

May 1, 2013

Mr. Brian Sadowski, Project Manager
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

RE: Iroquois Gas/Westwood Pharmaceuticals Site
100 Forest Avenue, Buffalo, New York 14213
Site No. 9-15-141A
NAPL Monitoring Quarterly Summary 1Q13

Dear Mr. Sadowski:

On behalf of Bristol-Myers Squibb Company, Groundwater & Environmental Services, Inc. (GES) is pleased to submit the Non-Aqueous Phase Liquid (NAPL) Monitoring Summary document (quarterly summary of monthly field observations). The Summary was prepared in accordance the "Work Plan for NAPL Monitoring of Extraction Wells and Piezometers" that was submitted to the New York State Department of Environmental Conservation (NYSDEC) in July 2012. The request for NAPL monitoring was initiated by the NYSDEC subsequent to work completed by National Fuel Gas (NFG) in August and September 2011 to stabilize the bank of Scajaquada Creek. The NYSDEC provided written approval of the Work Plan in a letter dated July 31, 2012.

GES began monthly NAPL gauging of the piezometers, extraction wells, and groundwater monitoring wells in September 2012. During the gauging events, GES records the depth to light NAPL (LNAPL), depth to water, depth to dense NAPL (DNAPL), and total measured depth. This report covers the gauging events that occurred in the first quarter of 2013.

During each monitoring event, GES attempts to recover any DNAPL encountered in the piezometers or sentinel wells using a stainless steel point source bailer. The recovered DNAPL or DNAPL/water mixture is disposed of in a 55-gallon drum. GES is unable to advance the stainless steel bailer down P-6 as the well casing appears to be obstructed within the top five to ten feet. An attempt to correct the obstruction was made during the extraction well development in October 2012 however maneuvering of the drill rig to P-6 was not successful. Since the obstruction cannot be corrected, GES will continue with the monthly gauge of the well and note any additional accumulation of DNAPL beyond the measured 0.15 feet observed during the initial September 2012 gauging event.

Attached for your review is a cumulative monthly NAPL monitoring data table, hydrographs for piezometers P-5 and P-6, and water table elevation charts for the piezometers, extraction wells, and groundwater monitoring wells. Piezometers P-5 and P-6 are the only two wells that have shown a consistent presence of DNAPL, therefore the DNAPL chart and hydrographs are specific to those two wells. If DNAPL is encountered on a consistent basis in any other well gauged, they will be added to the DNAPL chart and a hydrograph will be created.

Conclusions

During the gauging events, DNAPL was identified at a thickness of less than .25 feet during the March 2013 event at extraction wells EW-4 and EW-7. The data shows that DNAPL has been decreasing in thickness in the extraction wells since the initial September 2012 gauging event. GES believes this is a result of the extraction well development that was completed in October 2012. During that time, the pump depths were also lowered to within six to eight inches from the bottom of the well. A combination of increased well yield and additional pumping capacity has led to the increased amount of DNAPL able to be recovered from the site.

DNAPL was identified in piezometer P-5 in January and February 2013 however the thickness of DNAPL has generally decreased throughout the reporting period. Referring to the NAPL Monitoring Data Table and the hydrographs for piezometers P-5 and P-6, it is apparent that there has been no significant accumulation of DNAPL in either well.

LNAPL was identified in piezometer P-6 during the initial September 2012 gauging event. An absorbent well sock was installed and was checked for product accumulation during each subsequent gauging event. There has been no accumulation of LNAPL on the absorbent sock since it was installed in September 2012.

DNAPL was identified in the semi-annual groundwater monitoring well MW-F4 during the January 2013 gauging event at a thickness of approximately 0.08 feet.

The NAPL monitoring program is anticipated to continue through September 2013, with subsequent Quarterly Summary submittals to the NYSDEC. Following completion of the year-long monitoring plan, a more detailed discussion of the results will be provided.

If you have any questions or require additional information, please feel free to contact the undersigned at (800) 287-7857.

