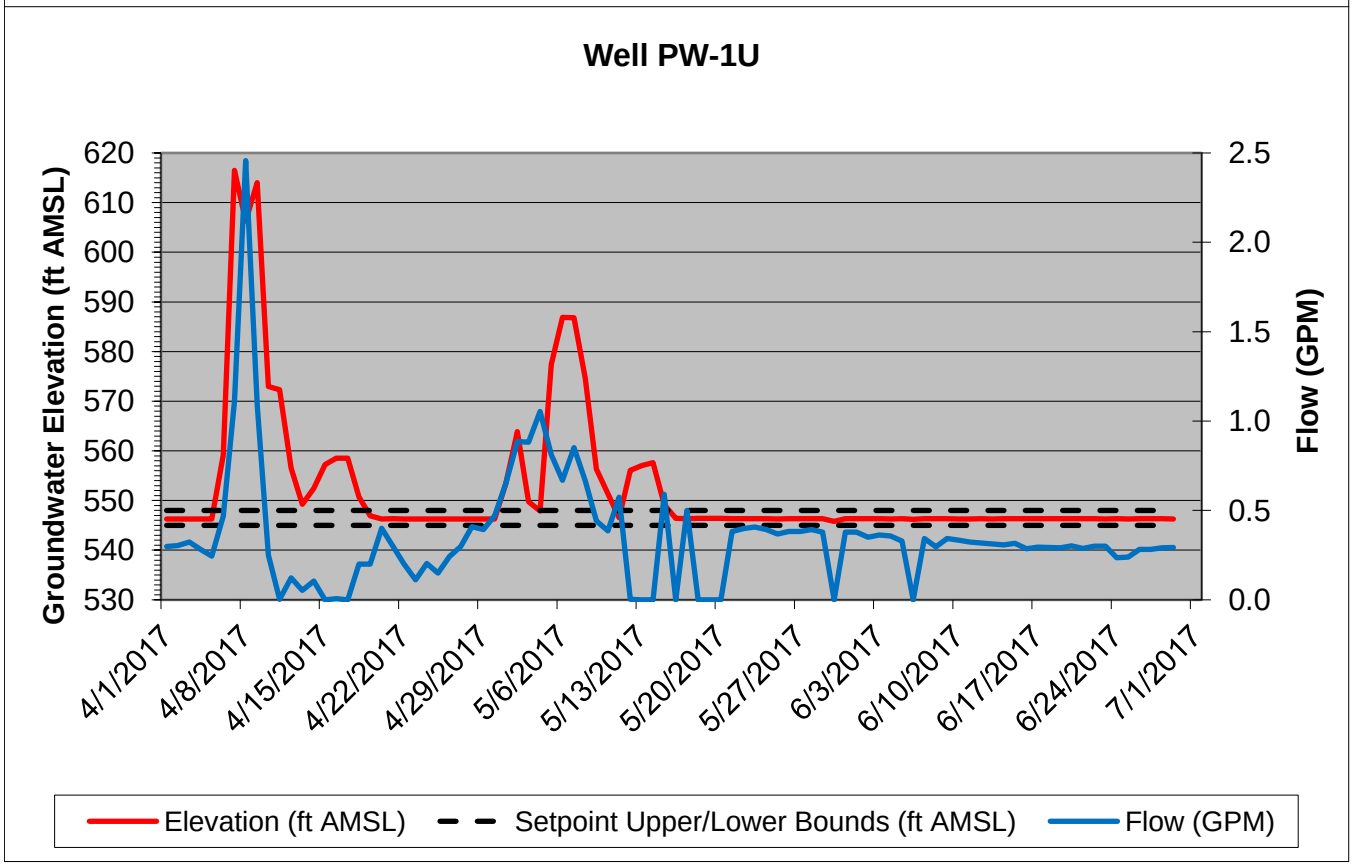
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



