Glenn Springs Holdings, Inc.
A subsidiary of Occidental Petroleum

Joe Branch
Project Manager
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Montague, MI 49437
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January 31, 2013

Reference No. 001069

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

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

Dear Ms. Sosa and Mr. Sadowski:

Re: **Quarterly Operations Report – Fourth Quarter 2012**
Hyde Park Remedial Program
Bedrock and Overburden Monitoring Programs

In accordance with the July 2006 "Performance Monitoring Plan," the following is the quarterly data report for the Hyde Park Remedial Program for the period October 1, 2012 through December 31, 2012. A total of 8.0 million gallons of aqueous phase liquid (APL) was collected, treated, and discharged in compliance with our City of Niagara Falls Publicly Owned Treatment Works (POTW) Significant Industrial Users Wastewater Discharge Permit #49. No non-aqueous phase liquid (NAPL) was shipped for disposal. The potentiometric contours are consistent with previous interpretations. Flow zones 6, 7, and 9 have dewatered areas between the landfill and the gorge face. The current data continue to support the interpretation of effective hydraulic containment and inward gradients.

The performance monitoring data are presented as follows:

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

The pumping wells are operational and functioning as designed. However, the following pumping wells have minor operational and setpoint issues that are currently being investigated, and an evaluation of each will be completed during the First Quarter 2013.

APW-2: The well is currently operating at higher than normal levels, but the pump is continuing to show normal flow.

PW-2UR: The pump is experiencing intermittent electrical faults.

PW-3L: Once per day, water level readings appear to indicate the well is not maintaining setpoint; however, manual water levels indicate that setpoint is being maintained while the pump is operating.

PW-5UR: Water level and pumping issues are present due to infiltration into well and well chamber from outside source.

PW-7U: Regardless of a pump replacement, the water level is steadily increasing.

PW-1U

In October 2012, a review of the data obtained from PW-1U showed that while the well had been functioning at setpoint, the flow at this location had been decreasing. Routine maintenance to assess the condition of the well and pump was conducted during the week of October 15, 2012 and upon removal of the pump, it was discovered that the pump had become caked with a "muddy buildup." Glenn Springs Holdings, Inc. (GSH) began investigating the cause of the buildup and conducted an evaluation of the integrity of the well. A preliminary evaluation indicated that the buildup was possibly a result of fine silt infiltrating the well and settling around the pump. This well is approximately 60 feet deep. On October 23, 2012, GSH notified the United States Environmental Protection Agency (USEPA), the New York State Department of Environmental Conservation (NYSDEC), and the New York State Department of Health (NYSDOH) via email of the condition of PW-1U and potential plans to address the issue.

During the investigation activities, the well was pumped dry and visually inspected. A large void in the rock at the base of the casing was observed (by using a flashlight down the well), and it was speculated that the source of the clay was likely the casing/bedrock interface, where the casing was seated into the bedrock (near the overburden/bedrock contact) or potentially from a fracture within the vicinity of the base of the casing. An inflatable packer was installed in the pumping well to isolate intervals within the well, and packer pumping tests were performed to determine where the fractures that contribute groundwater to the well were located. According to the pumping well installation details, the water-bearing zones in the well are Flow Zone 5 (FZ-05) and Flow Zone 6 (FZ-06), with FZ-05 located at or near the base of the casing and FZ-06 located in the last 5 feet of the well at depth. The packer testing determined that FZ-05 contributes the majority of the water in this well.

The investigation concluded that the main source of water for this well and the probable source of the clay infiltration is FZ-05. The clay infiltration is likely a result of continual wearing and flushing of fines from within the FZ-05 fracture system, possibly from years of wear within the fracture system or an isolated surge of fines, with the fines being flushed into the well and accumulating as a muddy clay buildup around the pump. It cannot be determined as to whether these fines will continue to accumulate in the well, or if this was an isolated occurrence. To prevent the potential for future clay infiltration, FZ-05 would need to be sealed off. However, sealing off FZ-05 would eliminate most of the groundwater in this well and reduce the overall effectiveness of the well. Rather than sealing off FZ-05, a decision was made to clean out the well and the pump and to reinstall the cleaned pump and monitor the performance of the well. If the infiltration of fines was an isolated event, the well should continue to function as designed. If fines continue to infiltrate the well, the performance of the pumping data would indicate this, and, at that time, alternative methods of handling the infiltration will be evaluated.

The well was developed with a surge block and submersible pump, and the maintenance crew reinstalled the cleaned pump on November 9, 2012. Pumping data from this well has been monitored for signs of additional potential clay infiltration and will continue to be monitored. A graph of the flow data, groundwater level, and setpoint for PW-1U from October 1 through December 31, 2012 is presented in Attachment 1. The graph for PW-1U demonstrates that after cleaning and reinstallation of the pump, the well is functioning as designed at setpoint, with a stable flow.

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

Very truly yours,

GLENN SPRINGS HOLDINGS, INC.

Joe Branch
Project Manager
231-670-6809 Cell

JB/adh/9
Encl.

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

*Includes one copy on CD

FIGURES

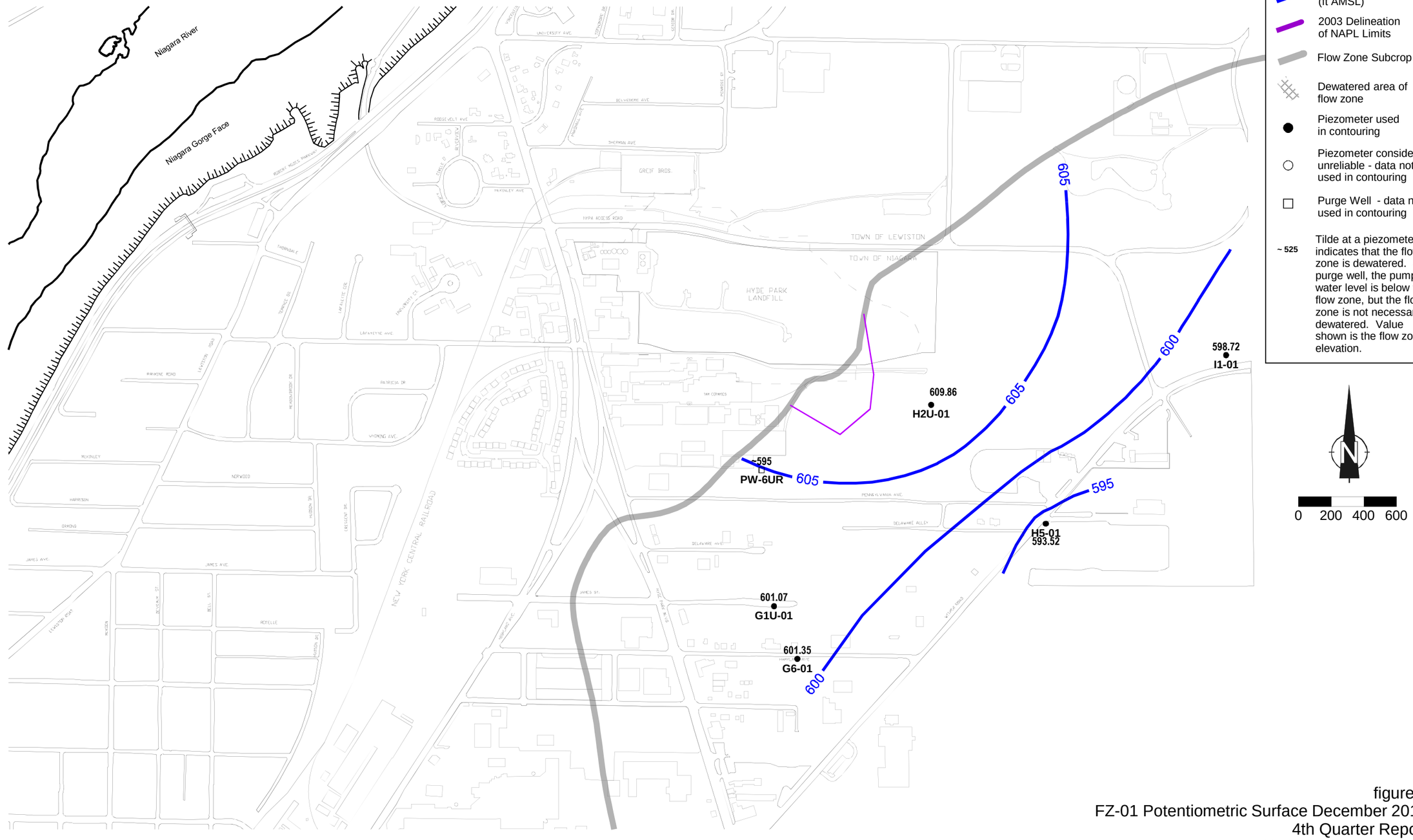


figure 1
FZ-01 Potentiometric Surface December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

