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

January 29, 2021

Reference No. 001069

Ms. Jaclyn Kondrk
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. Kondrk and Mr. Sadowski:

Re: Quarterly Operations Report - Fourth Quarter 2020
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 October 1, 2020 through December 31, 2020. A total of 3.41 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 (SIU) Wastewater Discharge Permit #49. One drum (approximately 600 pounds) of non-aqueous phase liquid (NAPL), five drums (approximately 1,200 pounds) of personal protective equipment (PPE), and two cargo tanks (approximately 76,980 pounds) of spent carbon were 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 continuously recorded water levels for the flow zone 9 piezometer PWM-1M-09 for the fourth quarter 2020 are presented on Figure 10. These water levels were less than 526 feet above mean sea level (AMSL) throughout the quarter, indicating that the FZ-09 outcrop along the New York Power Authority (NYPA) access road was unsaturated throughout the quarter.

The pumping wells were operational and functioning as designed during the fourth quarter 2020. 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 and resolved during the fourth quarter of 2020:

- The water level in PW-1U exceeded setpoint range periodically from October 2 through October 30 due to a faulty pump. The water level returned to within setpoint range on October 31. The pump was replaced on November 4.
- The water level in PW-2M exceeded setpoint range from October 12 through the end of the quarter. Troubleshooting has indicated a faulty variable frequency drive (VFD). The VFD and pump size are currently being reevaluated. In the interim, the well was redeveloped. Redevelopment occurred from December 21 through December 23 and on December 30, 2020. The VFD and potentially the pump will be replaced in the first quarter of 2021.
- The water level in PW-4U exceeded setpoint range from October 2 through October 4 due to a pump fault. The pump was reset and the water level returned to within setpoint range on October 5.
- The water levels in the following wells exceeded setpoint range due to a false leak detection:
  - PW-8U exceeded setpoint range on October 21 and returned to within setpoint range on October 22.
  - PW-9U exceeded setpoint range on October 21 and October 22 and returned to within setpoint range on October 23.
- The water level in PW-9U exceeded setpoint range on November 7 and November 8 due to an unknown pump fault. The water level returned to within setpoint range on November 9.
- The water level in APW-1 exceeded setpoint range on October 20 and October 21 due to a pump fault and returned to within setpoint range on October 22.

PW-1L was out of service from December 22 through December 30 for redevelopment. The well was returned to service on January 22, 2021, following replacement of the pump and motor.

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.

JBranch

Joe Branch
Project Manager
231-670-6809 Cell

JB/adh/8
Encl.

cc: G. May, NYSDEC
A. Zwack, NYSDOH
J. Robinson, NYSDOH
J. Pentilchuk, GHD
D. Hoyt, GHD
M. Popek, GHD

0 300 600ft

LEGEND

- PIEZOMETER USED IN CONTOURING
- PIEZOMETER CONSIDERED UNRELIABLE (DATA NOT USED IN CONTOURING)
- PURGE WELL (DATA NOT USED IN CONTOURING)
- 2003 DELINEATION OF NAPL LIMITS
- FLOW ZONE SUBCROP
- DEWATERED AREA OF FLOW ZONE
- 600 — POTENTIOMETRIC CONTOUR (FT AMSL)
- (597.64) — POTENTIOMETRIC ELEVATION (FT AMSL)
- (~595) — 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
- FT AMSL — FEET ABOVE MEAN SEA LEVEL

I1-01 (596.99)
H2U-01 (607.33)
PW-6UR (~595)
H5-01 (592.52)
G1U-01 (597.63)
G6-01 (597.64)

figure 1

FZ-01 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA001.DWG Plot Date: JAN 11, 2021

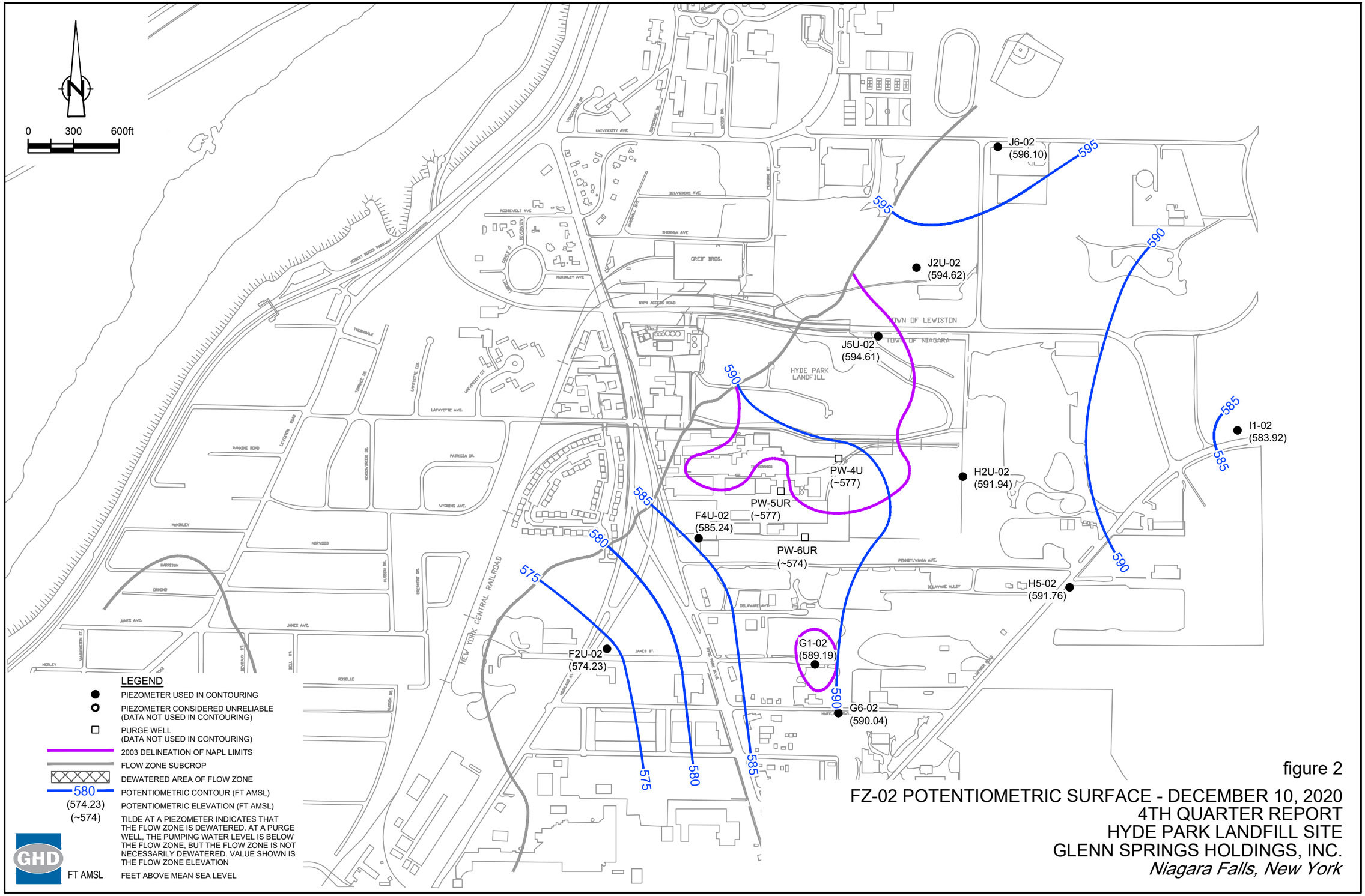


figure 2

FZ-02 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA002.DWG Plot Date: JAN 11, 2021

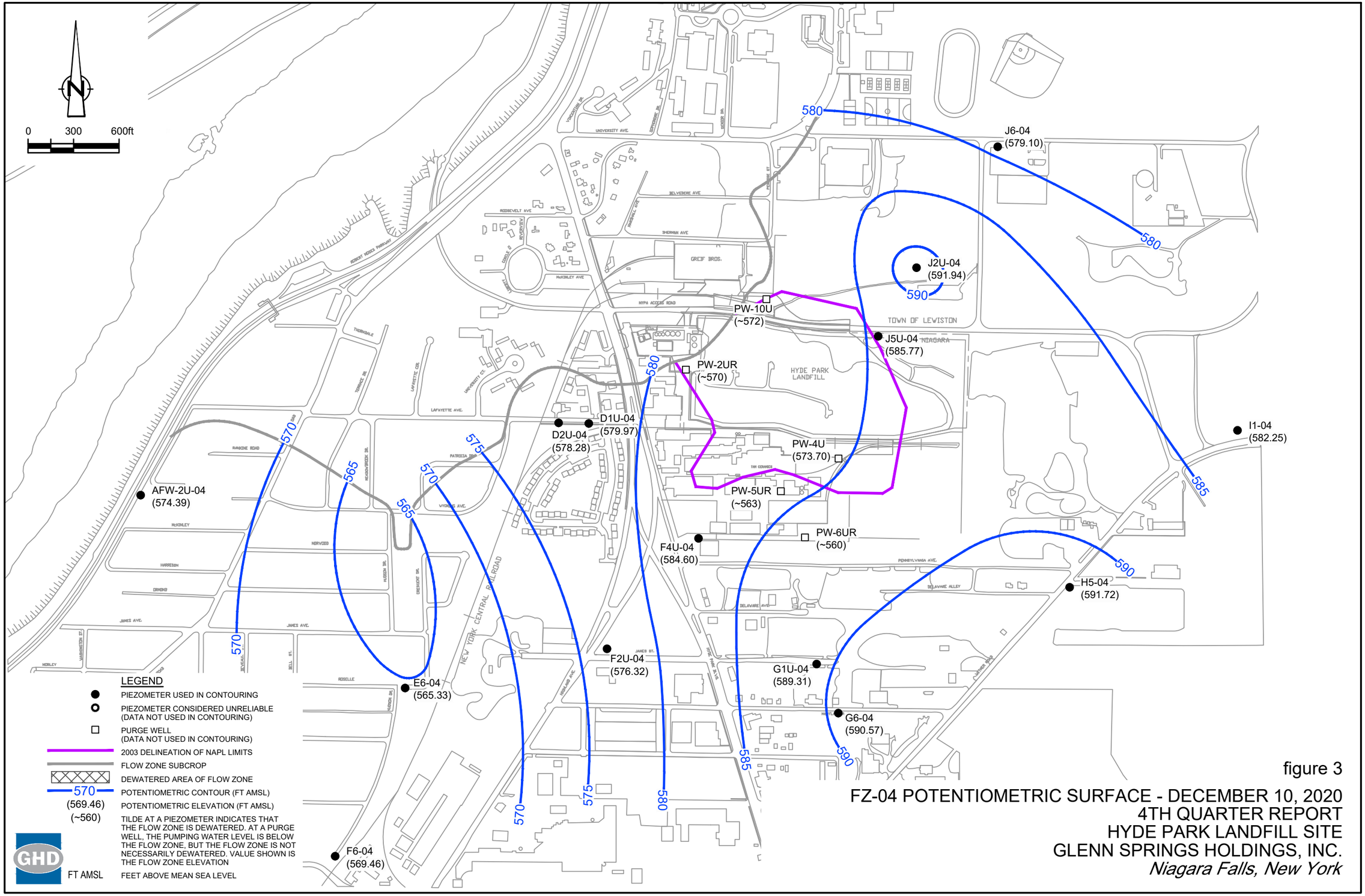


figure 3

FZ-04 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA003.DWG Plot Date: JAN 11, 2021

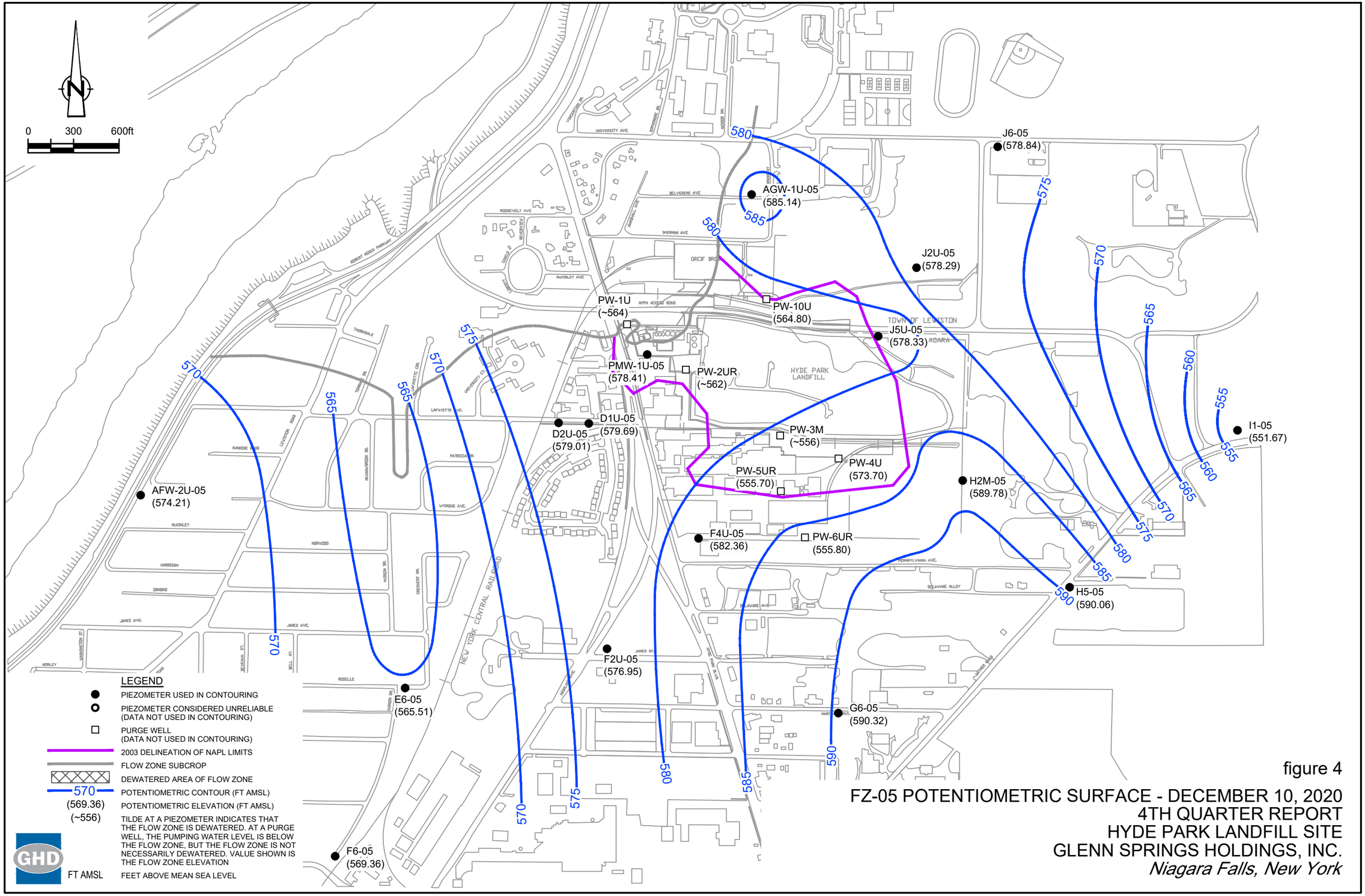


figure 4

FZ-05 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA004.DWG Plot Date: JAN 11, 2021