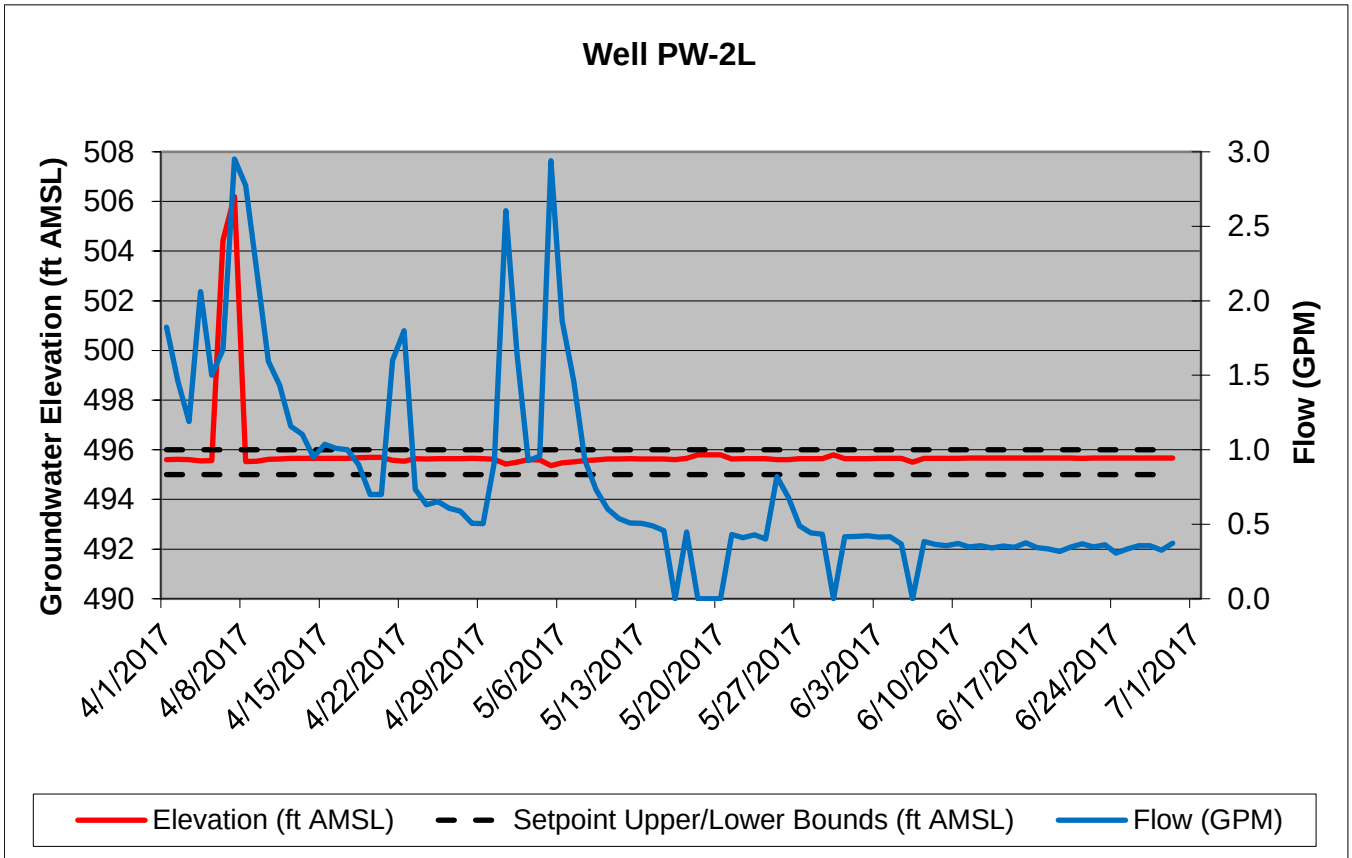


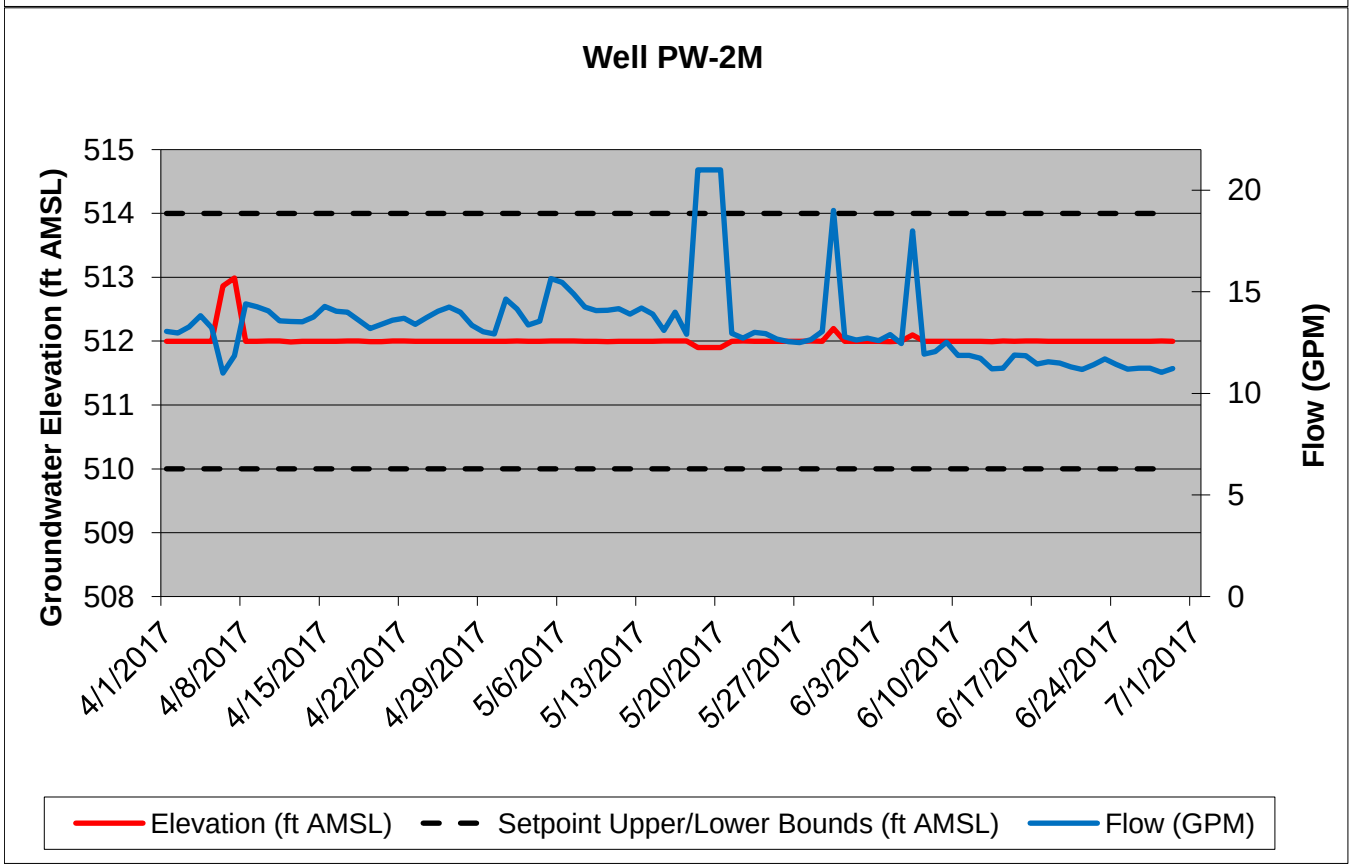
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