Sincerely,



Steven Leitten
Senior Project Manager

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

Attachments: 1) Site Map
 2) Monthly NAPL Monitoring Data Table
 3) P-5 Hydrograph
 4) P-6 Hydrograph
 5) Piezometer Water Table Elevation Chart
 6) Extraction Well Water Table Elevation Chart
 7) Groundwater Monitoring Well Water Table Elevation Chart

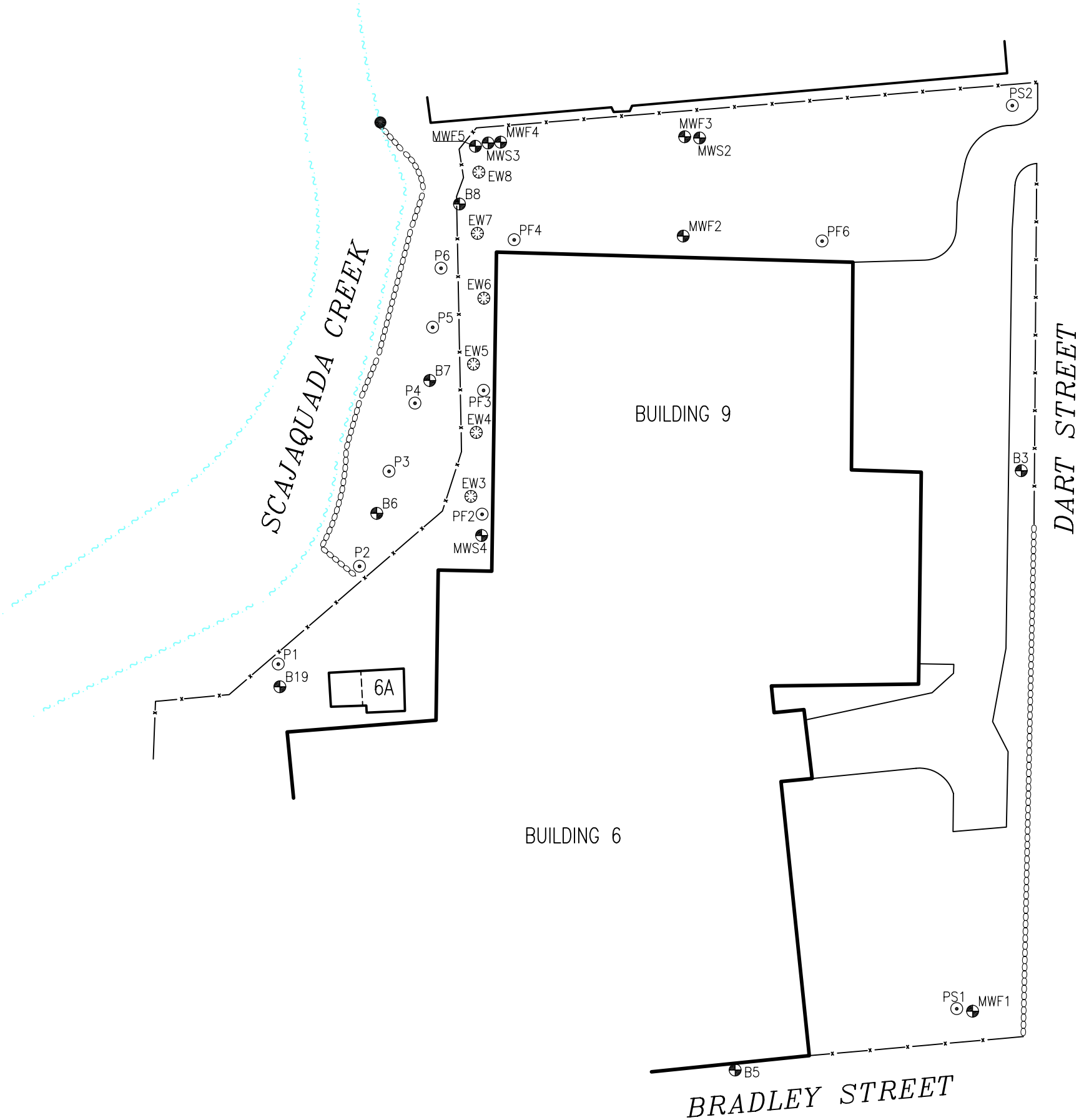
Iroquois Gas/Westwood Pharmaceuticals Site
100 Forest Avenue, Buffalo, New York 14213
Site No. 9-15-141A
NAPL Monitoring Quarterly Summary

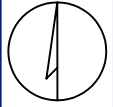
cc: Glenn May, CPG, NYSDEC
Douglas Morrison, Bristol-Myers Squibb Company, via email: douglas.morrison@bms.com
John Alonzo, de maximis, Inc., via email: jjalonzo@demaximis.com
Dan Darragh, Buchanan Ingersoll, via email: ddarragh@cohenlaw.com



LEGEND

- x—x—x— FENCE
- CONCRETE/RETAINING WALL
- ⊕ MONITORING WELL
- STREAM GAUGE
- ⊙ PIEZOMETER
- ⊗ SOIL VAPOR EXTRACTION WELL



DRAFTED BY: W.G.S. (N.J.)	SITE MAP		
CHECKED BY:	BRISTOL MYERS SQUIBB COMPANY 100 FOREST AVENUE BUFFALO, NEW YORK		
REVIEWED BY:	Groundwater & Environmental Services, Inc.		
	SCALE IN FEET 0 APPROXIMATE 100	DATE 9-17-12	FIGURE 1

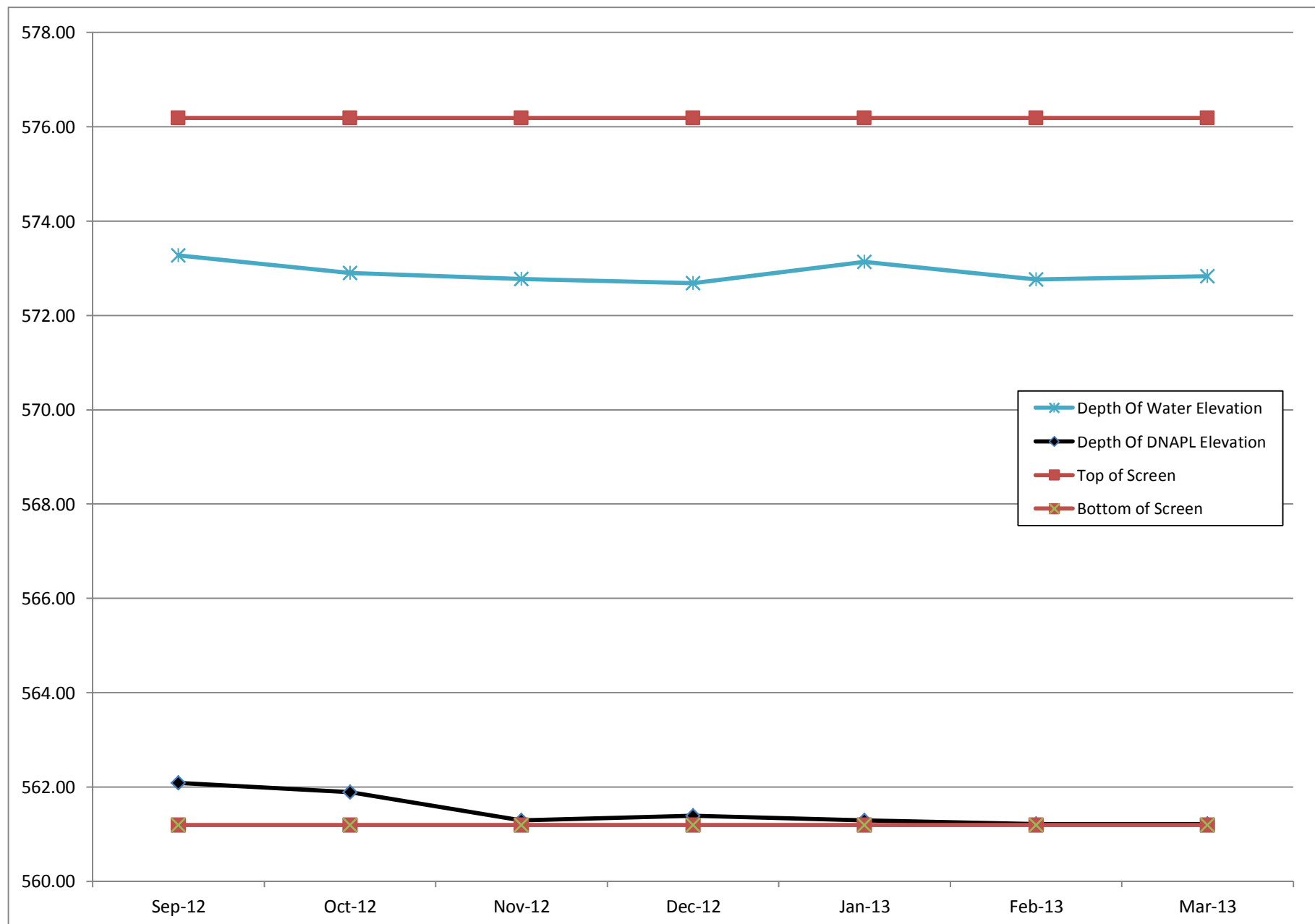
Iroquois Gas/Westwood Pharmaceutical 100 Forest Avenue Monthly NAPL Monitoring Data																																		
	Well Name	Well Size	Total Depth	Below Top of:	September 2012				October 2012				Extraction Well Development		November 2012				December 2012				January 2013				February 2013				March 2013			
					Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered	Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered	Depth Of Pump (Bottom)	Expected Depth Of Water	Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered	Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered	Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered	Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered	Depth Of LNAPL	Depth Of Water	Depth Of DNAPL	Amount of DNAPL Recovered
Extraction Wells	EW-3	8"	24.76	Vault Grate	-	16.40	-	NA	-	20.50	-	NA	24.14	21.39-24.14	-	16.45 ⁵	-	NA	-	21.55	-	NA	-	21.70	-	NA	-	21.63	-	NA	-	21.60	-	NA
	EW-4	8"	28.00	Vault Grate	-	21.30	-	NA	-	23.90	26.98	NA	27.55	24.80-27.55	-	24.51	-	NA	-	24.55	27.85	NA	-	24.41	27.98? Trace	NA	-	24.60	-	NA	-	18.01 ⁶	27.90	NA
	EW-5	6"	27.45	Vault Grate	-	21.35	-	NA	-	24.30	-	NA	26.75	24.00-26.75	-	24.30	-	NA	-	24.31	-	NA	-	24.07	-	NA	-	24.55	-	NA	-	24.30	-	NA
	EW-6	8"	27.54	Vault Grate	-	19.90	24.50	NA	-	23.20	27.00	NA	27.05	24.30-27.05	-	24.40	-	NA	-	24.40	27.19	NA	-	24.32	-	NA	-	24.50	-	NA	-	19.46	-	NA
	EW-7	8"	27.65	Vault Grate	-	19.80	24.50	NA	-	23.10	-	NA	27.1	24.35-27.10	-	16.55 ⁶	-	NA	-	23.50 ⁶	27.30	NA	-	24.05	27.41	NA	-	16.45 ⁶	-	NA	-	21.89 ⁶	27.41	NA
	EW-8	8"	28.96	Vault Grate	-	20.10	25.00	NA	-	26.10	28.10	NA	28.31	25.56-28.31	-	17.33 ⁶	-	NA	-	22.75 ⁶	-	NA	-	16.40 ⁵	-	NA	-	16.1 ⁶	-	NA	-	18.90 ⁶	-	NA
Piezometers	P-1	2"	21.90	PSC	-	15.17	-	-	-	14.62	-	-	NA	NA	-	14.83	-	-	-	14.78	-	-	-	14.21	-	-	-	14.63	-	-	-	14.83	-	-
	P-2	2"	27.40	PVC	-	17.12	-	-	-	16.81	-	-	NA	NA	-	16.86	-	-	-	16.87	-	-	-	16.88	-	-	-	17.15	-	-	-	17.19	-	-
	P-3	2"	31.80	PVC	-	20.78	-	-	-	19.48	-	-	NA	NA	-	19.40	-	-	-	19.69	-	-	-	19.23	-	-	-	19.45	-	-	-	19.78	-	-
	P-4	2"	31.55	PVC	-	21.42	-	-	-	20.08	-	-	NA	NA	-	19.98	-	-	-	20.23	-	-	-	19.81	-	-	-	20.06	-	-	-	20.19	-	-
	P-5	2"	30.20	PVC	-	18.12	29.30	~2 gallons ³	-	18.49	29.50	~1 gallon ³	NA	NA	-	18.62	30.10	~2 cups ³	-	18.70	30.00	~1 quart ³	-	18.25	30.10? Trace 28.43? Trace ²	~1 cup ³	-	18.63	30.18 ⁴	-	-	18.56	-	-
	P-6	2"	28.45	PVC	20.14 ^{1,2}	20.15	28.30 ²	-	-	19.00	28.43 ²	-	NA	NA	-	18.91	28.40 ²	-	-	19.51	28.41 ²	-	-	18.80	28.43? Trace ²	-	-	18.88	-	-	-	19.08	-	-
Semi-Annual Groundwater Monitoring Wells	B-6	2"	27.15	PSC	-	18.84	-	-	-	18.35	-	-	NA	NA	-	18.40	-	-	-	18.19	-	-	-	17.86	-	-	-	18.58	-	-	-	18.55	-	-
	B-7	1 1/2"	28.35	PVC	-	20.12	-	-	-	19.29	-	-	NA	NA	-	19.34	-	-	-	19.16	-	-	-	18.91	-	-	-	19.41	-	-	-	19.56	-	-
	B-8	2"	28.40	PVC	-	18.91	-	-	-	24.60	-	-	NA	NA	-	18.35	-	-	-	18.03	-	-	-	17.58	-	-	-	18.06	-	-	-	18.80	-	-
	MW-F2	2"	31.05	PSC	-	9.62	-	-	-	9.59	-	-	NA	NA	-	10.01	-	-	-	9.62	-	-	-	9.32	-	-	-	9.54	-	-	-	9.23	-	-
	MW-F3	2"	22.05	PVC	-	6.40	-	-	-	5.15	-	-	NA	NA	-	5.22	-	-	-	4.80	-	-	-	4.37	-	-	-	4.65	-	-	-	5.55	-	-
	MW-F4	2"	23.75	PSC	-	17.04	-	-	-	16.49	23.37	- ⁴	NA	NA	-	16.62	-	-	-	16.34	-	-	-	14.92	23.67? Trace	- ⁴	-	16.00	-	-	-	15.90	-	-
	PS-1	4"	47.20	PSC	-	9.39	-	-	-	11.66	-	-	NA	NA	-	11.09	-	-	-	11.76	-	-	-	10.00	-	-	-	9.92	-	-	-	10.52	-	-
	B-3	2"	19.60	PSC	-	9.11	-	-	-	10.11	-	-	NA	NA	-	10.17	-	-	-	10.01	-	-	-	9.80	-	-	-	10.02	-	-	-	10.40	-	-

Notes:
 All measurements are in FEET
 The "Total Depth" column was determined using a Solinst interface probe.
 PSC = Potective Steel Casing
 PVC = PVC Riser
 All measurements were taken using a Solinst interface probe.
 The "Depth Of Water" for each month was measured from the corresponding reference points listed in the "Below Top Of" column.

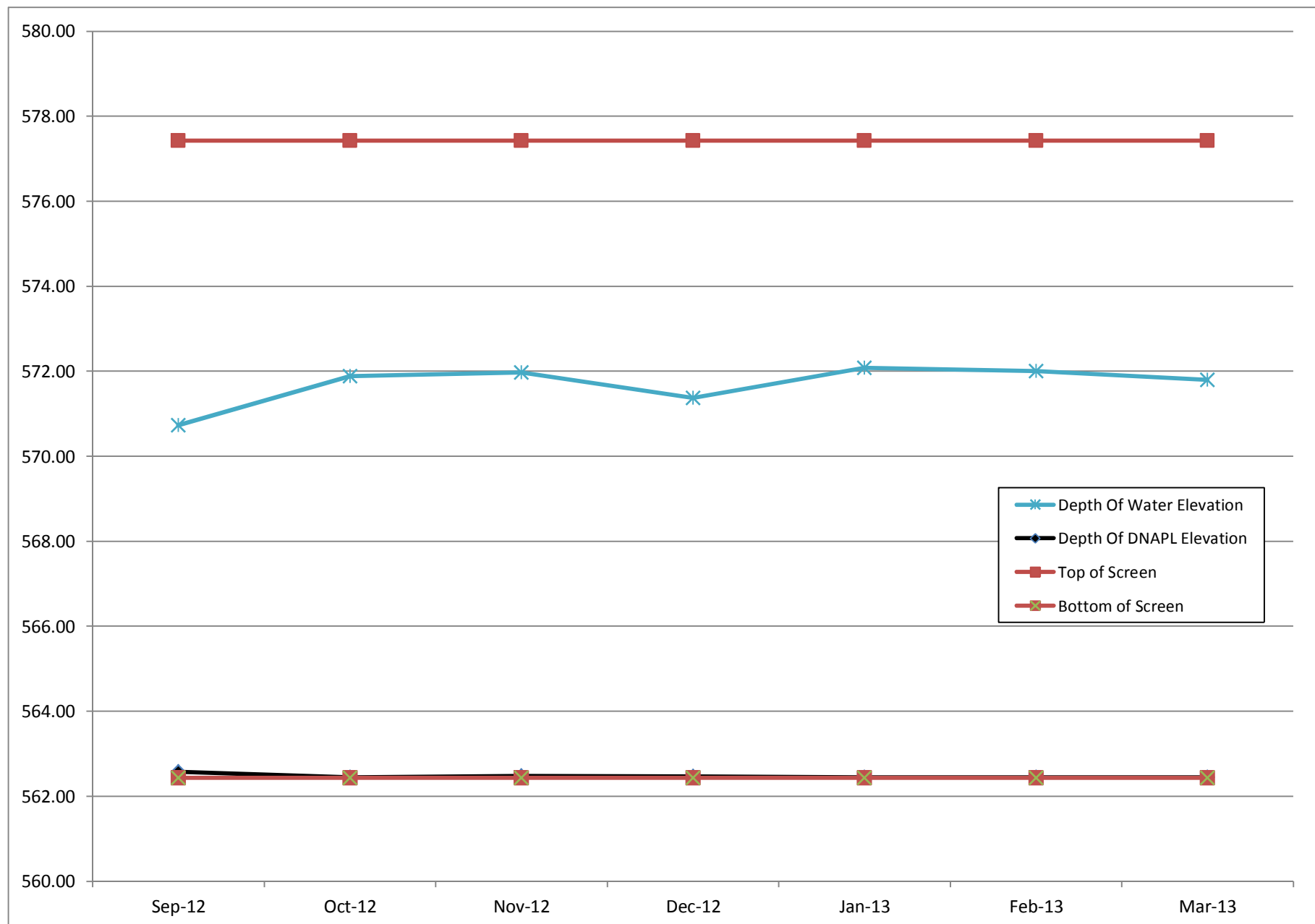
The extraction well development was completed on October 30 and 31, 2012.
 Therefore, the "Depth Of Water" measurements for the extraction wells during September and October should not be compared to the "Expected Depth Of Water" measurements provided in the Extraction Well Development columns.

- 1) An absorbent sock was installed in the well.
- 2) Well is damaged and unable to get stainless steel bailer down. Will monitor Depth of DNAPL
- 3) The DNAPL recovery method is via stainless steel bailer.
- 4) DNAPL was not able to be recovered using the stainless steel bailer due to lack of volume.
- 5) The extraction well pump was pulled and repaired.
- 6) The extraction well pump gets hung up due to viscous nature of DNAPL. The pump was shook to induce movement of the internal float.

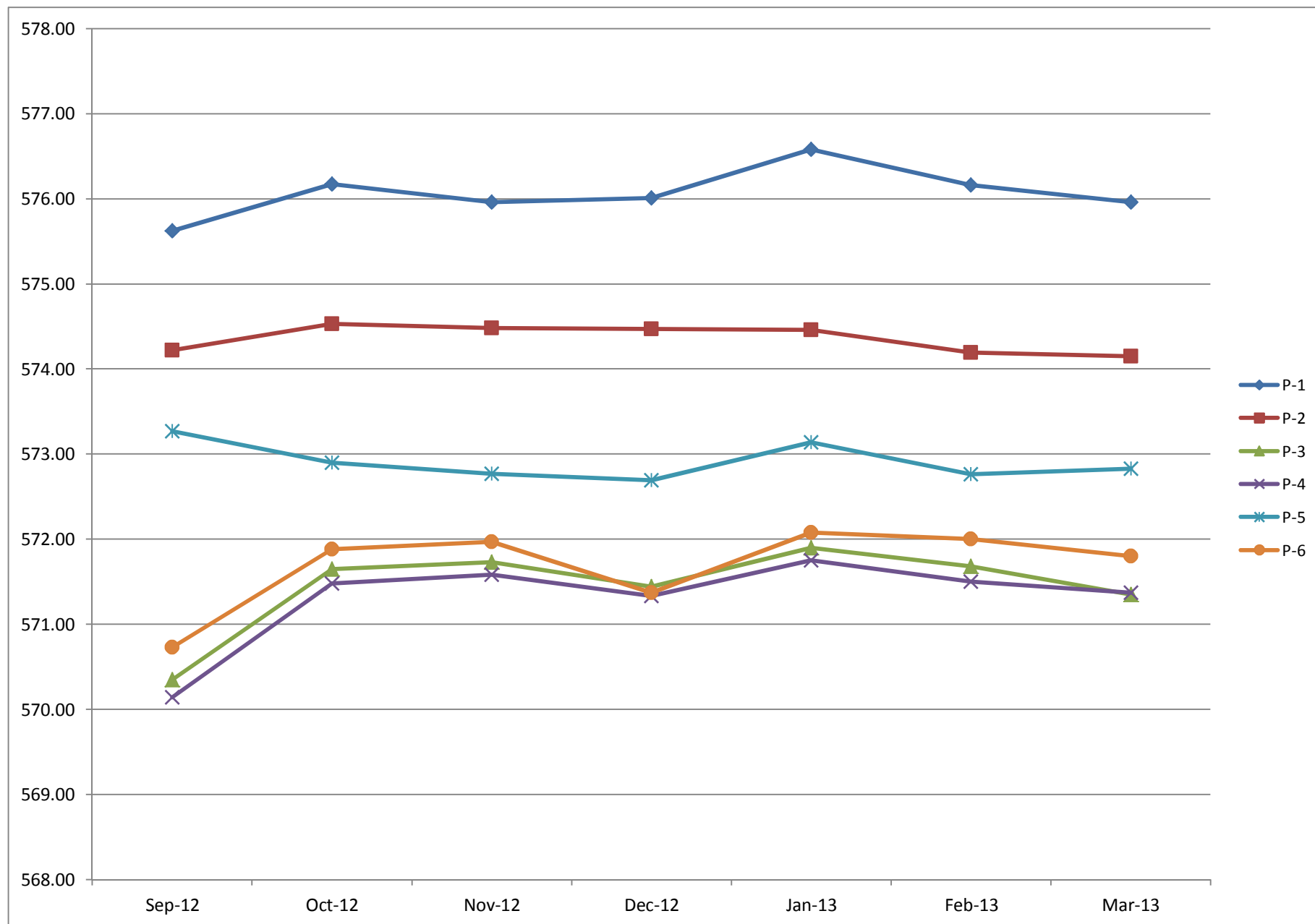
Iroquois Gas/Westwood Pharmaceutical
100 Forest Avenue
P-5 Hydrograph



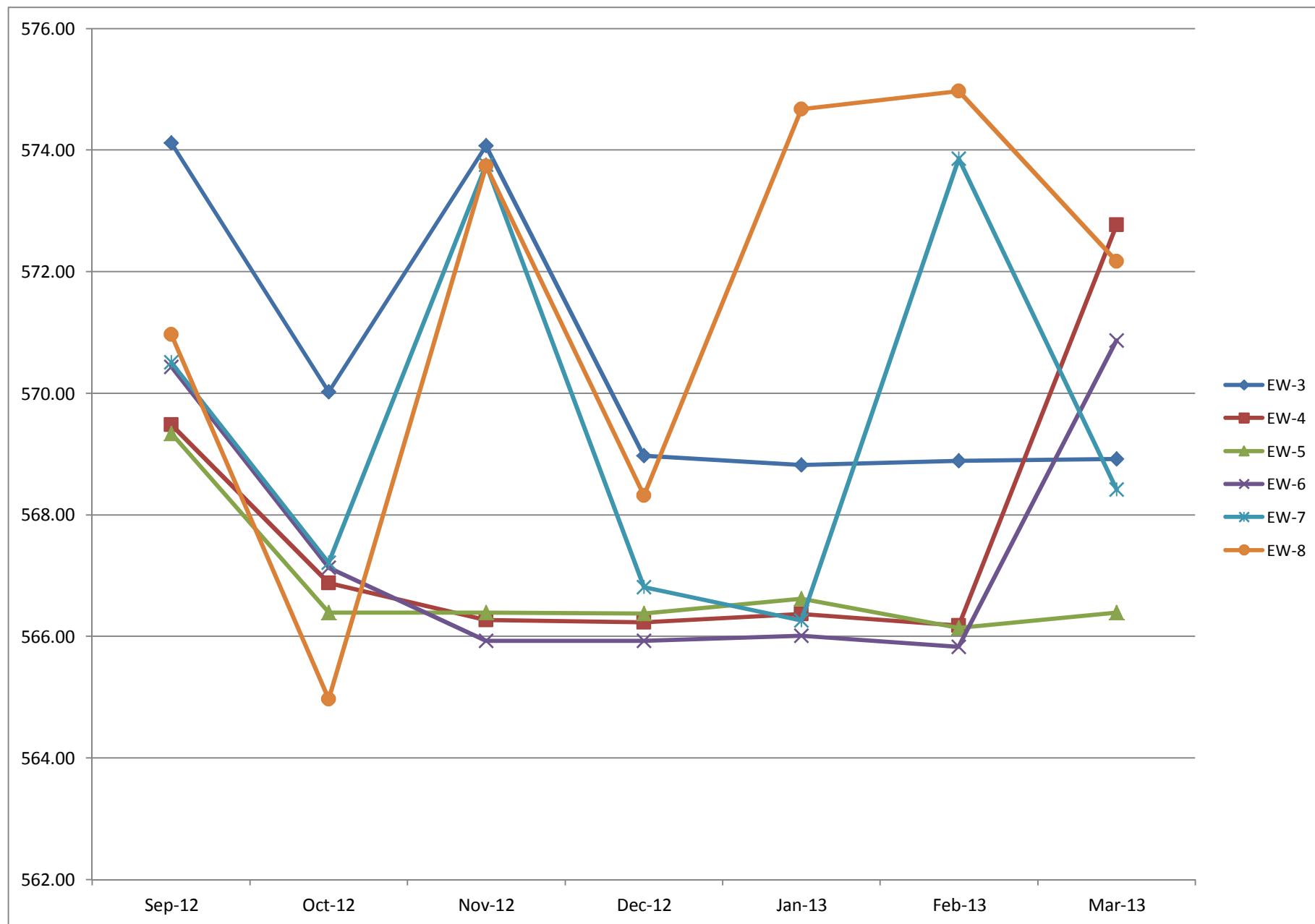
Iroquois Gas/Westwood Pharmaceutical
100 Forest Avenue
P-6 Hydrograph



Iroquois Gas/Westwood Pharmaceutical
100 Forest Avenue
Piezometer Water Table Elevation Chart



Iroquois Gas/Westwood Pharmaceutical
100 Forest Avenue
Extraction Well Water Table Elevation Chart



Iroquois Gas/Westwood Pharmaceutical
100 Forest Avenue
Groundwater Monitoring Well Water Table Elevation Chart

