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
Fax (231) 894-4033

January 31, 2012 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 2011**
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, 2011 through December 31, 2011. A total of 8.8 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. In addition, 3,500 gallons of non-aqueous phase liquid (NAPL) were shipped for incineration. The potentiometric contours are consistent with previous interpretations. Flow zones 6, 7, and 9 have large dewatered areas between the landfill and the gorge face. The current data continue to support the interpretation of effective hydraulic containment.

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

At the end of October, a scaling problem was noted on the level transmitter from APW-1. The scaling problem was solved in mid-November. The pumping well continued to operate during this time, and manual water levels demonstrate that the water level in the well was being maintained at the setpoint. The well is currently operational.

The pump in well PW-2M was pulled and replaced on October 5, 2011. The well is currently operational.

The pump in well PW-2L was pulled and replaced on November 2, 2011. The well is currently operational.

The pump in well PW-3L was pulled and replaced on December 7, 2011. The well is currently operational.

The pump in PW-5UR was pulled and replaced on October 11 and November 17, 2011. The well is currently operational.

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/EG/adh/2
Encl.

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

*Includes one copy on CD

FIGURES

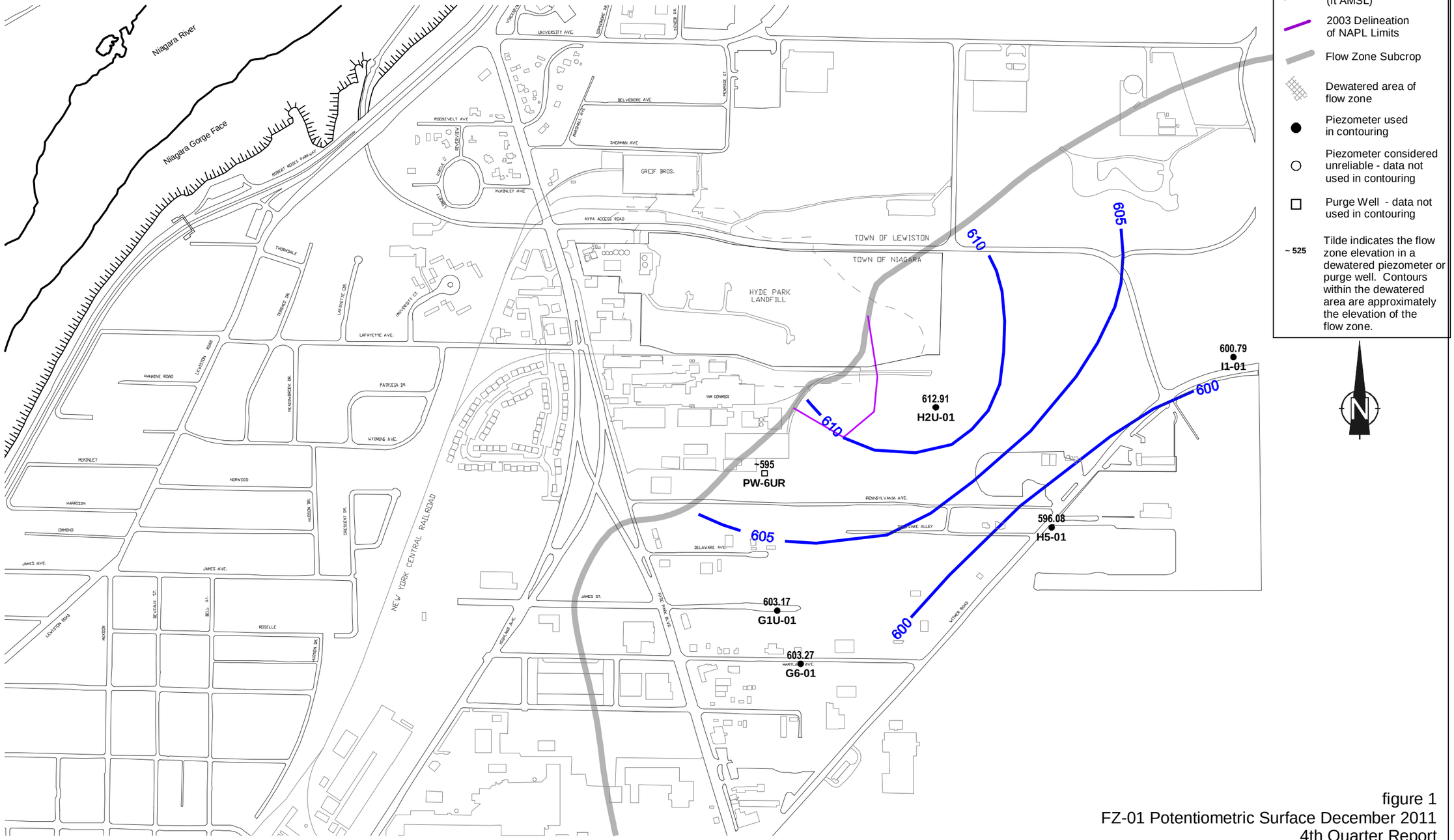


figure 1
FZ-01 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

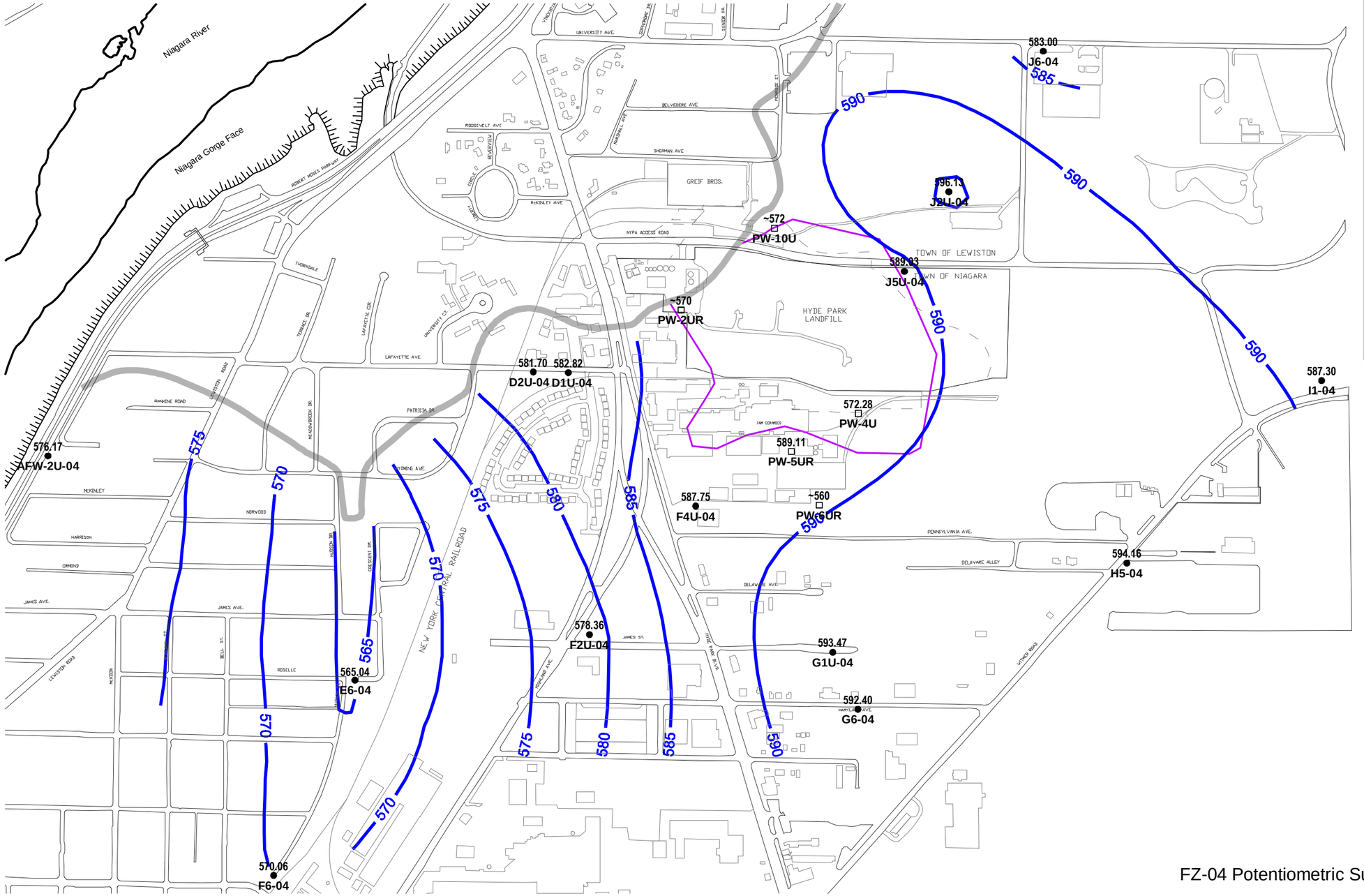
Legend

- 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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

N

figure 2
FZ-02 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Glenn Springs Holdings, Inc.

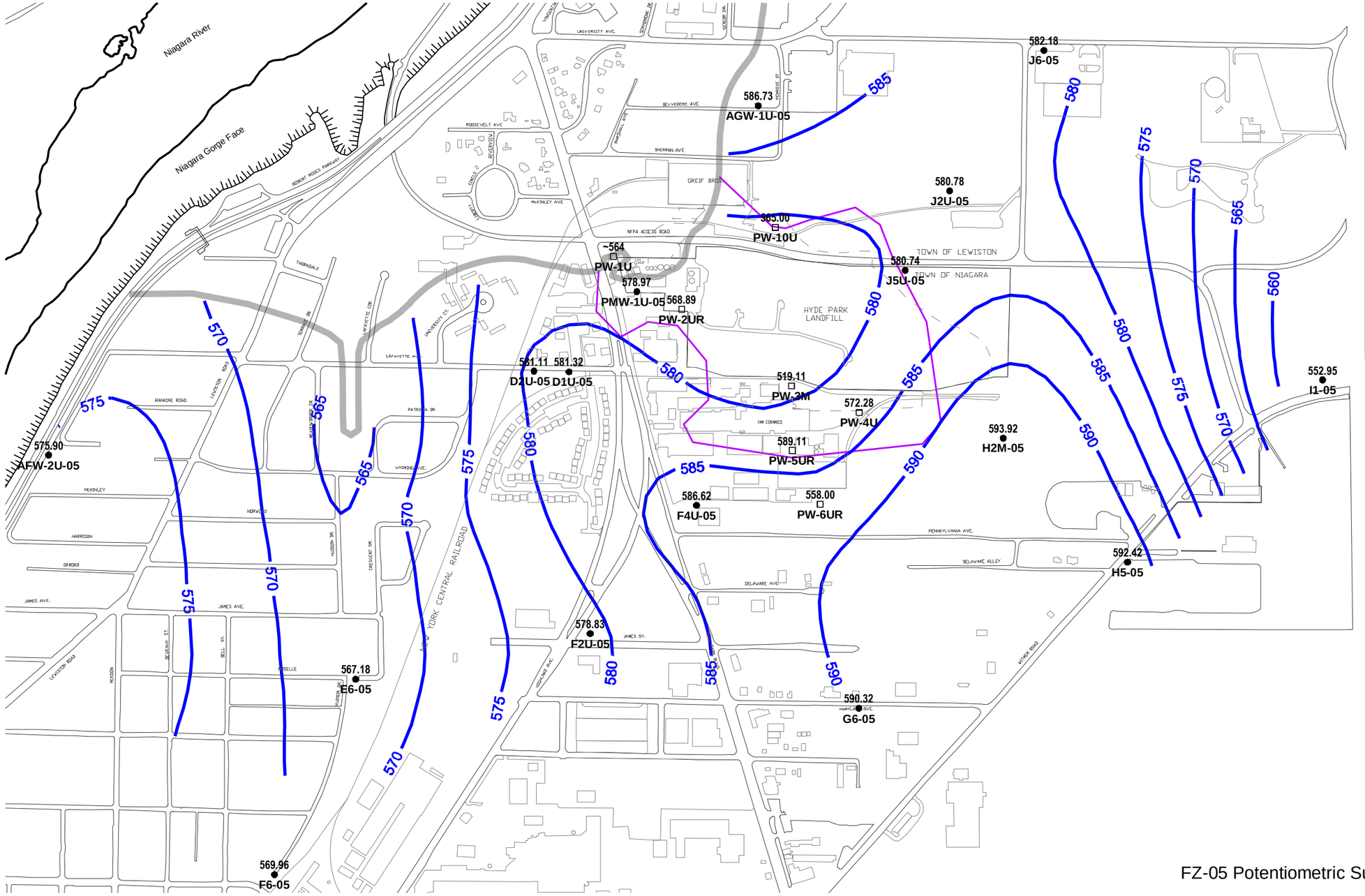


Legend

- 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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

N

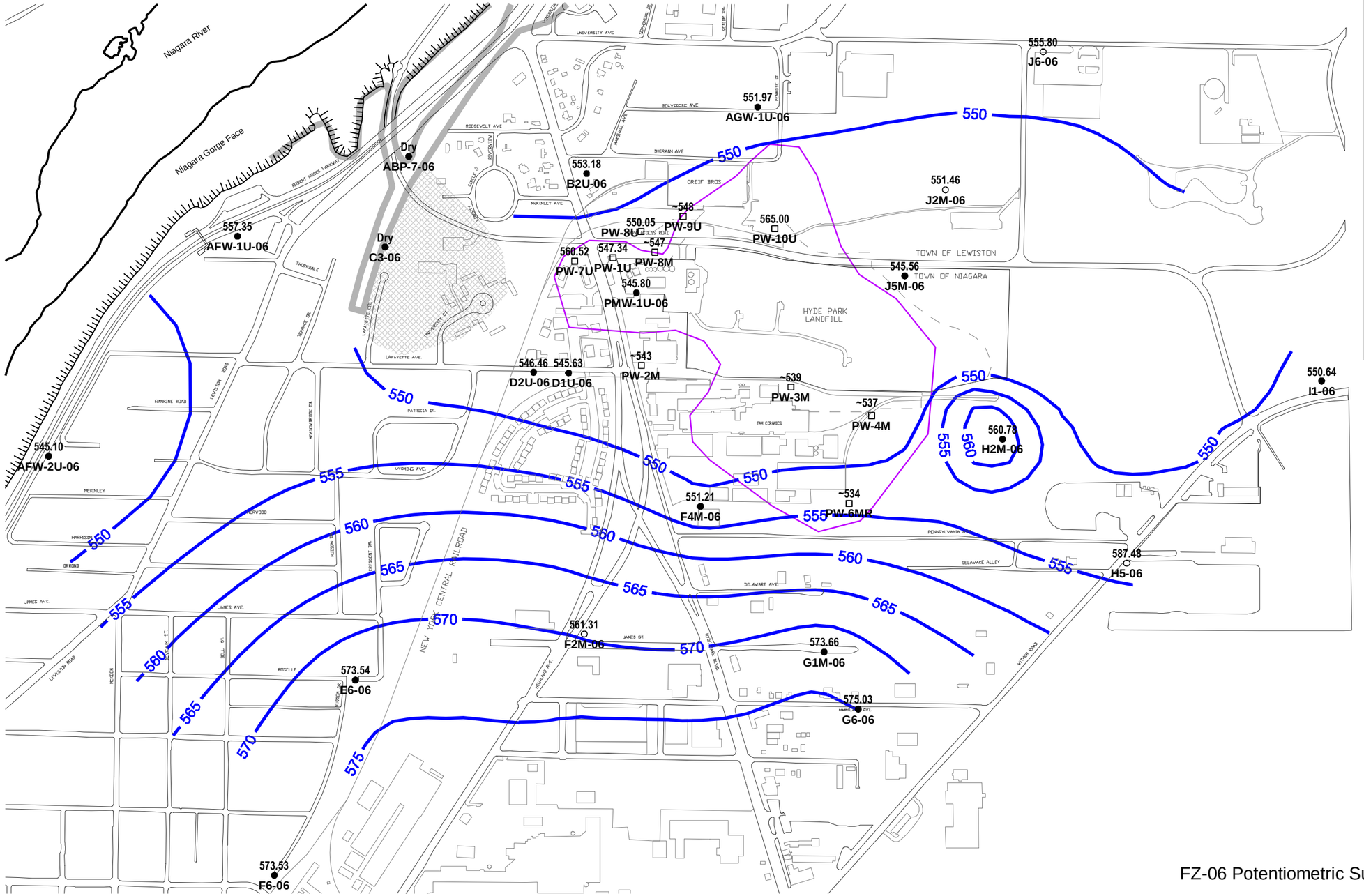
figure 3
FZ-04 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