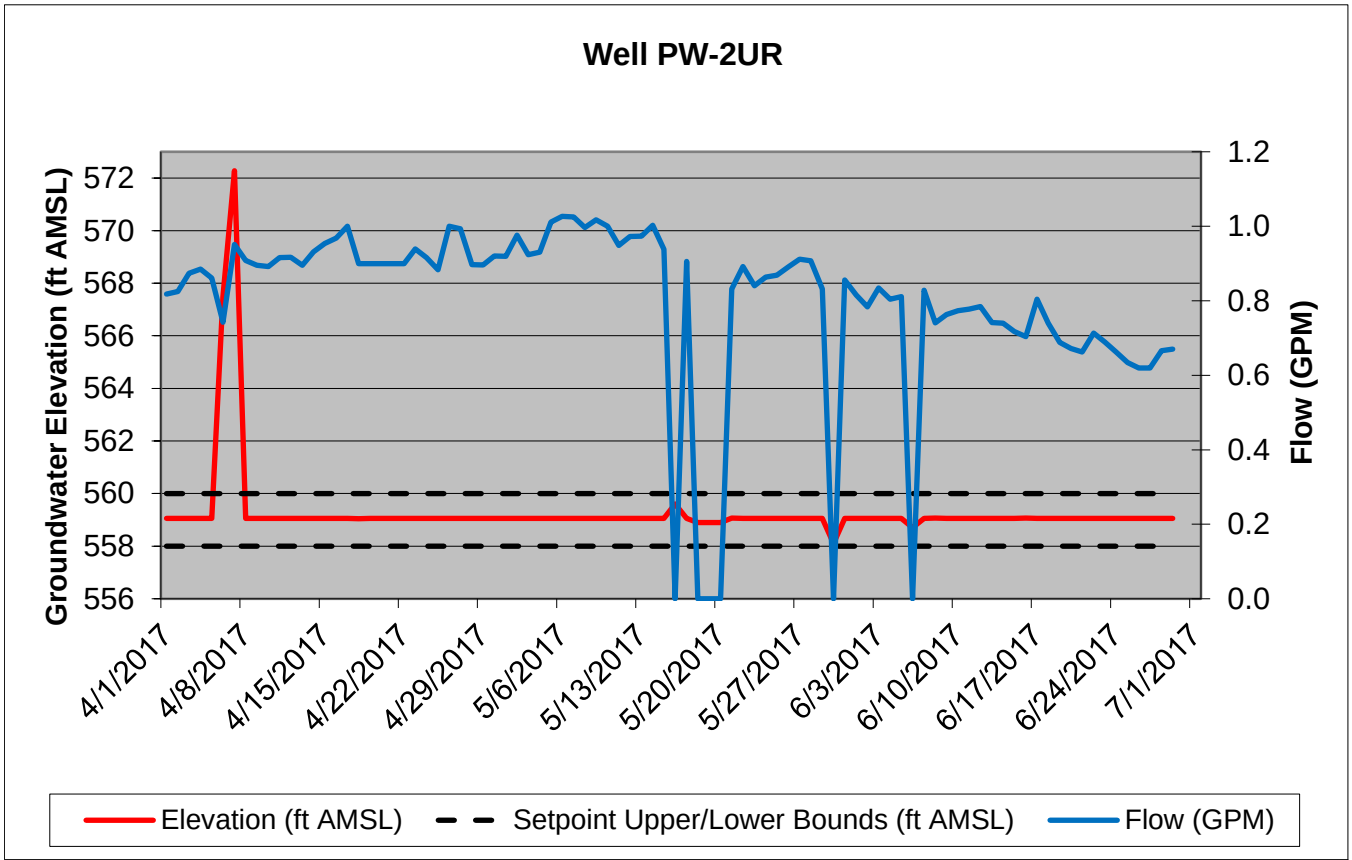


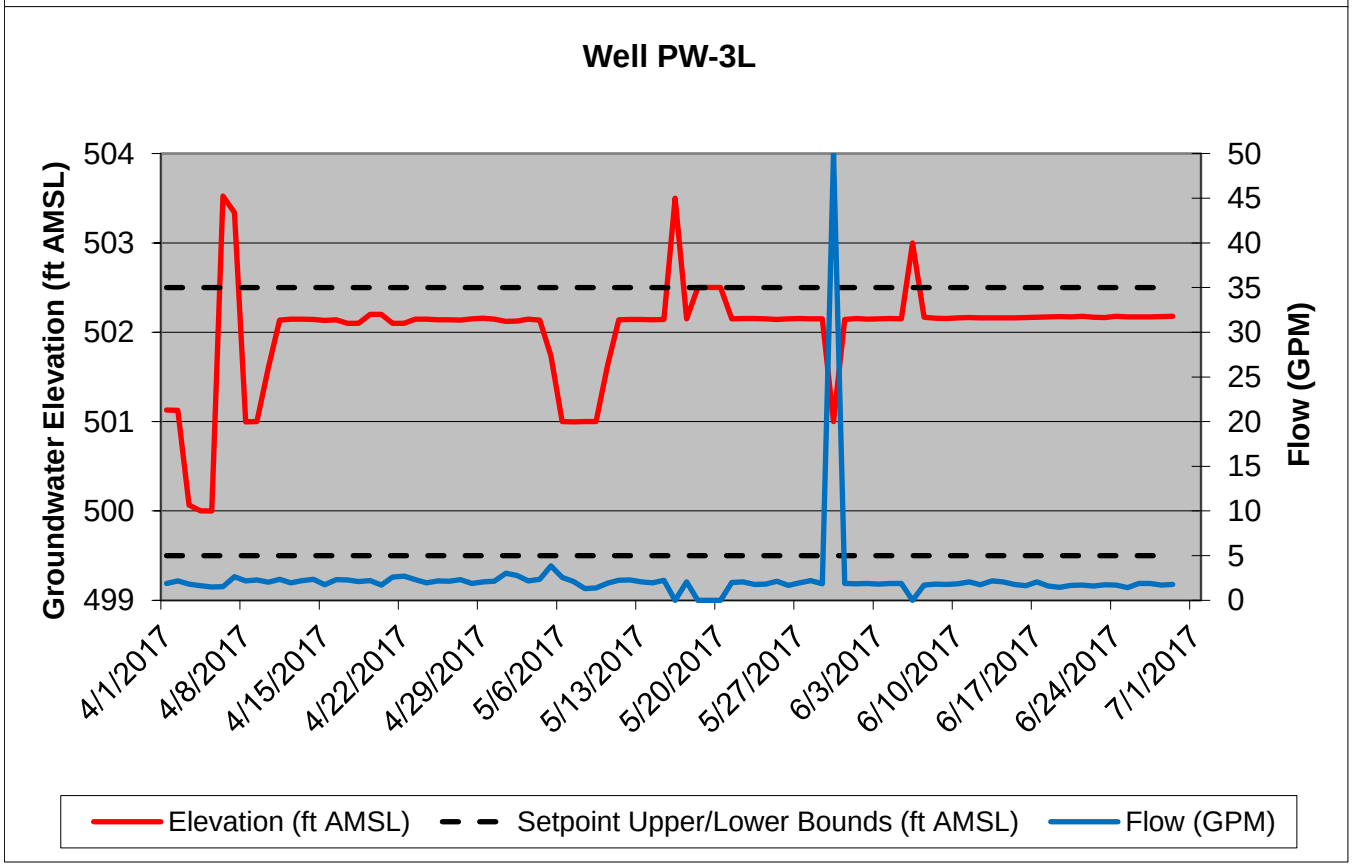
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