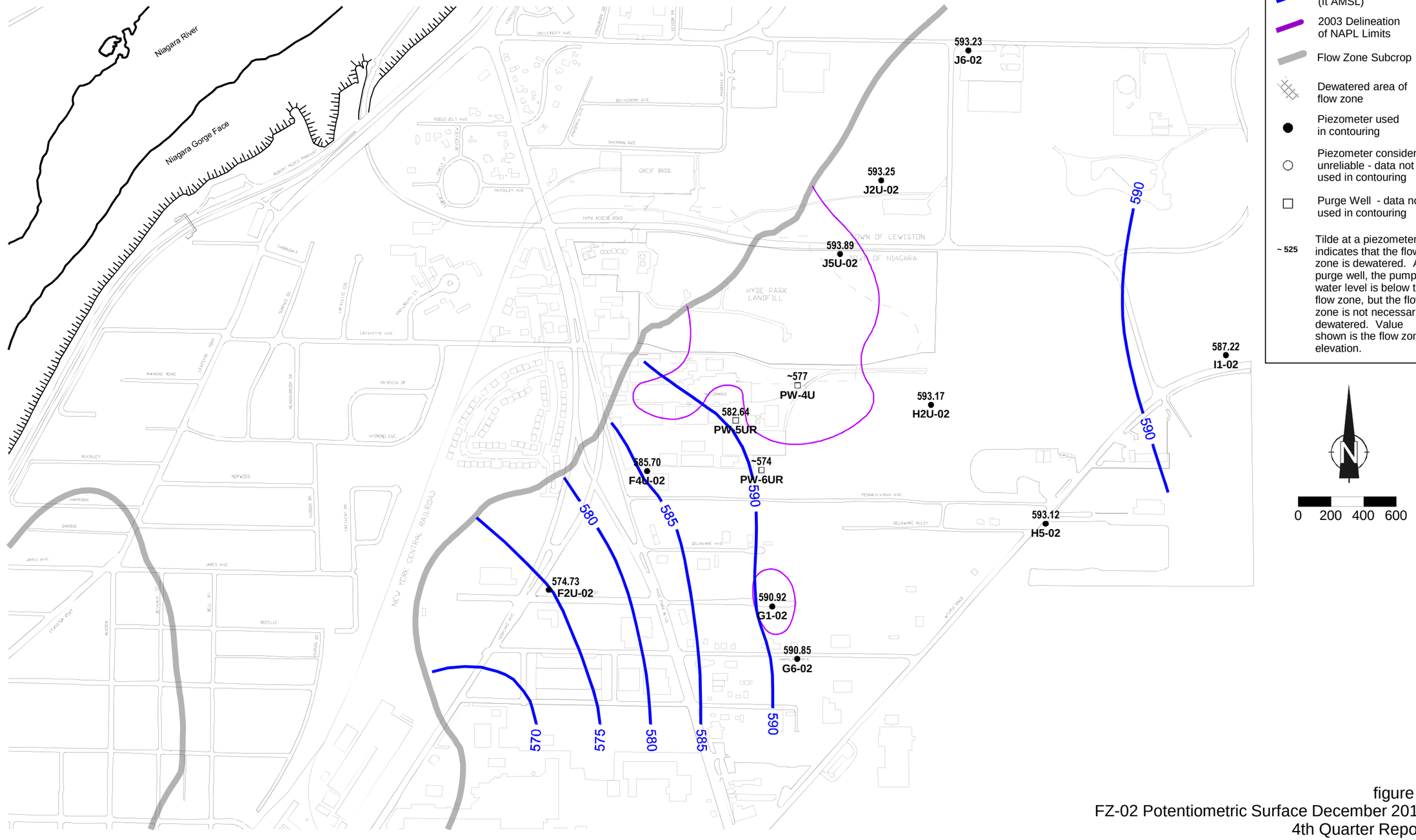
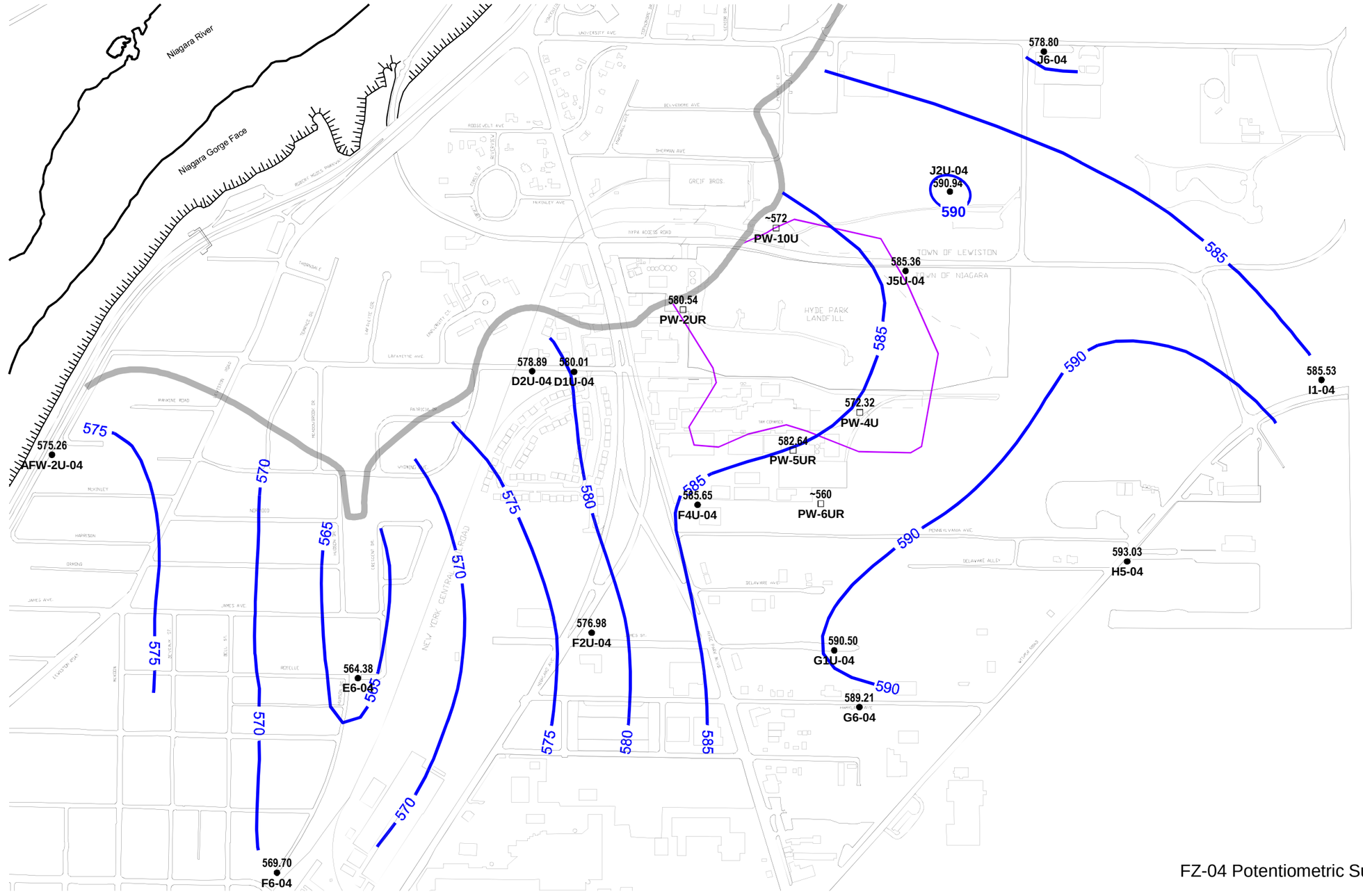