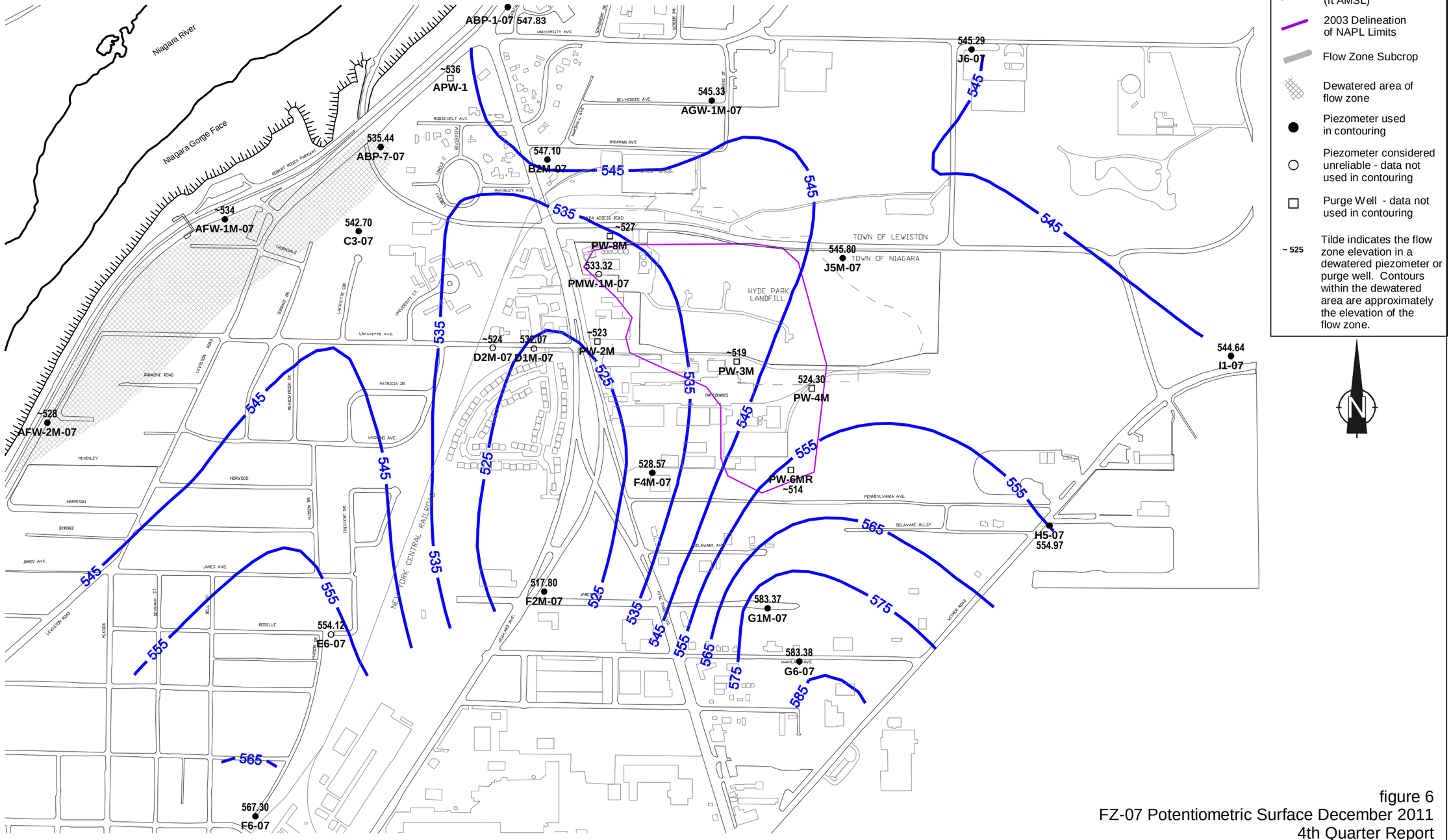
figure 4
FZ-05 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York



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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