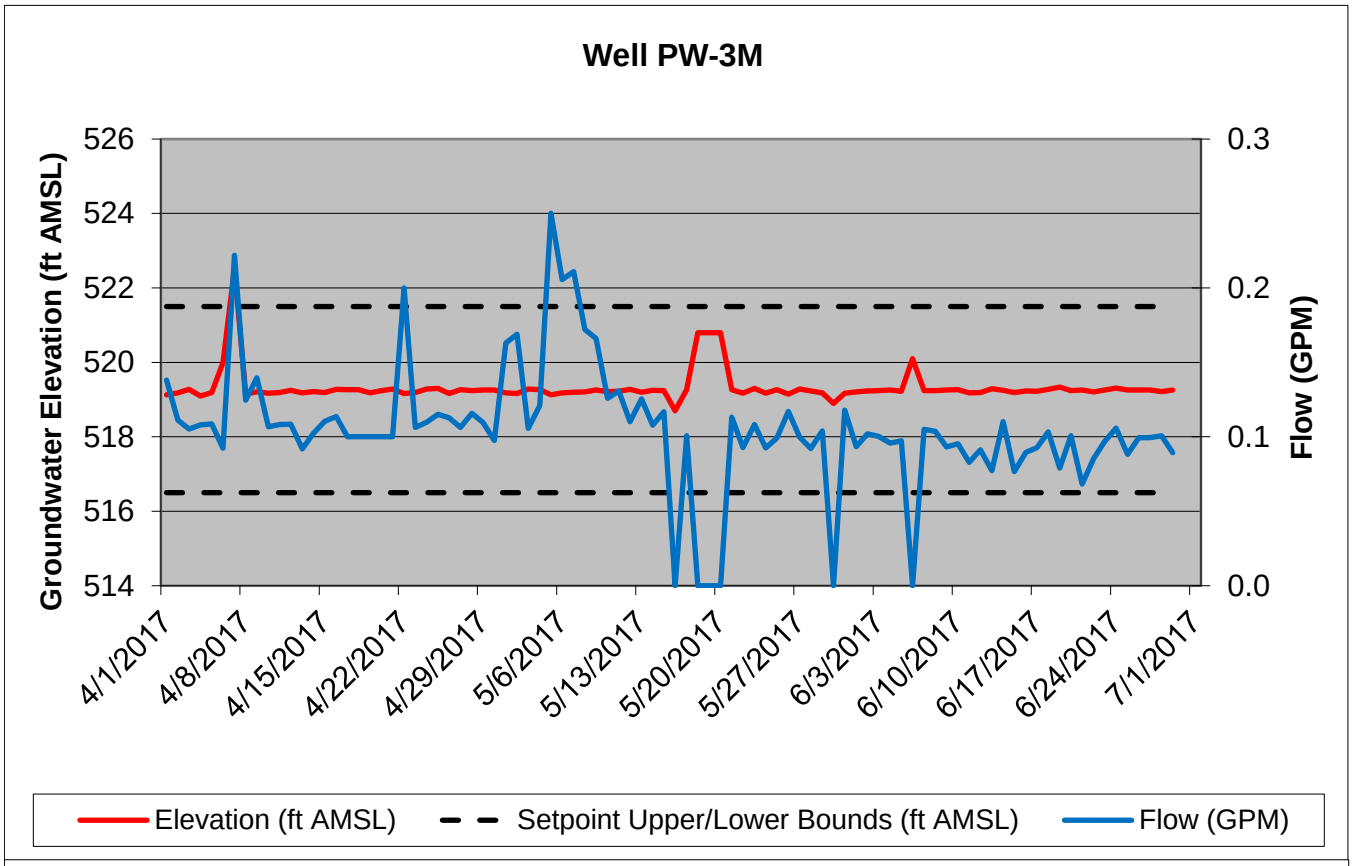


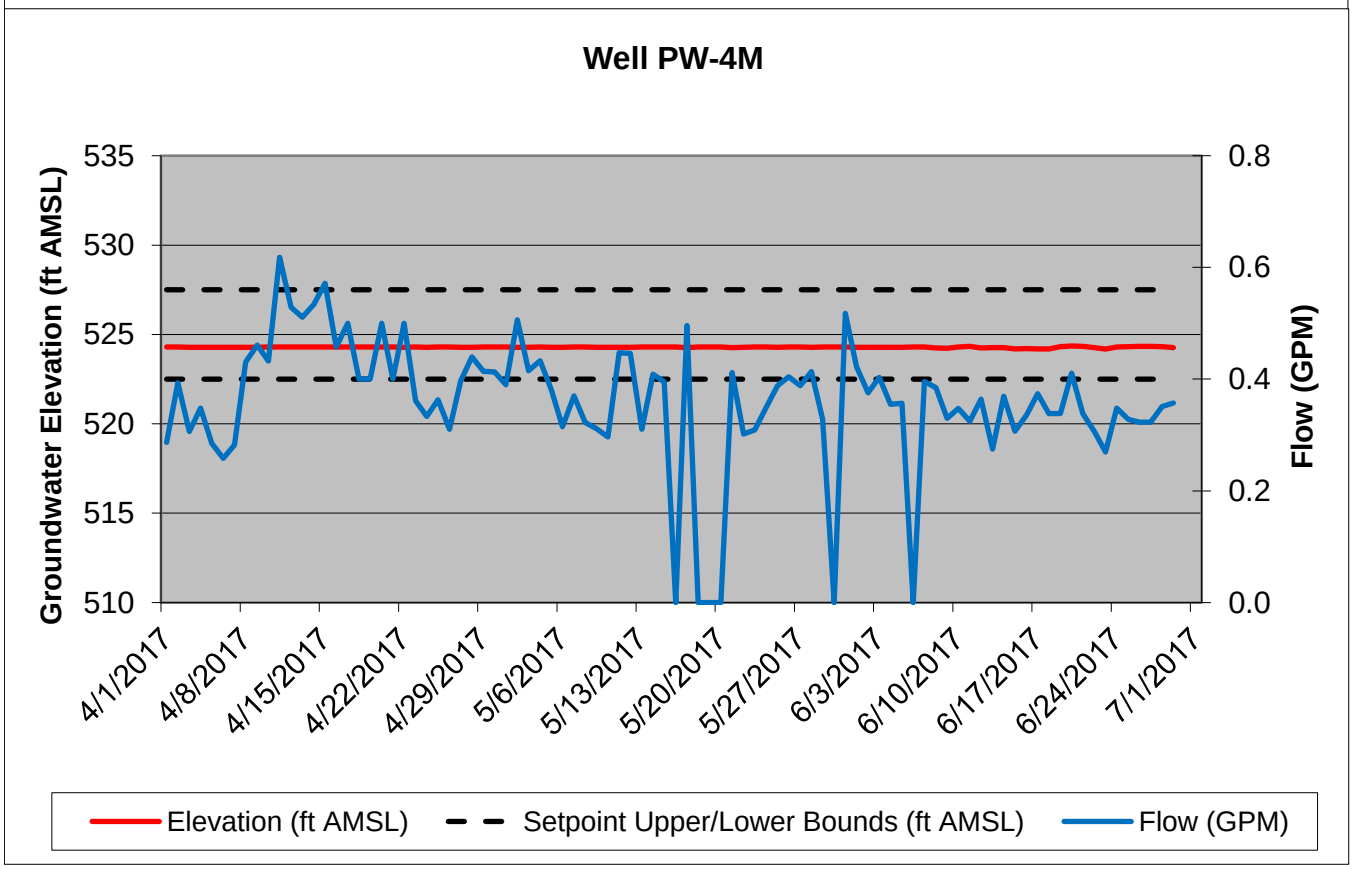
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