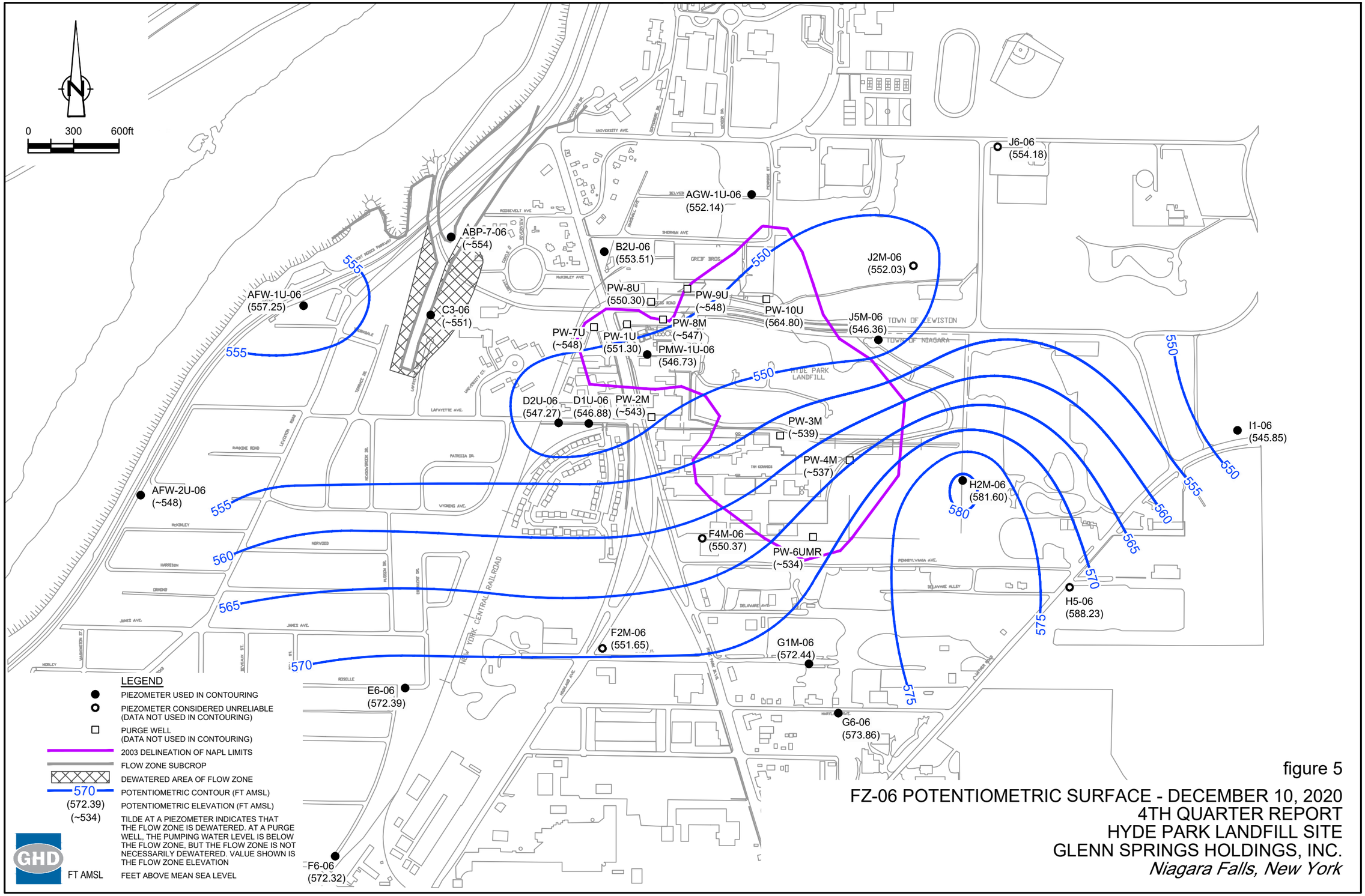


figure 5

FZ-06 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

0 300 600ft

ABP-1-07 (546.77)
APW-1 (~536)
AGW-1M-07 (543.13)
J6-07 (541.62)
ABP-7-07 (534.36)
B2M-07 (~531)
AFW-1M-07 (~534)
C3-07 (540.80)
PW-8M (~527)
J5M-07 (541.99)
PMW-1M-07 (530.23)
D1M-07 (532.07)
D2M-07 (523.32)
PW-2M (~523)
PW-3M (520.80)
PW-4M (524.30)
I1-07 (541.94)
AFW-2M-07 (~528)
F4M-07 (525.33)
PW-6UMR (~514)
H5-07 (554.67)
F2M-07 (519.78)
G1M-07 (577.78)
G6-07 (578.03)
E6-07 (554.82)
F6-07 (567.50)

545 540 535 525 555 565 575

TOWN OF LEWISTON
TOWN OF NIAGARA
HYDE PARK LANDFILL
NEW YORK CENTRAL RAILROAD

LEGEND

- PIEZOMETER USED IN CONTOURING
- PIEZOMETER CONSIDERED UNRELIABLE (DATA NOT USED IN CONTOURING)
- PURGE WELL (DATA NOT USED IN CONTOURING)
- 2003 DELINEATION OF NAPL LIMITS
- FLOW ZONE SUBCROP
- DEWATERED AREA OF FLOW ZONE
- 565 — POTENTIOMETRIC CONTOUR (FT AMSL)
- (567.50) (~523) — POTENTIOMETRIC ELEVATION (FT AMSL)
- 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
- FT AMSL — FEET ABOVE MEAN SEA LEVEL

GHD

figure 6

FZ-07 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA006.DWG Plot Date: JAN 11, 2021

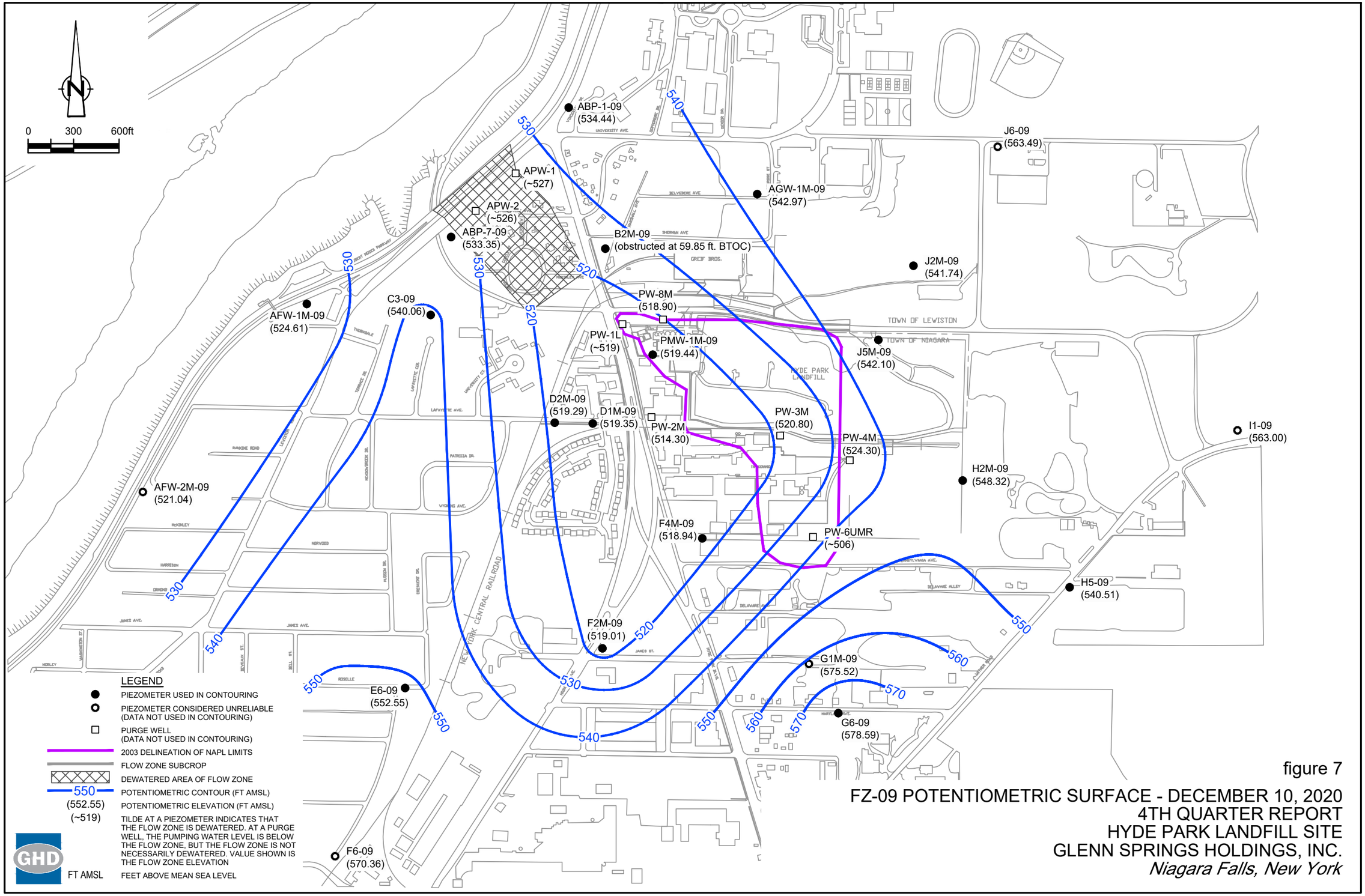


figure 7

FZ-09 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA007.DWG Plot Date: JAN 11, 2021

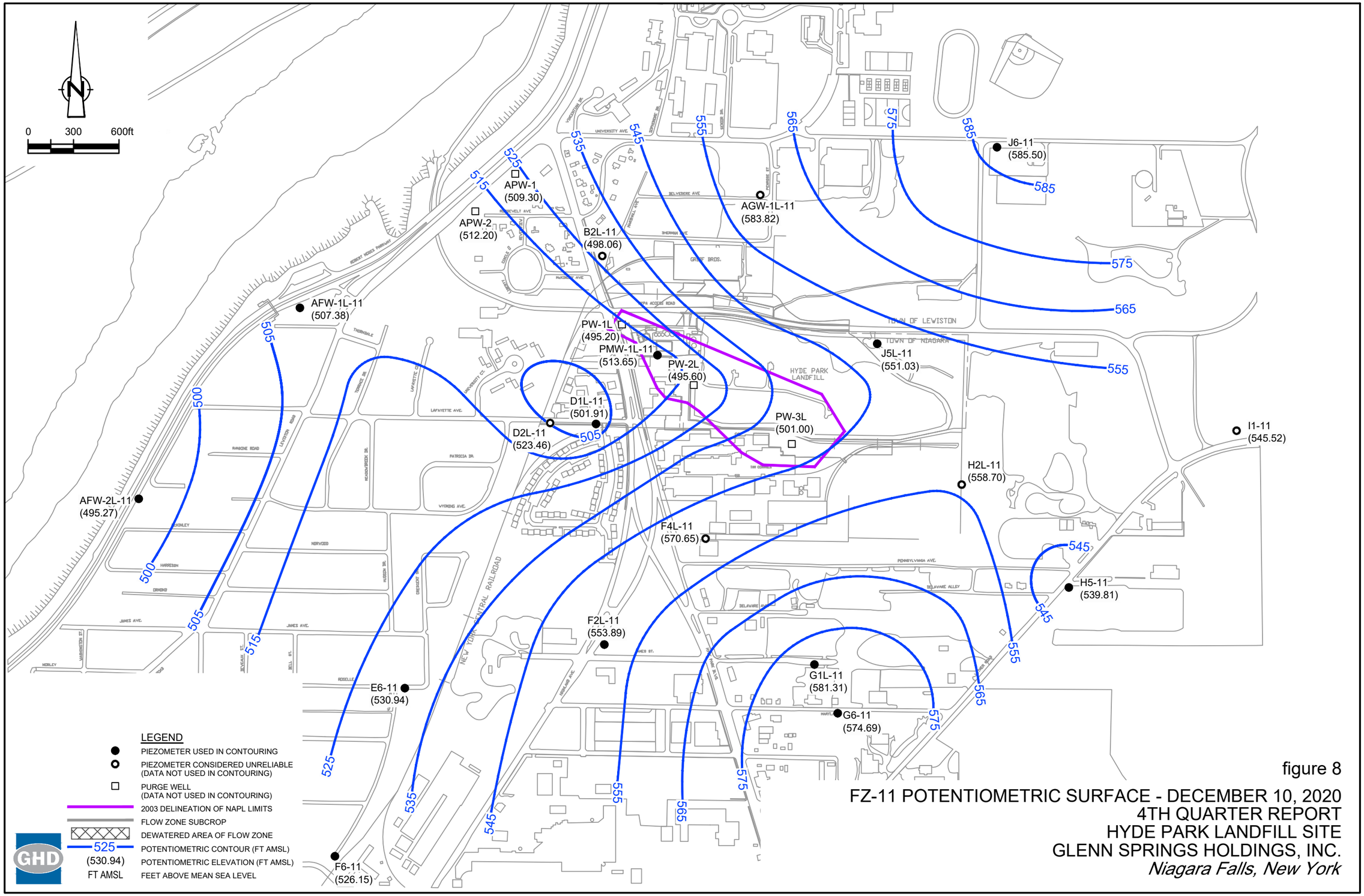


figure 8

FZ-11 POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

\\ghdnet.internal\ghd\CA\Waterloo\Legacy\CAD\drawings\01000s\01069\01069-corr\01069-30-403(KOSA008)\01069-30-403(KOSA008)GN\01069-30-403(KOSA008)GN-WA008.DWG Plot Date: JAN 11, 2021

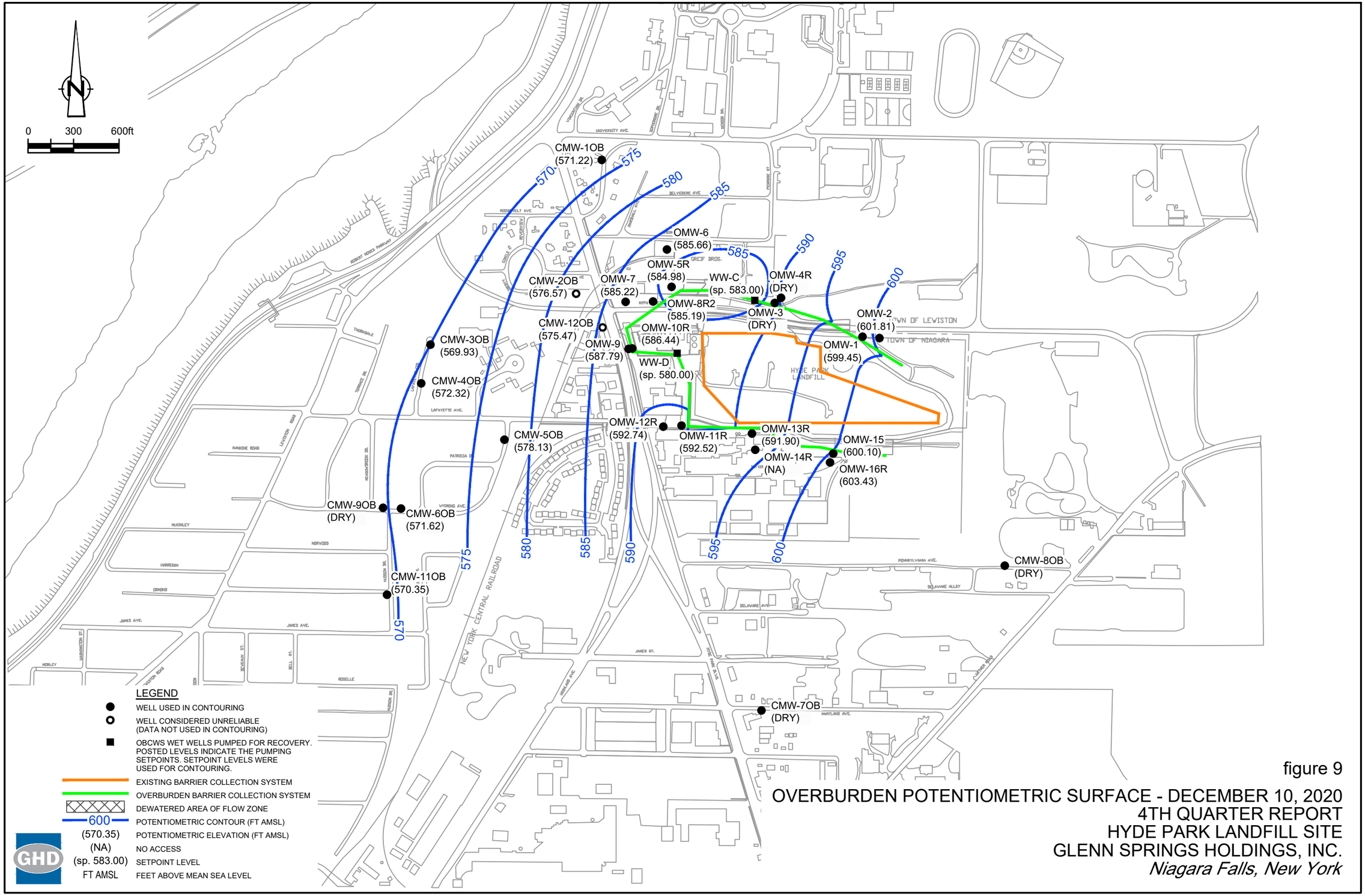


figure 9

OVERBURDEN POTENTIOMETRIC SURFACE - DECEMBER 10, 2020
4TH QUARTER REPORT
HYDE PARK LANDFILL SITE
GLENN SPRINGS HOLDINGS, INC.
Niagara Falls, New York

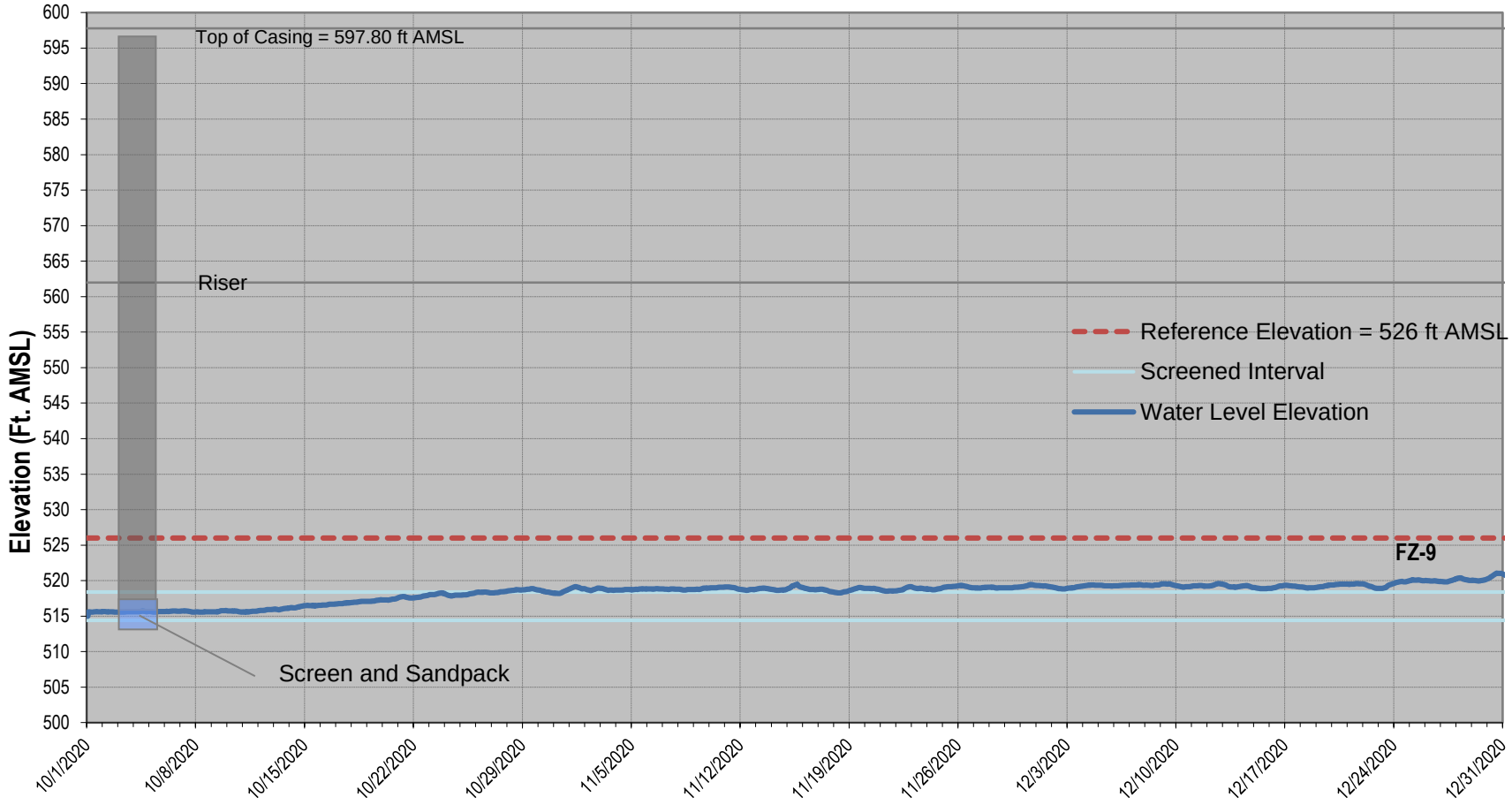


figure 10

PMW-1M-09 4th Quarter 2020 - Hourly Water Level Elevation
4th 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
Fourth Quarter - 2020
Hyde Park RRT Program

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Overburden			
CMW-2OB	590.79	14.22	576.57
CMW-3OB	582.13	12.20	569.93
CMW-4OB	574.28	1.96	572.32
CMW-5OB	583.43	5.30	578.13
CMW-6OB	571.89	0.27	571.62
CMW-7OB	611.00	Dry	-
CMW-8OB	616.11	Dry	-
CMW-9OB	571.76	Dry	-
CMW-1OB	576.80	5.58	571.22
CMW-11OB	572.85	2.50	570.35
CMW-12OB	594.74	19.27	575.47
MH20	605.87	4.68	601.19
MH21	599.77	6.14	593.63
MH22	593.37	Dry	-
MH23	587.05	12.39	574.66
MH24	582.57	10.02	572.55
MH25	583.82	Dry	-
MH26	584.48	Dry	-
MH27	586.12	Dry	-
MH28	585.23	16.89	568.34
MH29	604.58	Dry	-
MH30	599.49	10.15	589.34
MH31	590.10	9.58	580.52
MH32	592.01	9.62	582.39
MH33	592.51	8.72	583.79
MH34	598.34	7.19	591.15
MH35	605.69	6.53	599.16
MH35A	605.69	7.47	598.22
OMW-1	605.28	5.83	599.45
OMW-2	605.99	4.18	601.81
OMW-3	598.63	Dry	-
OMW-4R	601.17	Dry	-
OMW-5R	591.31	6.33	584.98
OMW-6	587.62	1.96	585.66
OMW-7	592.74	7.52	585.22
OMW-8R2	594.67	9.48	585.19
OMW-9	595.27	7.48	587.79
OMW-10R	595.13	8.69	586.44
OMW-11R	597.52	5.00	592.52
OMW-12R	596.71	3.97	592.74
OMW-13R	601.50	9.60	591.90
OMW-14R	599.64	-	-
OMW-15	607.48	7.38	600.10
OMW-16R	607.62	4.19	603.43
SC-2	625.61	22.92	602.69
SC-3	638.72	40.53	598.19
SC-4	639.35	39.22	600.13
SC-5	634.07	31.62	602.45
SC-6	631.15	20.08	611.07

Table 1

Water Level Elevation Summary
Fourth Quarter - 2020
Hyde Park RRT Program

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Shallow Bedrock			
CMW-1SH	576.11	13.00	563.11
CMW-2SH	590.51	19.28	571.23
CMW-3SH	581.91	28.64	553.27
CMW-4SH	574.16	7.93	566.23
CMW-5SH	583.36	8.40	574.96
CMW-6SH	572.05	10.50	561.55
CMW-7SH	610.58	14.54	596.04
CMW-8SH	615.95	9.73	606.22
CMW-9SH	571.96	12.10	559.86
CMW-11SH	573.21	8.04	565.17
CMW-12SH	597.02	25.36	571.66
Flow Zone 1			
G1U-01	617.08	19.45	597.63
G6-01	609.24	11.60	597.64
H2U-01	620.92	13.59	607.33
H5-01	617.61	25.09	592.52
I1-01	625.58	28.59	596.99
Flow Zone 2			
F2U-02	599.89	25.66	574.23
F4U-02	602.32	17.08	585.24
G1-02	616.86	27.67	589.19
G6-02	608.65	18.61	590.04
H2U-02	620.88	28.94	591.94
H5-02	617.47	25.71	591.76
I1-02	625.47	41.55	583.92
J2U-02	609.66	15.04	594.62
J5U-02	606.21	11.60	594.61
J6-02	609.23	13.13	596.10
Flow Zone 4			
AFW-2U-04	593.48	19.09	574.39
D1U-04	593.77	13.80	579.97
D2U-04	590.65	12.37	578.28
E6-04	578.23	12.90	565.33
F2U-04	599.76	23.44	576.32
F4U-04	602.19	17.59	584.60
F6-04	588.06	18.60	569.46
G1U-04	616.96	27.65	589.31
G6-04	609.15	18.58	590.57
H5-04	617.40	25.68	591.72
I1-04	625.30	43.05	582.25
J2U-04	609.42	17.48	591.94
J5U-04	606.05	20.28	585.77
J6-04	609.12	30.02	579.10

Table 1

Water Level Elevation Summary
Fourth Quarter - 2020
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	19.12	574.21
AGW-1U-05	591.80	6.66	585.14
D1U-05	593.51	13.82	579.69
D2U-05	590.56	11.55	579.01
E6-05	578.04	12.53	565.51
F2U-05	599.64	22.69	576.95
F4U-05	602.06	19.70	582.36
F6-05	587.85	18.49	569.36
G6-05	609.13	18.81	590.32
H2M-05	621.59	31.81	589.78
H5-05	617.31	27.25	590.06
I1-05	625.25	73.58	551.67
J2U-05	609.30	31.01	578.29
J5U-05	605.87	27.54	578.33
J6-05	609.02	30.18	578.84
PMW-1U-05	598.00	19.59	578.41
Flow Zone 6			
ABP-7-06	575.78	Dry	-
AFW-1U-06	571.83	14.58	557.25
AFW-2U-06	593.22	Dry	-
AGW-1U-06	591.66	39.52	552.14
B2U-06	589.29	35.78	553.51
C3-06	585.78	Dry	-
D1U-06	593.25	46.37	546.88
D2U-06	590.38	43.11	547.27
E6-06	577.99	5.60	572.39
F2M-06	599.06	47.41	551.65
F4M-06	602.05	51.68	550.37
F6-06	587.84	15.52	572.32
G1M-06	616.75	44.31	572.44
G6-06	609.09	35.23	573.86
H2M-06	621.42	39.82	581.60
H5-06	617.17	28.94	588.23
I1-06	625.15	79.30	545.85
J2M-06	608.94	56.91	552.03
J5M-06	606.22	59.86	546.36
J6-06	608.93	54.75	554.18
PMW-1U-06	597.92	51.19	546.73

Table 1

Water Level Elevation Summary
Fourth Quarter - 2020
Hyde Park RRT Program

Well	Reference Elevation (ft AMSL)	Depth to Water (ft)	Water Level Elevation (ft AMSL)
Flow Zone 7			
ABP-1-07	575.20	28.43	546.77
ABP-7-07	575.73	41.37	534.36
AFW-1M-07	571.41	Dry	-
AFW-2M-07	593.44	66.82	526.62
AGW-1M-07	592.91	49.78	543.13
B2M-07	589.52	58.98	530.54
C3-07	585.62	44.82	540.80
D1M-07	594.15	62.08	532.07
D2M-07	590.77	67.45	523.32
E6-07	577.91	23.09	554.82
F2M-07	598.91	79.13	519.78
F4M-07	601.91	76.58	525.33
F6-07	587.68	20.18	567.50
G1M-07	616.68	38.90	577.78
G6-07	609.06	31.03	578.03
H5-07	617.05	62.38	554.67
I1-07	625.14	83.20	541.94
J5M-07	606.07	64.08	541.99
J6-07	608.85	67.23	541.62
PMW-1M-07	598.50	68.27	530.23
Flow Zone 9			
ABP-1-09	575.19	40.75	534.44
ABP-7-09	575.67	42.32	533.35
AFW-1M-09	571.12	46.51	524.61
AFW-2M-09	593.32	72.28	521.04
AGW-1M-09	592.75	49.78	542.97
B2M-09	589.34	-	-
C3-09	585.00	44.94	540.06
D1M-09	594.02	74.67	519.35
D2M-09	590.66	71.37	519.29
E6-09	577.82	25.27	552.55
F2M-09	598.71	79.70	519.01
F4M-09	601.79	82.85	518.94
F6-09	587.53	17.17	570.36
G1M-09	616.58	41.06	575.52
G6-09	608.98	30.39	578.59
H2M-09	621.32	73.00	548.32
H5-09	616.93	76.42	540.51
I1-09	624.91	61.91	563.00
J2M-09	608.77	67.03	541.74
J5M-09	605.82	63.72	542.10
J6-09	608.76	45.27	563.49
PMW-1M-09	598.34	78.90	519.44