figure 5
FZ-06 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

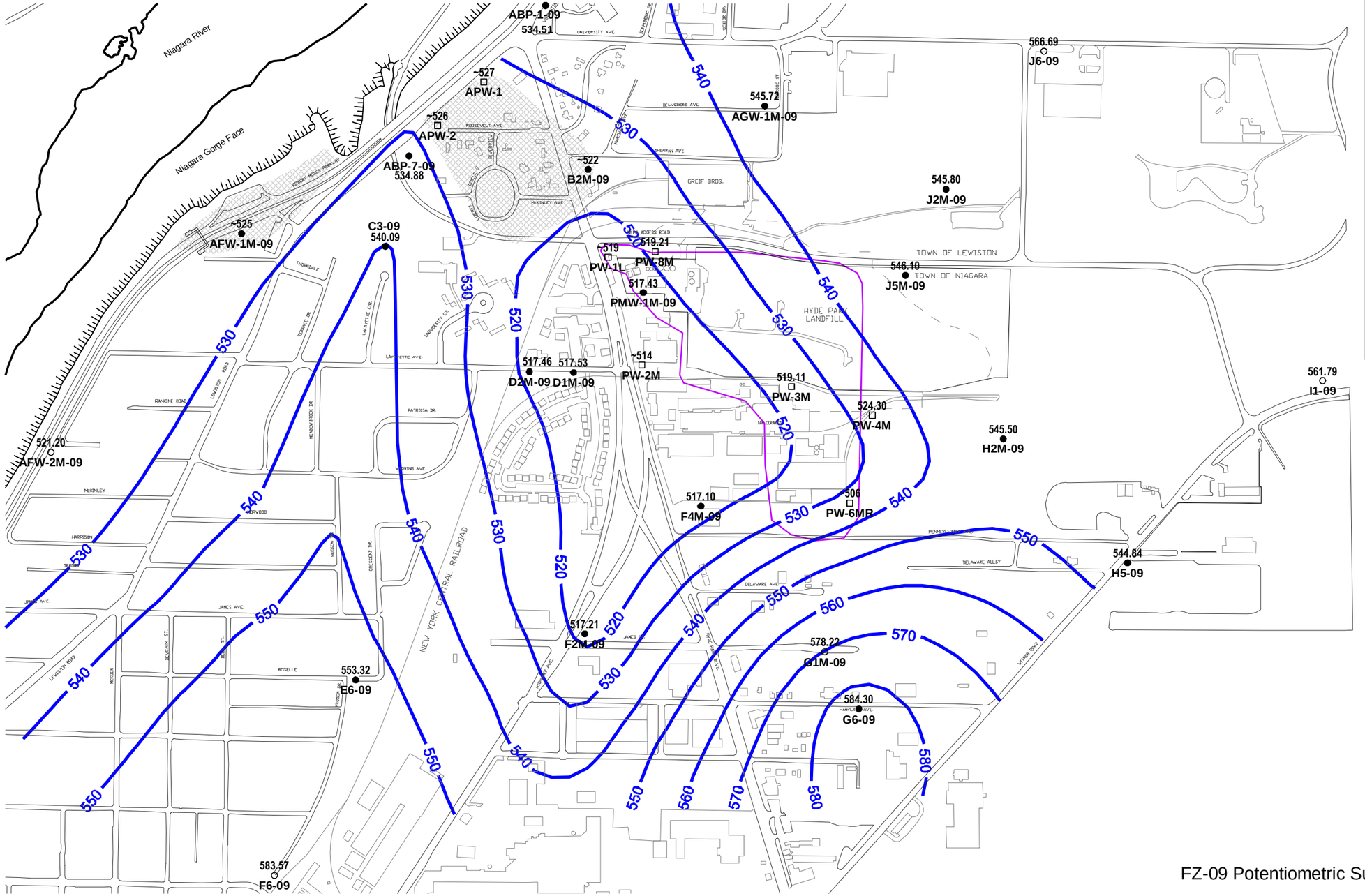


Legend

- 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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

N

figure 6
FZ-07 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

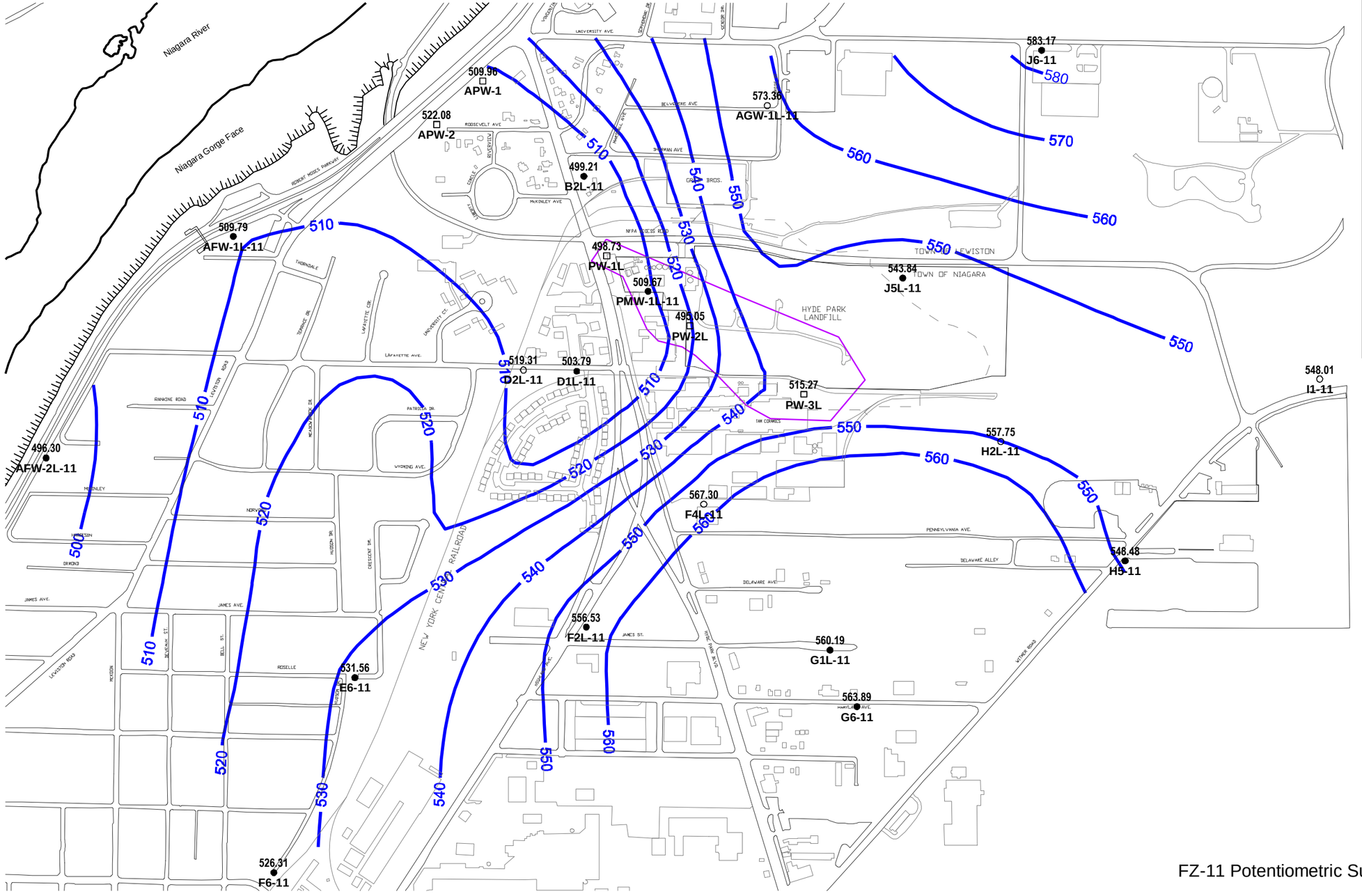


Legend

- 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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

N

figure 7
FZ-09 Potentiometric Surface December 2011
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 indicates the flow zone elevation in a dewatered piezometer or purge well. Contours within the dewatered area are approximately the elevation of the flow zone.

N

figure 8
FZ-11 Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Niagara River

Niagara Gorge Face

ROBERT MOSES PARKWAY

ROOSEVELT AVE

BELVEDERE AVE

SHERMAN AVE

PENROSE ST

MARSHALL AVE

RIVERVIEW

LIBERTY

McKINLEY AVE

GREIF BROS.

NYPA ACCESS ROAD

TOWN OF LEWISTON

TOWN OF NIAGARA

HYDE PARK LANDFILL

THORNDALE

TERRACE DR.

WHITE CIR

UNIVERSITY CT

LAFAYETTE AVE.

LEWISTON ROAD

MEADOWBROOK DR.

PATRICIA DR.

WYOMING AVE.

NORWOOD

HUDSON DR.

CRESCENT DR.

JAMES AVE.

BELL ST.

ROSELLE

HUDSON DR.

NEW YORK CENTRAL RAILROAD

JAMES ST.

HIGHLAND AVE.

HYDE PARK BLVD.

IAM CERAMICS

PENNSYLVANIA AVE.

DELAWARE ALLEY

DELAWARE AVE.