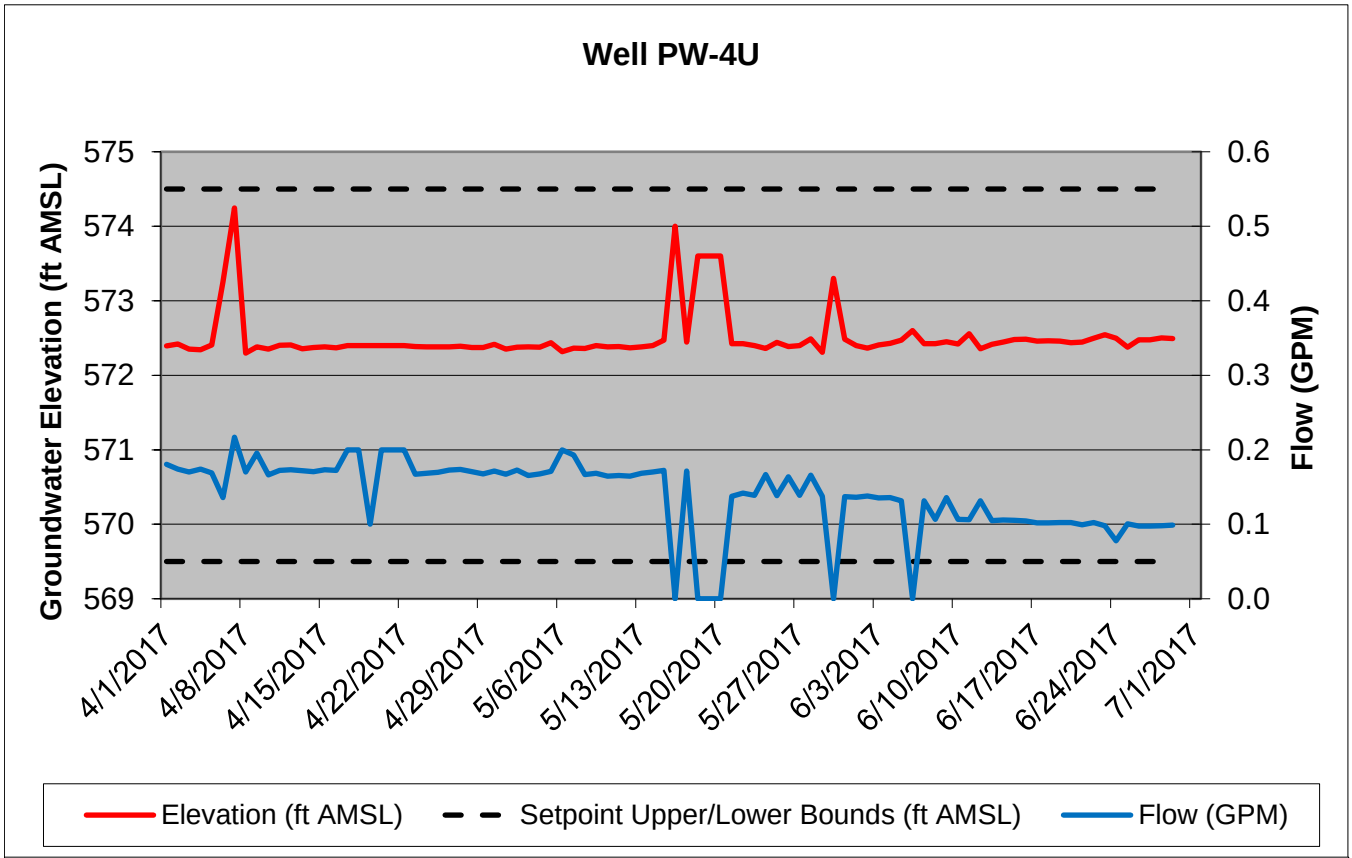


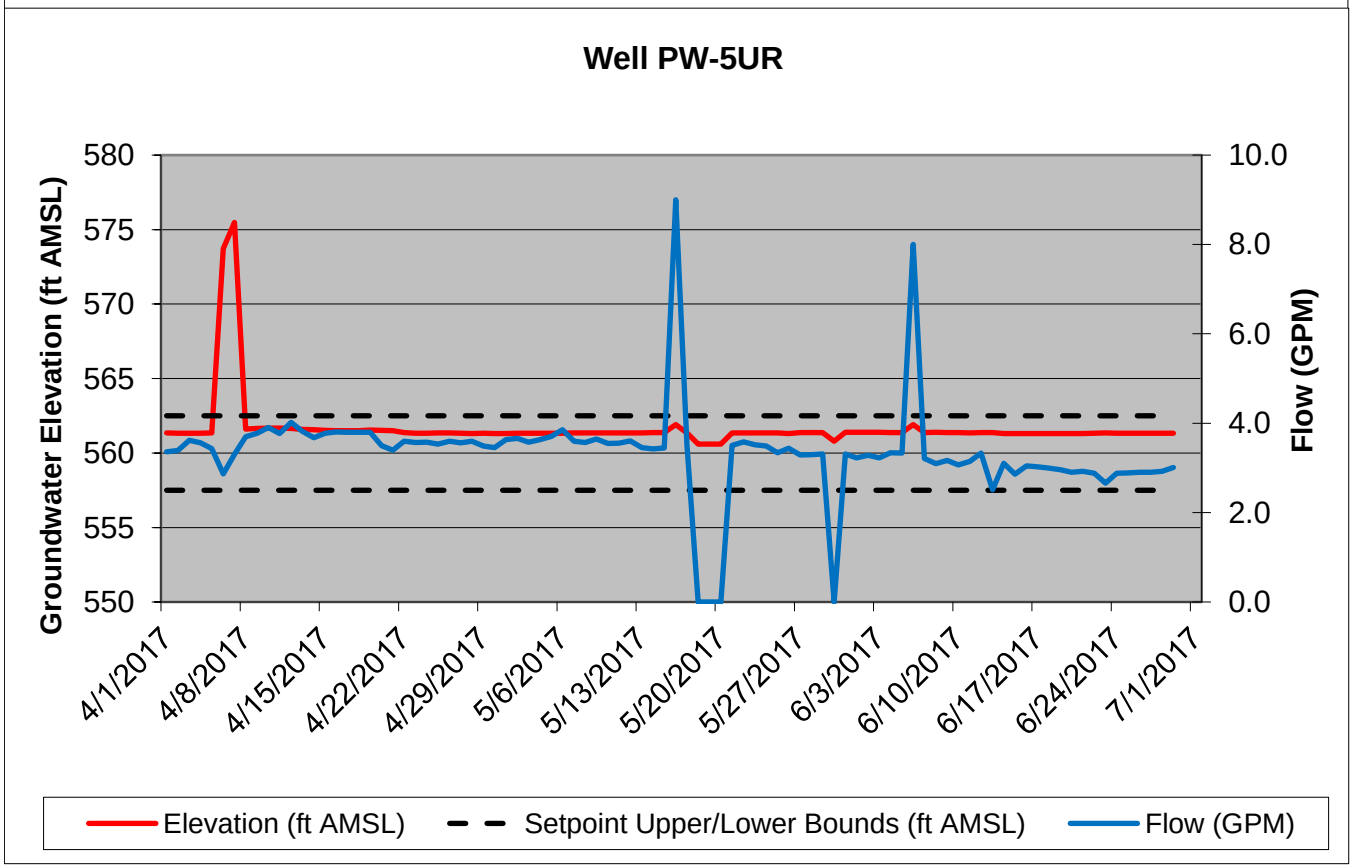
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