Table 1

Water Level Elevation Summary
Fourth Quarter - 2020
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	64.72	507.38
AFW-2L-11	593.43	98.16	495.27
AGW-1L-11	592.71	8.89	583.82
B2L-11	589.65	91.59	498.06
D1L-11	593.80	91.89	501.91
D2L-11	590.21	66.75	523.46
E6-11	577.72	46.78	530.94
F2L-11	598.94	45.05	553.89
F4L-11	602.22	31.57	570.65
F6-11	587.40	61.25	526.15
G1L-11	616.84	35.53	581.31
G6-11	608.89	34.20	574.69
H2L-11	620.73	62.03	558.70
H5-11	616.81	77.00	539.81
I1-11	624.75	79.23	545.52
J5L-11	607.20	56.17	551.03
J6-11	608.68	23.18	585.50
PMW-1L-11	598.84	85.19	513.65
Purge Wells			
APW-1	564.98	55.68	509.30
APW-2	569.89	57.69	512.20
PW-1L	593.16	97.96	495.20
PW-1U	593.50	42.20	551.30
PW-2L	597.29	101.69	495.60
PW-2M	596.61	82.31	514.30
PW-2UR	594.75	35.05	559.70
PW-3L	599.05	98.05	501.00
PW-3M	597.79	76.99	520.80
PW-4M	606.93	82.63	524.30
PW-4U	604.85	31.15	573.70
PW-5UR	601.31	45.61	555.70
PW-6UMR	609.31	107.61	501.70
PW-6UR	608.47	52.67	555.80
PW-7U	592.47	52.27	540.20
PW-8M	592.67	73.77	518.90
PW-8U	589.27	38.97	550.30
PW-9U	587.47	43.27	544.20
PW-10U	593.54	28.74	564.80

Notes:

- - Not applicable
ft AMSL - Feet above mean sea level
Dry - No water present at the time of measurement

Table 2

Leachate Treatment System Daily Effluent Monitoring Data
Fourth Quarter - 2020
Hyde Park RRT Program

	Effluent	
Date	**pH**	**Flow**
	(su)	(gal)
10/01/20	7.1	35,000
10/02/20		
10/03/20		
10/04/20		
10/05/20		
10/06/20	7.0	115,000
10/07/20	7.0	39,000
10/08/20		
10/09/20		
10/10/20		
10/11/20		
10/12/20		
10/13/20	7.0	130,000
10/14/20	7.0	14,000
10/15/20		
10/16/20		
10/17/20		
10/18/20		
10/19/20		
10/20/20	7.1	104,000
10/21/20	7.2	30,000
10/22/20		
10/23/20		
10/24/20		
10/25/20		
10/26/20		
10/27/20	7.1	158,000
10/28/20	7.0	150,000
10/29/20		
10/30/20		
10/31/20		
11/01/20		
11/02/20		
11/03/20	7.1	155,000
11/04/20	7.0	27,000
11/05/20		
11/06/20		

Table 2

Leachate Treatment System Daily Effluent Monitoring Data
Fourth Quarter - 2020
Hyde Park RRT Program

	Effluent	
Date	**pH**	**Flow**
	(su)	(gal)
11/07/20		
11/08/20		
11/09/20	7.1	125,000
11/10/20	7.0	16,000
11/11/20		
11/12/20	6.9	130,000
11/13/20		
11/14/20		
11/15/20		
11/16/20		
11/17/20	7.1	116,000
11/18/20	7.2	35,000
11/19/20		
11/20/20		
11/21/20		
11/22/20		
11/23/20	7.2	119,000
11/24/20	7.2	44,000
11/25/20	7.2	41,000
11/26/20		
11/27/20		
11/28/20		
11/29/20		
11/30/20	7.3	165,000
12/01/20		
12/02/20	7.2	166,000
12/03/20	7.1	163,000
12/04/20		
12/05/20		
12/06/20		
12/07/20	7.0	95,000
12/08/20	7.3	42,000
12/09/20	7.2	19,000
12/10/20		
12/11/20		
12/12/20		
12/13/20		

Table 2

Leachate Treatment System Daily Effluent Monitoring Data
Fourth Quarter - 2020
Hyde Park RRT Program

	Effluent	
Date	**pH**	**Flow**
	(su)	(gal)
12/14/20	7.1	137,000
12/15/20	7.0	160,000
12/16/20	7.1	15,000
12/17/20		
12/18/20		
12/19/20		
12/20/20		
12/21/20	7.0	224,000
12/22/20		
12/23/20	7.0	140,000
12/24/20		
12/25/20		
12/26/20		
12/27/20		
12/28/20		
12/29/20	7.1	217,000
12/30/20	7.0	231,000
12/31/20	7.1	55,000
	Total	3,412,000

Notes:

su - Standard Unit
gal - Gallons

Analytical Results Summary
Weekly Sampling - Leachate Treatment System
Fourth Quarter - 2020
Hyde Park RRT Program

Effluent

Parameter	Units	10/07/2020	10/14/2020	10/21/2020	10/27/2020	11/04/2020	11/11/2020
Volatiles							
1,1,1-Trichloroethane	µg/L	0.55 J	0.61 J	0.47 J	2.0 U	2.0 U	0.60 J
1,1,2,2-Tetrachloroethane	µg/L	6.7	7.5	5.2	4.6	5.1	5.0
1,1,2-Trichloroethane	µg/L	1.2 J	1.3 J	1.1 J	0.77 J	0.95 J	1.1 J
1,1-Dichloroethane	µg/L	4.5	6.3	4.9	4.5	3.4	4.7
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	7.3	10	9.6	6.5	5.4	7.5
1,2-Dichloropropane	µg/L	1.2 J	1.1 J	0.90 J	2.0 U	0.77 J	0.82 J
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	8.8	9.6	8.3	5.5	7.2	6.6
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	59	30	18	43	24	13
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	13	19	14	7.8	15	15
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	2.3	3.0	2.2	2.1	1.6 J	2.1
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
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methylene chloride	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	0.45 J	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	0.60 J	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	120	250	150	150	94	130
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	0.0159	0.0137	0.0113	0.0097	0.0193	0.0139

Table 3

Analytical Results Summary
Weekly Sampling - Leachate Treatment System
Fourth Quarter - 2020
Hyde Park RRT Program

Effluent

Parameter	Units	11/18/2020	11/24/2020	12/02/2020	12/09/2020	12/16/2020	12/21/2020
Volatiles							
1,1,1-Trichloroethane	µg/L	2.0 U	2.0 U	1.8 J	2.0 U	0.35 J	2.0 U
1,1,2,2-Tetrachloroethane	µg/L	6.3	6.1	5.4	5.7	5.8	4.6
1,1,2-Trichloroethane	µg/L	1.7 J	1.5 J	1.0 J	1.6 J	1.5	0.79 J
1,1-Dichloroethane	µg/L	4.6	4.7	4.7	4.5	3.6	3.8
1,1-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 J	2.0 U	1.0 U	2.0 U
1,2,4-Trichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
1,2-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
1,2-Dichloroethane	µg/L	7.7	7.1	6.2	7.0	7.2	6.4
1,2-Dichloropropane	µg/L	2.0 U	2.0 U	2.0 U	0.79 J	1.1	0.70 J
1,3-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
1,4-Dichlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
2-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
3-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
4-Chlorotoluene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Benzene	µg/L	9.2	8.7	6.0	8.1	13	6.6
Bromodichloromethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Bromoform	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Bromomethane (Methyl bromide)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Carbon disulfide	µg/L	36	32	29	21	6.2	6.0
Carbon tetrachloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Chlorobenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Chloroethane	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Chloroform (Trichloromethane)	µg/L	21	18	15	20	18	15
Chloromethane (Methyl chloride)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
cis-1,2-Dichloroethene	µg/L	2.2	1.9 J	1.9 J	2.7	2.1	1.6 J
cis-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Ethylbenzene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
m&p-Xylenes	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U
m-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Methylene chloride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
o-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
o-Xylene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
p-Monochlorobenzotrifluoride	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Styrene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Tetrachloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Toluene	µg/L	2.0 U	2.0 U	0.47 J	2.0 U	1.0 U	2.0 U
trans-1,2-Dichloroethene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
trans-1,3-Dichloropropene	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Trichloroethene	µg/L	2.0 U	2.0 U	1.6 J	2.0 U	0.24 J	2.0 U
Trichlorofluoromethane (CFC-11)	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U
Vinyl acetate	µg/L	4.0 U	4.0 U	4.0 U	4.0 U	2.0 U	4.0 U
Vinyl chloride	µg/L	130	130	140	120	87	98
Xylenes (total)	µg/L	6.0 U	6.0 U	6.0 U	6.0 U	3.0 U	6.0 U
General Chemistry							
Phenolics (total)	mg/L	0.0107	0.0092	0.0070	0.0087	0.0050 U	0.0050 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
mg/L - Milligrams per liter
µg/L - Micrograms per liter

Table 4

Analytical Results Summary
Quarterly Sampling - Leachate Treatment System
Fourth Quarter - 2020
Hyde Park RRT Program

Sample Location:		**EFFLUENT**	**EFFLUENT**
Sample ID:		**HP 122120 EFF**	**HP 122120 EFF**
Sample Date:		**12/21/2020**	**12/21/2020**
Parameters	**Units**		
Volatile Organic Compounds			
Vinyl chloride	µg/L	100	-
General Chemistry			
Phosphorus	mg/L	-	0.203

Notes:

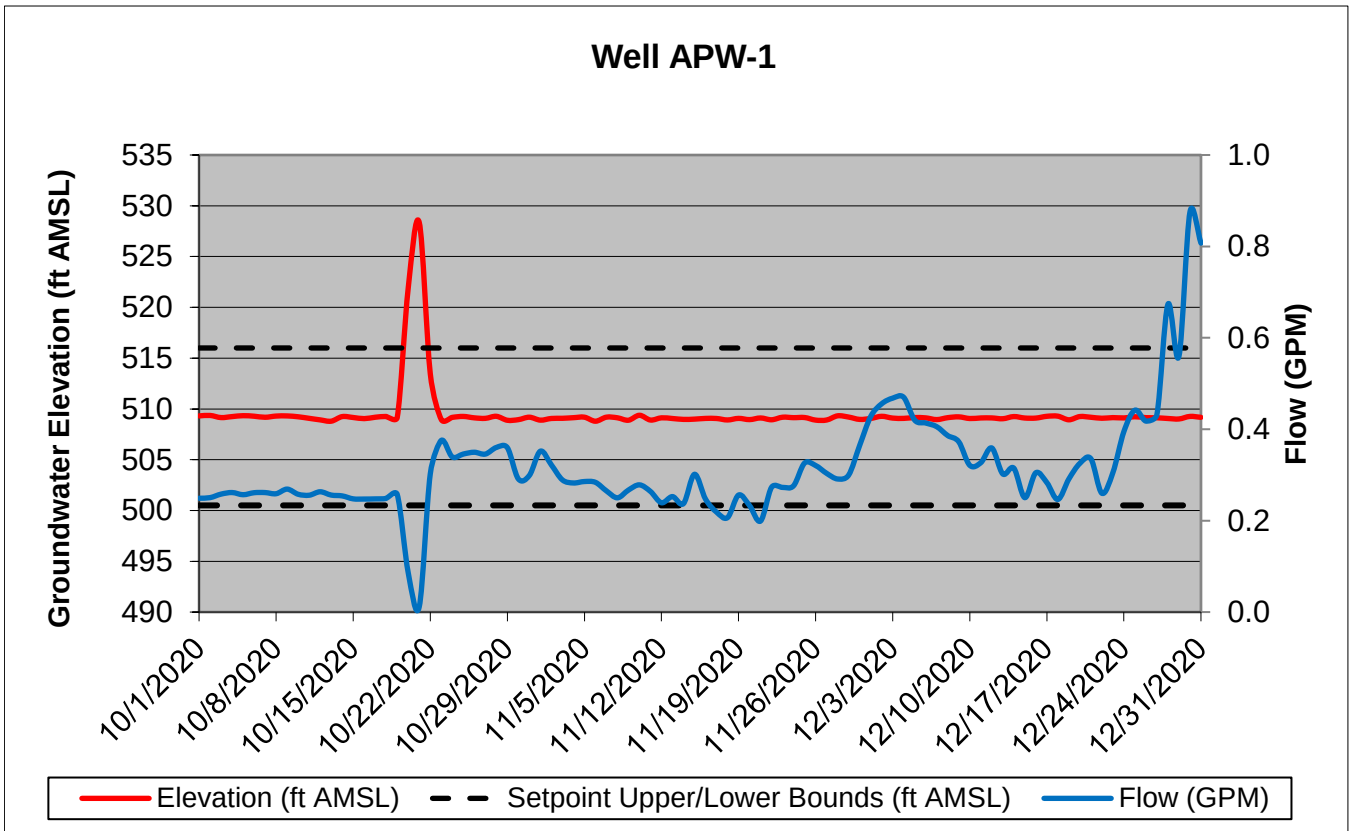
"-" - Not applicable

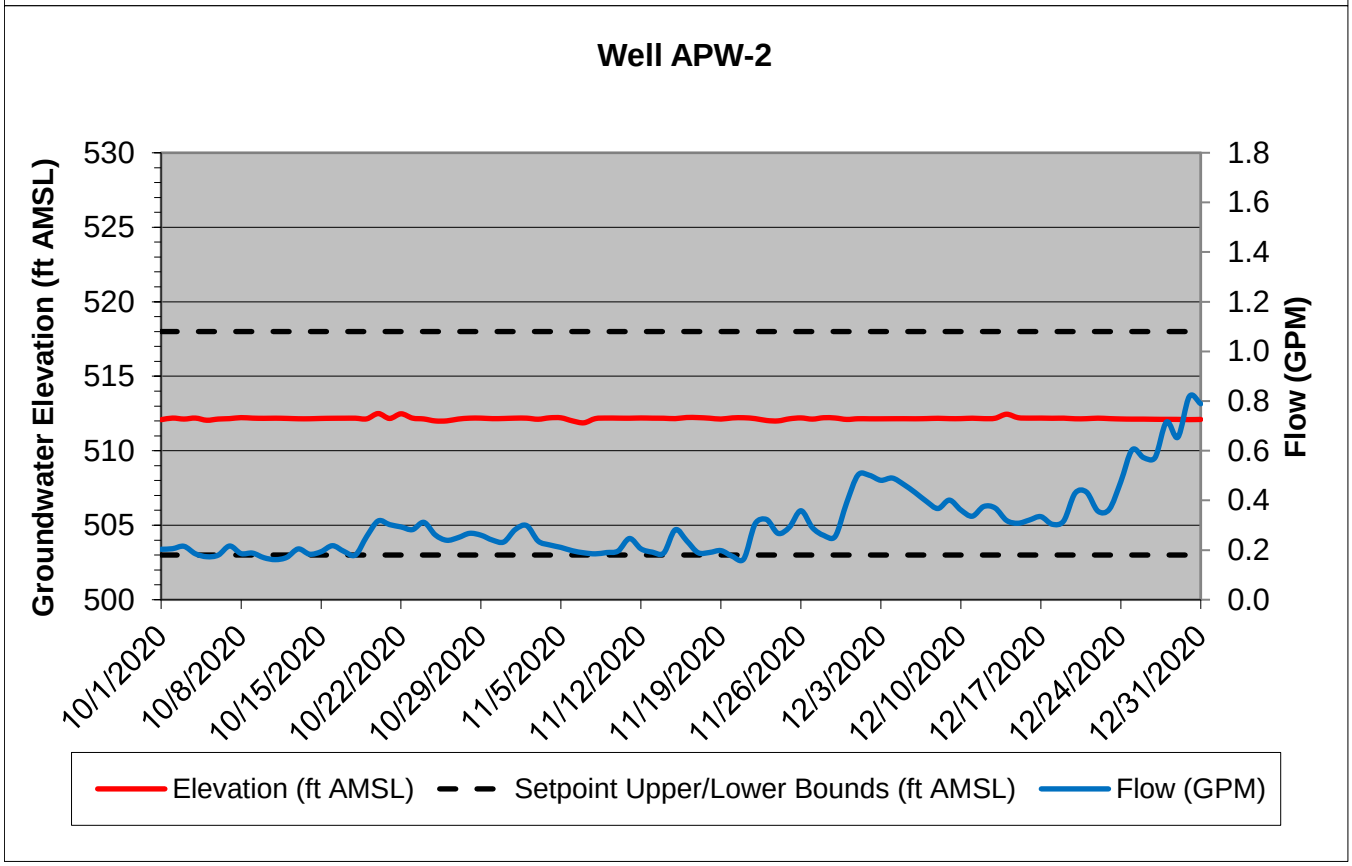
mg/L - Milligrams per liter

µg/L - Micrograms per liter

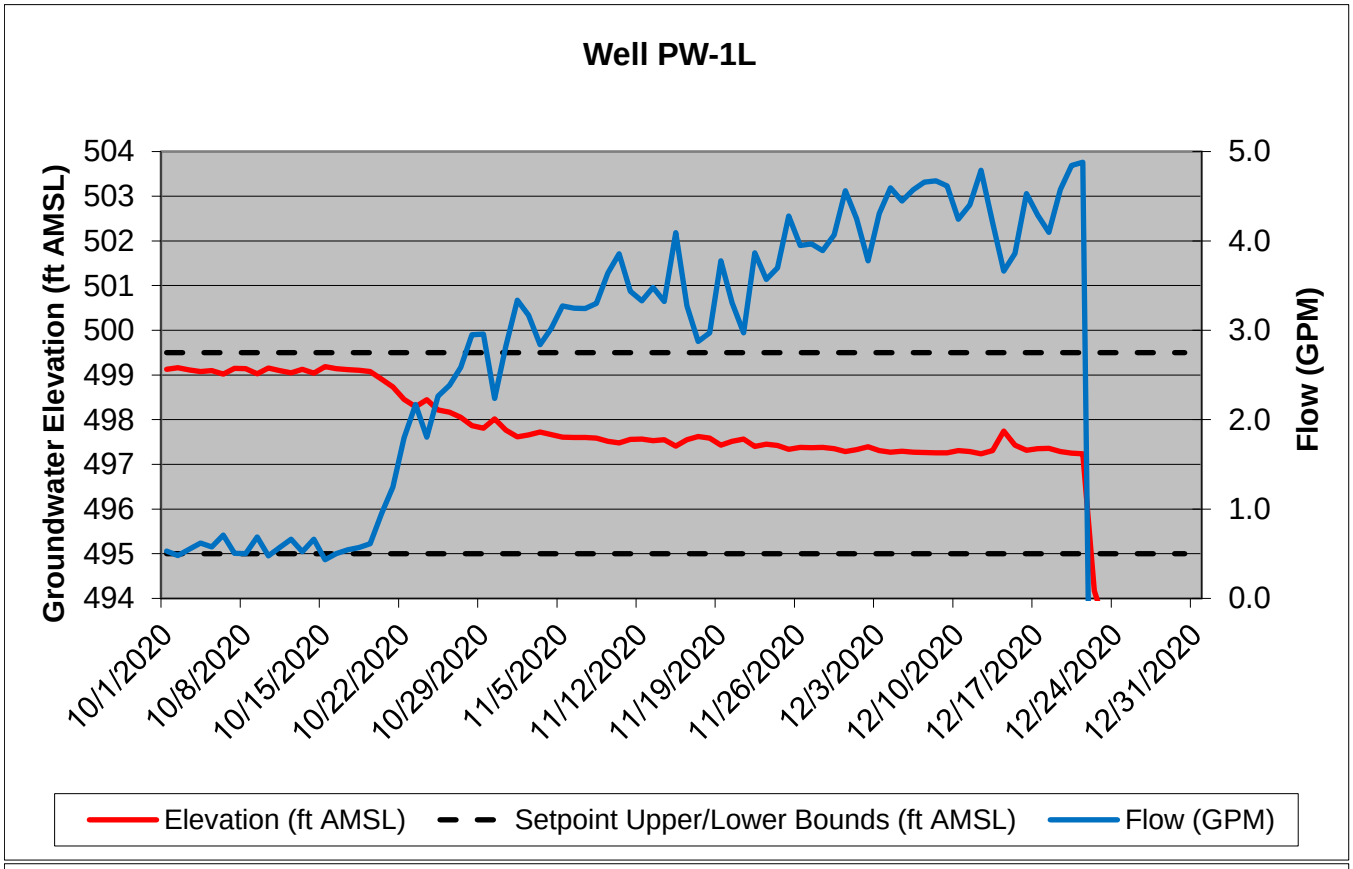
Attachment A
Fourth Quarter 2020
Pumping Well Performance Graphs

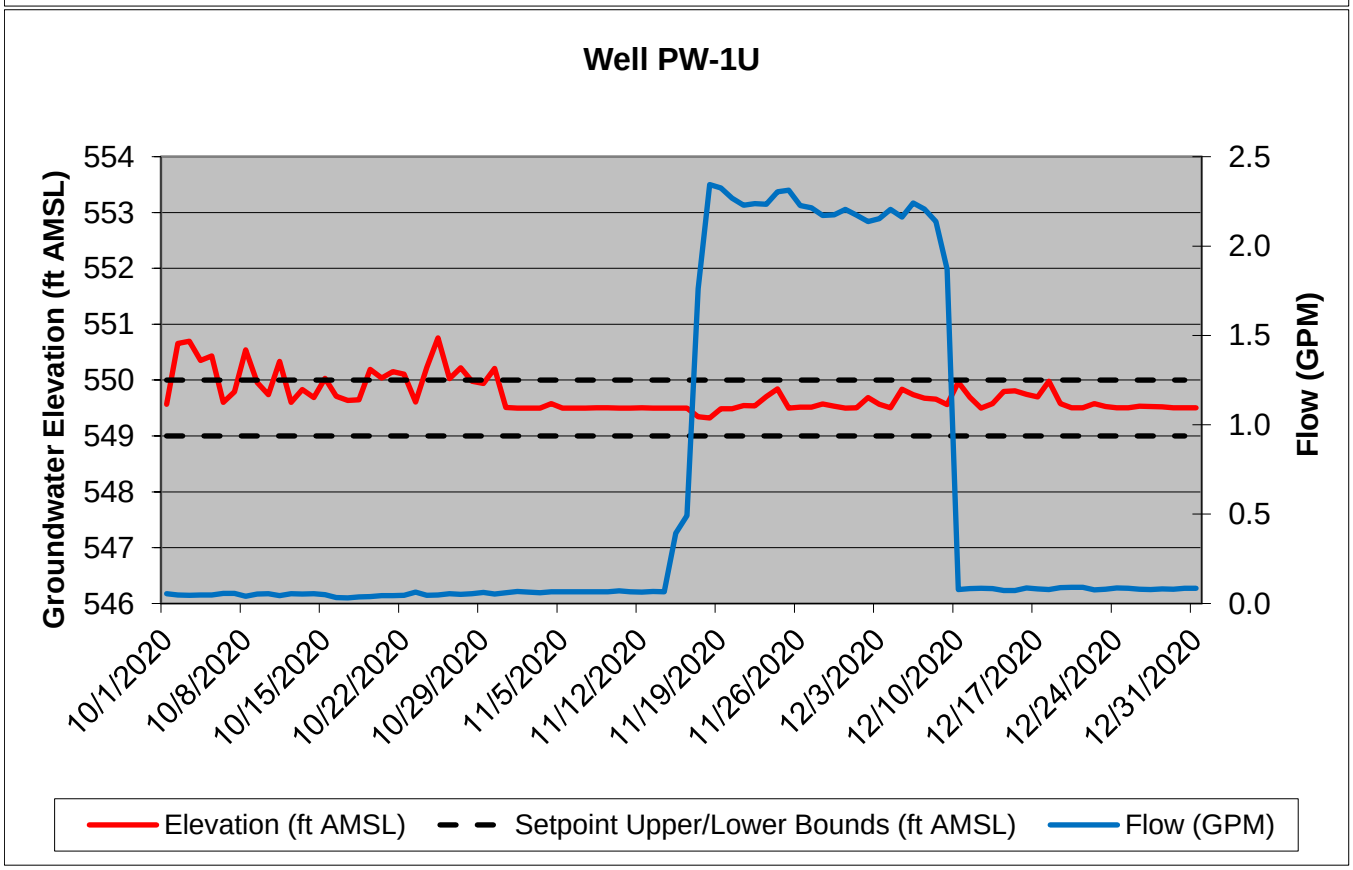
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



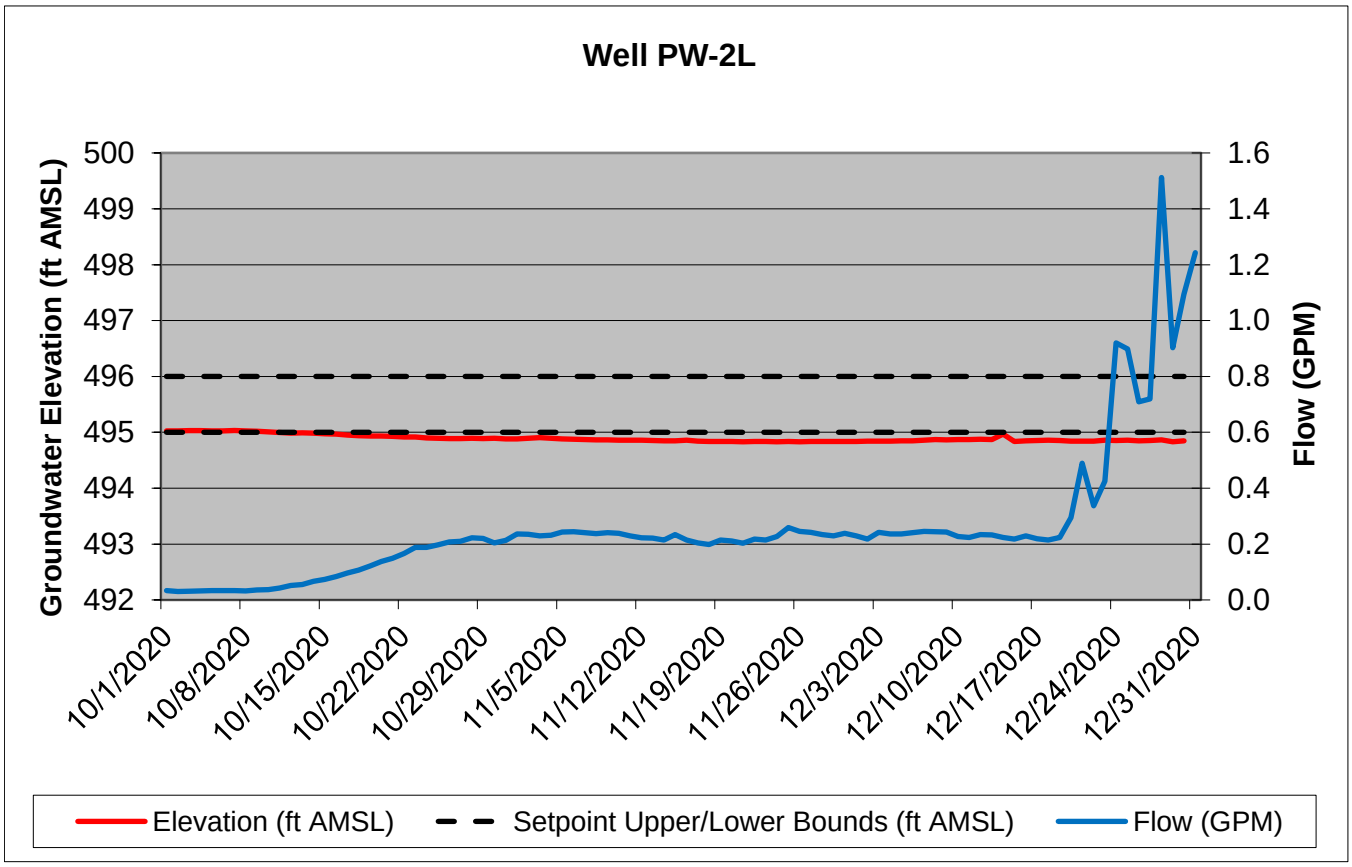


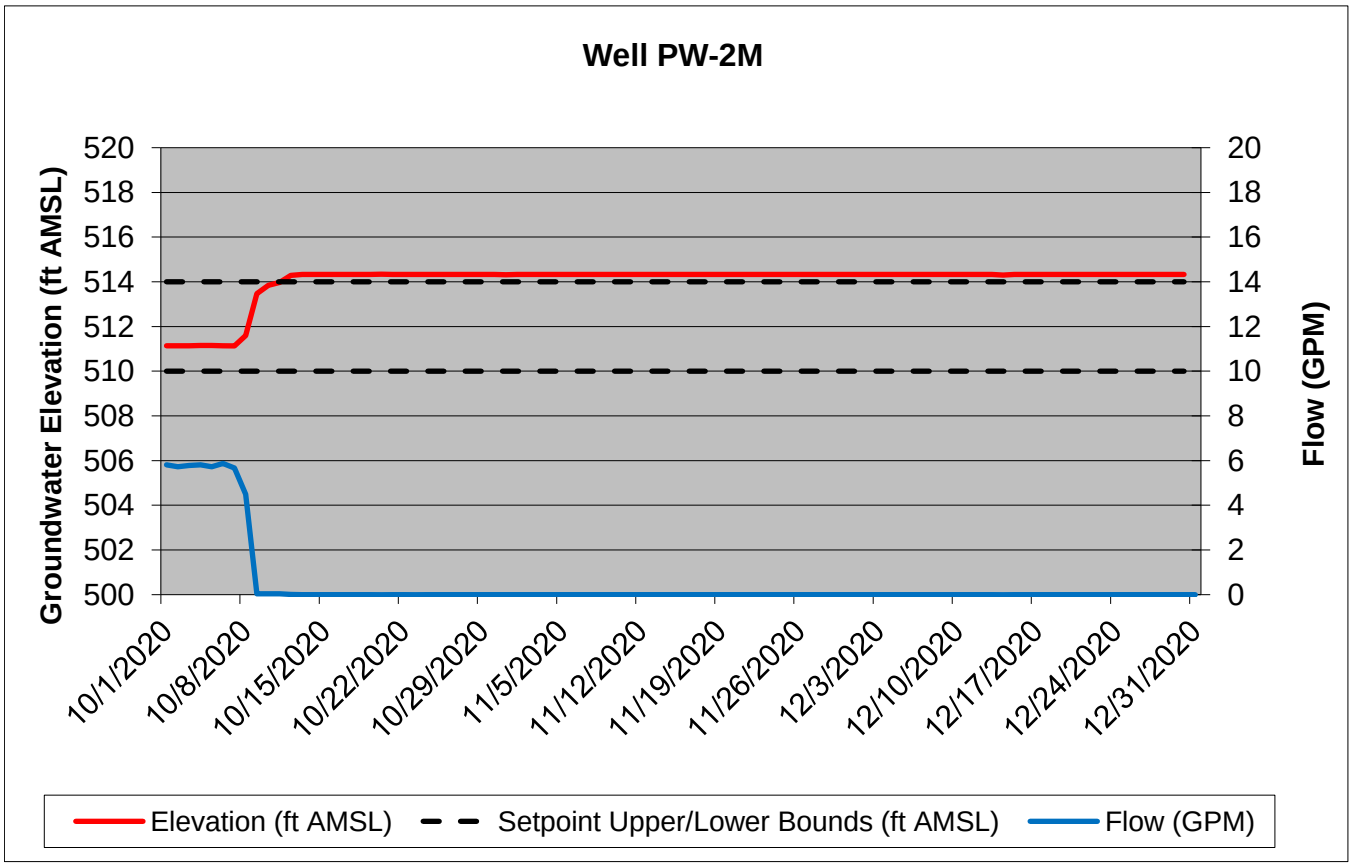
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



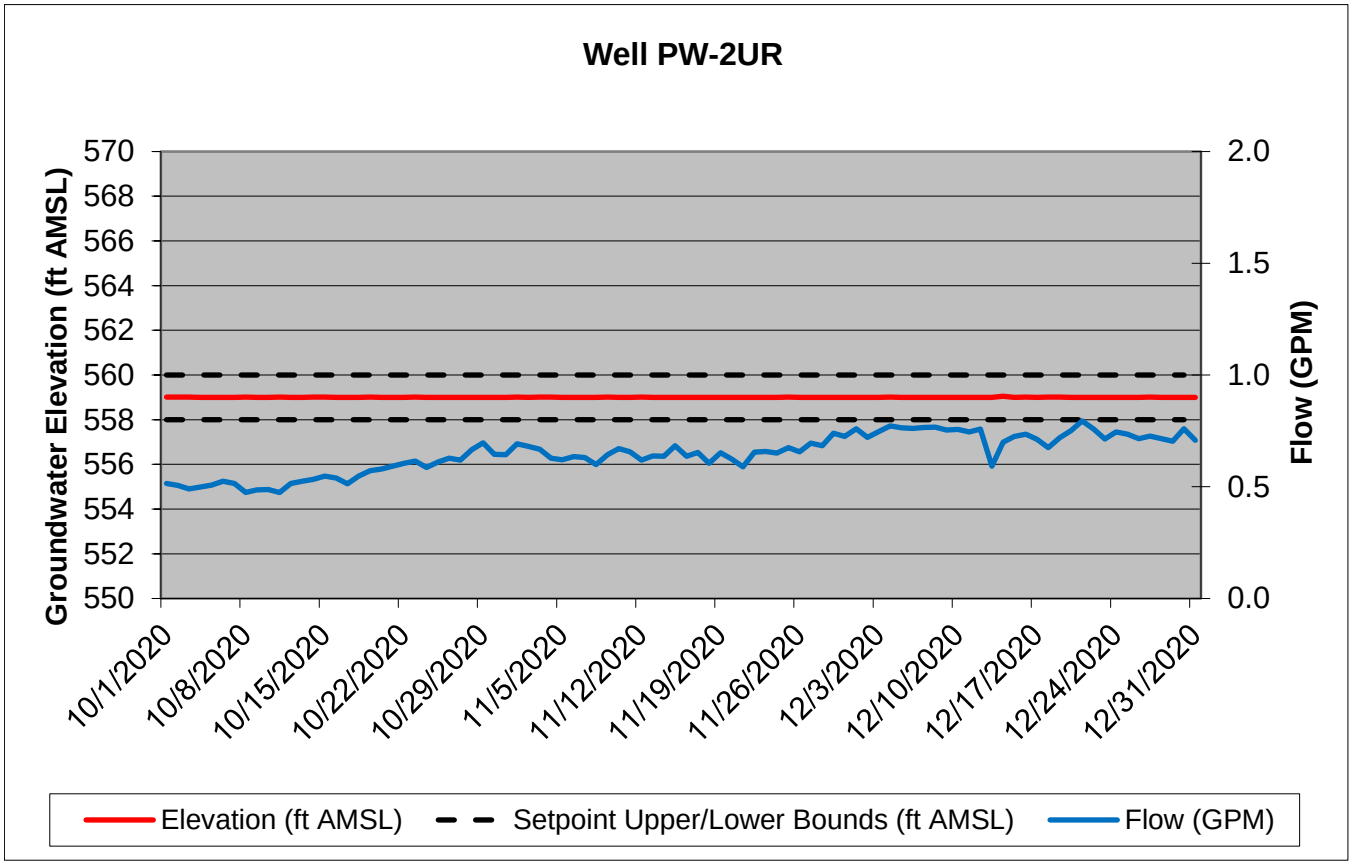


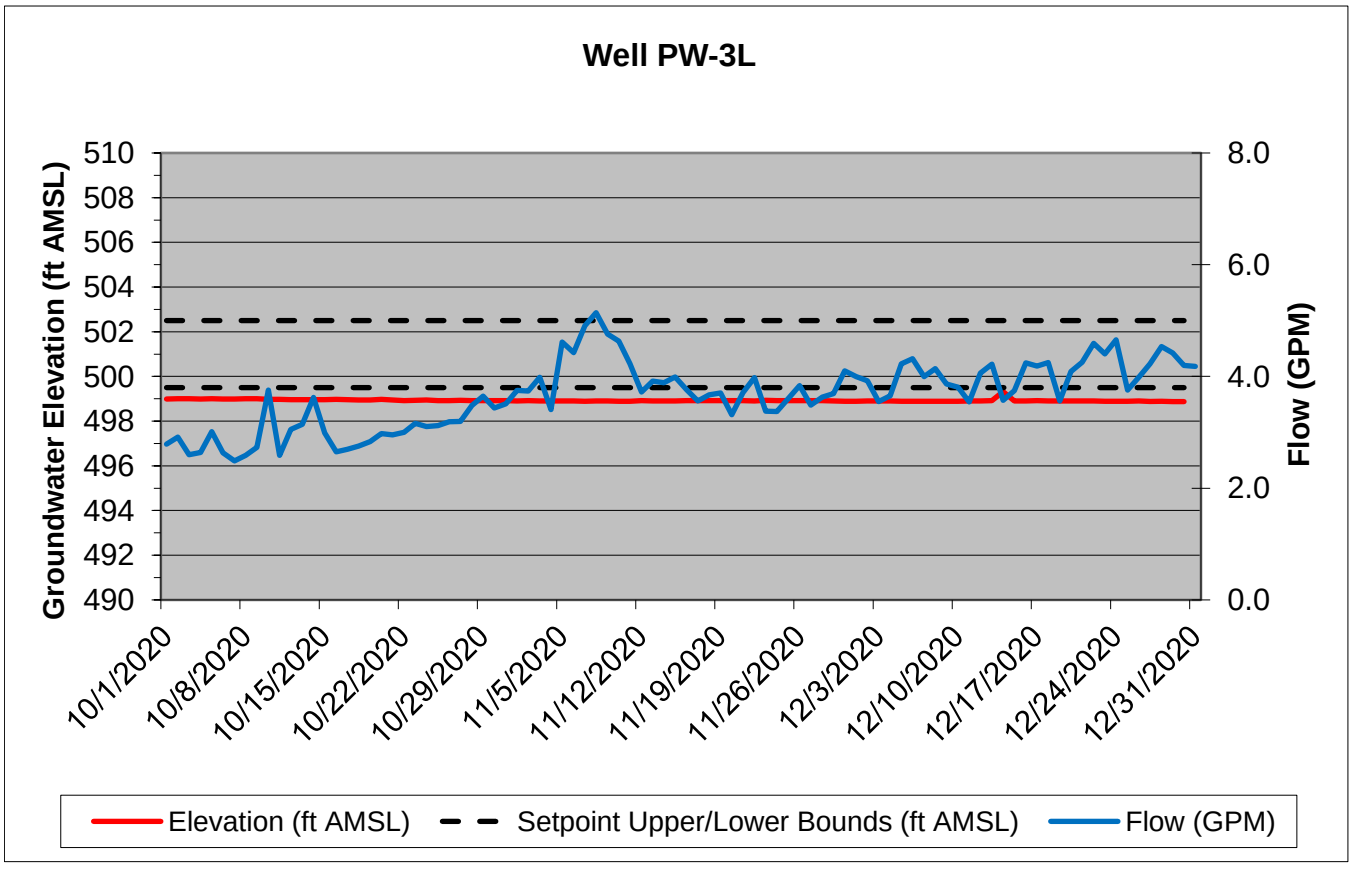
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



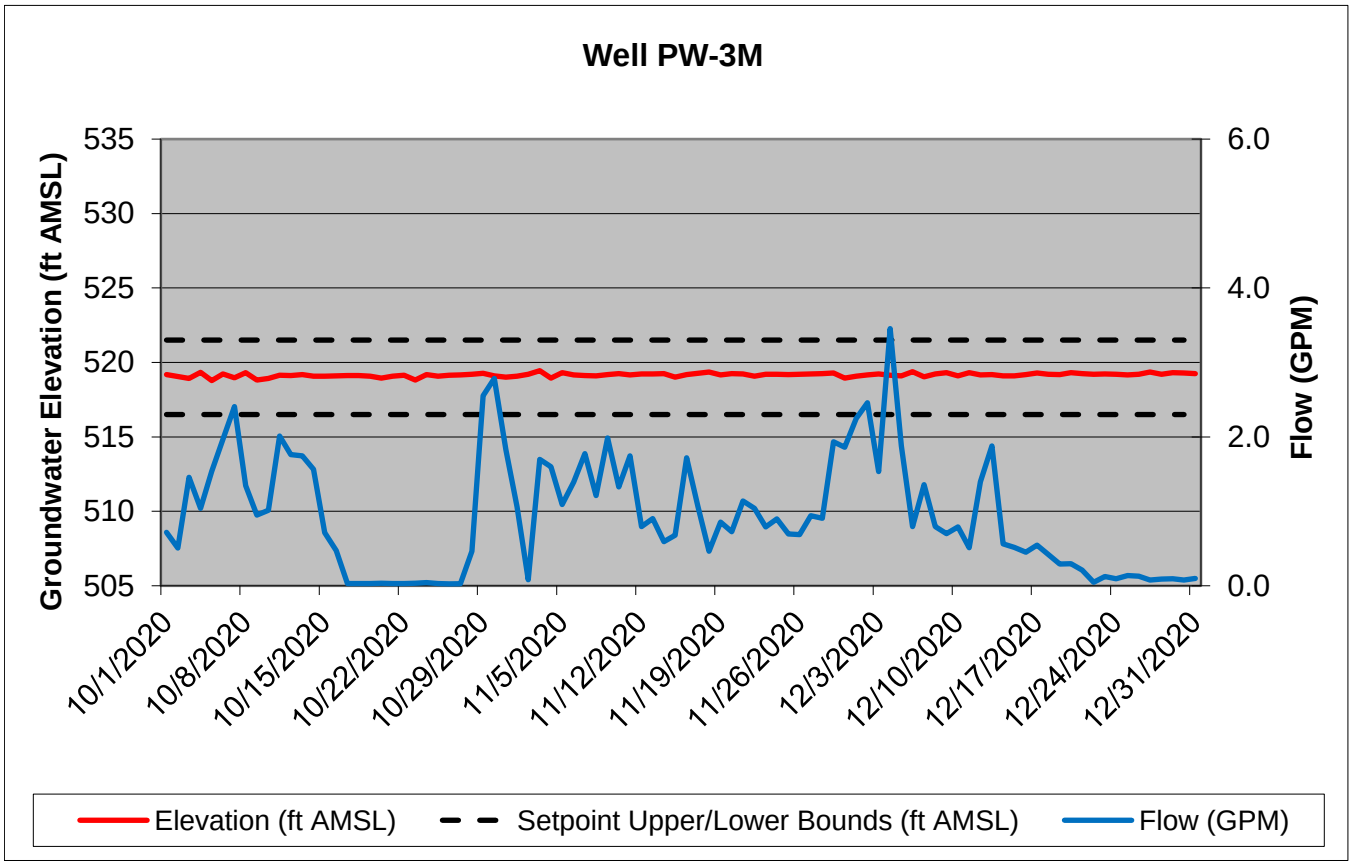


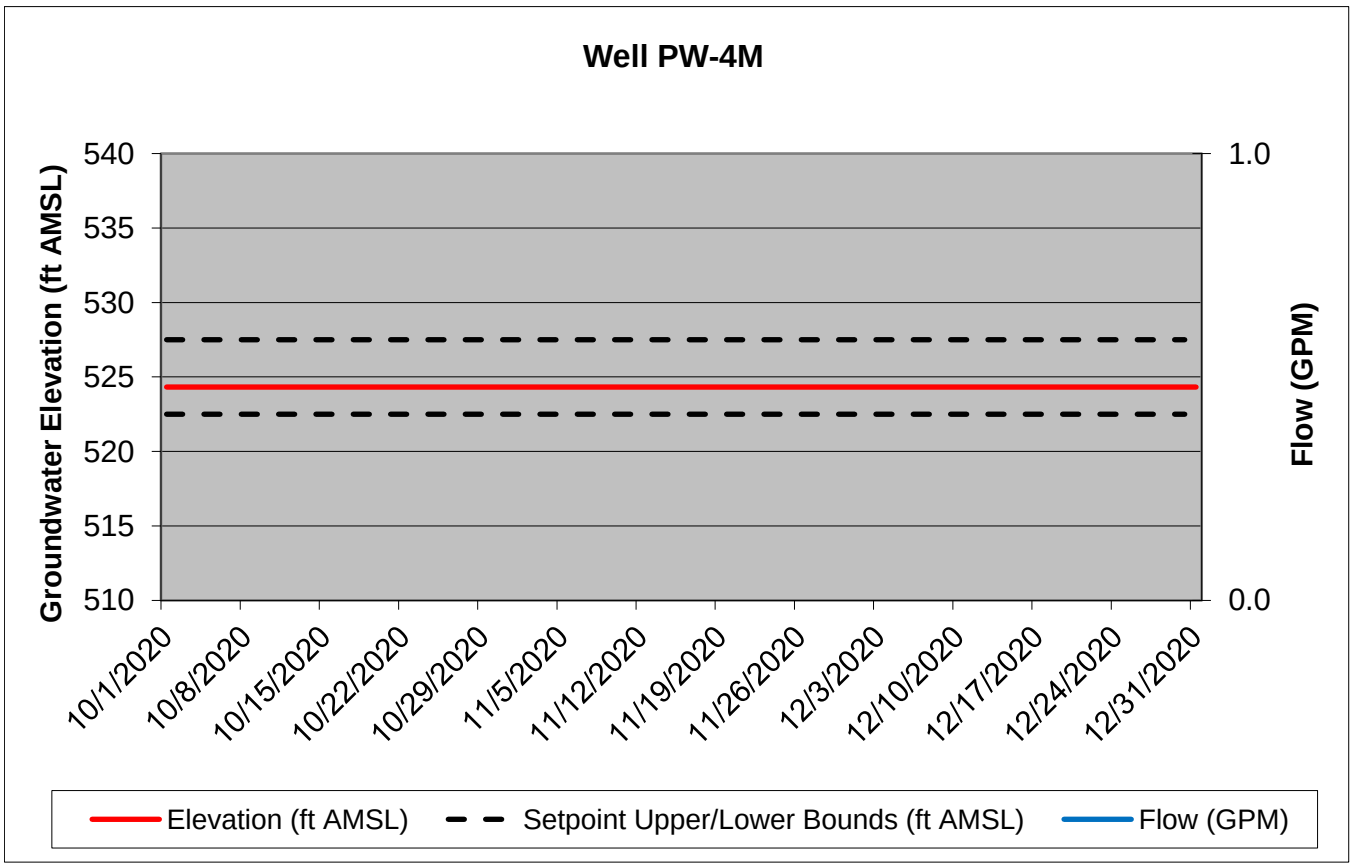
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



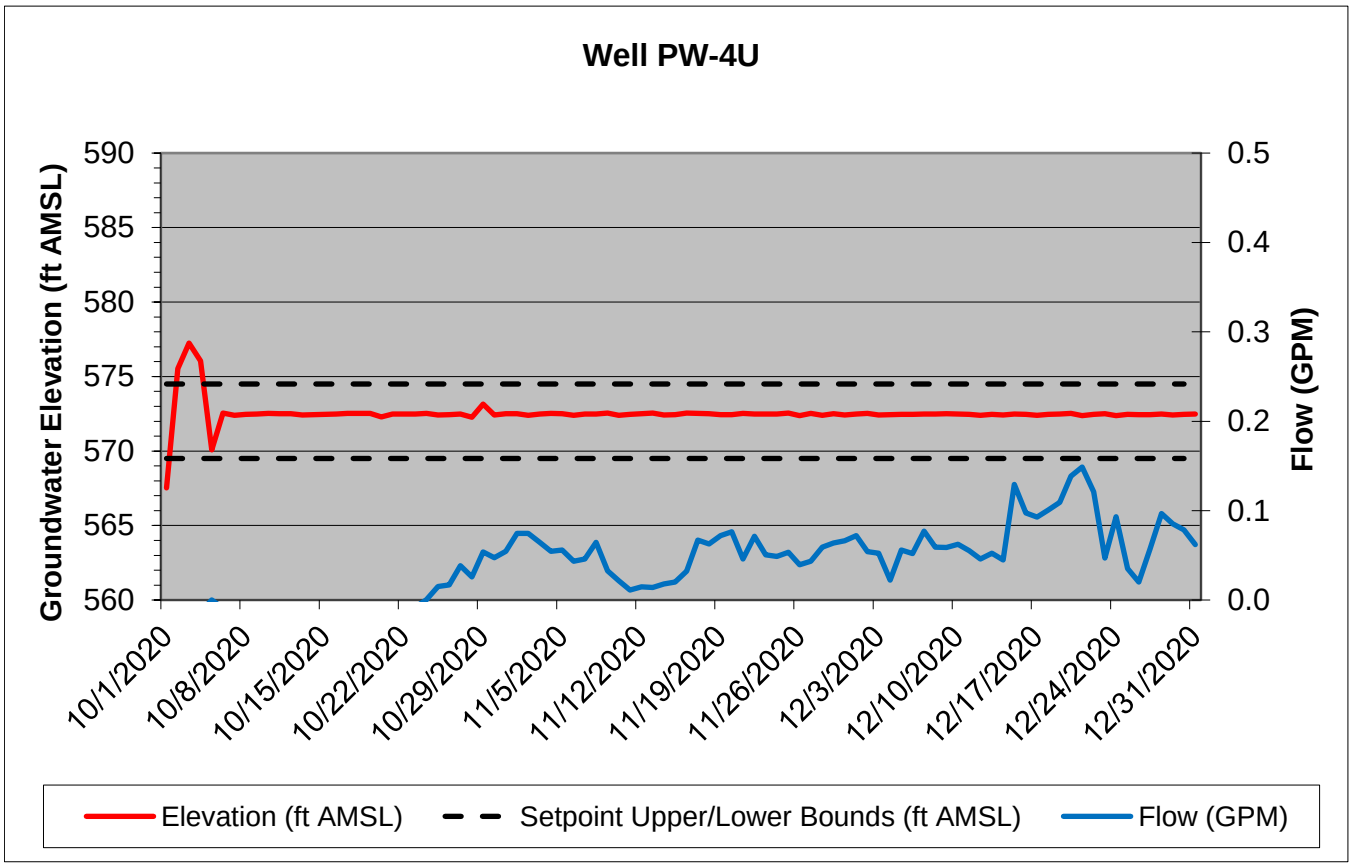


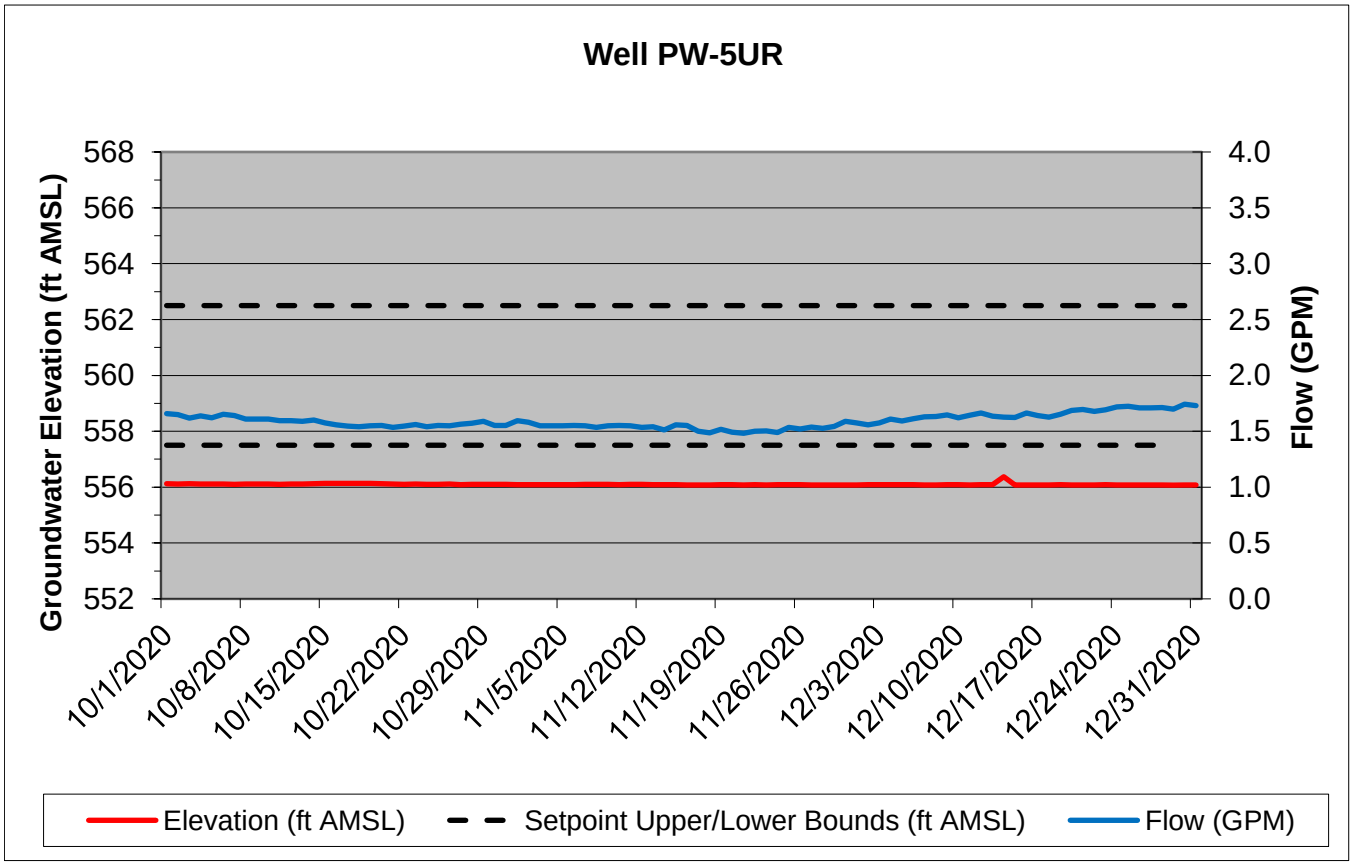
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



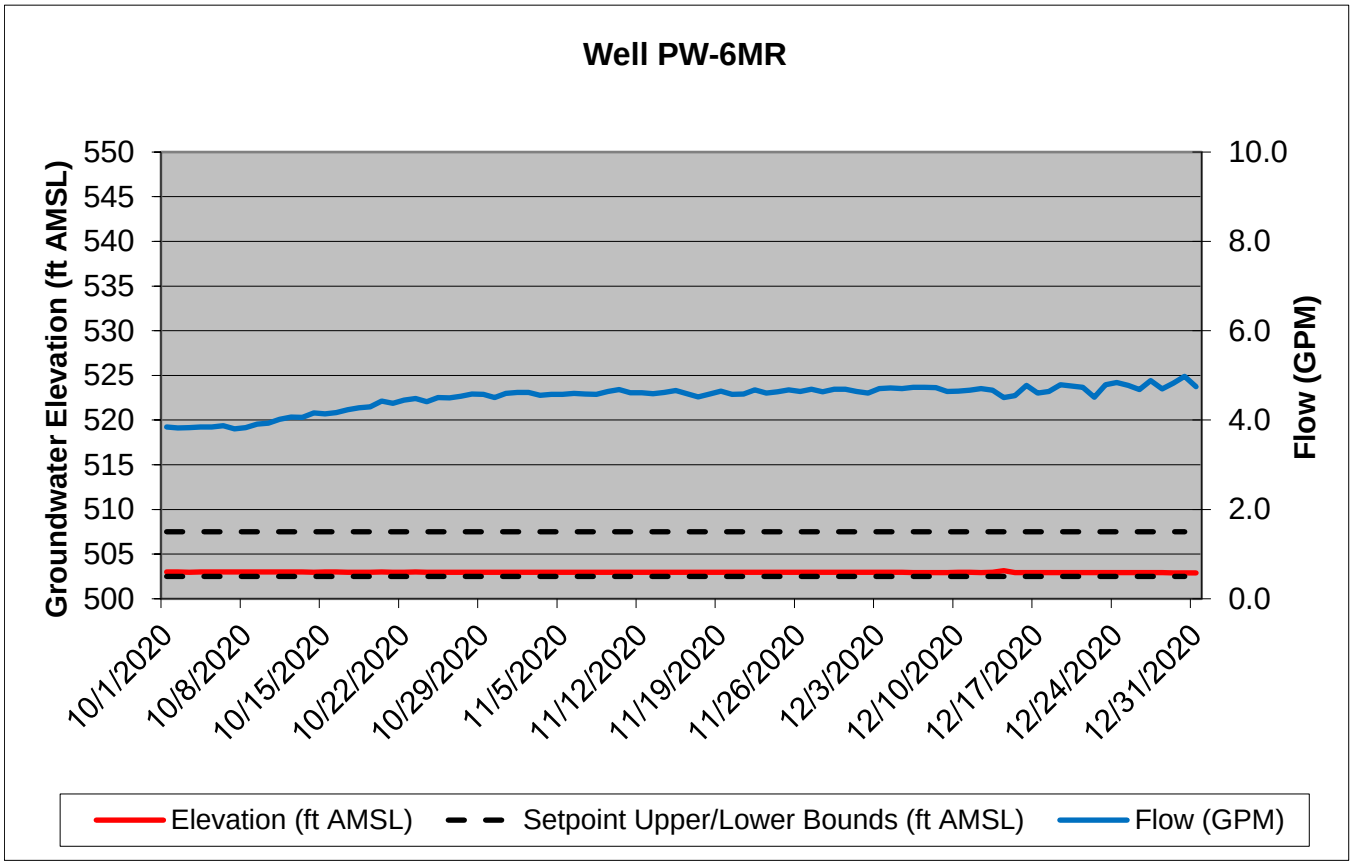


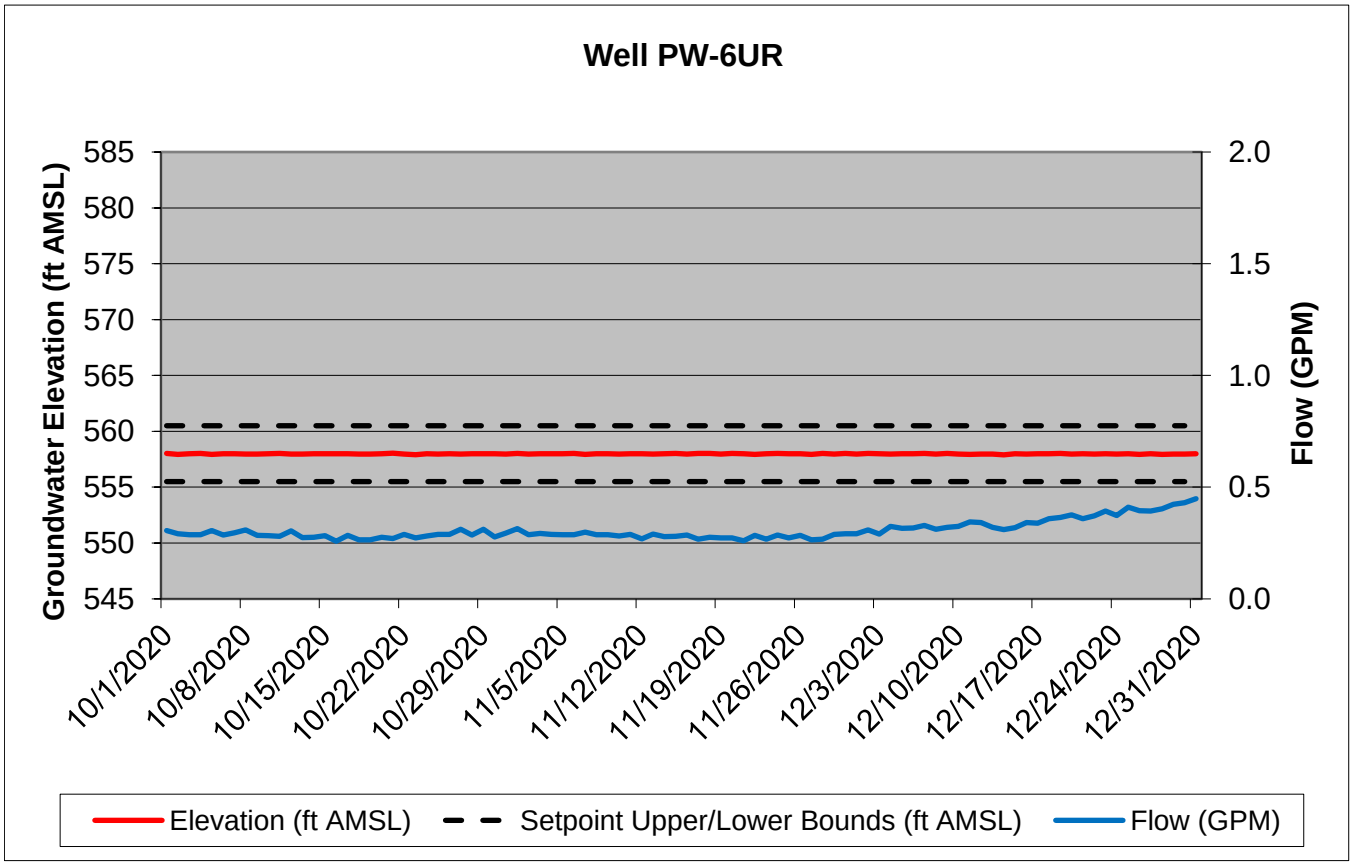
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK



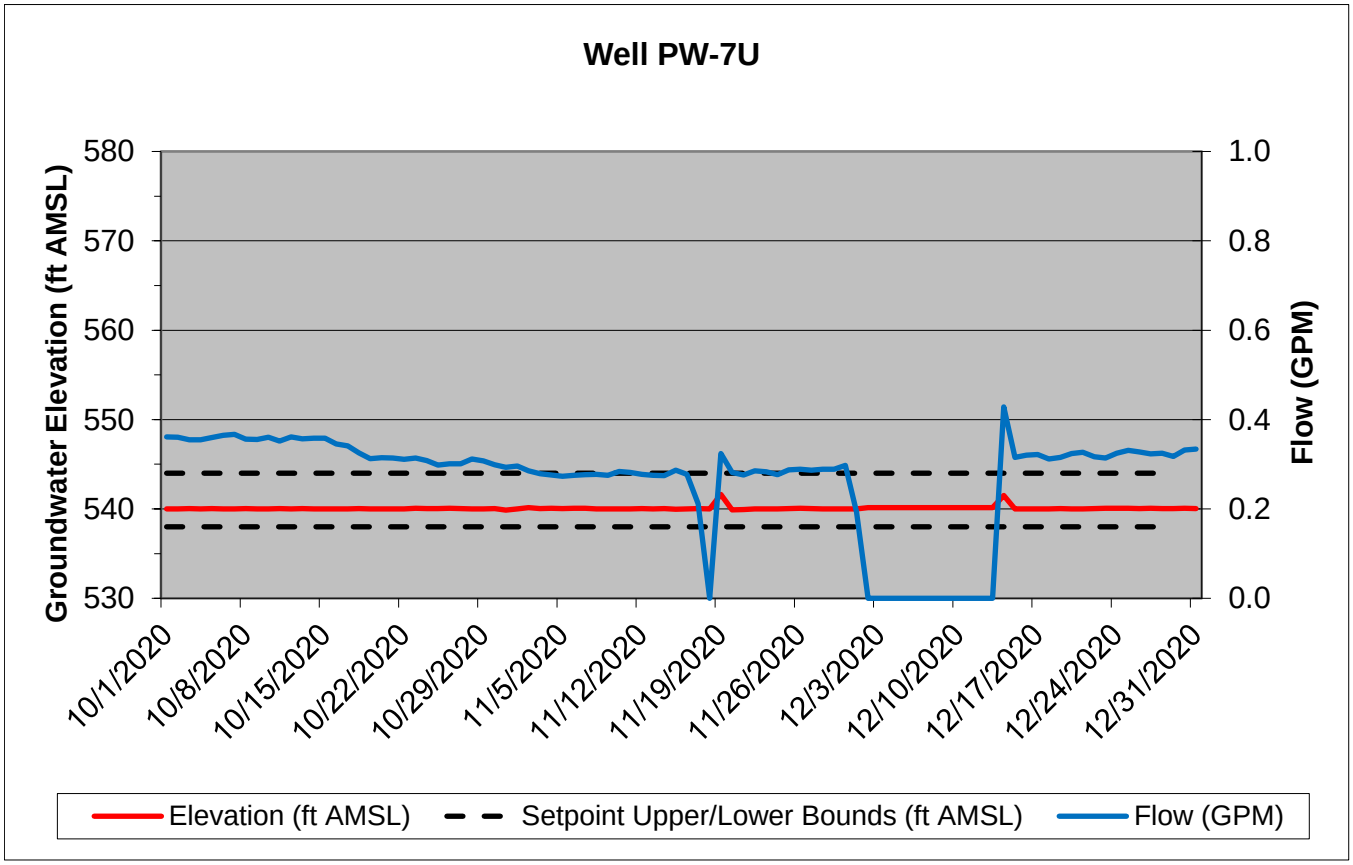


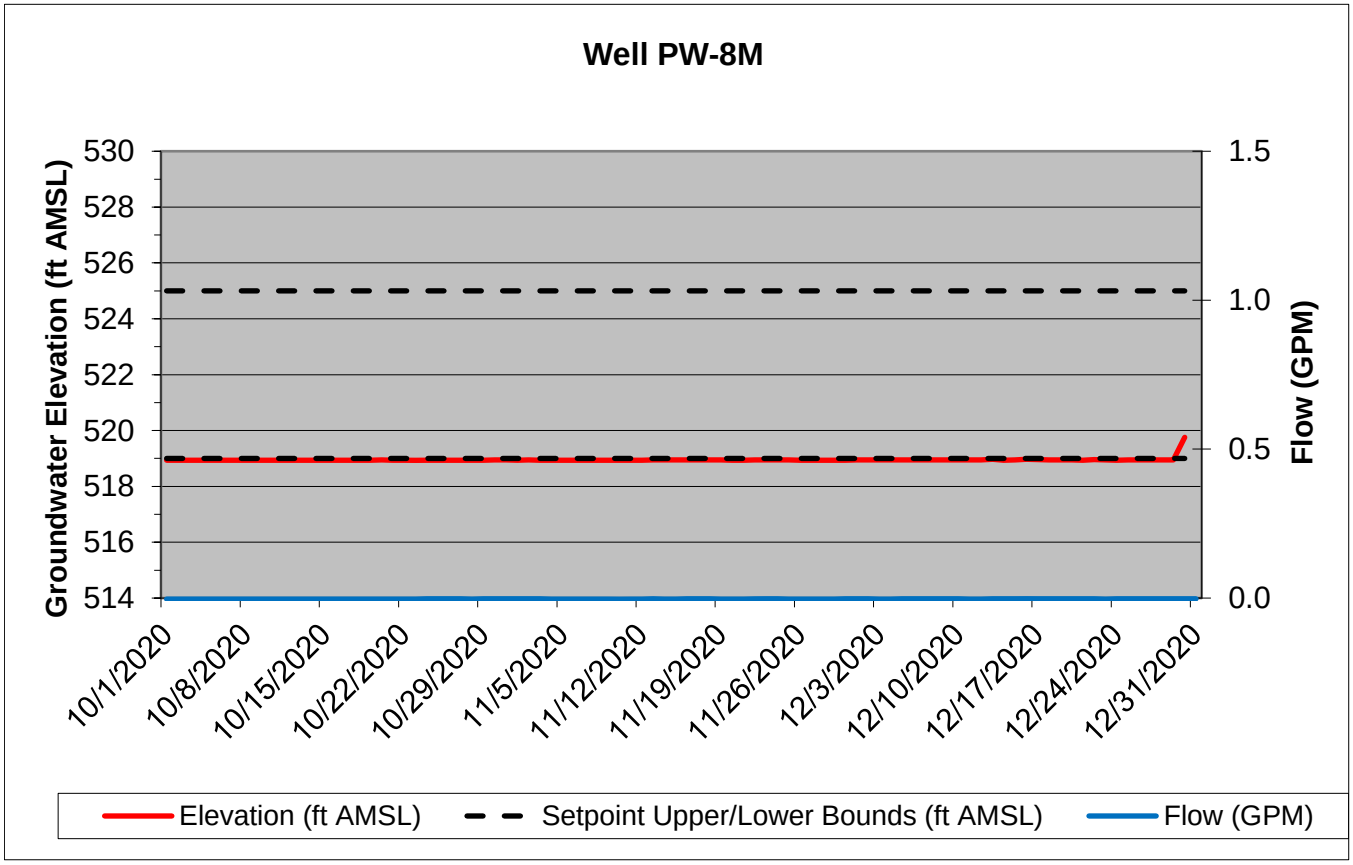
FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK





FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
HYDE PARK





FOURTH QUARTER 2020 - PUMPING WELL PERFORMANCE GRAPHS
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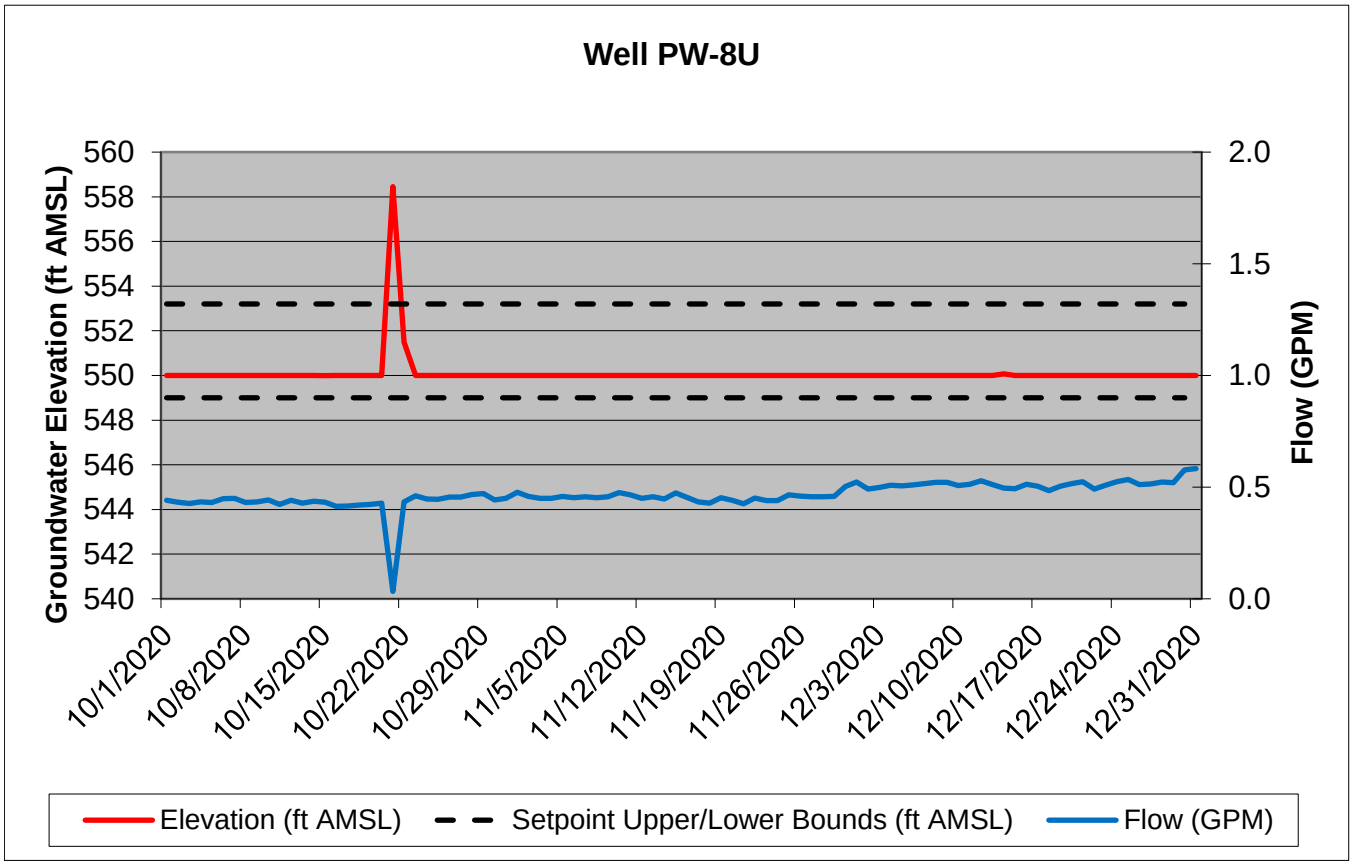

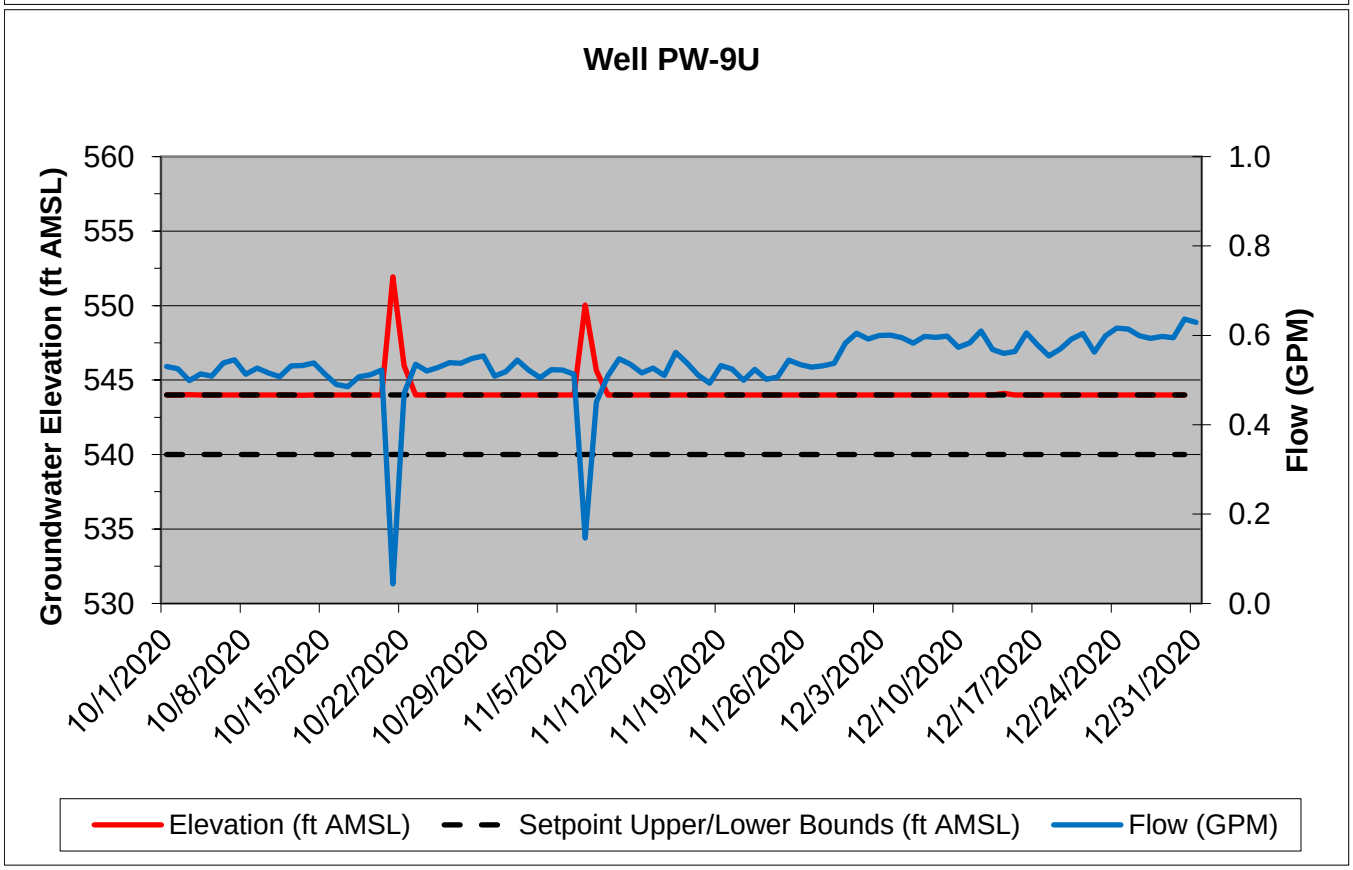

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