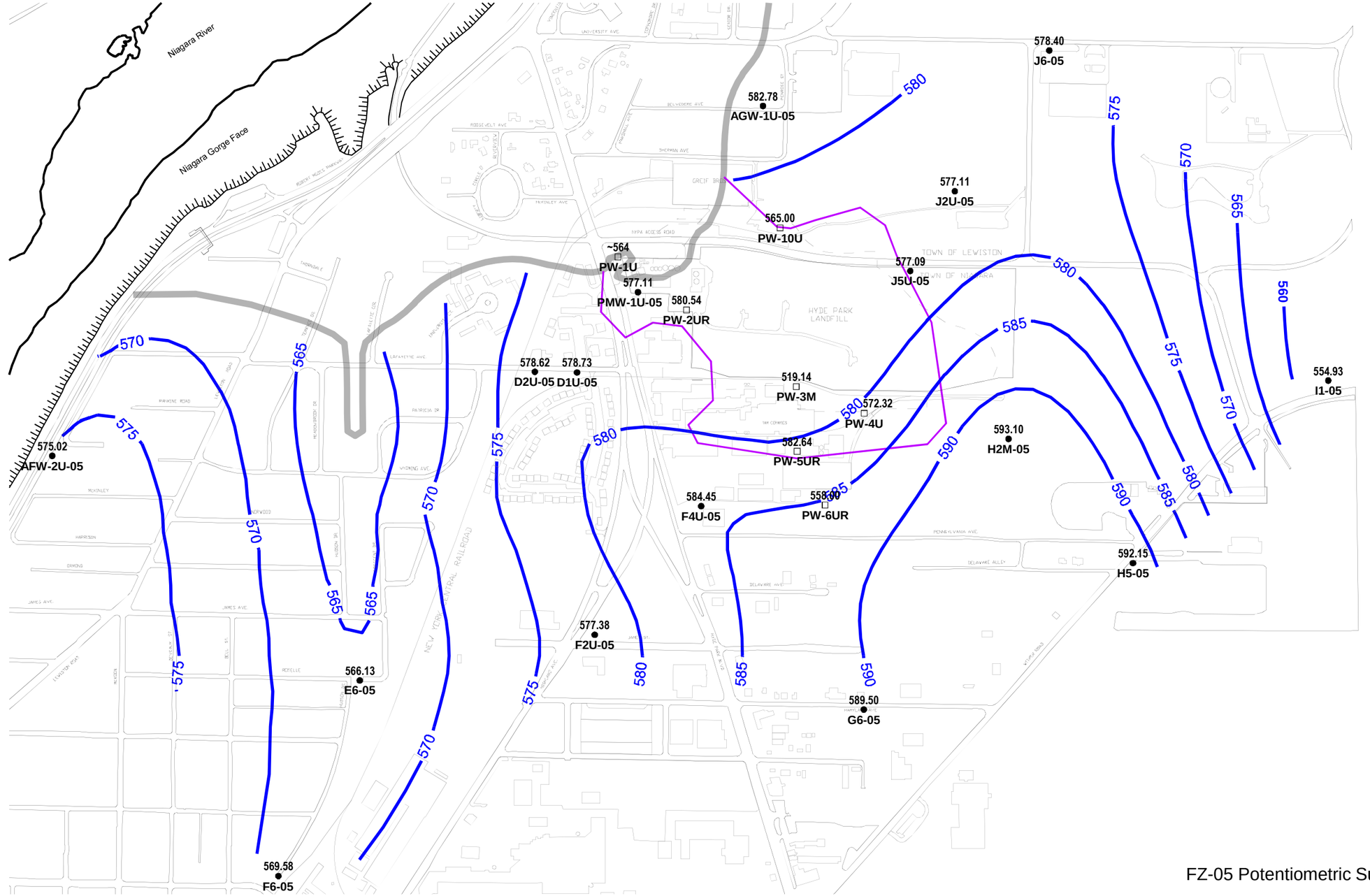
figure 2
FZ-02 Potentiometric Surface December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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.

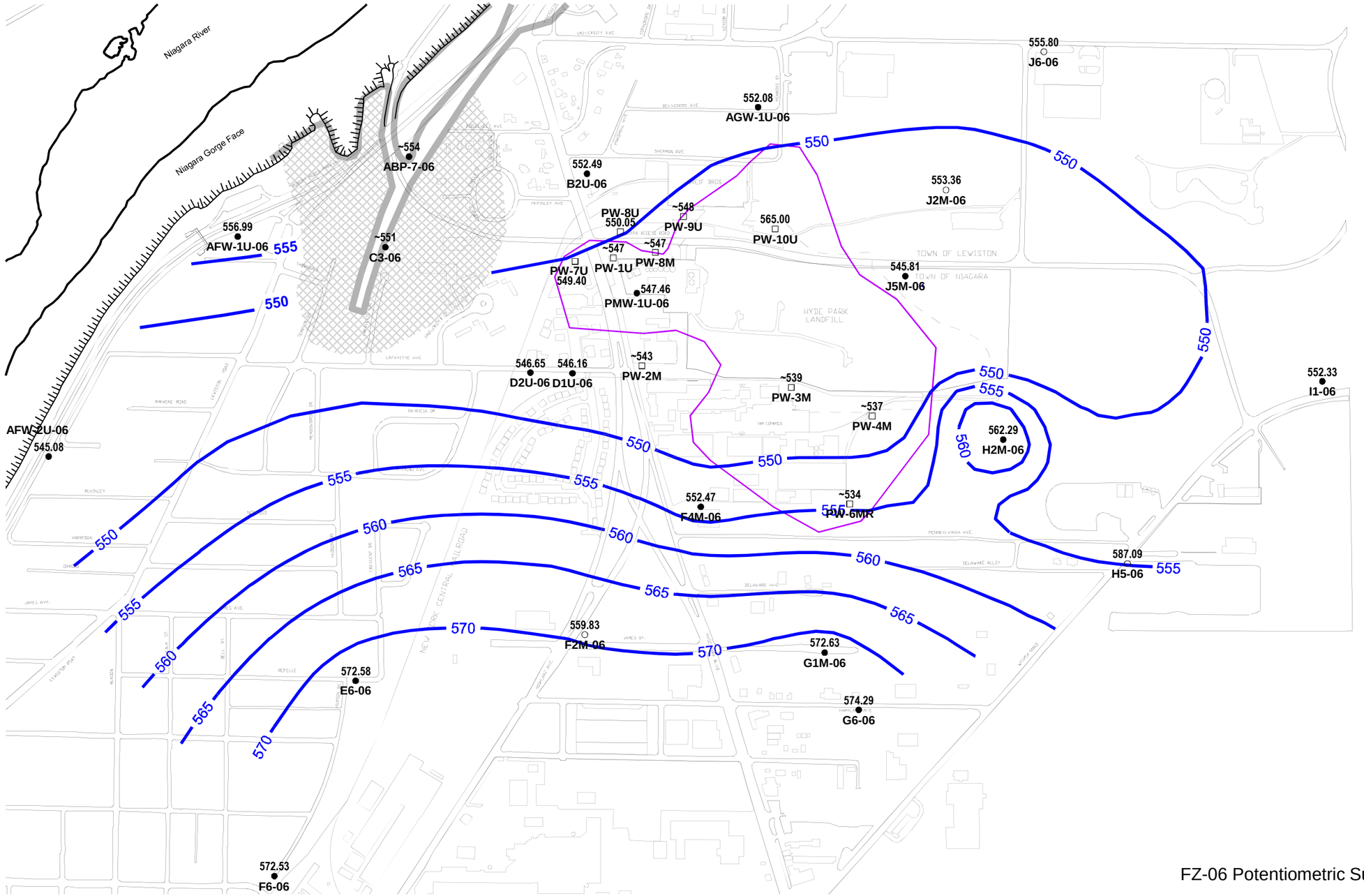
figure 3
FZ-04 Potentiometric Surface December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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 December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

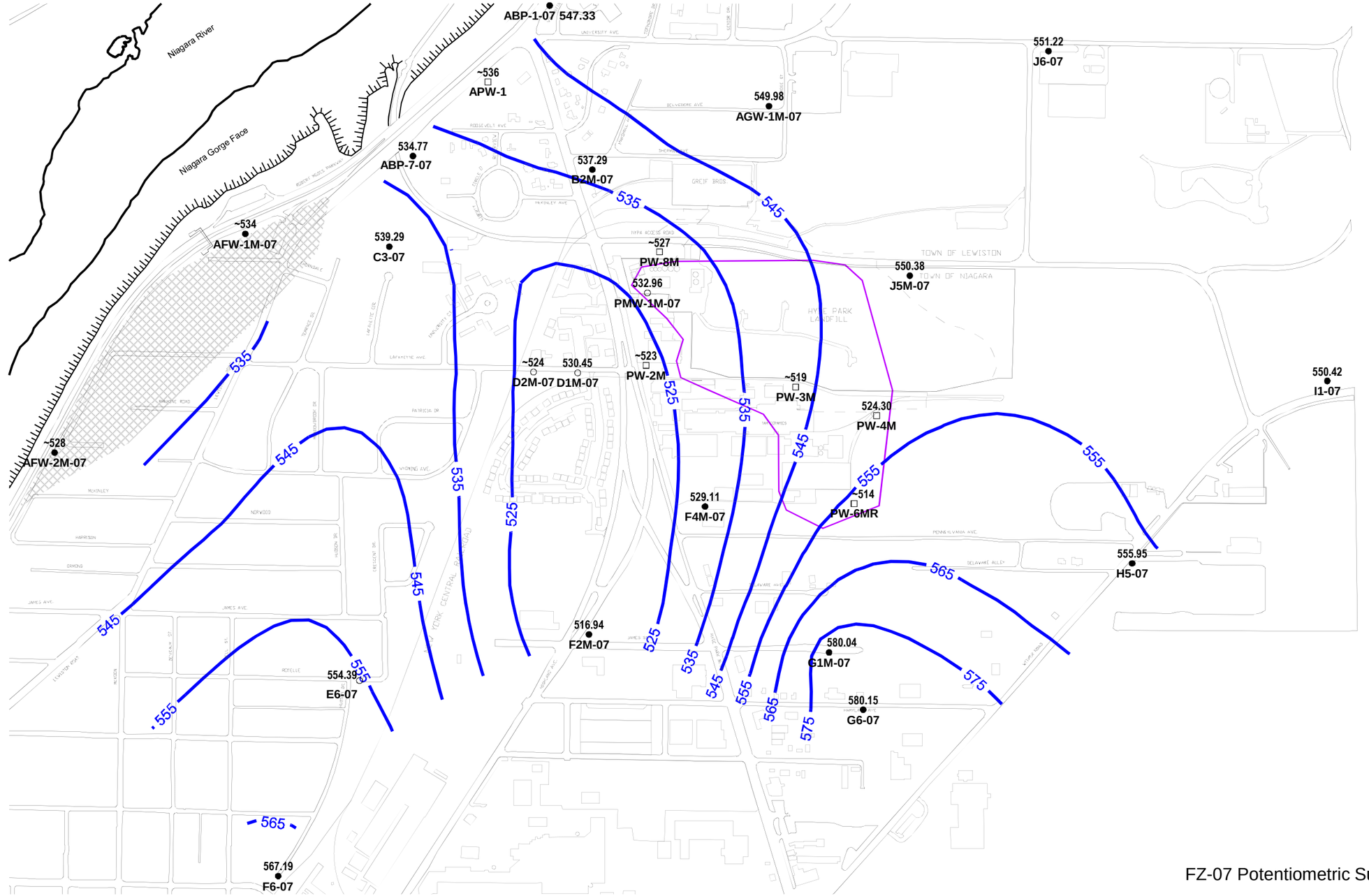


Legend

- 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 December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

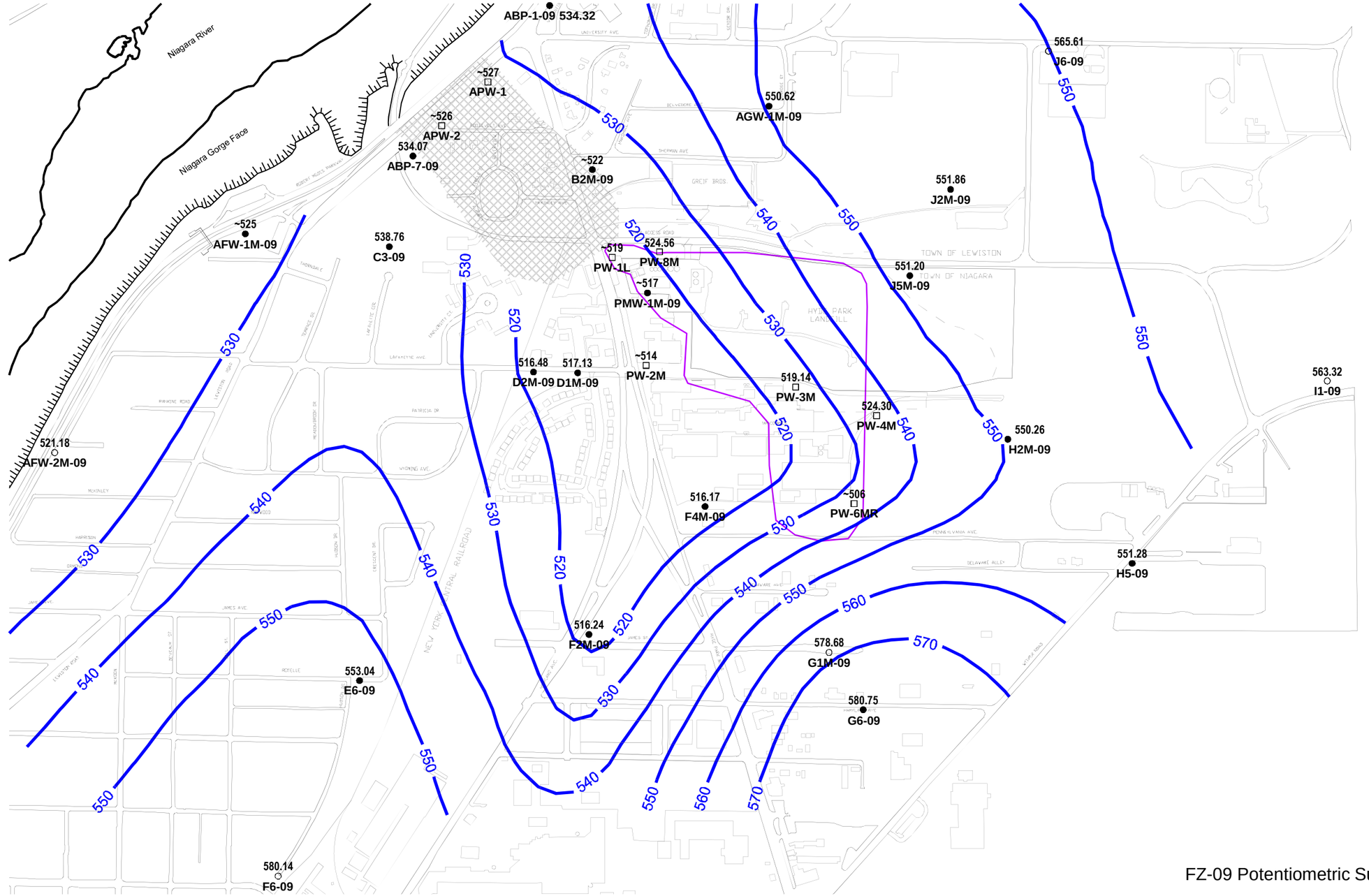
Glenn Springs Holdings, Inc.



Legend

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

figure 6
FZ-07 Potentiometric Surface December 2012
4th 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 December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

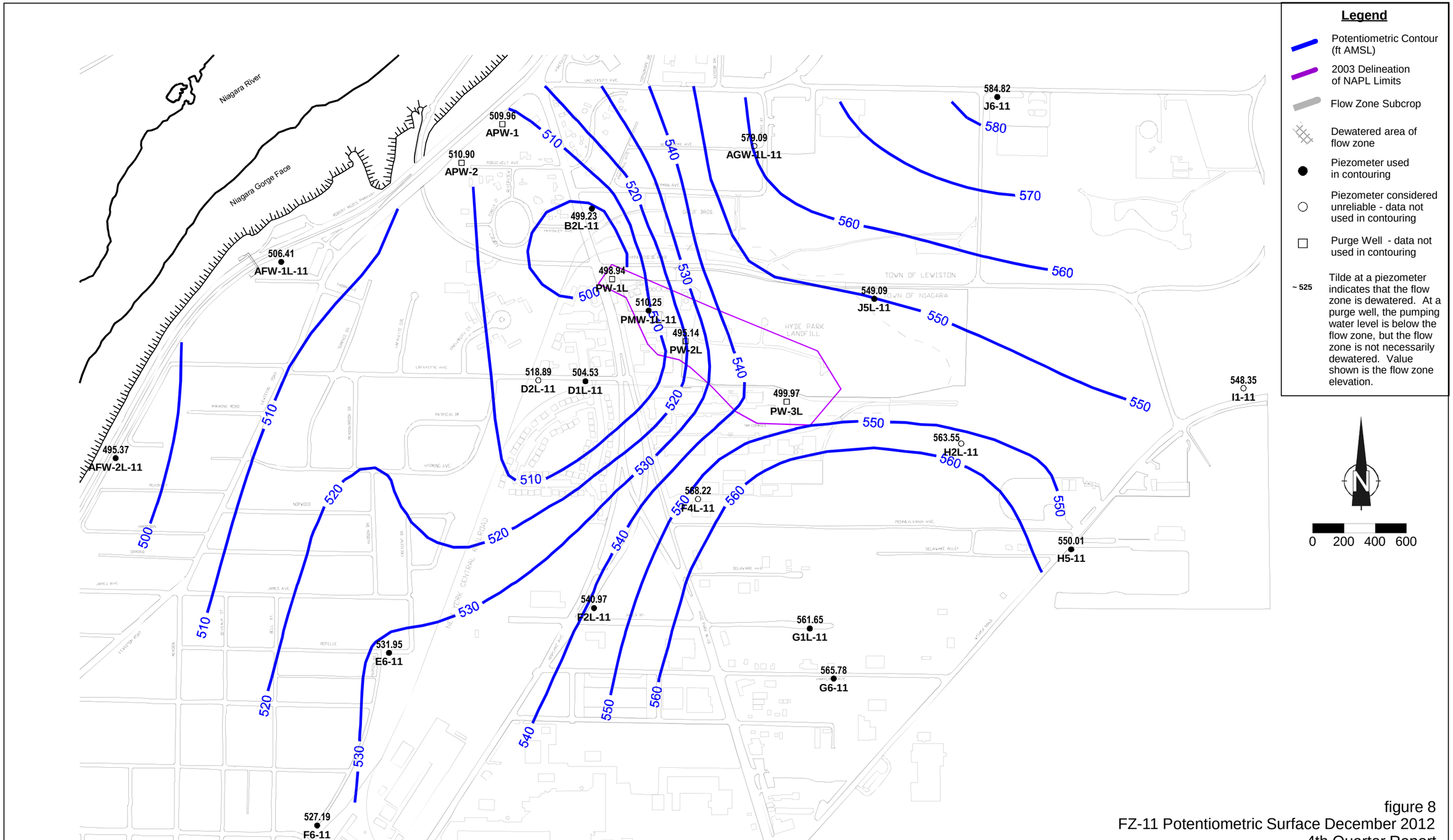


figure 8
FZ-11 Potentiometric Surface December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

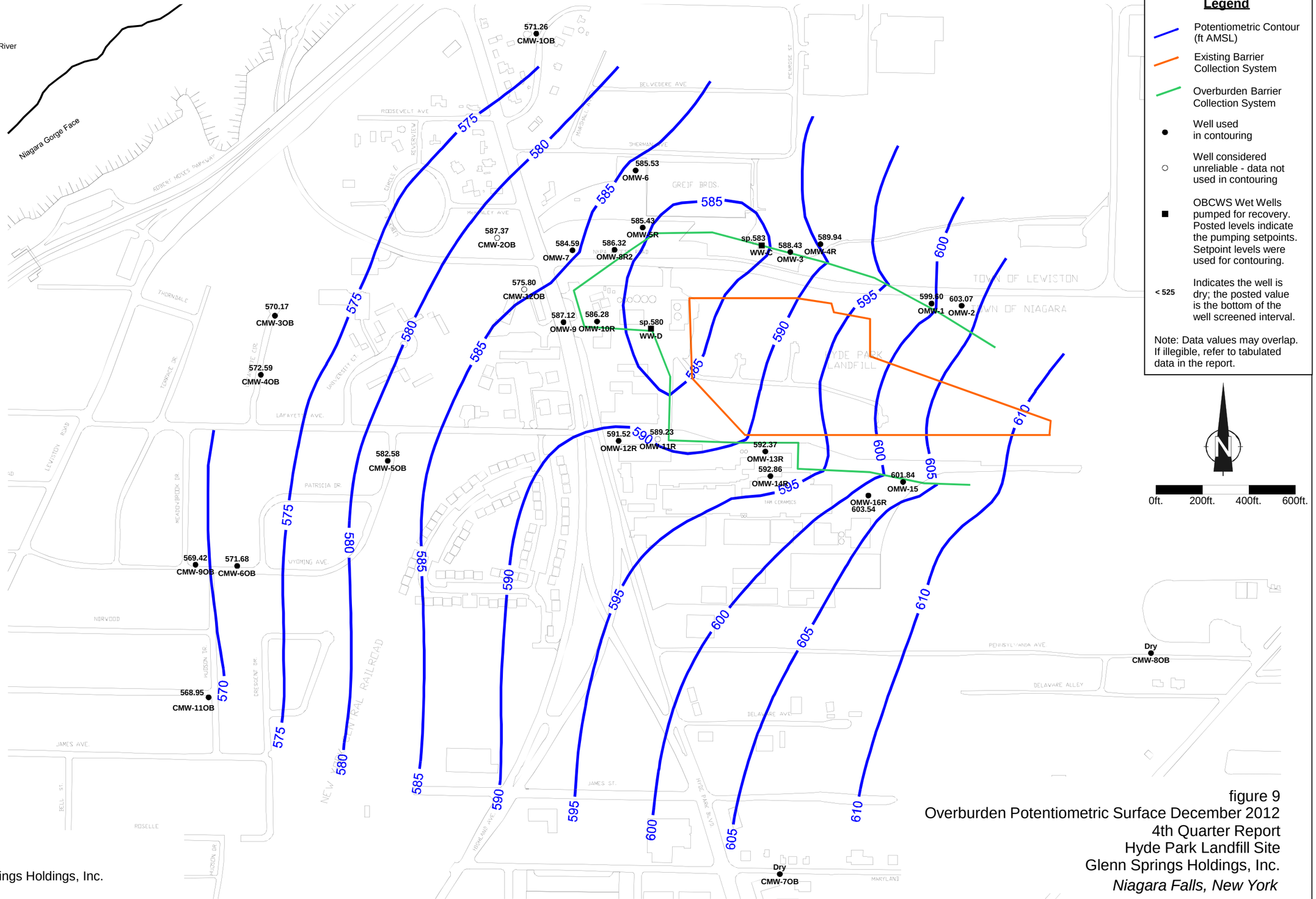


figure 9
Overburden Potentiometric Surface December 2012
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Glenn Springs Holdings, Inc.

PMW-1M-09 4th Quarter 2012- Hourly Water Level Elevation

Glenn Springs Holdings, Inc.
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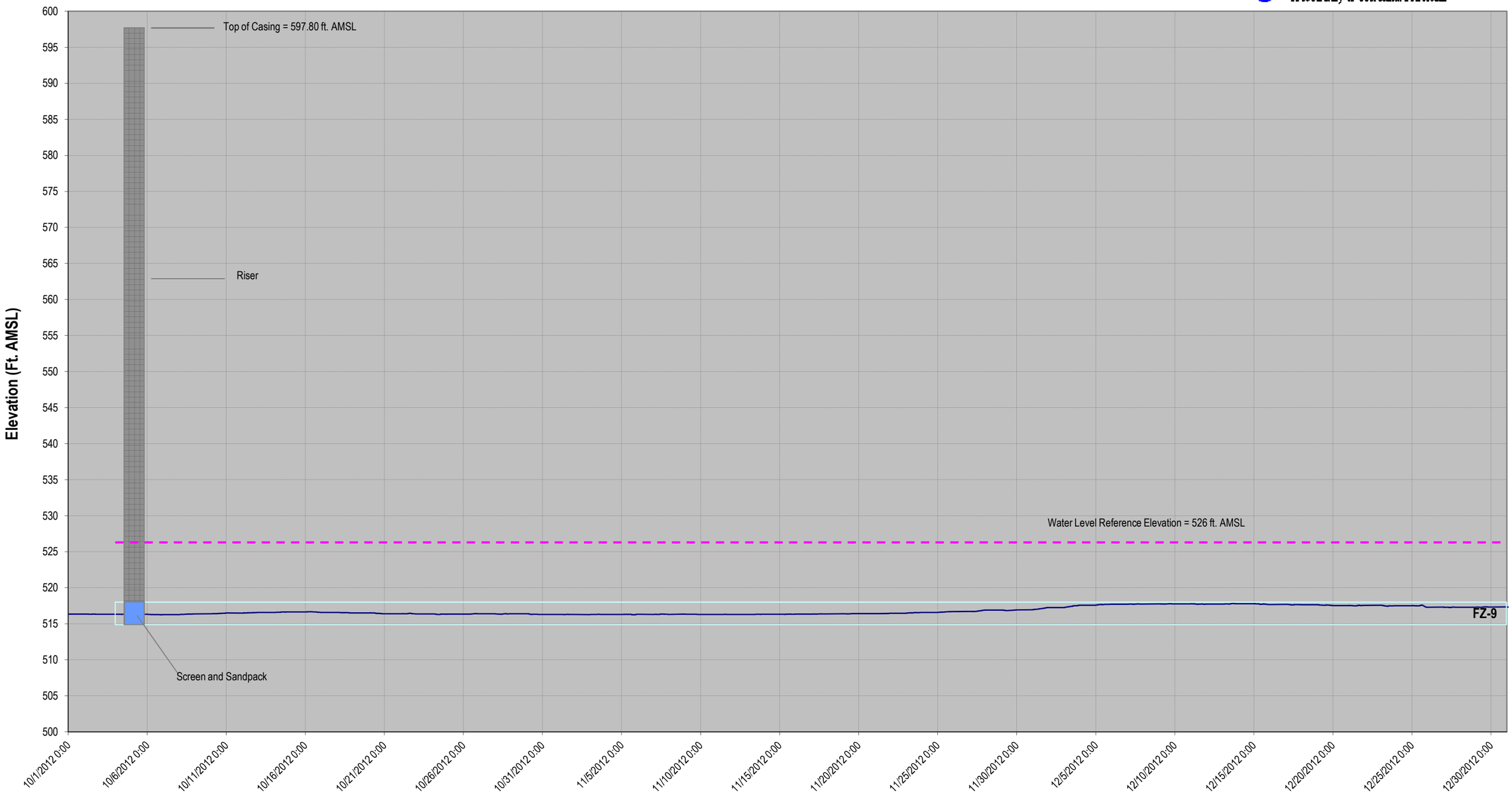


figure 10

TABLES

TABLE 1

WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2012
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Overburden			
CMW-2OB	590.79	3.42	587.37
CMW-3OB	582.13	11.96	570.17
CMW-4OB	574.28	1.69	572.59
CMW-5OB	583.43	0.85	582.58
CMW-6OB	571.89	0.21	571.68
CMW-7OB	611.00	Dry	Dry
CMW-8OB	616.11	Dry	Dry
CMW-9OB	571.76	2.34	569.42
CMW-1OB	576.80	5.54	571.26
CMW-11OB	572.85	3.90	568.95
CMW-12OB	594.74	18.94	575.80
OMW-1	605.28	5.68	599.60
OMW-2	605.99	2.92	603.07
OMW-3	598.63	10.20	588.43
OMW-4R	601.17	11.23	589.94
OMW-5R	591.31	5.88	585.43
OMW-6	587.62	2.09	585.53
OMW-7	592.74	8.15	584.59
OMW-8R2	594.67	8.51	586.32
OMW-9	595.52	8.40	587.12
OMW-10R	595.13	8.85	586.28
OMW-11R	597.52	6.36	589.23
OMW-12R	596.79	5.27	591.52
OMW-13R	601.50	9.13	592.37
OMW-14R	599.64	6.78	592.86
OMW-15	607.48	5.64	601.84
OMW-16R	607.62	4.08	603.54
SC-2	625.61	22.42	603.19
SC-3	638.72	40.13	598.59
SC-4	639.35	43.17	596.18
SC-5	634.07	>28.35	<605.72
SC-6	631.15	17.98	613.17
Shallow Bedrock			
CMW-1SH	576.11	12.89	563.22
CMW-2SH	590.51	20.09	570.42
CMW-3SH	581.91	32.79	549.12
CMW-4SH	574.16	8.03	566.13
CMW-5SH	583.36	7.90	575.46
CMW-6SH	572.05	10.26	561.79
CMW-7SH	610.58	11.70	598.88
CMW-8SH	615.95	8.82	607.13
CMW-9SH	571.96	12.14	559.82
CMW-11SH	573.21	8.13	565.08
CMW-12SH	597.02	27.50	569.52

TABLE 1

WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2012
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 1			
G1U-01	617.08	16.01	601.07
G6-01	609.24	7.89	601.35
H2U-01	620.92	11.06	609.86
H5-01	617.61	24.09	593.52
I1-01	625.58	26.86	598.72
Flow Zone 2			
F2U-02	599.89	25.16	574.73
F4U-02	602.32	16.62	585.70
G1-02	616.86	25.94	590.92
G6-02	608.65	17.80	590.85
H2U-02	620.88	27.71	593.17
H5-02	617.47	24.35	593.12
I1-02	625.47	38.25	587.22
J2U-02	609.66	16.41	593.25
J5U-02	606.21	12.32	593.89
J6-02	609.23	16.00	593.23
Flow Zone 4			
AFW-2U-04	593.48	18.22	575.26
D1U-04	593.77	13.76	580.01
D2U-04	590.65	11.76	578.89
E6-04	578.23	13.85	564.38
F2U-04	599.76	22.78	576.98
F4U-04	602.19	16.54	585.65
F6-04	588.06	18.36	569.70
G1U-04	616.96	26.46	590.50
G6-04	609.15	19.94	589.21
H5-04	617.40	24.37	593.03
I1-04	625.30	39.77	585.53
J2U-04	609.42	18.48	590.94
J5U-04	606.05	20.69	585.36
J6-04	609.12	30.32	578.80

TABLE 1

WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2012
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	18.31	575.02
AGW-1U-05	591.80	9.02	582.78
D1U-05	593.51	14.78	578.73
D2U-05	590.56	11.94	578.62
E6-05	578.04	11.91	566.13
F2U-05	599.64	22.26	577.38
F4U-05	602.06	17.61	584.45
F6-05	587.85	18.27	569.58
G6-05	609.13	19.63	589.50
H2M-05	621.59	28.49	593.10
H5-05	617.31	25.16	592.15
I1-05	625.25	70.32	554.93
J2U-05	609.30	32.19	577.11
J5U-05	605.87	28.78	577.09
J6-05	609.02	30.62	578.40
PMW-1U-05	598.00	20.89	577.11
Flow Zone 6			
ABP-7-06	575.78	Dry	Dry
AFW-1U-06	571.83	14.84	556.99
AFW-2U-06	593.22	48.14	545.08
AGW-1U-06	591.66	39.58	552.08
B2U-06	589.29	36.80	552.49
C3-06	585.78	Dry	Dry
D1U-06	593.25	47.09	546.16
D2U-06	590.38	43.73	546.65
E6-06	577.99	5.41	572.58
F2M-06	599.06	39.23	559.83
F4M-06	602.05	49.58	552.47
F6-06	587.84	15.31	572.53
G1M-06	616.75	44.12	572.63
G6-06	609.09	34.80	574.29
H2M-06	621.42	59.13	562.29
H5-06	617.17	30.08	587.09
I1-06	625.15	72.82	552.33
J2M-06	608.94	55.58	553.36
J5M-06	606.22	60.41	545.81
J6-06	608.93	53.13	555.80
PMW-1U-06	597.92	50.46	547.46

TABLE 1

WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2012
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	29.11	547.33
ABP-7-07	575.73	40.96	534.77
AFW-1M-07	571.41	Dry	Dry
AFW-2M-07	593.44	66.82	526.62
AGW-1M-07	592.91	42.93	549.98
B2M-07	589.52	52.23	537.29
C3-07	585.62	46.33	539.29
D1M-07	594.15	63.70	530.45
D2M-07	590.77	66.90	523.87
E6-07	577.91	23.52	554.39
F2M-07	598.91	81.97	516.94
F4M-07	601.91	72.80	529.11
F6-07	587.68	20.49	567.19
G1M-07	616.68	36.64	580.04
G6-07	609.06	28.91	580.15
H5-07	617.05	61.10	555.95
I1-07	625.14	74.72	550.42
J5M-07	606.07	55.69	550.38
J6-07	608.85	57.63	551.22
PMW-1M-07	598.50	65.54	532.96
Flow Zone 9			
ABP-1-09	575.49	41.17	534.32
ABP-7-09	575.67	41.60	534.07
AFW-1M-09	571.12	46.19	524.93
AFW-2M-09	593.32	72.14	521.18
AGW-1M-09	592.75	42.13	550.62
B2M-09	589.34	68.63	520.71
C3-09	585.00	46.24	538.76
D1M-09	594.02	76.89	517.13
D2M-09	590.66	74.18	516.48
E6-09	577.82	24.78	553.04
F2M-09	598.71	82.47	516.24
F4M-09	601.79	85.62	516.17
F6-09	587.53	7.39	580.14
G1M-09	616.58	37.90	578.68
G6-09	608.98	28.23	580.75
H2M-09	621.32	71.06	550.26
H5-09	616.93	65.65	551.28
I1-09	624.91	61.59	563.32
J2M-09	608.77	56.91	551.86
J5M-09	605.82	54.62	551.20
J6-09	608.76	43.15	565.61
PMW-1M-09	598.34	81.90	516.44

TABLE 1

WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2012
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	65.69	506.41
AFW-2L-11	593.43	98.06	495.37
AGW-1L-11	592.71	13.62	579.09
B2L-11	589.65	90.42	499.23
D1L-11	593.80	89.27	504.53
D2L-11	590.21	71.32	518.89
E6-11	577.72	45.77	531.95
F2L-11	598.94	57.97	540.97
F4L-11	602.22	34.00	568.22
F6-11	587.40	60.21	527.19
G1L-11	616.84	55.19	561.65
G6-11	608.89	43.11	565.78
H2L-11	620.73	57.18	563.55
H5-11	616.81	66.80	550.01
I1-11	624.75	76.40	548.35
J5L-11	607.20	58.11	549.09
J6-11	608.68	23.86	584.82
PMW-1L-11	598.84	88.59	510.25

Notes:
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 - 2012
HYDE PARK RRT PROGRAM

	Effluent		
Date	*Phenol (mg/L)*	*pH (su)*	*Flow (gal)*
10/02/12	-	6.80	134,000
10/03/12	0.20	6.80	61,000
10/05/12	-	6.80	111,000
10/08/12	-	6.80	120,000
10/09/12	-	6.80	72,000
10/10/12	0.19	6.70	48,000
10/12/12	-	6.70	98,000
10/15/12	-	6.80	142,000
10/16/12	-	6.80	59,000
10/17/12	0.010	6.80	45,000
10/19/12	-	6.80	116,000
10/22/12	-	6.90	106,000
10/23/12	-	6.90	88,000
10/24/12	0.010 U	6.90	116,000
10/26/12	-	6.80	117,000
10/29/12	-	6.90	431,000
10/30/12	-	6.90	164,000
10/31/12	0.081	6.90	156,000
11/01/12	-	7.00	397,000
11/02/12	-	7.10	57,000
11/05/12	-	7.40	326,000
11/06/12	-	7.40	345,000
11/07/12	0.010 U	7.20	168,000
11/08/12	-	7.10	120,000
11/09/12	-	6.90	130,000
11/12/12	-	7.20	129,000
11/13/12	-	7.20	151,000
11/14/12	0.030	7.00	129,000
11/15/12	-	6.90	86,000
11/19/12	-	6.90	259,000
11/20/12	0.061	6.90	23,000
11/21/12	-	7.10	78,000
11/26/12	-	7.00	354,000
11/28/12	0.61	7.00	83,000
11/30/12	-	7.00	114,000
12/03/12	-	7.00	154,000
12/04/12	-	7.00	82,000
12/05/12	0.058	7.00	72,000
12/07/12	-	7.10	127,000
12/10/12	-	7.00	147,000
12/11/12	-	7.10	146,000
12/12/12	0.010 U	7.00	109,000
12/13/12	-	7.00	108,000
12/17/12	-	7.00	218,000
12/18/12	-	7.00	129,000
12/19/12	0.009 J	6.90	78,000
12/20/12	-	6.90	169,000
12/21/12	-	7.00	230,000
12/23/12	-	7.00	293,000
12/24/12	-	7.00	202,000
12/27/12	0.010 U	7.30	418,000
12/28/12	-	6.90	65,000
12/31/12	-	6.90	156,000

Notes:

gal	Gallons.
mg/L	Milligram per liter.
su	Standard Unit.
U	Non-detect at associated value.
-	Not available.

TABLE 3

ANALYTICAL RESULTS SUMMARY
WEEKLY SAMPLING - LEACHATE TREATMENT SYSTEM
FOURTH QUARTER - 2012
HYDE PARK RRT PROGRAM

Effluent

Parameter	*Units*	*10/03/12*	*10/10/12*	*10/17/12*	*10/24/12*	*10/31/12*	*11/07/12*	*11/14/12*	*11/20/12*
Volatiles									
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	0.74 J	0.77 J	0.76 J	0.65 J	0.39 J	0.50 J	0.58 J	0.48 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 J
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	150	180	120	130	110	130	140	170
Xylenes (total)	µg/L	15 U	3.0 U	15 U	3.0 U	3.0 U	3.0 U	16 J	24 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
WEEKLY SAMPLING - LEACHATE TREATMENT SYSTEM
FOURTH QUARTER - 2012
HYDE PARK RRT PROGRAM

Effluent

Parameter	*Units*	*11/28/12*	*12/05/12*	*12/12/12*	*12/19/12*	*12/27/12*
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.44 J
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	0.23	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	0.53 J	0.76 J	0.48 J	0.48 J	1.4
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	150	90	91	110	32
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Notes:

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

TABLE 4

ANALYTICAL RESULTS SUMMARY
QUARTERLY SAMPLING - LEACHATE TREATMENT SYSTEM
FOURTH QUARTER - 2012
HYDE PARK RRT PROGRAM

Effluent

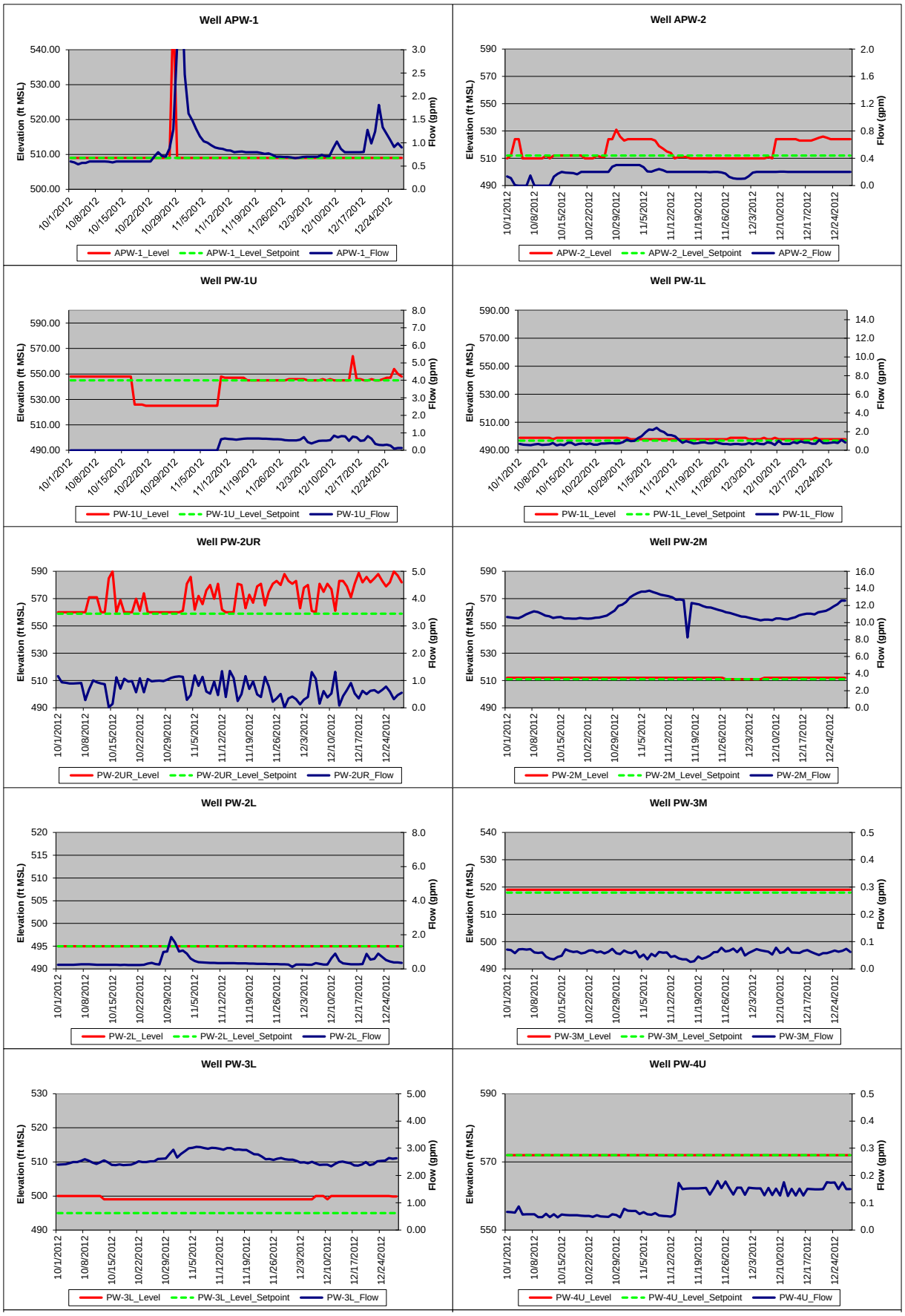
	Sample ID:	***HP121212 EFF***
	Sample Date:	***12/12/12***
Parameter	***Units***	
Phosphorus, Total	mg/L	0.22
Vinyl chloride	µg/L	120

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

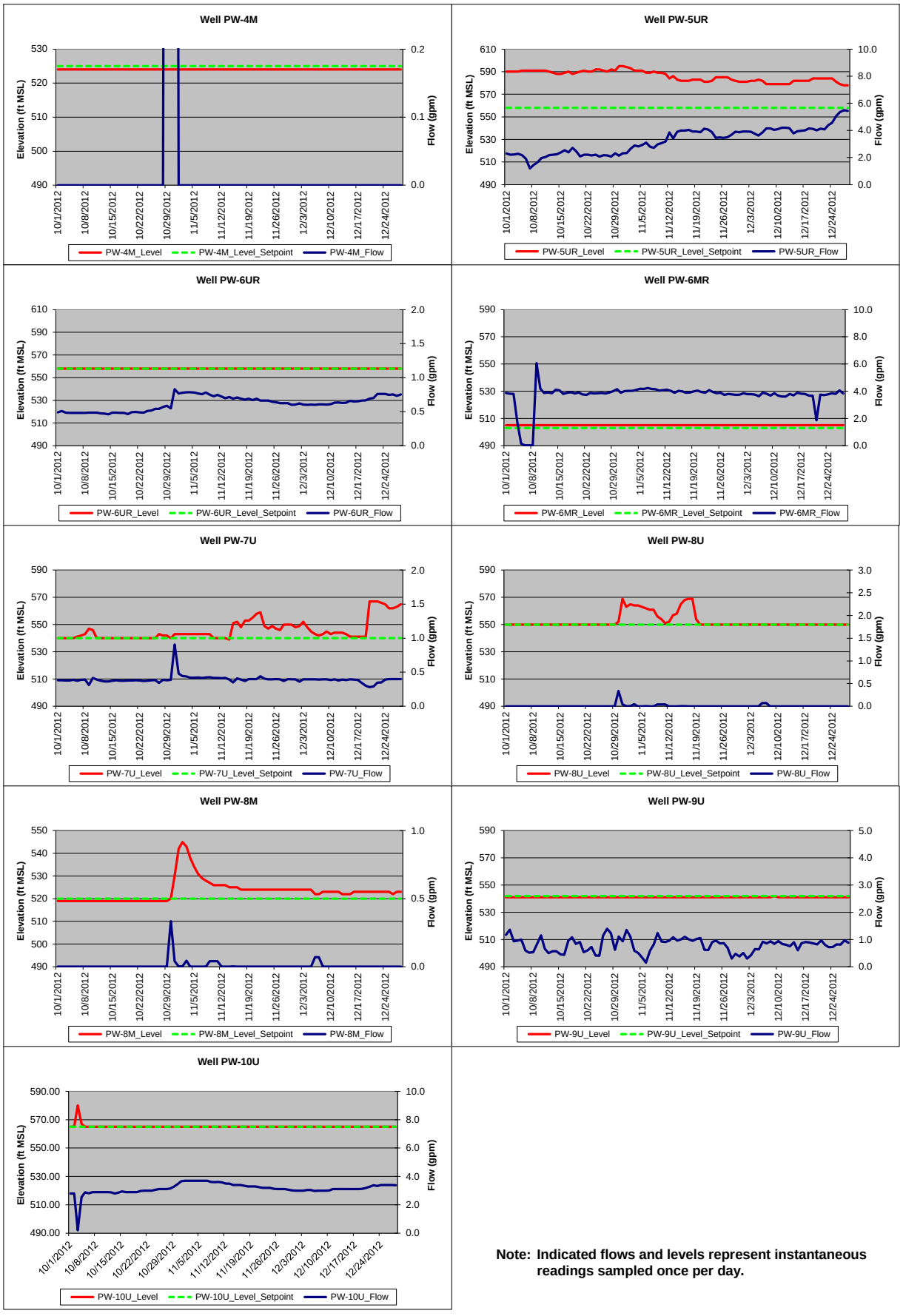
ATTACHMENT 1

PURGE WELL GRAPHS

ATTACHMENT 1
4TH QUARTER 2012 - PUMPING LEVELS AND FLOWS
HYDE PARK



ATTACHMENT 1
4TH QUARTER 2012 - PUMPING LEVELS AND FLOWS
HYDE PARK



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