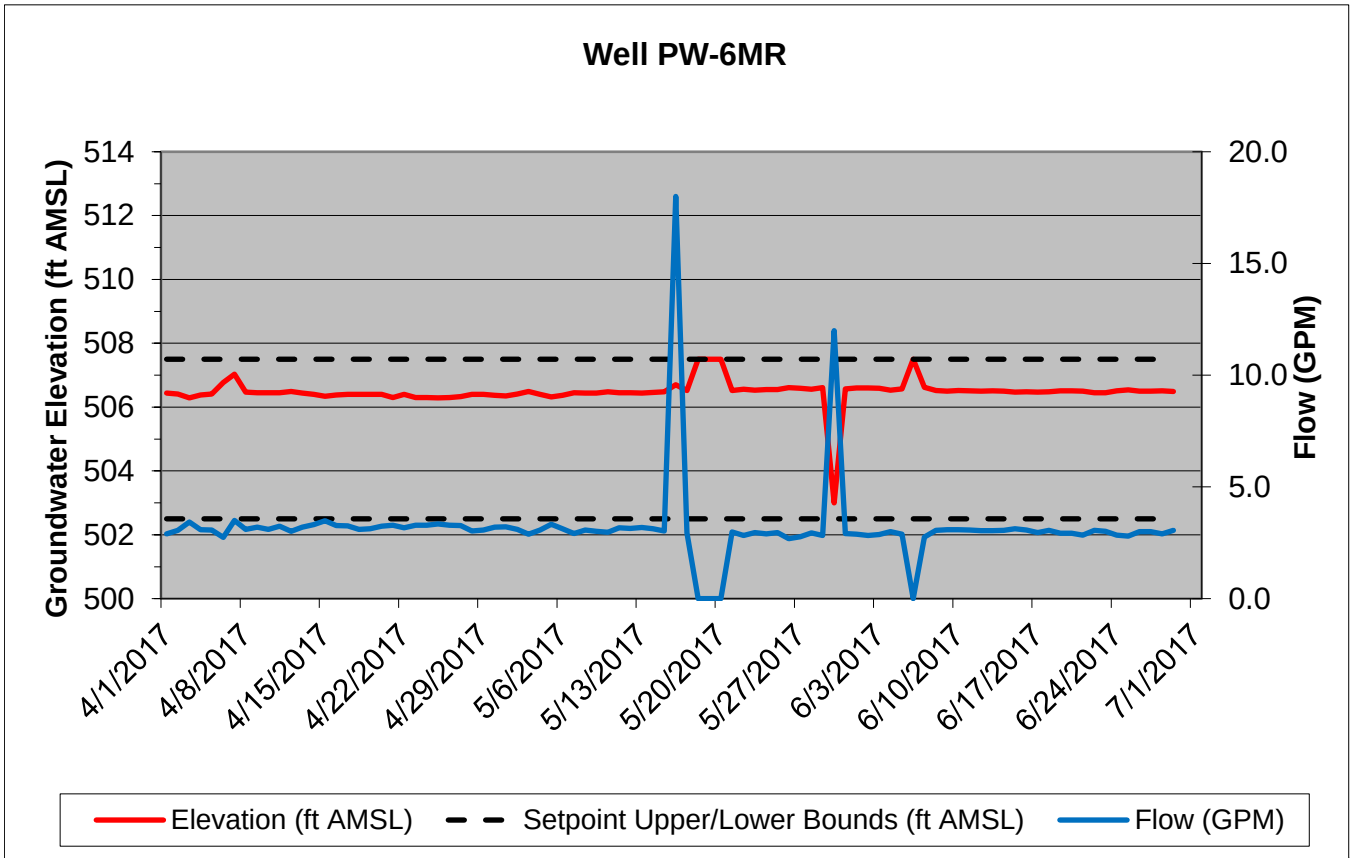


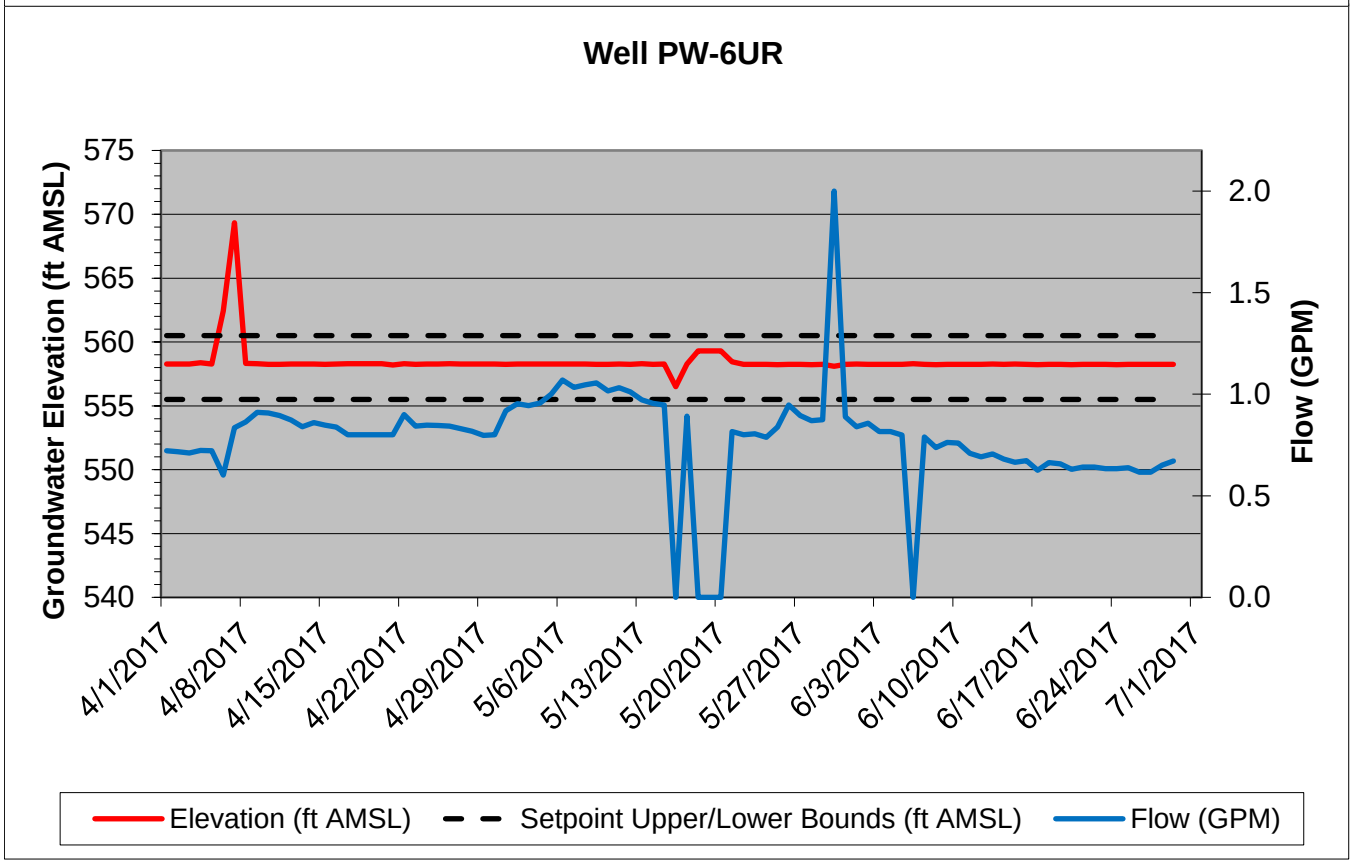
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