MARYLAND

571.46
CMW-1OB

585.76
OMW-6

590.49
CMW-2OB

585.30
OMW-7

586.40
OMW-5R

586.88
OMW-8R2

sp.583
WW-C

590.15
OMW-3

589.66
OMW-4R

573.32
CMW-12OB

572.06
CMW-3OB

588.14
OMW-9

586.55
OMW-10R

sp.580
WW-D

600.71
OMW-1

603.75
OMW-2

574.28
CMW-4OB

592.79
OMW-12R

592.51
OMW-11R

592.61
OMW-13R

594.15
OMW-14R

602.95
OMW-15

603.69
OMW-16R

583.43
CMW-5OB

569.37
CMW-9OB

571.73
CMW-6OB

571.11
CMW-11OB

Dry
CMW-8OB

Dry
CMW-7OB

570
575
580
585
590
595
600
605

Legend

- Potentiometric Contour (ft AMSL)
- Existing Barrier Collection System
- Overburden Barrier Collection System
- ● Well used in contouring
- ○ Well considered unreliable - data not used in contouring
- ■ OBCWS Wet Wells pumped for recovery. Posted levels indicate the pumping setpoints. Setpoint levels were used for contouring.
- < 525 Indicates the well is dry; the posted value is the bottom of the well screened interval.

Note: Data values may overlap. If illegible, refer to tabulated data in the report.

N

0ft. 200ft. 400ft. 600ft.

figure 9
Overburden Potentiometric Surface December 2011
4th Quarter Report
Hyde Park Landfill Site
Glenn Springs Holdings, Inc.
Niagara Falls, New York

Glenn Springs Holdings, Inc.

PMW-1M-09 4th Quarter 2011 - Hourly Water Level Elevation

Glenn Springs Holdings, Inc.
A subsidiary of Occidental Petroleum

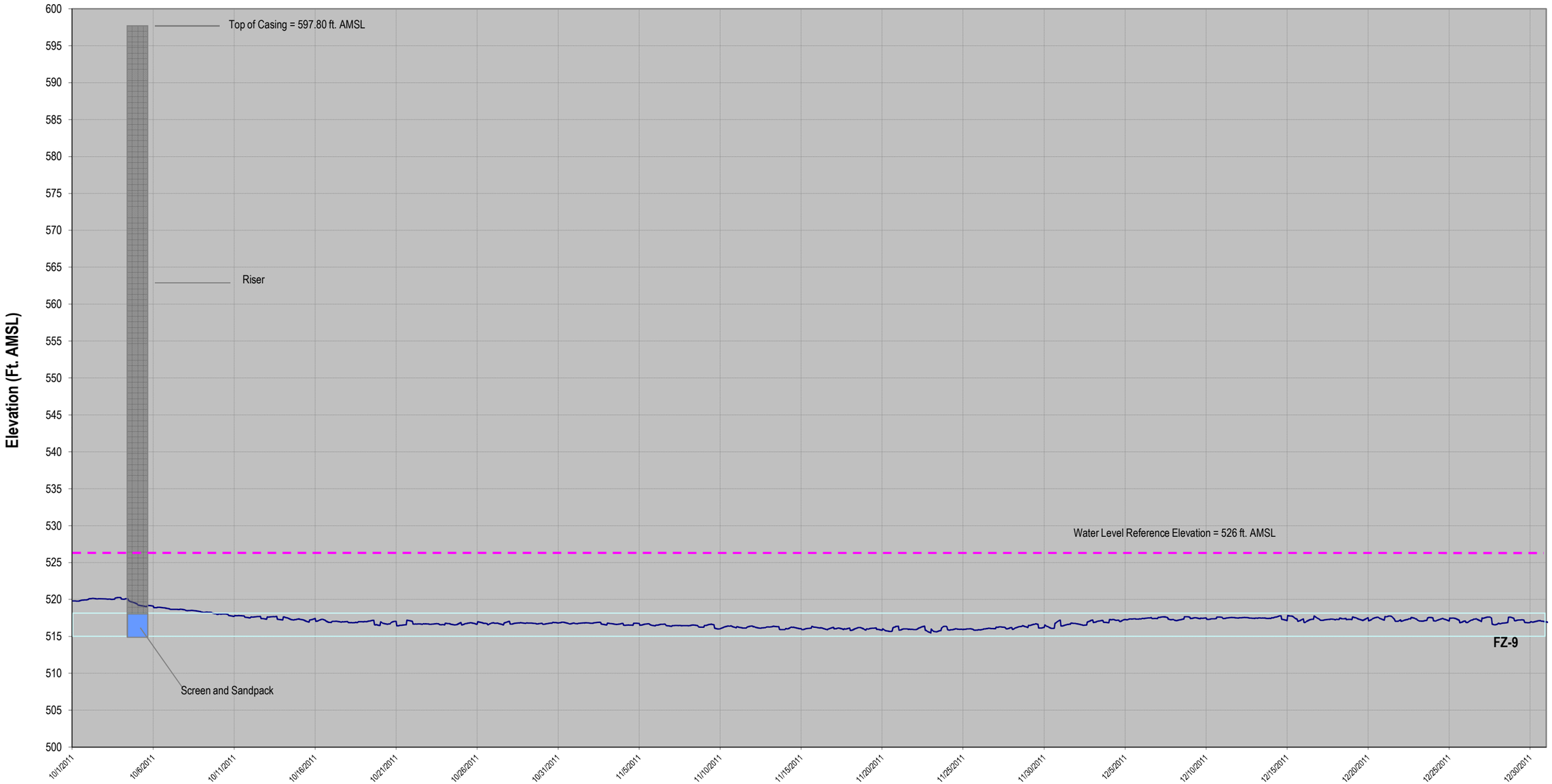


Figure 10

TABLES

TABLE 1
WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Overburden			
CMW-2OB	590.79	0.30	590.49
CMW-3OB	582.13	10.07	572.06
CMW-4OB	574.28	Surcharged	574.28
CMW-5OB	583.43	Surcharged	583.43
CMW-6OB	571.89	0.16	571.73
CMW-7OB	611.00	Dry	-
CMW-8OB	616.11	Dry	-
CMW-9OB	571.76	2.39	569.37
CMW-1OB	576.80	5.34	571.46
CMW-11OB	572.85	1.74	571.11
CMW-12OB	594.74	21.42	573.32
OMW-1	605.28	4.57	600.71
OMW-2	605.99	2.24	603.75
OMW-3	598.63	8.48	590.15
OMW-4R	601.17	11.51	589.66
OMW-5R	591.31	4.91	586.40
OMW-6	587.62	1.86	585.76
OMW-7	592.74	7.44	585.30
OMW-8R2	594.67	7.79	586.88
OMW-9	595.52	7.38	588.14
OMW-10R	595.13	8.58	586.55
OMW-11R	597.52	5.01	592.51
OMW-12R	596.79	4.00	592.79
OMW-13R	601.50	8.89	592.61
OMW-14R	599.64	5.49	594.15
OMW-15	607.48	4.53	602.95
OMW-16R	607.62	3.93	603.69
SC-2	625.61	22.22	603.39
SC-3	638.72	40.05	598.67
SC-4	639.35	40.72	598.63
SC-5	634.07	(1)	605.70
SC-6	631.15	17.04	614.11
Shallow Bedrock			
CMW-1SH	576.11	12.02	564.09
CMW-2SH	590.51	18.11	572.40
CMW-3SH	581.91	32.69	549.22
CMW-4SH	574.16	7.00	567.16
CMW-5SH	583.36	6.46	576.90
CMW-6SH	572.05	10.49	561.56
CMW-7SH	610.58	10.72	599.86
CMW-8SH	615.95	5.78	610.17
CMW-9SH	571.96	11.55	560.41
CMW-11SH	573.21	8.14	565.07
CMW-12SH	597.02	24.91	572.11
Flow Zone 1			
G1U-01	617.08	13.91	603.17
G6-01	609.24	5.97	603.27
H2U-01	620.92	8.01	612.91
H5-01	617.61	21.53	596.08
I1-01	625.58	24.79	600.79

TABLE 1
WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 2			
F2U-02	599.89	23.89	576.00
F4U-02	602.32	15.13	587.19
G1-02	616.86	23.59	593.27
G6-02	608.65	16.63	592.02
H2U-02	620.88	26.28	594.60
H5-02	617.47	23.21	594.26
I1-02	625.47	35.19	590.28
J2U-02	609.66	10.87	598.79
J5U-02	606.21	7.62	598.59
J6-02	609.23	10.26	598.97
Flow Zone 4			
AFW-2U-04	593.48	17.31	576.17
D1U-04	593.77	10.95	582.82
D2U-04	590.65	8.95	581.70
E6-04	578.23	13.19	565.04
F2U-04	599.76	21.40	578.36
F4U-04	602.19	14.44	587.75
F6-04	588.06	18.00	570.06
G1U-04	616.96	23.49	593.47
G6-04	609.15	16.75	592.40
H5-04	617.40	23.24	594.16
I1-04	625.30	38.00	587.30
J2U-04	609.42	13.29	596.13
J5U-04	606.05	17.02	589.03
J6-04	609.12	26.12	583.00
Flow Zone 5			
AFW-2U-05	593.33	17.43	575.90
AGW-1U-05	591.80	5.07	586.73
D1U-05	593.51	12.19	581.32
D2U-05	590.56	9.45	581.11
E6-05	578.04	10.86	567.18
F2U-05	599.64	20.81	578.83
F4U-05	602.06	15.44	586.62
F6-05	587.85	17.89	569.96
G6-05	609.13	18.81	590.32
H2M-05	621.59	27.67	593.92
H5-05	617.31	24.89	592.42
I1-05	625.25	72.30	552.95
J2U-05	609.30	28.52	580.78
J5U-05	605.87	25.13	580.74
J6-05	609.02	26.84	582.18
PMW-1U-05	598.00	19.03	578.97

TABLE 1
WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 6			
ABP-7-06	575.78	Dry	-
AFW-1U-06	571.83	14.48	557.35
AFW-2U-06	593.22	48.12	545.10
AGW-1U-06	591.66	39.69	551.97
B2U-06	589.29	36.11	553.18
C3-06	585.78	Dry	-
D1U-06	593.25	47.62	545.63
D2U-06	590.38	43.92	546.46
E6-06	577.99	4.45	573.54
F2M-06	599.06	37.75	561.31
F4M-06	602.05	50.84	551.21
F6-06	587.84	14.31	573.53
G1M-06	616.75	43.09	573.66
G6-06	609.09	34.06	575.03
H2M-06	621.42	60.64	560.78
H5-06	617.17	29.69	587.48
I1-06	625.15	74.51	550.64
J2M-06	608.94	57.48	551.46
J5M-06	606.22	60.66	545.56
J6-06	608.93	53.13	555.80
PMW-1U-06	597.92	52.12	545.80
Flow Zone 7			
ABP-1-07	576.44	28.61	547.83
ABP-7-07	575.73	40.29	535.44
AFW-1M-07	571.41	Dry	-
AFW-2M-07	593.44	66.82	526.62
AGW-1M-07	592.91	47.58	545.33
B2M-07	589.52	42.42	547.10
C3-07	585.62	42.92	542.70
D1M-07	594.15	62.08	532.07
D2M-07	590.77	67.29	523.48
E6-07	577.91	23.79	554.12
F2M-07	598.91	81.11	517.80
F4M-07	601.91	73.34	528.57
F6-07	587.68	20.38	567.30
G1M-07	616.68	33.31	583.37
G6-07	609.06	25.68	583.38
H5-07	617.05	62.08	554.97
I1-07	625.14	80.50	544.64
J5M-07	606.07	60.27	545.80
J6-07	608.85	63.56	545.29
PMW-1M-07	598.50	65.18	533.32

TABLE 1
WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Flow Zone 9			
ABP-1-09	575.49	40.98	534.51
ABP-7-09	575.67	40.79	534.88
AFW-1M-09	571.12	46.49	524.63
AFW-2M-09	593.32	72.12	521.20
AGW-1M-09	592.75	47.03	545.72
B2M-09	589.34	68.52	520.82
C3-09	585.00	44.91	540.09
D1M-09	594.02	76.49	517.53
D2M-09	590.66	73.20	517.46
E6-09	577.82	24.50	553.32
F2M-09	598.71	81.50	517.21
F4M-09	601.79	84.69	517.10
F6-09	587.53	3.96	583.57
G1M-09	616.58	38.36	578.22
G6-09	608.98	24.68	584.30
H2M-09	621.32	75.82	545.50
H5-09	616.93	72.09	544.84
I1-09	624.91	63.12	561.79
J2M-09	608.77	62.97	545.80
J5M-09	605.82	59.72	546.10
J6-09	608.76	42.07	566.69
PMW-1M-09	598.34	80.91	517.43
Flow Zone 11			
AFW-1L-11	572.10	62.31	509.79
AFW-2L-11	593.43	97.13	496.30
AGW-1L-11	592.71	19.35	573.36
B2L-11	589.65	90.44	499.21
D1L-11	593.80	90.01	503.79
D2L-11	590.21	70.90	519.31
E6-11	577.72	46.16	531.56
F2L-11	598.94	42.41	556.53
F4L-11	602.22	34.92	567.30
F6-11	587.40	61.09	526.31
G1L-11	616.84	56.65	560.19
G6-11	608.89	45.00	563.89
H2L-11	620.73	62.98	557.75
H5-11	616.81	68.33	548.48
I1-11	624.75	76.74	548.01
J5L-11	607.20	63.36	543.84
J6-11	608.68	25.51	583.17
PMW-1L-11	598.84	89.17	509.67

TABLE 1
WATER LEVEL ELEVATION SUMMARY
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Well	*Reference Elevation (ft AMSL)*	*Depth to Water (ft)*	*Water Level Elevation (ft AMSL)*
Purge Wells			
APW-1	564.98	NM	509.96
APW-2	569.89	NM	519.75
PW-1L	593.16	NM	498.80
PW-1U	593.16	NM	547.15
PW-2L	597.29	NM	495.06
PW-2M	596.61	NM	512.05
PW-2UR	594.75	NM	573.93
PW-3L	599.05	NM	515.20
PW-3M	597.79	NM	519.07
PW-4M	606.93	NM	524.30
PW-4U	604.85	NM	572.30
PW-5UR	601.31	NM	594.49
PW-6UMR	609.31	NM	505.00
PW-6UR	608.47	NM	558.00
PW-7U	592.47	NM	560.00
PW-8M	592.67	NM	519.20
PW-8U	589.27	NM	550.10
PW-9U	587.47	NM	541.90
PW-10U	593.54	NM	565.00

Notes:
ft AMSL Feet above mean sea level.
(1) Obstruction in well at 29.70 ft bgs.
- Dry.
NM Not Measured (water level recorded from control screen).

TABLE 2

LEACHATE TREATMENT SYSTEM DAILY EFFLUENT MONITORING DATA
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

	Effluent			
Date	*Phenol (mg/L)*	*pH (su)*	*Flow (gal)*	*Comments*
10/03/11	-	7.50	139000	
10/04/11	-	7.10	142000	
10/05/11	0.010 U	7.00	157000	
10/06/11	-	7.10	136000	
10/10/11	-	8.00	112000	
10/11/11	-	7.10	138000	
10/12/11	0.018	7.20	140000	
10/13/11	-	7.20	81000	
10/14/11	-	7.70	73000	
10/19/11	0.010 U	7.10	141000	
10/20/11	-	7.90	255000	
10/21/11	-	7.90	124000	
10/24/11	-	7.90	142000	
10/25/11	-	7.70	138000	
10/26/11	0.010 U	7.10	242000	
10/27/11	-	7.80	105000	
10/31/11	-	7.10	398000	
11/01/11	-	7.20	45000	
11/02/11	0.032	7.00	78000	
11/07/11	-	7.10	140000	
11/08/11	-	7.10	145000	
11/09/11	0.010 U	7.30	122000	
11/10/11	-	7.10	101000	
11/14/11	-	7.10	129000	
11/15/11	-	7.00	119000	
11/16/11	0.010 U	7.50	94000	
11/18/11	-	7.80	85000	
11/22/11	-	7.10	292000	
11/27/11	-	7.00	386000	
11/28/11	-	7.00	44000	
11/29/11	-	7.00	136000	
11/30/11	0.010 U	7.10	124000	
12/01/11	-	7.00	350000	
12/02/11	-	6.90	60000	
12/05/11	-	7.10	371000	
12/06/11	-	7.00	139000	
12/07/11	0.010 U	7.00	137000	
12/08/11	-	7.00	373000	
12/09/11	-	7.10	131000	
12/12/11	-	8.00	318000	
12/13/11	-	7.20	322000	
12/14/11	0.010 U	7.20	39000	
12/15/11	-	7.90	104000	
12/18/11	-	7.10	394000	
12/19/11	-	7.00	148000	
12/20/11	-	7.10	132000	
12/21/11	0.010 U	6.90	327000	
12/22/11	-	7.00	14000	
12/26/11	-	7.10	354000	
12/28/11	0.010 U	7.00	355000	
12/29/11	-	7.10	54000	

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

TABLE 3

ANALYTICAL RESULTS SUMMARY
WEEKLY SAMPLING - LEACHATE TREATMENT SYSTEM
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Effluent

Parameter	*Units*	*10/05/11*	*10/12/11*	*10/19/11*	*10/26/11*	*11/02/11*	*11/09/11*	*11/16/11*	*11/23/11*
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	0.50 J	0.44 J	0.48 J	0.40 J	0.38 J	0.28 J	0.25 J	0.23 J
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	1.0 U	1.0 U	1.0 U	1.0 U	1.1
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	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	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	3.2	3.2	3.3	2.9	2.3	2.0	2.2	1.5
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 U
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	2.1	3.4	2.8	5.7	17	17	22	20
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

TABLE 3

ANALYTICAL RESULTS SUMMARY
WEEKLY SAMPLING - LEACHATE TREATMENT SYSTEM
FOURTH QUARTER - 2011
HYDE PARK RRT PROGRAM

Effluent

Parameter	*Units*	*11/30/11*	*12/07/11*	*12/14/11*	*12/21/11*	*12/28/11*
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	0.21 J	0.22 J	2.5 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
2-Chlorotoluene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
3-Chlorotoluene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
4-Chlorotoluene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Benzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Bromomethane (Methyl Bromide)	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Carbon disulfide	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Chloroethane	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Chloromethane (Methyl Chloride)	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	µg/L	1.9	1.5 J	1.3 J	1.5	1.3 J
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Methylene chloride	µg/L	1.0 U	0.50 J	2.5 U	1.0 U	1.0 U
m-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
o-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
p-Monochlorobenzotrifluoride	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Styrene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Vinyl acetate	µg/L	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U
Vinyl chloride	µg/L	33	35	44	78	100
Xylenes (total)	µg/L	3.0 U	3.0 U	7.5 U	15 U	15 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 - 2011
HYDE PARK RRT PROGRAM

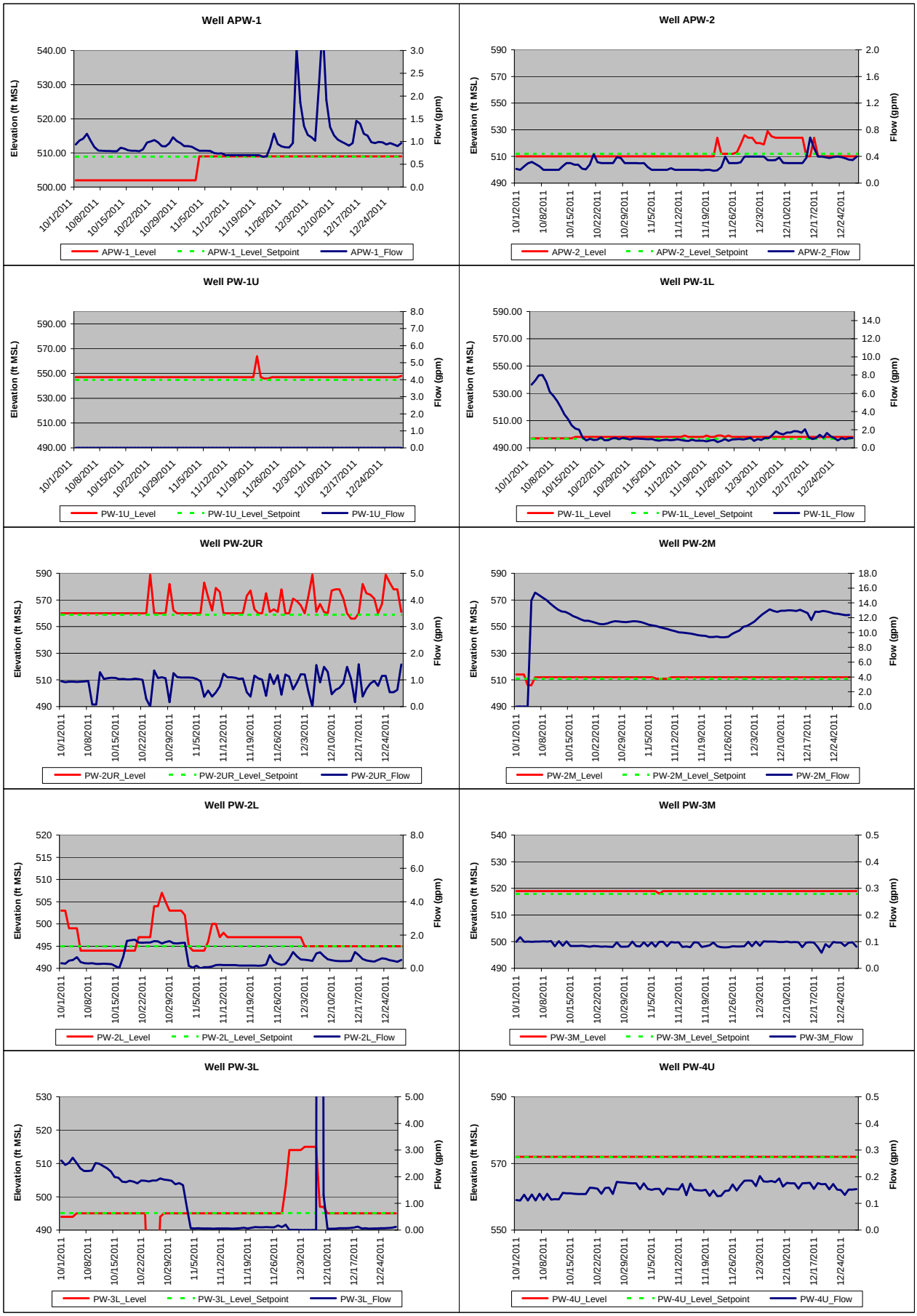
Effluent

		Sample ID:	*HP12611 EFF*
	Sample Date:		*12/06/11*
Parameter	*Units*		
Phosphorus, Total	mg/L		0.075 J
Vinyl chloride	µg/L		33

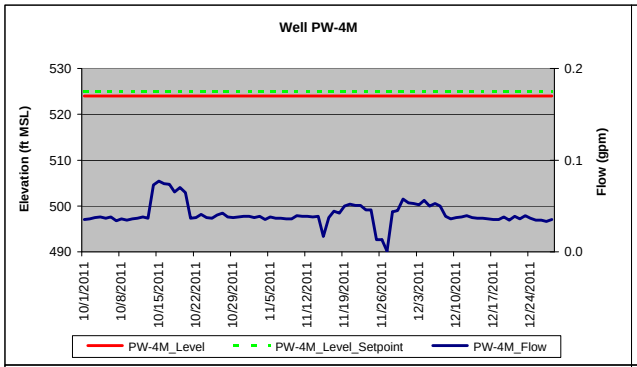
Notes:
- Not available/not applicable.
J Estimated value.
mg/L Milligrams per liter.
µg/L Micrograms per liter.

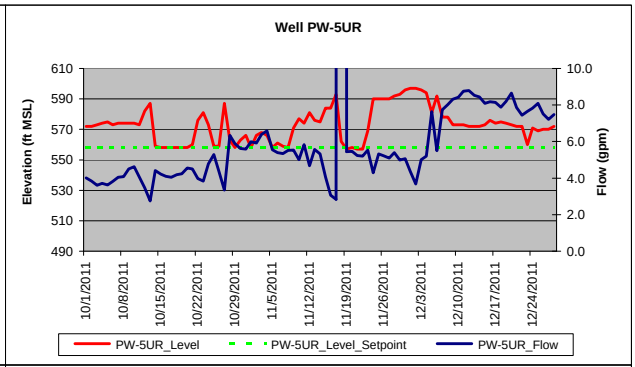
ATTACHMENT 1

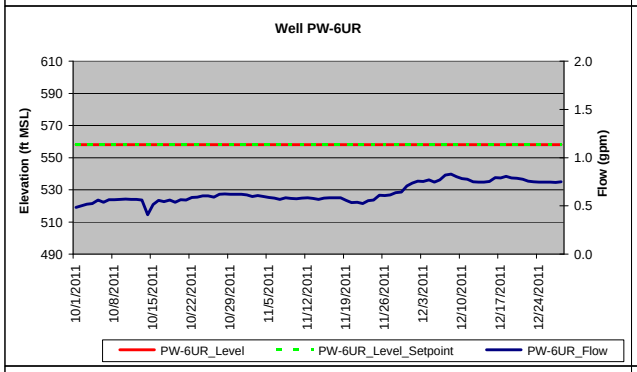
4th Quarter 2011 - Pumping Levels and Flows
Hyde Park

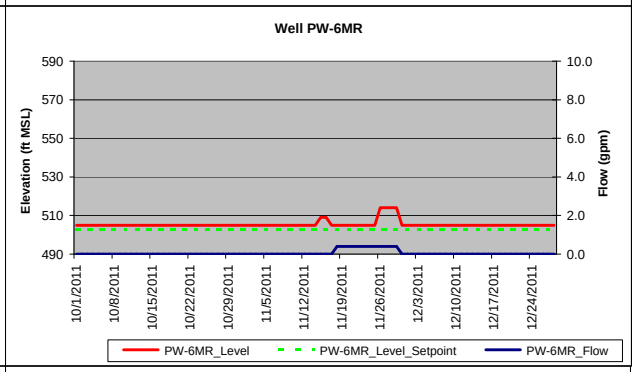


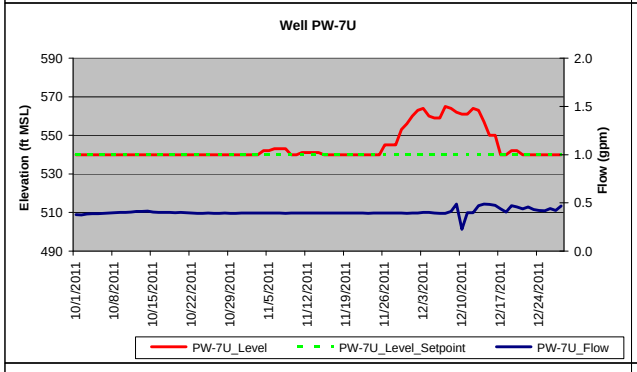
4th Quarter 2011 - Pumping Levels and Flows
Hyde Park

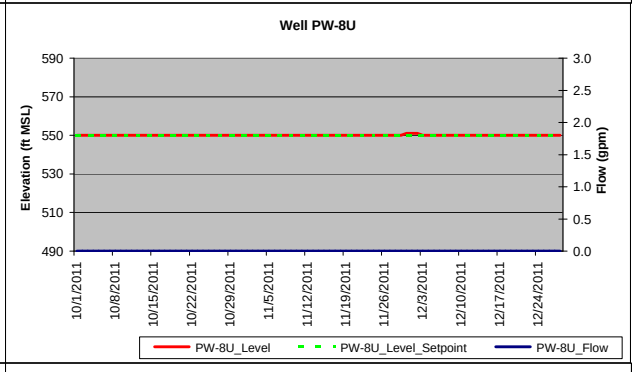


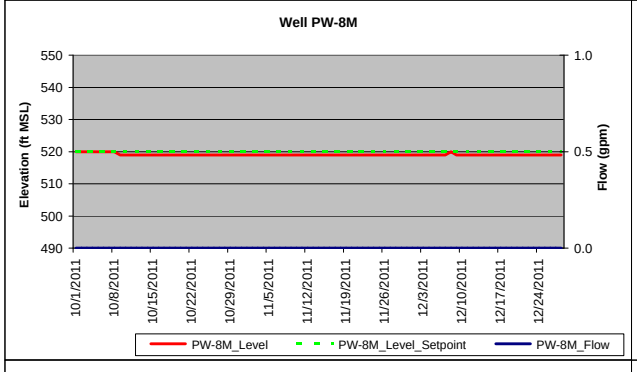


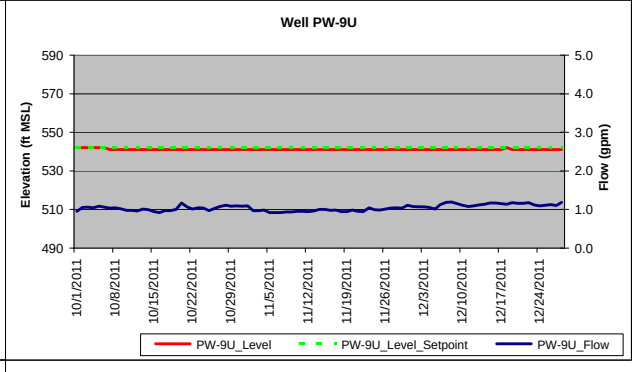


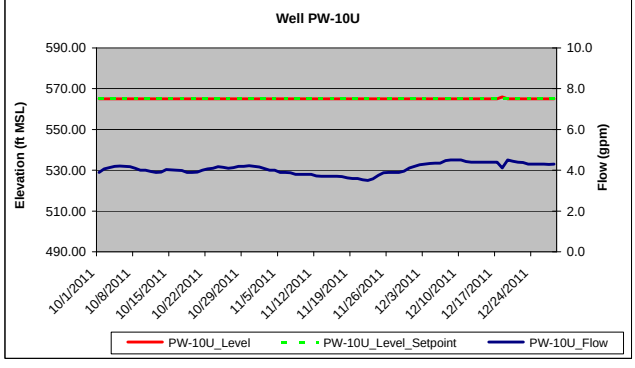












Note: Indicated flows and levels represent instantaneous readings sampled once per day.