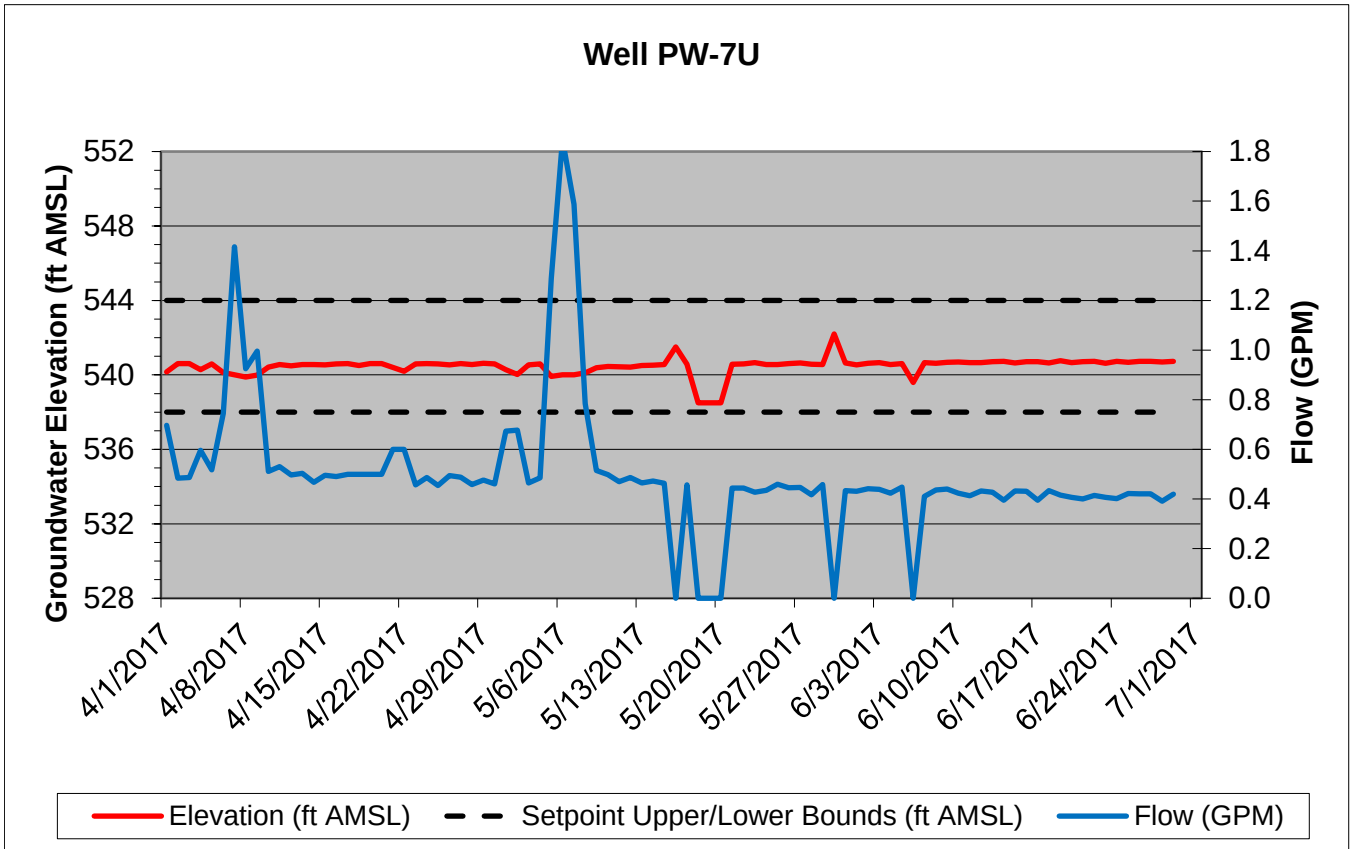


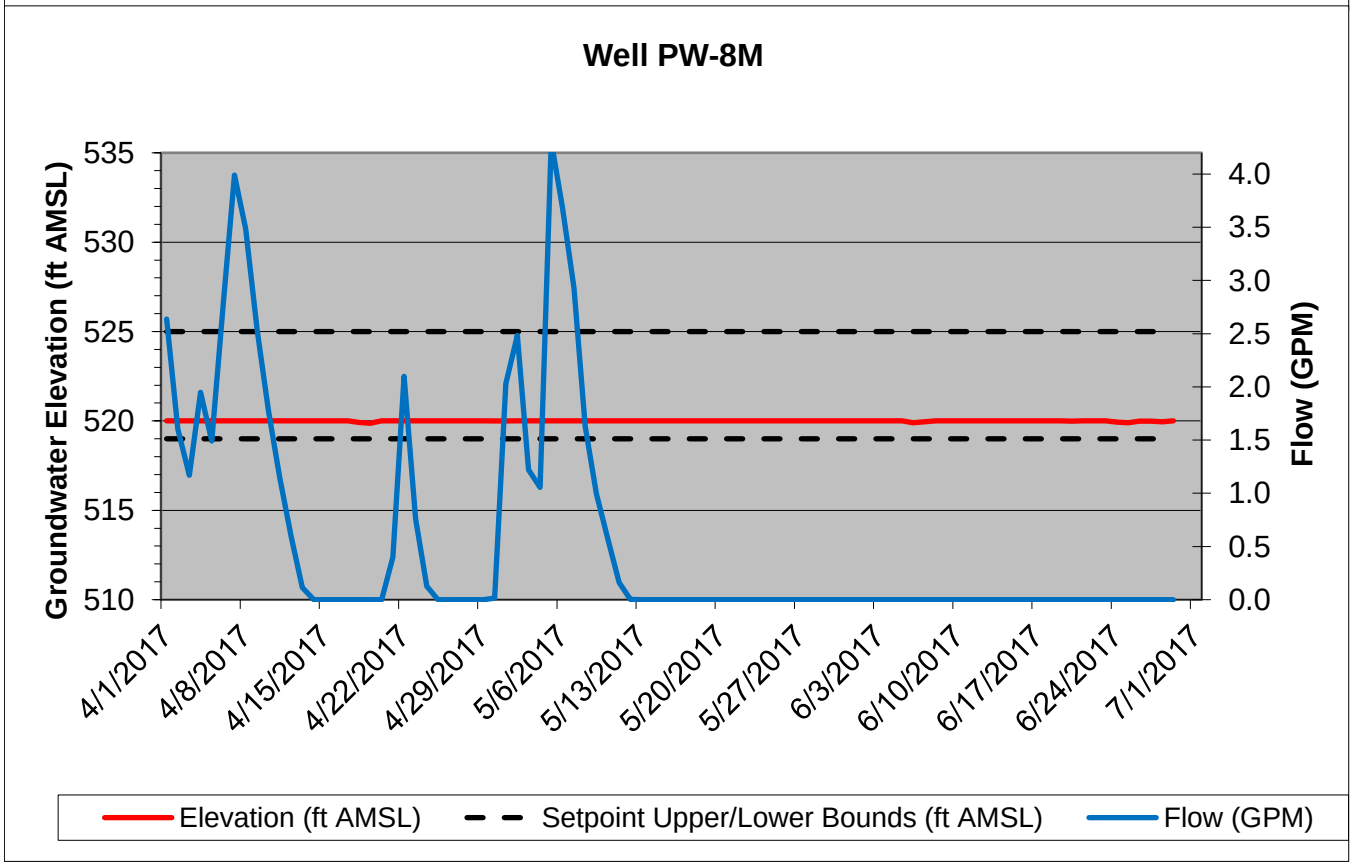
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



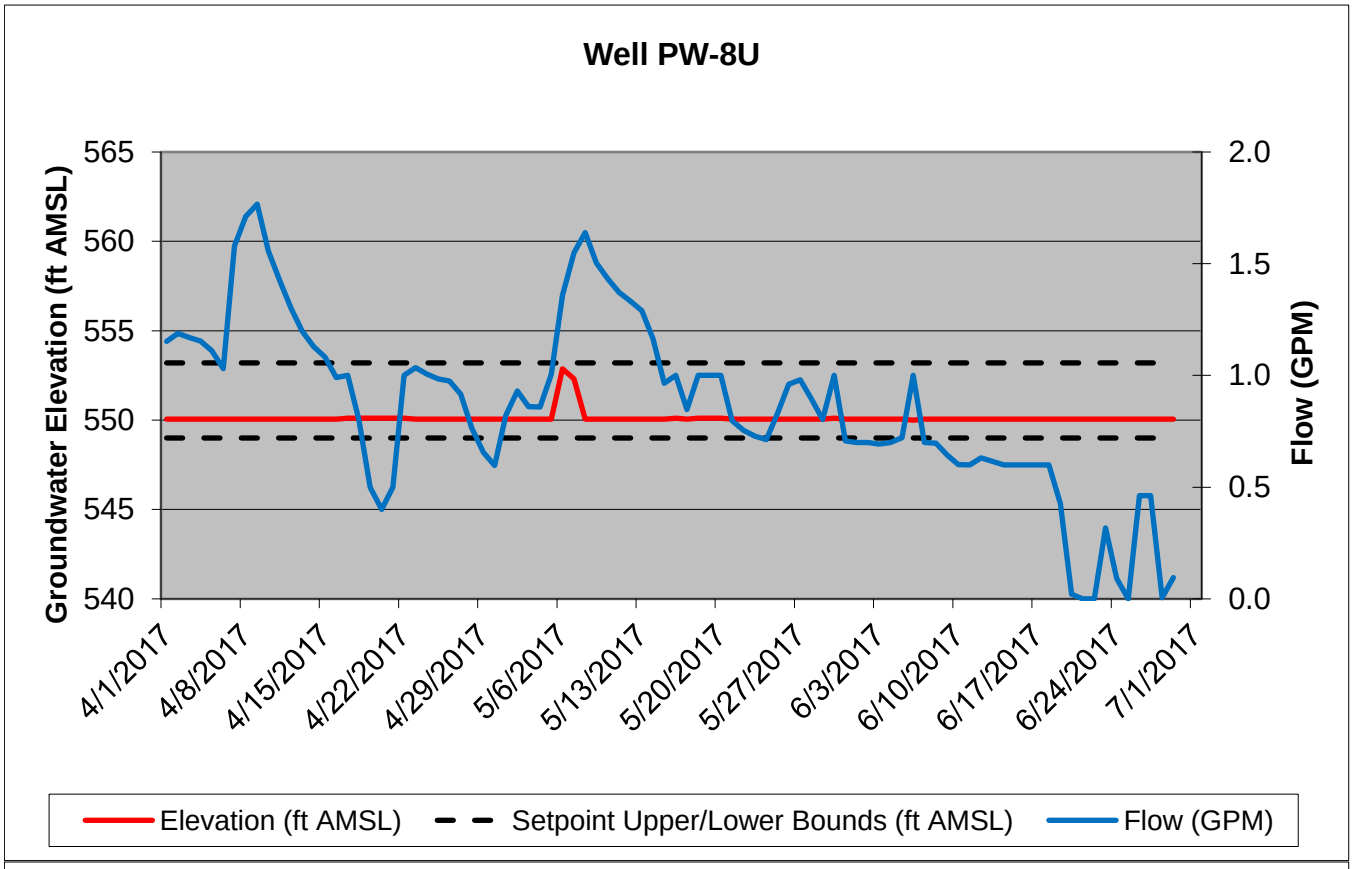


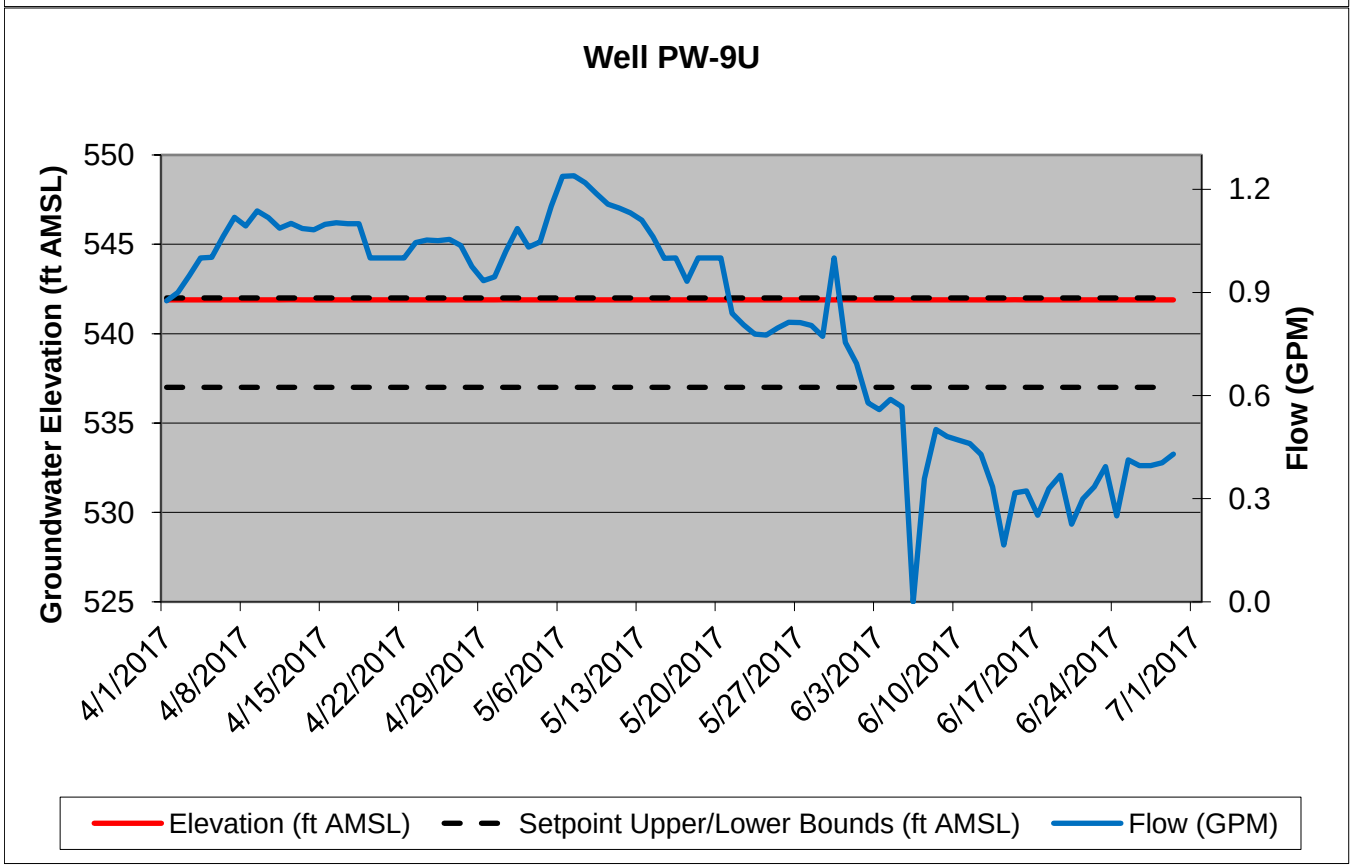
SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK





SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK





SECOND QUARTER 2017 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK