Olin

P. O. BOX 248, 1186 LOWER RIVER ROAD, NW, CHARLESTON, TN 37310-0248

(423) 336-4000 FAX: (423) 336-4166

April 20, 2007

Mr. Alex Czuhanich
New York State Dept. of Environmental Conservation
Division of Hazardous Waste
625 Broadway
Albany, NY 12233

re: Quarterly/Annual Report: Olin Chemicals
Buffalo Ave. Facility, Niagara Falls, NY

Dear Mr. Czuhanich:

This is the 38th Quarterly report as required by Olin's Administrative Order on Consent (AOC) for our Niagara Falls Plant, (Index #R9-4171-94-08, Site Registry #9-32-051A, and B). The timeframe for this report covers the period from January 1, 2007 through March 31, 2007. This also serves as the annual report covering the period from April 1, 2006 through March 31, 2007.

Operation / Maintenance issues :
Details of the implementation of routine maintenance tasks and trouble shooting activities are included for the most recent quarter in the monthly memoranda from Olin's consultant, Mactec Engineering and Consulting, (***Attachment 1***). The most significant metrics of system performance are the tracking of downtime and of target drawdown levels. Historically, when the system is running and operating efficiently, hydraulic capture is achieved. The monthly O&M reports document the details of all issues.

Annual Operation / Maintenance issues have focused on enhancing capture system-wide.

The recovery well OBA9AR has been overdrilled to create a deeper reservoir at the well bottom. This allows the pump intake to remain below water level and allow for continuous operation of the well.This improvement has allowed us to maintain consistent pumping, and hence capture, at the southern end of Plant 2. .
RW2 has experienced significant increases in flow. We have determined that this increase is not due to naturally occurring aquifer characteristics, but rather, to seasonal variations in external hydraulic input. We have tested well yields and have replaced the pump with a pump of appropriate capacity. This improvement has allowed us to regain consistent hydraulic capture across the site.

We have also continued to maintain the recovery wells to reduce or eliminate scaling, thereby improving pumping efficiency and enhancing our ability to withdraw groundwater along the site boundary. This was achieved by a combination of continuous and episodic acid addition to targeted recovery wells.

Hydraulic Capture:
Attachment 2 includes piezometric maps for each hydraulic zone representing the most recent quarter. That attachment also includes tables and hydrographs documenting empirical monthly hydraulic capture comparisons. Data for piezometric levels are included electronically on the CD in ***Attachment 3.***

A-zone: The A-zone groundwater capture criterion is via empirical comparison to Gill Creek stage. In general, A-zone capture is being achieved over most of the 300 foot boundary with Gill Creek, and relative to potential northward flow toward Buffalo Avenue. Gill Creek elevation remains predominantly greater than local groundwater elevation along its boundary.
B-zone: B-zone capture is being achieved, as indicated by piezometric plots. One zone of possible capture uncertainty has been in the area of PN6B. Piezometric plots for the first quarter of 2007 indicate that an elevated area around that well is significantly narrower, suggesting that the high point represents a divide between capture cones, rather than a hydraulic bypass. Capture has been consistently achieved, as evidenced by cones of depression around the recovery wells along Gill Creek and by the gradient toward the recovery wells along Buffalo Avenue.
C-zone: C and CD-zone capture is achieved, with flow gradients consistent over time, per the pumping at the high volume Production well in Plant 1. This groundwater is captured by the Olin production well, and is demonstrated by piezometric plots showing gradients consistent with historic gradients toward the production well.

Annual trends in capture indicate that capture has been re-established on a consistent basis by enhancing pumping capacity, as described above. This maintenance action was necessitated by seasonal variations in available water.

Groundwater Quality:
The first quarter recovery well header groundwater data are included on the CD in ***Attachment 3***. This attachment also includes piezometric data and system flow data.
Annual trends in header groundwater quality data indicate that ...

Overview of extracted groundwater volume and contaminant mass:
The volume of pumped groundwater for this quarter was approximately 7.2million gallons. The total volume of groundwater extracted and treated since system startup is approximately 224 million gallons. Since startup the system has extracted over 48,000 pounds of organics, 227 pounds of pesticides and 3 pounds of mercury.

Annual trends in groundwater wtihdrawal indicate that with time of operation the system has become more efficient and has removed an increasing volume of groundwater.
Attachment 4 contains data and tables to support calculations of mass removed during the currently reported quarter and for the entire project duration. Included are recovery well flow data, recovery well header contaminant concentrations, estimated mass removed for each quarter by parameter group and a table of groundwater flow and mass removed since start-up. ***Attachment 4*** also contains tables of chemical analysis data for discharge headers.

Annual trends in mass removed indicate that removal rates are decreasing for total organics and for pesticides. The pounds of constituents extracted per gallon is declining for both organics and pesticides, suggesting that the cleanup rate has peaked and that diminishing reductions may be expected in the future. Even with decreasing rates, significant mass is being removed from the aquifer. We will continue to monitor trends. Mercury removal remains stable and at very low levels, as it has since system startup. This is likely due to a smaller mass of mercury being available for removal. Relevant graphs, based on flow and mass removed data, are included in ***Attachment 4***.

Accelerated Remediation Program: Annual overview
Olin has implemented a small scale bioremediation pilot program at the southern end of Plant 2. This pilot program extends the bench scale biodegradation testing that we had implemented during the previous year. The bench scale test indicated that aerobic degradation was the most effective approach to remediating Olin's chlorinated benzene compounds and pesticides. The

pilot field program was implemented at the southern end of Plant 2 because that area contained the highest concentration of constituents.

Our efforts focused on optimizing the oxygen delivery system, adding nutrients, and tracing the zone of influence of an initial "injection" well. We also tracked the temporal trends in constituent concentrations to determine the timeframe for constituent degradation.

Future efforts will focus on adding one or more additional "injection" points, enhancing oxygen and nutrient delivery, and tracking the combined system effectiveness.

The conclusions of our 2007 pilot program are that:

1. A continuous introduction of oxygen, via compressor, is more efficient than episodic introduction of hydrogen peroxide, because the hydrogen peroxide has limited residence time and rapid mobility through the system. Nonetheless, additional efficiency is desirable and possible. We will attempt to enhance oxygen delivery using Oxygen Release Compound (ORC) socks.
2. Nutrient addition is generally beneficial and that nutrient residence time is long enough to allow addition episodically.
3. Helium tracing indicated that groundwater affected by oxygen addition occurs in elongated zones corresponding to flow lines, rather than by general radial dispersal. Thus, the geometry for additional points of oxygen introduction should consist of a broader but more tightly spaced grid. We achieved some decrease in constituent concentrations, but did not approach cleanup levels. We expect that the enhanced oxygen delivery, and the continued addition of nutrients, plus additional time of operation, will enhance constituent degradation rates.

We believe that we are continuing to make significant progress in removing contaminant mass from Olin's Niagara Falls Plant site via our remediation system. We will continue to improve the system and monitor its effectiveness. Please direct any questions or comments to me at 423/336-4587.

Sincerely,

Michael J. Bellotti

Michael J. Bellotti

OLIN CORPORATION

List of Attachments

Attachment 1:
Monthly Operation and Maintenance Status Reports:

Attachment 2:
Piezometric maps, hydrographs and supporting data

Attachment 3:
Data CD:

- Piezometric data
- Groundwater Quality Data:
- Groundwater collection system flow data

Attachment 4:

- Quarterly Contaminant mass removed
- Groundwater flow and mass removed since project start-up
- Recovery well header and constituent concentrations (hard copy)
- Mass removal trend graphs

cc:
Pat Concannon - NYSDEC Buffalo, NY
Ben Brayley: Olin Niagara Falls, NY
Dale Carpenter: USEPA: Region II, New York, NY
Rick Marotte: Mactec Engineering: Kennesaw, GA

MACTEC

MEMORANDUM

To: Mike Bellotti @ Olin-Charleston; Don Greer, Bill Bibko, Jose Reyes, Gina Senia @ Olin-Niagara; Margaret Tanner and Rick Marotte @ MACTEC.

From: Tony Englund

Date: April 16, 2007

Subject: Monthly O&M Status Update for Ground-Water Collection and Treatment System for March 2007
Olin Corporation, Niagara Falls, New York
MACTEC Job # 6100070001

This memo addresses the status of the O&M issues for the ground-water collection and treatment system at the Olin –Niagara Plant, Niagara Falls, New York.

SYSTEM STATUS

The following table presents general treatment system data for March 2007:

Ground-Water Collection and Treatment System Status
March 2007

Recovery Well	Average Flowrate (gpm)	Average GW Elevation (ft MSL)	Target Drawdown Level (ft MSL)	Days Meeting Target Drawdown
RW-1	2.4	557.30	559	31
RW-2	27.9	557.83	556	0
RW-3	7.2	557.16	558.3	31
RW-4	9.2	556.92	558.1	31
PR-4	1.3	555.03	556.7	30
RW-5	0.4	549.32	557.5	31
PR-12	7.0	557.35	558.9	31
OBA-9AR	0.057	557.05	557.7	30

RW-2 was unable to meet drawdown levels in March 2007. The pump in RW-2 was pulled on March 27, 2007 for a pump test, resulting in a downtime for RW-2 for approximately 8 hours, and two brief downtimes for the system on the same day. The pump test showed that a flowrate of 60 gallons per minute would draw the well down to 556.68 ft MSL. However, capture is being maintained at the existing drawdown level. Since more than 60 gpm will be necessary to draw the well down below the target level, that flowrate would produce line pressures of greater than 200 psi which is greater than the pressure rating of the existing piping (160 psi). Therefore, it was determined that the existing pump rate would be operationally acceptable, since it does provide drawdown that attains hydraulic capture. We will continue to track drawdown and capture to verify the efficacy of this pump rate. The resulting drawdown elevation is approximately 557.5 ft above msl. The pumping system in RW2 attained this level for 27 out of 31 days during March.

DOWNTIMES

	Date	Duration (hrs:min)	Reason
RW-2	3/27/2007	7:50	Pump pulled for a pump test.
System	3/27/2007	0:15	System shut down due to RW-2 pump test
System	3/27/2007	0:55	System shut down due to RW-2 pump test

WELL INSPECTIONS

Each week, the recovery wells are inspected for well loss and transducer calibration. Differences of a foot or greater between the well and the piezometer indicate unacceptable well loss and is generally corrected by acid washing the well. Differences of 0.25 feet or more between the piezometer and the transducer reading in OMNX indicate that the transducer should be recalibrated. The following table summarizes the results of those inspections and any actions taken to correct problems:

	Date	Piez/OMNX Difference (ft)	Piez/Well Difference (ft)	Comment
RW-1	3/6/2007	-0.14	0.13	
	3/13/2007	-0.52	-0.49	Transducer checked - ok
	3/20/2007	-0.05	0.05	
	3/27/2007	-0.14	-0.19	
RW-2	3/6/2007	-0.19	-0.03	
	3/13/2007	-0.22	-0.03	
	3/20/2007	-0.22	-0.03	
	3/27/2007	-9.97	-0.03	Pump pulled this day; transducer bad
	3/27/2007	-0.09	NM	Replace transducer and remeasure
RW-3	3/6/2007	-0.04	-0.03	
	3/13/2007	-0.01	-0.05	
	3/20/2007	0.00	-0.03	
	3/27/2007	-0.04	-0.06	
RW-4	3/6/2007	-0.12	0.05	
	3/13/2007	0.07	0.06	
	3/20/2007	0.05	0.04	
	3/27/2007	0.14	0.04	
PR-4	3/6/2007	-0.22	0.21	
	3/13/2007	-0.41	1.12	
	3/20/2007	0.33	-0.22	
	3/20/2007	0.08	NM	Transducer cleaned - remeasure
	3/27/2007	-0.24	0.30	
RW-5	3/6/2007	0.07	3.06	Pz dry
	3/13/2007	0.25	1.81	Pz dry
	3/20/2007	0.08	1.56	Pz dry
	3/27/2007	-0.14	2.75	Pz dry- lowered transducer to bottom of PZ
PR-12	3/6/2007	-0.21	NA	
	3/13/2007	0.00	NA	
	3/20/2007	1.26	NA	
	3/20/2007	-0.05	NA	Transducer cleaned - remeasure
	3/27/2007	-0.20	NA	
OBA-9AR	3/6/2007	0.14	-0.05	
	3/13/2007	0.10	-0.02	
	3/20/2007	0.16	-0.04	
	3/27/2007	0.17	-0.09	

DNAPL INSPECTION

On March 8, 2007, seven recovery wells and seven monitoring wells were inspected for the presence of DNAPL. The following table presents the results of the inspection:

Recovery Well	Volume Purged (gallons)	DNAPL Presence	DNAPL Quantity Removed (mL)	Comment
RW-1	1	NO		
RW-2	1	NO		
RW-3	1	NO		
RW-4	1	NO		
RW-5	1	NO		
PR-4	1	YES	5 ml	
PR-5	1	YES	Trace	
OBA-9AR	1	NO		
PN-11B	1	NO		
PN-12B	1.5	YES	100 mL	
PN-14B	1	YES	100 mL	
PN-15B	1	NO		
OBA-10A	1	YES	Trace	

MACTEC

MEMORANDUM

To: Mike Bellotti @ Olin-Charleston; Don Greer, Bill Bibko, Jose Reyes, Gina Senia @ Olin-Niagara; Margaret Tanner and Rick Marotte @ MACTEC.

From: Tony Englund

Date: March 13, 2007

Subject: Monthly O&M Status Update for Ground-Water Collection and Treatment System for February 2007
Olin Corporation, Niagara Falls, New York
MACTEC Job # 6100070001

This memo addresses the status of the O&M issues for the ground-water collection and treatment system at the Olin Niagara Plant, Niagara Falls, New York.

SYSTEM STATUS

The following table presents general treatment system data for February 2007:

Ground-Water Collection and Treatment System Status
February 2007

Recovery Well	Average Flowrate (gpm)	Average GW Elevation (ft MSL)	Target Drawdown Level (ft MSL)	Days Meeting Target Drawdown
RW-1	1.7	557.52	559	28
RW-2	30.3	557.40	556	0
RW-3	7.3	557.06	558.3	28
RW-4	8.7	557.08	558.1	28
PR-4	1.1	555.29	556.7	26
RW-5	0.4	549.94	557.5	28
PR-12	6.9	557.04	558.9	28
OBA-9AR	0.0	561.89	559.8	0

RW-2 was unable to meet drawdown levels in February 2007. Testing of the well to evaluate the necessary flowrate to meet the drawdown level was unable to be performed in February 2007 due to severe weather and the repair efforts for OBA-9AR and has been rescheduled for March 2007.

A number of system shutdowns occurred due to low pH. RW-1 was down for three days in mid-February due to freezing temperatures. PR-12 was manually shut down twice in February: for maintenance work on February 6, 2007 and on February 20, 2007 to test the pump for OBA-9AR. The OBA-9AR was started on February 20, 2007 and pumped successfully with PR-12 shut down. However, when PR-12 was restarted, the 9AR pump was unable to overcome the pressure of PR-12 to enter the combined line. A higher pressure pump was ordered and will be installed to correct this problem.

DOWNTIMES

	Date	Duration (hrs:min)	Reason
PR-12	2/6/2007	6:10	Pump shut down manually for maintenance work.
System	2/8/2007	4:45	System shut down due to low pH.
System	2/11/2007	0:50	System shut down due to low pH.
System	2/15/2007	6:30	System shut down due to low pH.
RW-1	2/15/2007-2/18/2007	3 days	After pH adjustment, well was frozen due to harsh weather conditions.
PR-12	2/20/2007	5:15	Pump was manually shut down to test OBA-9AR

WELL INSPECTIONS

Each week, the recovery wells are inspected for well loss and transducer accuracy. Differences of a foot or greater between the well and the piezometer indicate unacceptable well loss and is generally corrected by acid washing the well. Once the transducers have been set in place and the appropriate zero elevation and level range has been entered into OMNX, no calibration should be performed. Any differences seen between the OMNX measurement and the actual measurement are generally a result of level changes between the time the readings are collected or differences caused by signal noise. If high differences (>1 ft) are seen consistently, the transducer will be checked, cleaned, and/or replaced, if necessary. The following table summarizes the results of those inspections and any actions taken to correct problems:

	Date	Piez/OMNX Difference (ft)	Piez/Well Difference (ft)	Comment
RW-1	2/6/2007	-0.19	-0.01	
	2/13/2007	-0.38	-0.03	
	2/20/2007	-0.23	-0.01	
	2/27/2007	-0.44	0.04	
RW-2	2/6/2007	-0.17	0.00	
	2/13/2007	-0.70	-0.45	
	2/20/2007	-0.17	-0.03	
	2/27/2007	-0.30	-0.04	
RW-3	2/6/2007	-0.02	-0.06	
	2/13/2007	-0.05	-0.06	
	2/20/2007	-0.11	-0.16	
	2/27/2007	-0.04	-0.01	
RW-4	2/6/2007	0.04	0.04	
	2/13/2007	0.07	0.04	
	2/20/2007	0.20	0.04	
	2/27/2007	-0.02	0.06	
PR-4	2/6/2007	-2.12	1.33	
	2/13/2007	-0.16	1.33	Acid washed
	2/20/2007	-0.13	0.33	
	2/27/2007	-0.21	0.06	
RW-5	2/6/2007	-0.85	-1.02	Piezometer dry
	2/13/2007	-0.92	0.98	Piezometer dry – acid washed.
	2/20/2007	0.13	3.10	Piezometer dry
	2/27/2007	0.02	2.45	Piezometer dry
PR-12	2/6/2007	0.22	NA	
	2/13/2007	-0.36	NA	
	2/20/2007	0.76	NA	
	2/27/2007	0.44	NA	
OBA-9AR	2/20/2007	0.34	0.00	
	2/27/2007	0.42	0.00	

The differences between the RW-5 PZ and well are the result of the well being drawn down below the bottom of the PZ.

DNAPL INSPECTION

On February 6, 2007, seven recovery wells and seventeen monitoring wells were inspected for the presence of DNAPL. The following table presents the results of the inspection:

Recovery Well	Volume Purged (gallons)	DNAPL Presence	DNAPL Quantity Removed (mL)	Comment
RW-1	1	NO		
RW-2	1	NO		
RW-3	1	NO		
RW-4	1	NO		
RW-5	1	NO		
PR-1	1	NO		
PR-2	1	NO		
PR-3	1	NO		
PR-4	1	YES	Trace	
PR-5	1	NO		
PR-6	1	NO		
PR-7	1	NO		
PR-8	1	NO		
PR-9	1	YES	Trace	
PR-10	1.5	YES	750ml	
PR-11	1	NO		
PR-12	NM	NM	NM	Could not get tubing to bottom of well.
PR-13	1	NO		
OBA-9AR	1	NO		
PN-11B	1	NO		
PN-12B	1.5	YES	400 mL	
PN-14B	1	YES	200 mL	
PN-15B	1	NO		
PN-21B	1	NO		Diffuser in well
OBA-10A	1	NO		

MACTEC

MEMORANDUM

To: Mike Bellotti @ Olin-Charleston; Don Greer, Bill Bibko, Jose Reyes, Gina Senia @ Olin-Niagara; Margaret Tanner and Rick Marotte @ MACTEC.

From: Tony Englund

Date: February 9, 2007

Subject: Monthly O&M Status Update for Ground-Water Collection and Treatment System for January 2007
Olin Corporation, Niagara Falls, New York
MACTEC Job # 6100070001

This memo addresses the status of the O&M issues for the ground-water collection and treatment system at the Olin –Niagara Plant, Niagara Falls, New York.

SYSTEM STATUS

The following table presents general treatment system data for January 2007:

Ground-Water Collection and Treatment System Status
January 2007

Recovery Well	Average Flowrate (gpm)	Average GW Elevation (ft MSL)	Target Drawdown Level (ft MSL)	Days Meeting Target Drawdown
RW-1	2.3	556.89	559	31
RW-2	31.5	556.96	556	0
RW-3	7.9	556.81	558.3	31
RW-4	10.0	556.09	558.1	31
PR-4	1.9	555.10	556.7	31
RW-5	0.5	551.41	557.5	31
PR-12	3.5	556.73	558.9	15
OBA-9AR	0.0	562.84	559.8	0

Note: Average GW Elevations and Days Meeting Target Drawdown were calculated from weekly manual groundwater measurements.

RW-2 was unable to meet drawdown levels in January 2007. Testing of the well to evaluate the necessary flowrate to meet the drawdown level was unable to be performed in January 2007 and has been rescheduled for February 2007.

PR-12 was down to pull the pump from the well and acid clean the well to remove scale. Significant effort was required to dissolve the scale enough to allow the pump to be removed. Once the scaling was removed, the pump was pulled and cleaned, reinstalled, restarted, and the target drawdown was met.

OBA-9AR was re-drilled on January 8, 2007. The new OBA-9AR was constructed of a 6" stainless casing installed to 13.5' below ground surface. A 1" piezometer was installed in the borehole. The screened interval of the well and piezometer was from 4.5' to 13.5' below ground surface. A submersible pump, flowmeter, and transducer have all been installed. The well is awaiting final connection of the control wiring.

DOWNTIMES

	Date	Duration (hrs:min)	Reason
System	1/9/2007	2:35	Low pH water introduced into system from building sump. Most likely from clean-up after drilling activities
PR-12	1/8/2007 – 1/24/2007	NA	Pump and controls removed, well acid cleaned, and all equipment reinstalled.

WELL INSPECTIONS

Each week, the recovery wells are inspected for well loss and transducer calibration. Differences of a foot or greater between the well and the piezometer indicate unacceptable well loss and is generally corrected by acid washing the well. Differences of 0.25 feet or more between the piezometer and the transducer reading in OMNX indicate that the transducer should be recalibrated. The following table summarizes the results of those inspections and any actions taken to correct problems:

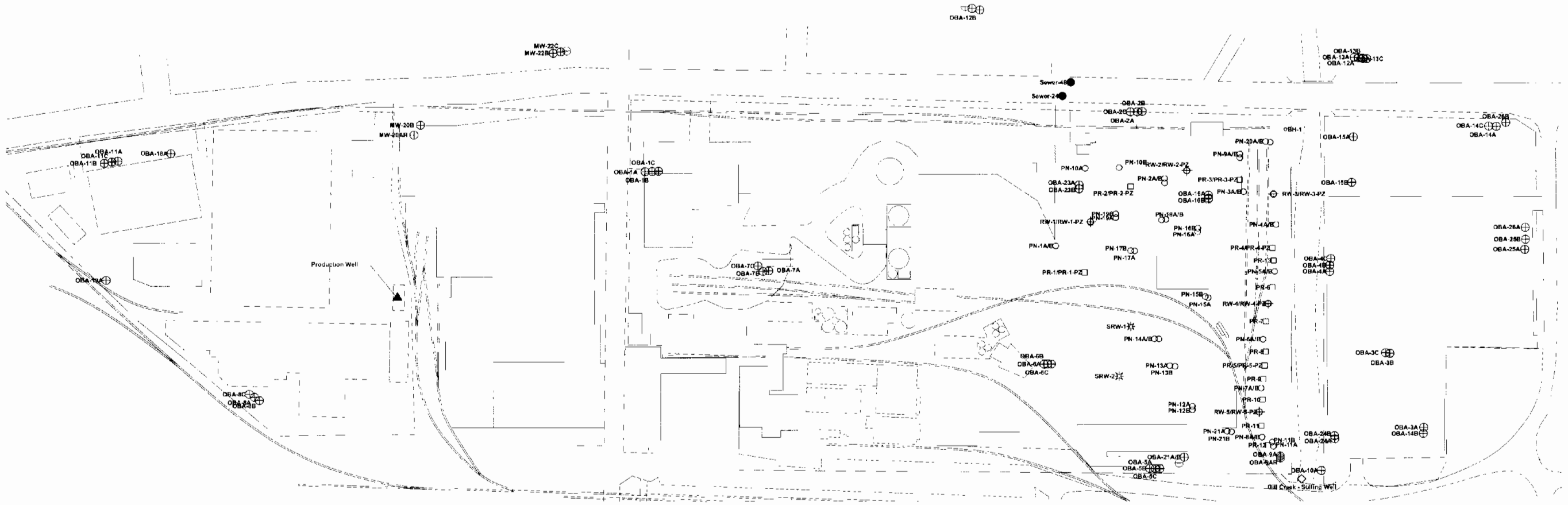
	Date	Piez/OMNX Difference (ft)	Piez/Well Difference (ft)	Comment
RW-1	1/2/2007	-0.30	0.60	
	1/9/2007	0.01	-0.02	
	1/16/2007	1.82	-0.04	Transducer zero reset
	1/22/2007	0.13	-0.06	
	1/30/2007	-0.09	-0.14	
RW-2	1/2/2007	-0.06	-0.04	
	1/9/2007	-0.14	-0.02	
	1/16/2007	1.79	-0.05	Transducer zero reset
	1/22/2007	-0.23	-0.07	
	1/30/2007	-0.21	-0.03	
RW-3	1/2/2007	-0.34	-0.03	
	1/9/2007	-0.38	-0.04	
	1/16/2007	2.10	-0.04	Transducer zero reset
	1/22/2007	-0.04	-0.04	
	1/30/2007	-0.04	-0.06	
RW-4	1/2/2007	-0.08	1.12	
	1/9/2007	-0.11	0.69	
	1/16/2007	2.37	0.16	Transducer zero reset
	1/22/2007	0.03	0.09	
	1/30/2007	0.00	0.05	
PR-4	1/2/2007	-1.44	0.02	
	1/9/2007	-1.20	0.01	
	1/16/2007	0.37	0.24	Transducer zero reset
	1/22/2007	-0.03	-0.07	
	1/30/2007	-0.45	0.20	
RW-5	1/2/2007	-0.37	-0.03	
	1/9/2007	-0.43	-0.03	
	1/16/2007	0.54	0.01	Transducer zero reset
	1/22/2007	-0.13	-0.05	
	1/30/2007	0.75	0.03	
PR-12	1/2/2007	8.51	NA	
	1/9/2007	4.86	NA	
	1/16/2007	4.89	NA	
	1/22/2007	3.05	NA	Transducer zero reset
	1/30/2007	0.16	NA	

Transducer zero elevations (except PR-12) were re-measured and reset on January 19, 2007. The PR-12 transducer zero was measured and reset on January 26, 2007. The high difference in RW-5 on 1/30/2007 was likely due to the water level in the recovery well running below the bottom of the piezometer. The difference for PR-4 on 1/30/2007 was possibly caused by fouling and will be checked and cleaned if necessary.

DNAPL INSPECTION

On January 3, 2007, seven recovery wells and seven monitoring wells were inspected for the presence of DNAPL. The following table presents the results of the inspection:

Recovery Well	Volume Purged (gallons)	DNAPL Presence	DNAPL Quantity Removed (mL)	Comment
RW-1	1	NO		
RW-2	1	NO		
RW-3	1	NO		
RW-4	1	NO		
PR-4	1	NO		
RW-5	1	YES	Trace	
PR-12	NM	NM	NM	Could not get tubing to bottom of well due to scaling.
OBA-9AR	1	NO		
PN-11B	1	NO		
PN-12B	1.5	YES	350 mL	
PN-14B	1	YES	100 mL	
PN-15B	1	NO		
PN-21B	1	NO		Diffuser in well
PR-5	1	NO		
OBA-10A	1	NO		



LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL
- ⊖ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ○ GROUNDWATER RECOVERY WELLS
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT ELEVATION
- ✳ SUPPLEMENTAL REMEDIATION WELL
- ——— PROPERTY LINE

0 200 400

Scale 1 inch = 200 feet

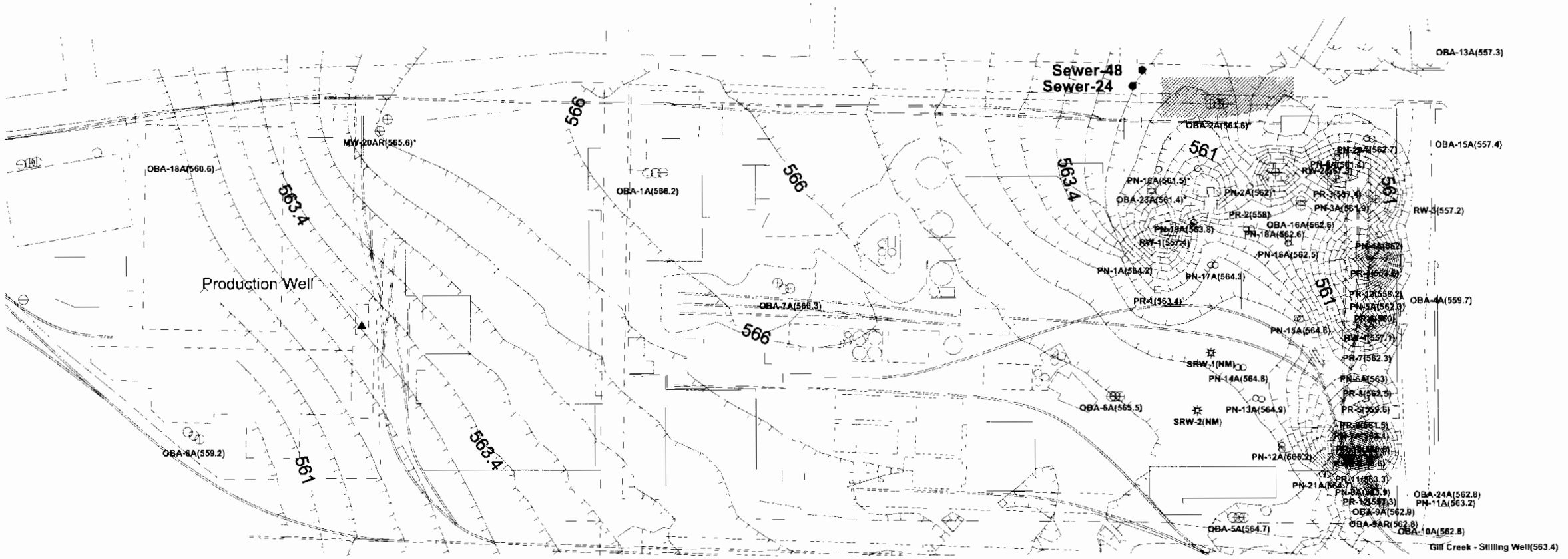
Prepared By: MET 06/19/2006
Checked By: AWE 06/20/2006

OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

WELL LOCATION MAP

Job No.: 6300-06-0005



LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL (FLOW RATE FROM DUPONT)
- ⊖ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ○ GROUNDWATER RECOVERY WELLS
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT
- ✲ SUPPLEMENTAL REMEDIATION WELL
- PROPERTY LINE
- 565 ESTIMATED GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL: 1 FOOT)
- EQUIPOTENTIAL CONTOUR EQUIVALENT TO GILL CREEK ELEVATION
- ESTIMATED DRY AREA IN ZONE A

Extraction Well	Average Flow Rate (gpm)***
RW-1	1.7
RW-2	30.3
RW-3	7.3
RW-4	8.7
RW-5	0.4
PR-4	1.1
PR-12	6.9
OBA-9AR	0.0

*** : Averaged using daily flow rates for February 2007.
: The water levels in RW-1, RW-2, RW-3, RW-4, RW-5, PR-4, and PR-12 were below the bottom of the A-zone.

0 200 400

Scale 1 inch = 200 feet

NOTES

* . Well dry, elevation of bottom of A-Zone used in contouring.

● : Buffalo Avenue Sewer invert is assumed to be a groundwater sink. The piezometric surface is estimated as the bottom of the A-zone. The bottom of the A-zone along Buffalo Avenue was estimated from borings OBA-1A, OBA-2A, OBA-3A, and OBA-11A.

NM : Not measured

The Gill Creek elevation is continuously monitored (1 hr intervals), using a data logging transducer installed in the Gill Creek stilling well. Due to technical difficulty, the transducer data is unavailble for February 2007. A discrete measurement from Gill Creek Stilling was used in contouring the A-Zone

POTENTIOMETRIC SURFACE CONTOUR GENERATED USING SURFER 8 FOR WINDOWS BY GOLDEN SOFTWARE, INC. 2002.

Prepared By VUO 03/26/2007
Checked By AWE 03/27/2007

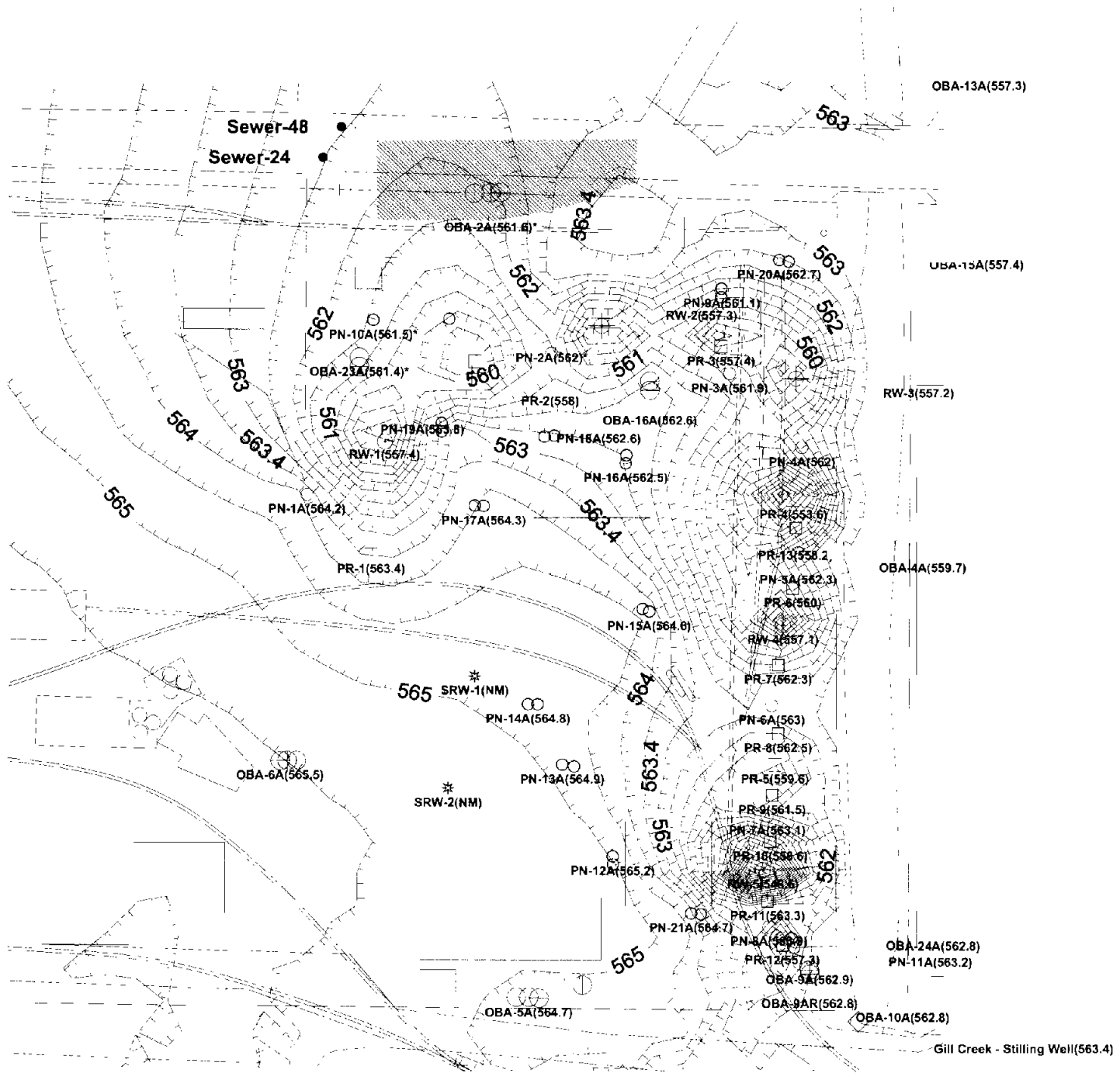
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

POTENTIOMETRIC SURFACE -- A ZONE
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 1



Extraction Well	Average Flow Rate (gpm)***
RW-1	1.7
RW-2	30.3
RW-3	7.3
RW-4	8.7
RW-5	0.4
PR-4	1.1
PR-12	6.9
OBA-9AR	0.0

*** : Averaged using daily flow rates for February 2007.
: The water levels in RW-1, RW-2, RW-3, RW-4, RW-5, PR-4, and PR-12 were below the bottom of the A-zone.

LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL (FLOW RATE FROM DUPONT)
- ⊖ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ⊖ GROUND WATER RECOVERY WELLS
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT
- ✲ SUPPLEMENTAL REMEDIATION WELL
- ——— PROPERTY LINE
- 565 ESTIMATED GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL: 1 FOOT)
- ——— EQUIPOTENTIAL CONTOUR EQUIVALENT TO GILL CREEK ELEVATION
- ESTIMATED DRY AREA IN THE A-ZONE

0 120 240
Scale 1 inch = 120 feet

NOTES

* : Well dry, elevation of bottom of A-Zone used in contouring.

● : Buffalo Avenue Sewer invert is assumed to be a groundwater sink. The piezometric surface is estimated as the bottom of the A-zone. The bottom of the A-zone along Buffalo Avenue was estimated from borings OBA-1A, OBA-2A, OBA-3A, and OBA-11A.

NM : Not measured

The Gill Creek elevation is continuously monitored (1 hr intervals), using a data logging transducer installed in the Gill Creek stilling well. Due to technical difficulty, the transducer data is unavailble for February 2007. A discrete measurement from Gill Creek Stilling was used in contouring the A-Zone

POTENTIOMETRIC SURFACE CONTOUR GENERATED USING SURFER 8 FOR WINDOWS BY GOLDEN SOFTWARE, INC 2002

Prepared By VUO 03/26/2007
Checked By AWE 03/27/2007

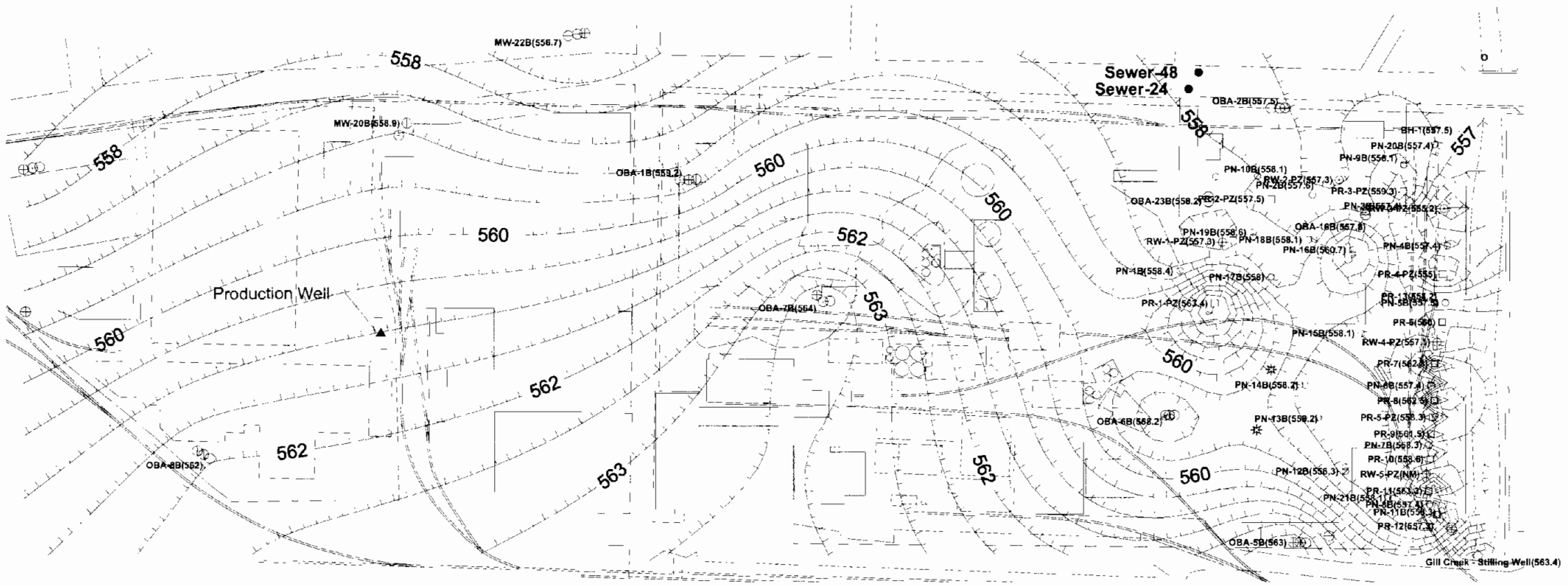
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

ARGC AREA
POTENTIOMETRIC SURFACE -- A ZONE
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 1A



0 200 400

Scale: 1 inch = 200 feet

LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL (FLOW RATE FROM DUPONT)
- ○ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ⊖ GROUNDWATER RECOVERY WELLS
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT
- ✲ SUPPLEMENTAL REMEDIATION WELL
- ——— PROPERTY LINE
- 565 ESTIMATED GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL: 1 FOOT)

Extraction Well	Average Flow Rate (gpm)***
RW-1	1.7
RW-2	30.3
RW-3	7.3
RW-4	8.7
RW-5	0.4
PR-4	1.1
PR-12	6.9
OBA-9AR	0.0

*** : Averaged using daily flow rates for February 2007.
: The water levels in RW-1, RW-2, RW-3, RW-4, RW-5, PR-4, and PR-12 were below the bottom of the A-zone.

NOTES

▲ : Olin Production Well.
● : Buffalo Avenue Sewer invert is assumed to be a groundwater sink. The piezometric surface is not known
The ground water contours were estimated based on the sewer invert elevation.
PN-2B elevation used as dummy points north of RW-2.
: The Gill Creek elevation is continuously monitored (1 hr intervals), using a data logging transducer installed in the Gill Creek stilling well.
: Contour interval = 1 foot
: Hypothetical data points (563.4 feet msl) added along southern portion of Gill Creek in area without monitoring wells to account for leakage.

POTENTIOMETRIC SURFACE CONTOUR GENERATED USING SURFER 8 FOR WINDOWS BY GOLDEN SOFTWARE, INC. 2002.

Prepared By: VUO 03/26/2007
Checked By: AWE 03/27/2007

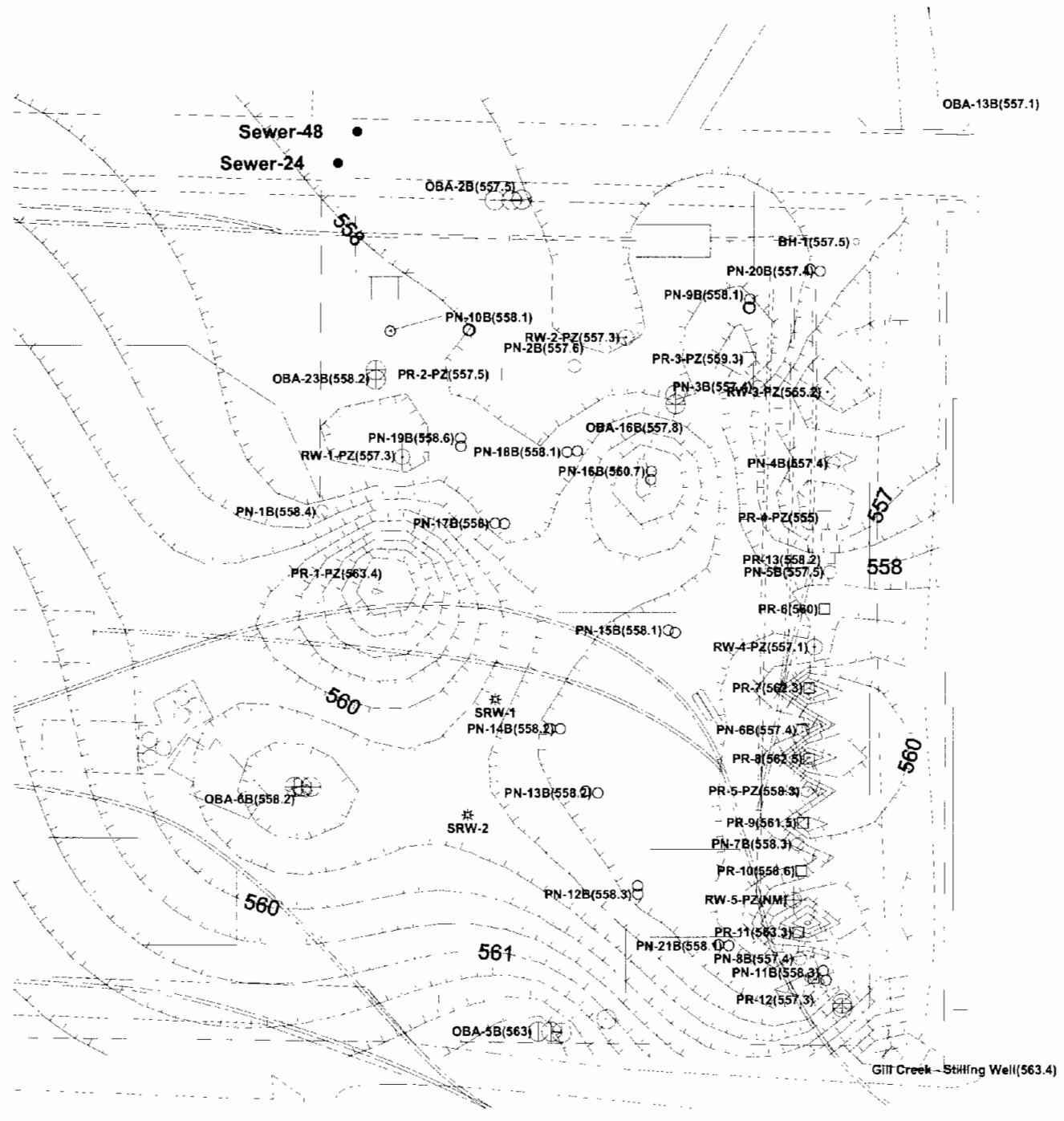
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

POTENTIOMETRIC SURFACE -- B ZONE
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 2



Extraction Well	Average Flow Rate (gpm)***
RW-1	1.7
RW-2	30.3
RW-3	7.3
RW-4	8.7
RW-5	0.4
PR-4	1.1
PR-12	6.9
OBA-9AR	0.0

*** : Averaged using daily flow rates for February 2007.
: The water levels in RW-1, RW-2, RW-3, RW-4, RW-5, PR-4, and PR-12 were below the bottom of the A-zone.

LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL (FLOW RATE FROM DUPONT)
- ○ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ⊖ GROUND WATER RECOVERY WELLS
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT
- ✲ SUPPLEMENTAL REMEDIATION WELL
- ——— PROPERTY LINE
- 565 ——— ESTIMATED GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL: 1.0 FEET)

0 120 240

Scale: 1 inch = 120 feet

NOTES

- * : Elevation not used in contouring.
- ▲ : Olin Production Well
- ● : Buffalo Avenue Sewer invert is assumed to be a ground-water sink. The piezometric surface is not known. The ground water contours were estimated based on the sewer invert elevation. PN-2B elevation used as dummy points north of RW-2.
- : The Gill Creek elevation is continuously monitored (1 hr intervals), using a data logging transducer installed in the Gill Creek stilling well.
- : Contour interval = 1 foot
- : Hypothetical data points (563.4 feet msl) added along southern portion of Gill Creek in area without monitoring wells to account for leakage.

POTENTIOMETRIC SURFACE CONTOUR GENERATED USING SURFER 8 FOR WINDOWS BY GOLDEN SOFTWARE, INC 2002

Prepared By: VUO 03/26/2007
Checked By: AWE 03/27/2007

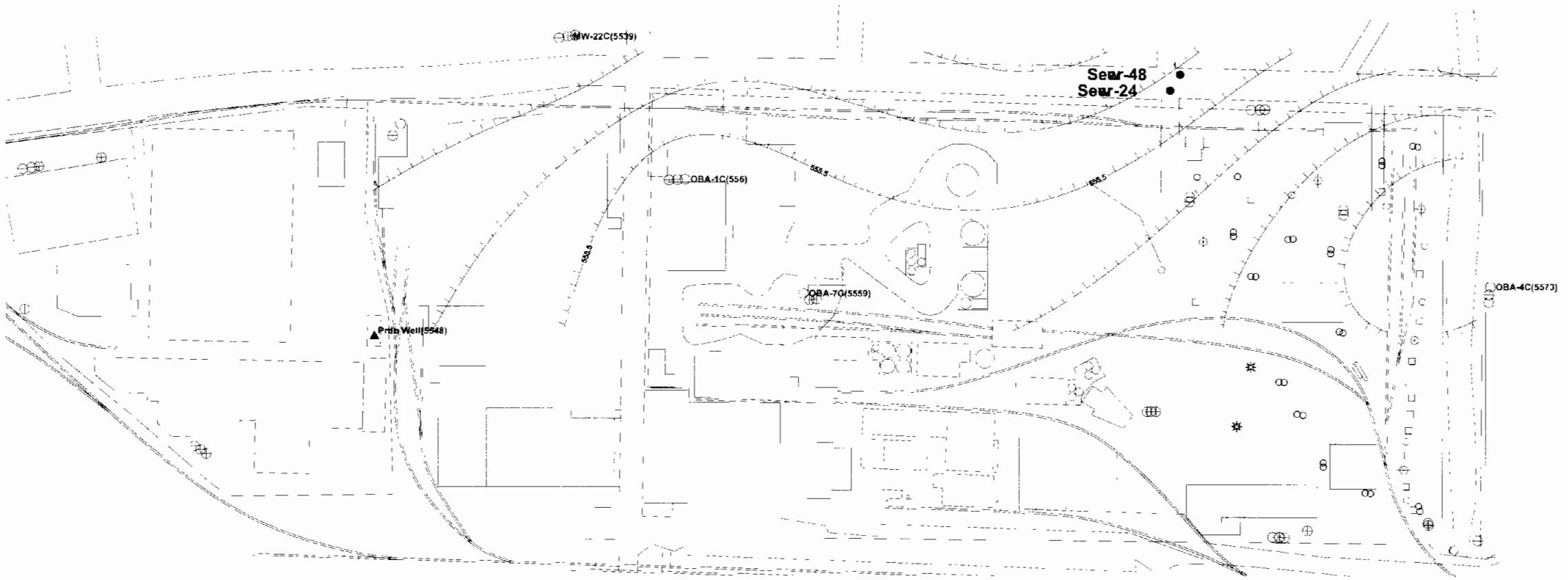
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

ARGC AREA
POTENTIOMETRIC SURFACE -- B ZONE
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 2A



N

LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL (FLOW RATE FROM DUPONT)
- ⊖ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ⊕ GROUNDWATER RECOVERY WELLS (FLOW RATE FROM OMNX SYSTEM)
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT
- PROPERTY LINE
- 565 ESTIMATED GROUNDWATER CONTOUR LINES (CONTOUR INTERVAL: 1 FOOT)

POTENTIOMETRIC SURFACE CONTOUR GENERATED USING SURFER 8 FOR WINDOWS BY GOLDEN SOFTWARE, INC 2002

Well	Average Flow Rate (gpm)
Olin Production Well	520

Pumping Rate to Water Elevation Conversion:
Y = -0.00613915 (X) + 557.951

Where:
Y = Water Elevation (ft)
X = Pumping Rate (gpm)

0 200 400
Scale 1 inch = 200 feet

Prepared By: VUO 03/26/2007
Checked By: AWE 03/27/2007

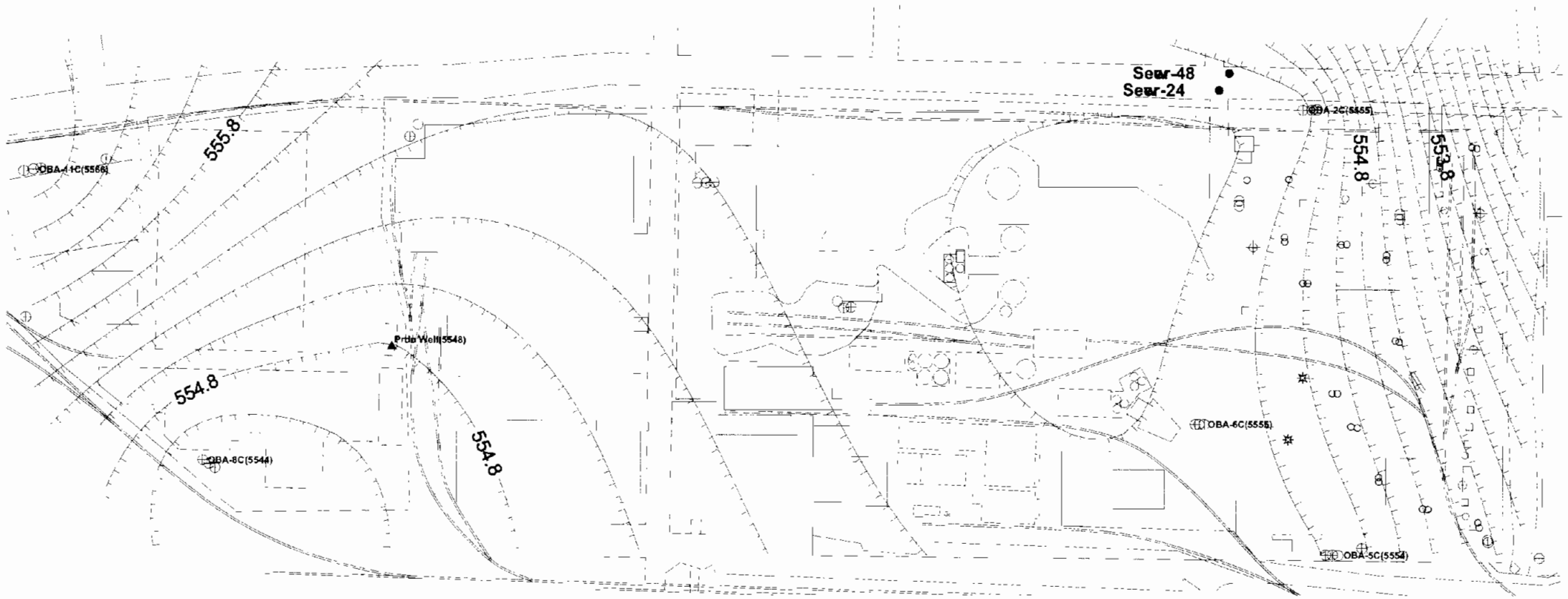
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

POTENTIOMETRIC SURFACE -- C ZONE
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 3



N

LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL (FLOW RATE FROM DUPONT)
- ⊖ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ⊖ GROUNDWATER RECOVERY WELLS (FLOW RATE FROM OMNX SYSTEM)
- □ PASSIVE RELIEF WELLS
- ● SEWER INVERT

———— PROPERTY LINE

565 ESTIMATED GROUNDWATER CONTOUR LINES

Well	Average Flow Rate (gpm)
Olin Production Well	520

Pumping Rate to Water Elevation Conversion:
Y = -0.00613915 (X) + 557.951

Where:
Y = Water Elevation (ft)
X = Pumping Rate (gpm)

0 200 400
Scale 1 inch = 200 feet

POTENTIOMETRIC SURFACE CONTOUR GENERATED USING SURFER 8 FOR WINDOWS BY GOLDEN SOFTWARE INC. 2002.

Prepared By VUO 03/26/2007
Checked By AWE 03/27/2007

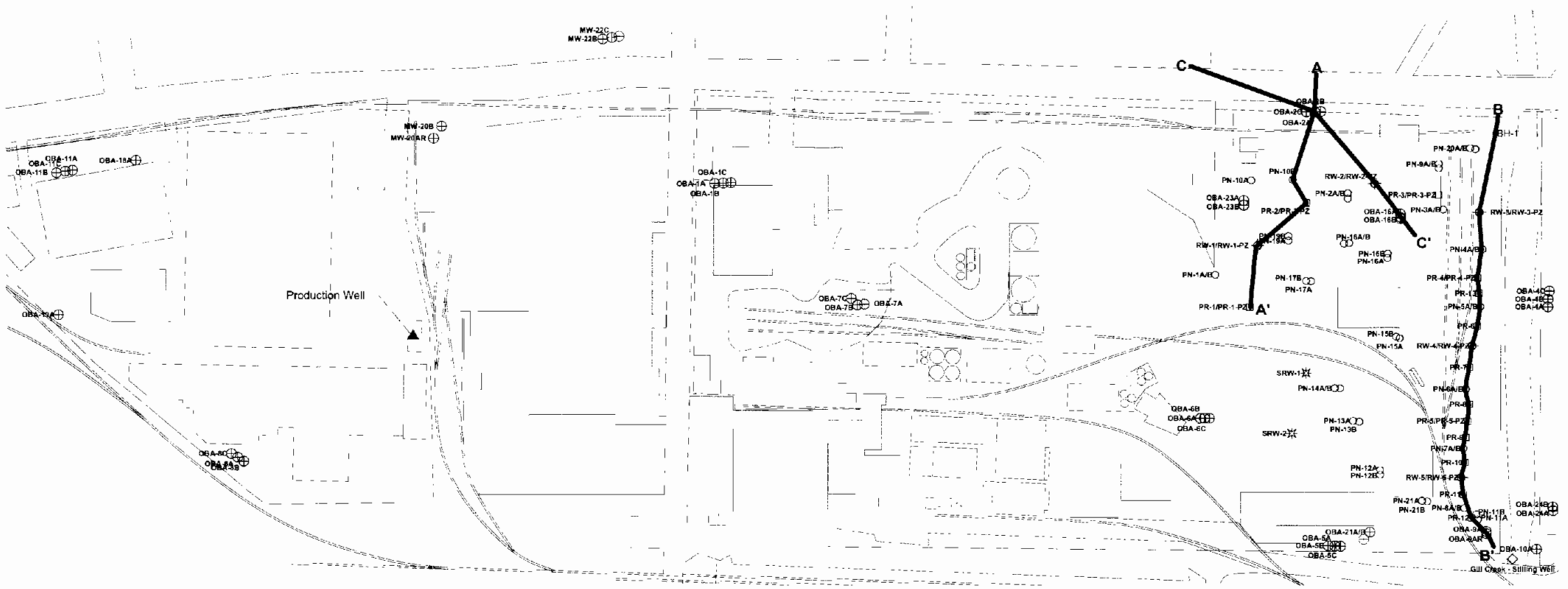
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

POTENTIOMETRIC SURFACE -- C/ZONE
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 4



LEGEND

- ◇ GILL CREEK MONITORING POINT
- ▲ OLIN PRODUCTION WELL
- ⊖ WATER QUALITY MONITORING WELLS
- ○ A/B ZONE PIEZOMETER NESTS
- ○ GROUNDWATER RECOVERY WELLS
- ⌋ PASSIVE RELIEF WELLS
- ● SEWER INVERT ELEVATION
- ✳ SUPPLEMENTAL REMEDIATION WELL
- ——— PROPERTY LINE

0 200 400

Scale 1 inch = 200 feet

Prepared By: LMS 01/03/2007
Checked By: AWE 01/05/2007

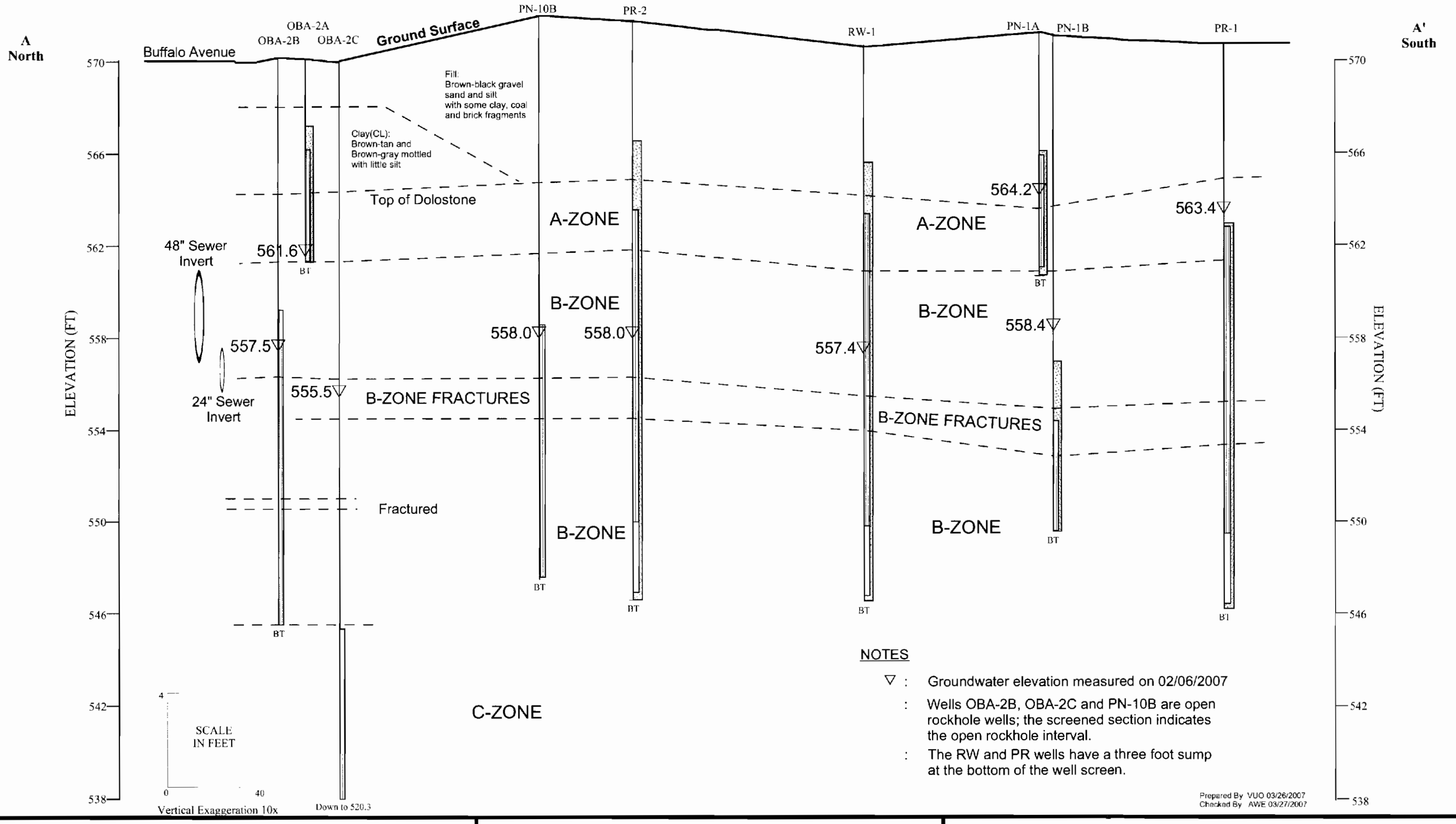
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

CROSS SECTION LOCATION MAP
(FEBRUARY 6, 2006)

Job No.: 6100-07-0001

Figure 5



NOTES

▽ : Groundwater elevation measured on 02/06/2007

: Wells OBA-2B, OBA-2C and PN-10B are open rockhole wells; the screened section indicates the open rockhole interval.

: The RW and PR wells have a three foot sump at the bottom of the well screen.

Prepared By VUO 03/26/2007
Checked By AWE 03/27/2007

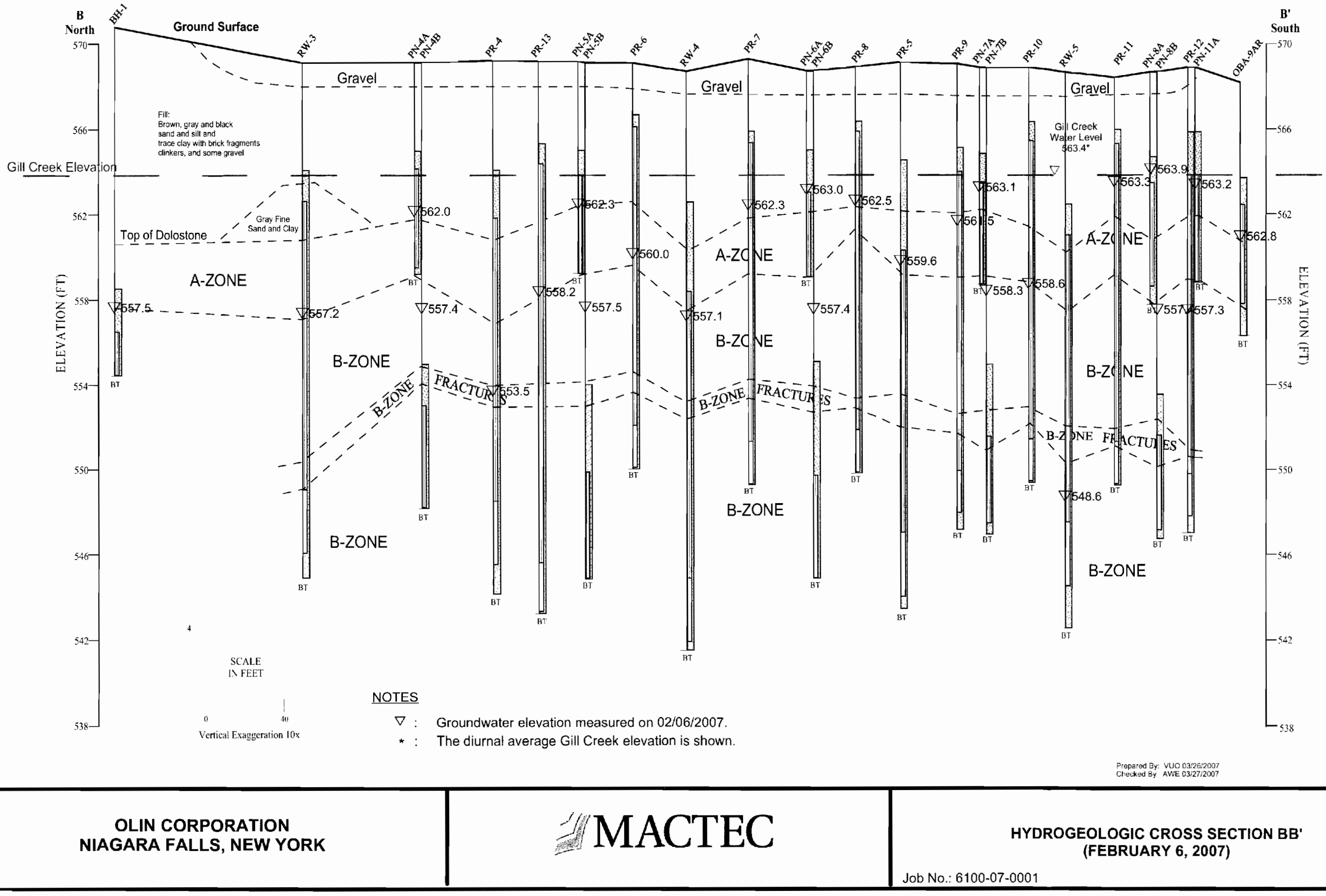
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

HYDROGEOLOGIC CROSS SECTION AA'
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 6



NOTES

▽ : Groundwater elevation measured on 02/06/2007.

* : The diurnal average Gill Creek elevation is shown.

Prepared By: VUO 03/26/2007
Checked By AWE 03/27/2007

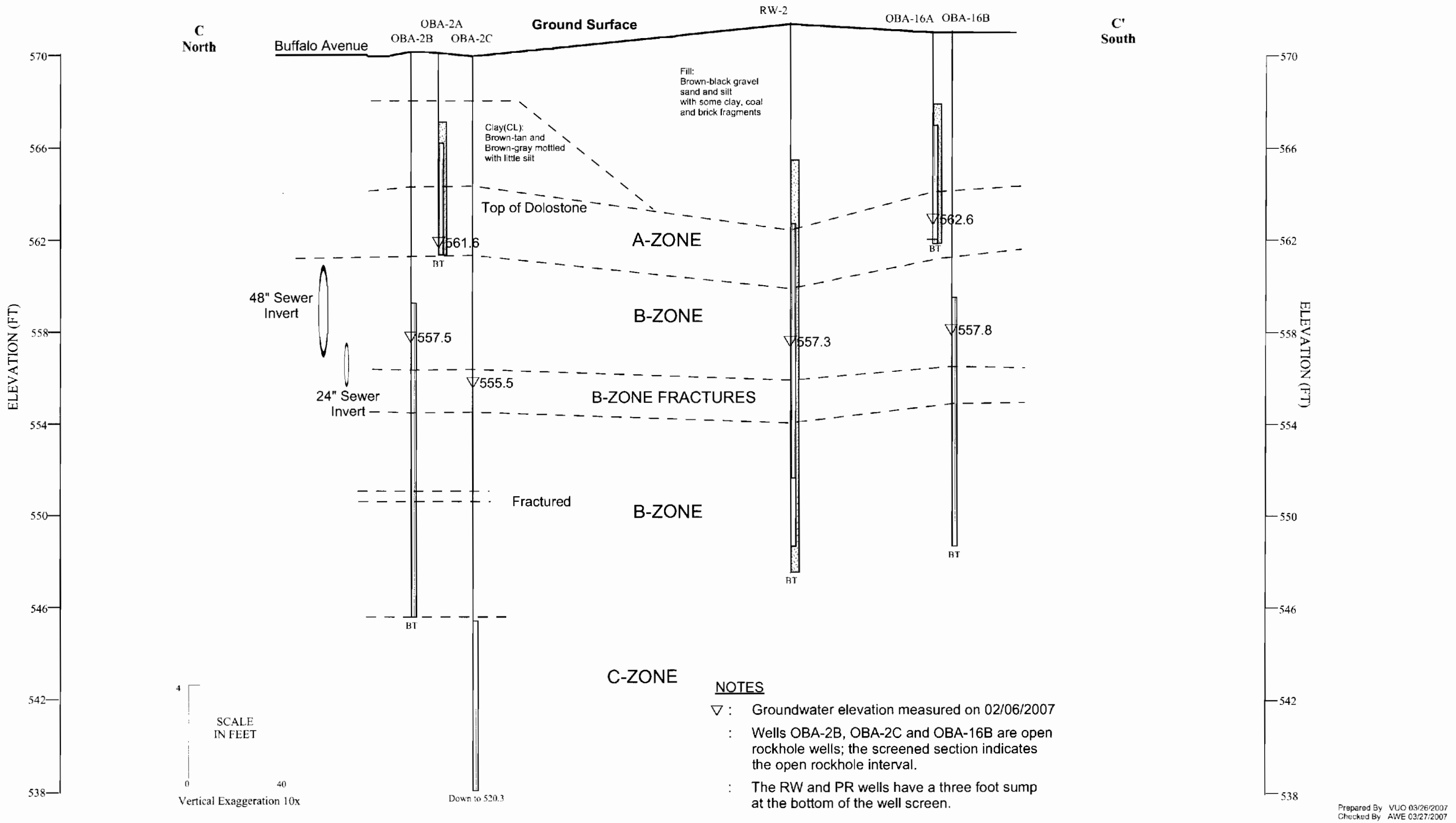
OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

HYDROGEOLOGIC CROSS SECTION BB'
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 7



NOTES

▽ : Groundwater elevation measured on 02/06/2007

: Wells OBA-2B, OBA-2C and OBA-16B are open rockhole wells; the screened section indicates the open rockhole interval.

: The RW and PR wells have a three foot sump at the bottom of the well screen.

Prepared By VUO 03/26/2007
Checked By AWE 03/27/2007

OLIN CORPORATION
NIAGARA FALLS, NEW YORK

MACTEC

HYDROGEOLOGIC CROSS SECTION CC'
(FEBRUARY 6, 2007)

Job No.: 6100-07-0001

Figure 8

HYDROGRAPHS

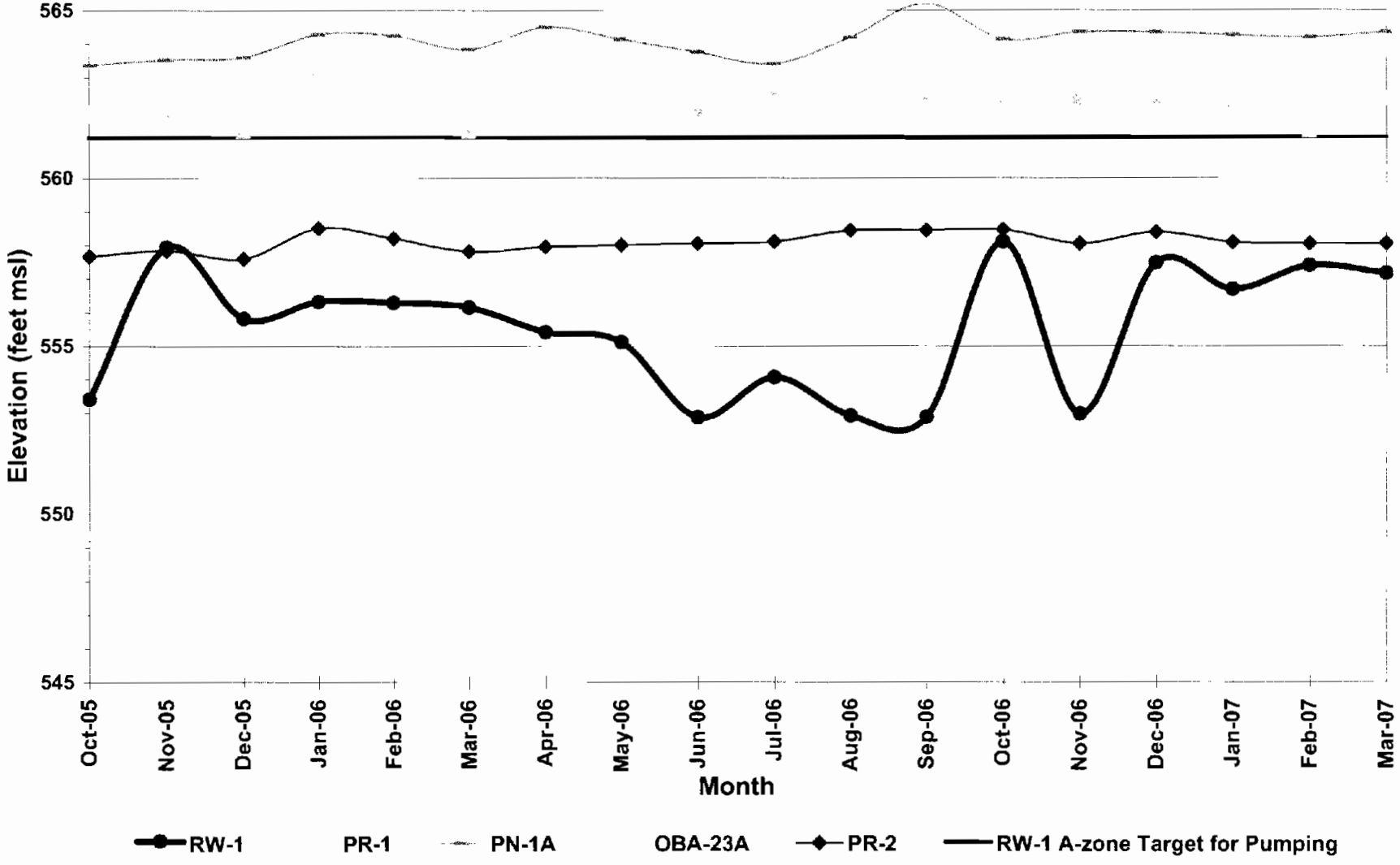
Table A-1
A-Zone
RW-1 and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
PR-1	561.96	562.04	562.27	563.58	563.26	562.55	563.26	562.98	562.66	562.51	563.49	563.61	563.33	563.63	563.91	563.60	563.39	563.92
PN-1A	563.36	563.53	563.59	564.28	564.24	563.82	564.49	564.13	563.75	563.40	564.18	565.19	564.13	564.34	564.33	564.25	564.19	564.34
RW-1	553.41	557.93	555.81	556.31	556.28	556.14	555.41	555.11	552.87	554.07	552.92	552.88	558.10	552.97	557.47	556.68	557.38	557.15
OBA-23A	561.87	561.84	561.40	563.19	562.50	561.40	562.46	561.76	561.89	562.46	562.05	562.44	562.16	562.34	562.28	561.98	561.40	562.36
PR-2	557.66	557.83	557.59	558.50	558.20	557.81	557.95	558.00	558.05	558.10	558.44	558.44	558.46	558.04	558.38	558.08	558.04	558.04
RW-1 A-zone Target	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20	561.20

Notes:
Elevations are reported in feet above mean seal level (msl)
*An elevation of 561.40 feet msl for OBA-23A indicates that this well is dry
#N/A Unable to collect water level

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Figure A-1
RW-1 Drawdown and Adjacent A-Zone Water Table Surface



Prepared by: AWE 4/1/07
Checked by: CMB 4/5/07

msl - mean sea level

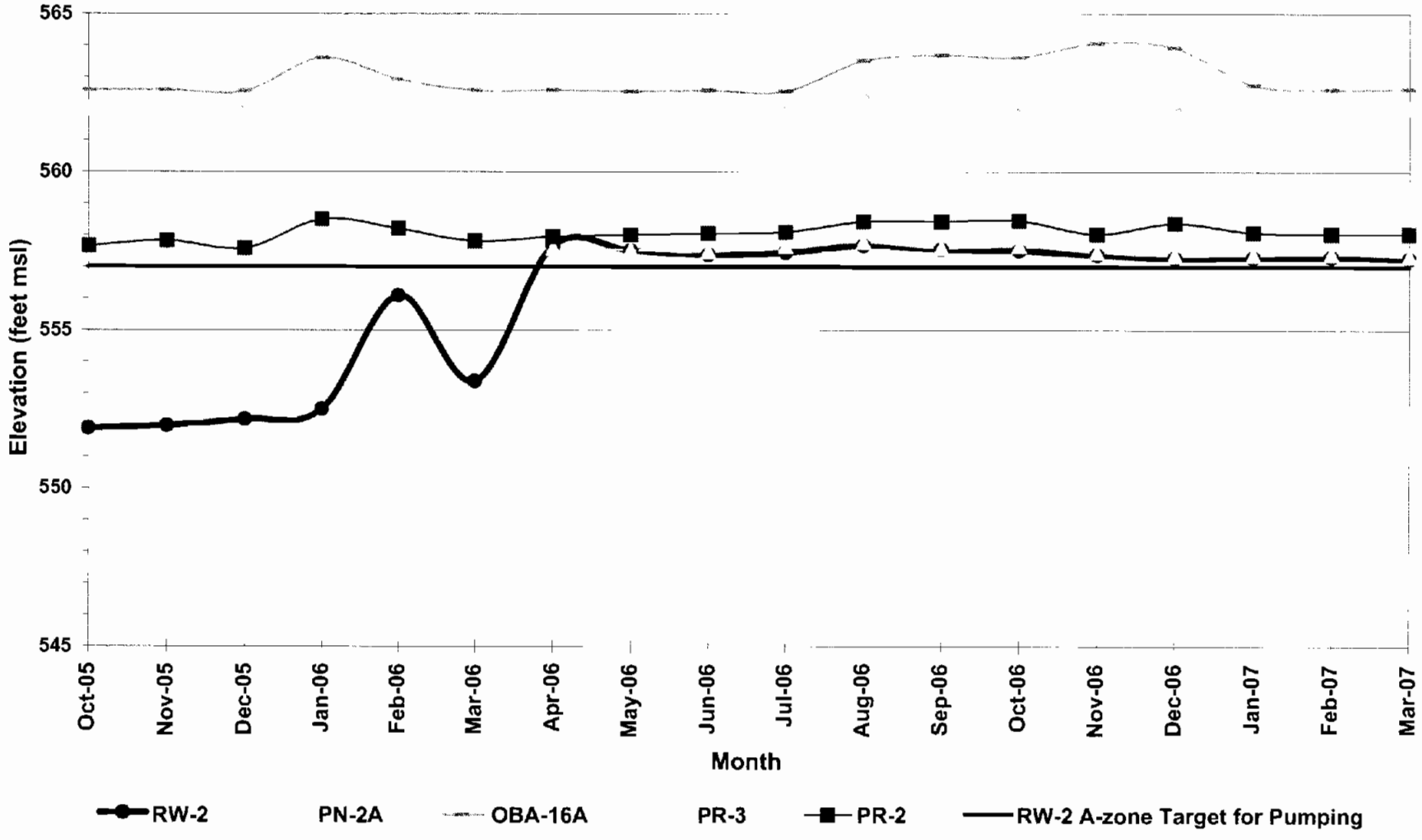
Table A-2
A-Zone
RW-2 and Adjaeent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
PN-2A*	562.00	562.00	562 00	562.49	562 00	562.00	562 00	562.00	562.00	562.00	562.40	562.00	562.00	562.44	562.00	562.00	562.00	562.00
RW-2	551.89	551.97	552.17	552.50	556 09	553 38	557.66	557.51	557.39	557.45	557.68	557 56	557 52	557.38	557 28	557.29	557.31	557.25
OBA-16A	562.59	562.59	562 55	563 60	562 92	562 57	562.58	562.54	562.58	562.55	563.51	563.68	563.62	564.07	563.92	562.74	562 60	562.62
PR-3	557.48	557.41	557.38	557 51	557 42	557 29	557.59	557.54	557.49	557.65	557.79	557.61	557 66	557 47	557 36	557.38	557 40	557.34
PR-2	557.66	557 83	557.59	558.50	558.20	557.81	557.95	558.00	558.05	558.10	558.44	558.44	558.46	558.04	558 38	558.08	558 04	558 04
RW-2 A-zone Target	557.00	557 00	557.00	557 00	557.00	557.00	557.00	557.00	557.00	557.00	557 00	557 00	557 00	557 00	557 00	557 00	557 00	557 00

Notes:
Elevations are reported in feet above mean seal level (msl)
*An elevation of 562.00 feet msl for PN-2A indicates that the piezometer is dry.

Prepared by : AWF 4/1/07
Checked by CMB 4/5/07

Figure A-2
RW-2 Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

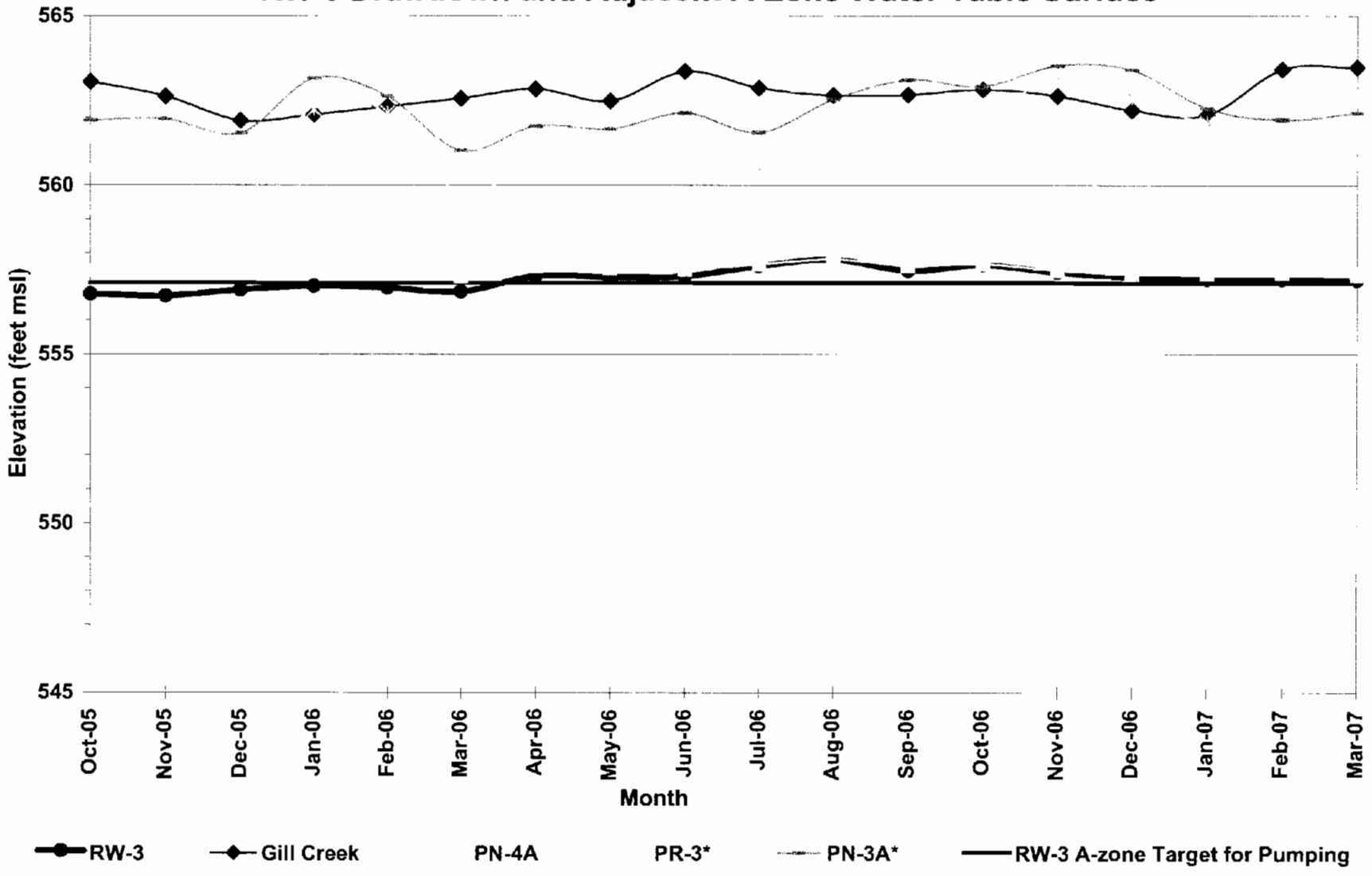
Table A-3
A-Zone
RW-3 and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Gill Creek - Stilling Well	563.04	562.61	561.90	562.08	562.31	562.55	562.83	562 48	563 35	562 86	562 64	562 66	562.82	562.62	562 20	562.06	563.42	563.48
PN-3A	561.90	561.94	561 52	563 15	562 61	561.01	561.73	561 65	562 12	561 54	562 52	563.10	562.91	563.52	563.39	562.26	561 92	562.12
RW-3	556 76	556 71	556.89	557.00	556.95	556.84	557.30	557.27	557.30	557.60	557.79	557.46	557.63	557.41	557.27	557.20	557.20	557.18
PN-4A	561.49	561.40	560.44	562 23	562.13	559.74	560.78	561 02	561.37	560.52	561.82	562.08	561.96	563.26	562.60	561.84	561.96	561 33
PR-3	557 48	557 41	557.38	557.51	557.42	557.29	557.59	557.54	557.49	557.65	557.79	557.61	557.66	557.47	557.36	557.38	557 40	557 34
RW-3 A-zone Target	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557.10	557 10	557.10	557.10	557.10	557 10

Note
Elevations are reported in feet above mean seal level (msl)

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Figure A-3
RW-3 Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Table A-4

A-Zone

RW-4 and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Gill Creek -Stilling Well	563.04	562 61	561.90	562.08	562.31	562.55	562 83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562 06	563 42	563 48
PN-5A	562.37	562.12	561.73	562.57	562.48	561.74	562.06	562.03	562.44	562.06	562.68	562 79	562.80	562 99	562.68	562.27	562 29	562.08
PR-13**	559.20	559.16	559.16	559.49	559.34	559.14	559 37	559.35	559.24	559.14	559.36	559.10	559 16	559.24	559.20	558 95	558.20	NM
RW-4	556.49	556.56	556.66	557.08	556.85	556.16	557 19	556.90	556.49	557.30	557.52	557.49	557 56	555 61	555.99	554.79	557.06	557.00
PN-6A	562.72	562.70	562.35	563.31	563.23	562 44	562 80	562.80	562.90	562.36	562.97	563.13	563.21	563.46	563.31	563.11	562.96	562.95
PR-6*	560.25	560.14	560.18	560 36	560.49	559.91	560 15	560 04	560.28	559.89	560.10	559.88	559.97	559.93	560.59	560.20	559.97	560.52
PR-7*	562.41	562 34	562.02	563.79	562.95	562 09	562 38	562.34	562.54	562.10	562.65	562.78	562.78	563.80	562.69	562.56	562.25	562.33
RW-4 A-zone Target	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557 30

Notes:

Elevations are reported in feet above mean seal level (msl)

Due to significant well loss documented in RW-4 for March-02, the water level in RW-4-PZ is used as a more accurate water level for RW-4.

* Passive relief well installed in September 2002.

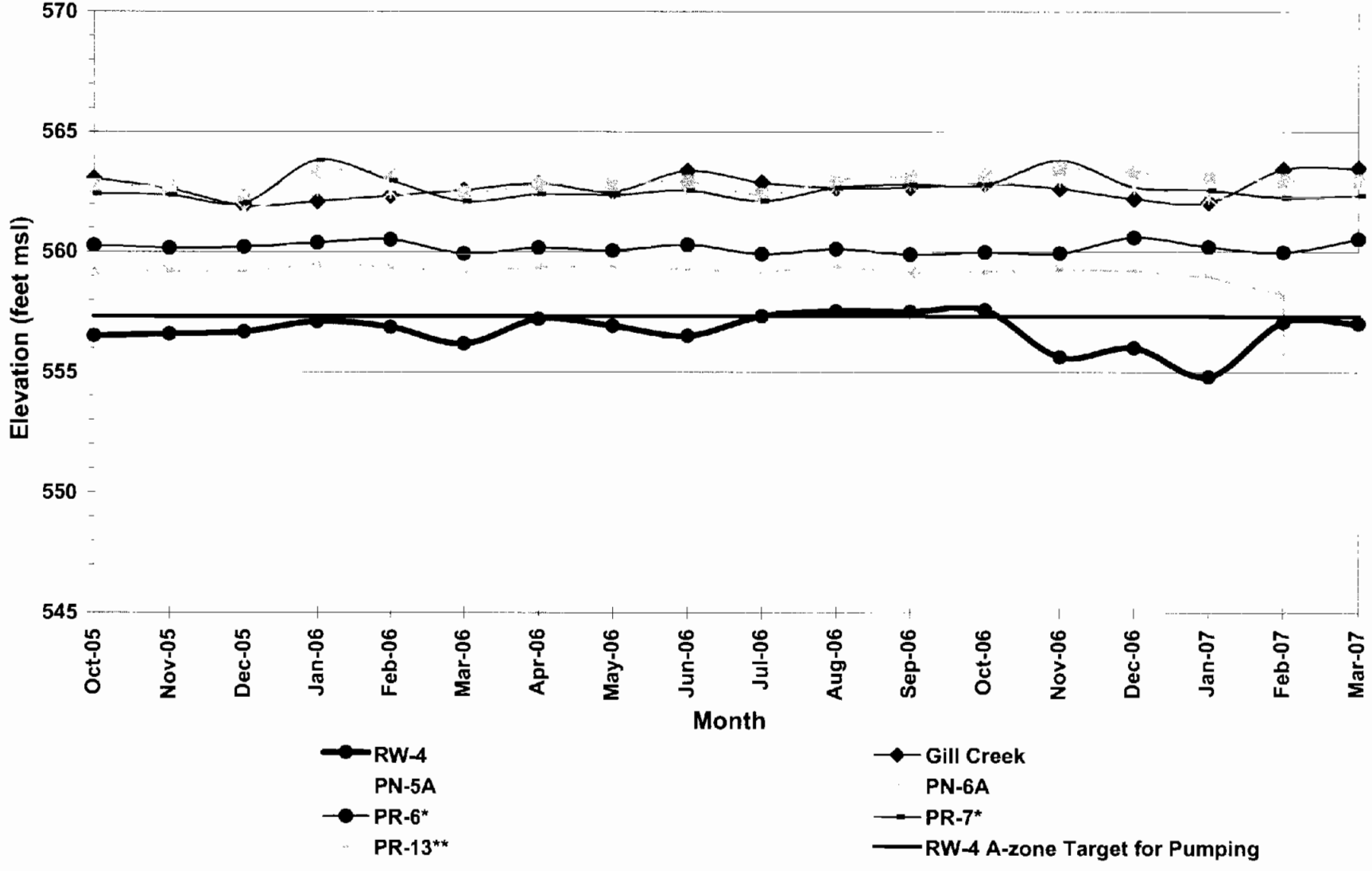
** Passive relief well Installed June 2003

NI - Not Installed

Prepared by AWE 4/1 07

Checked by: CMB 4/5/07

Figure A-4
RW-4 Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by AWE 4/1/07
Checked by CMB 4/5/07

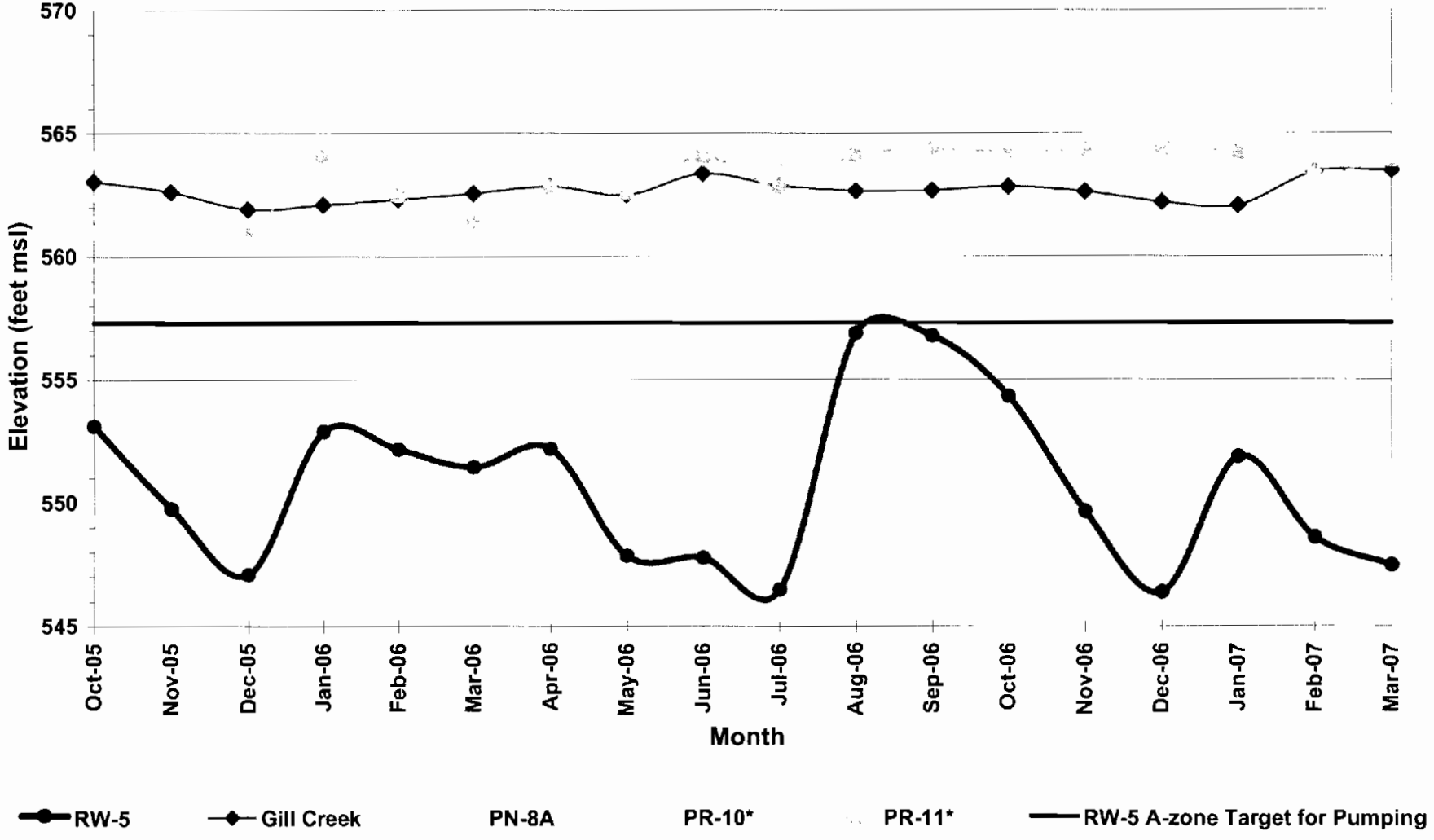
Table A-5
A-Zone
RW-5 and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Gill Creek - Stilling Well	563.04	562 61	561 90	562 08	562.31	562.55	562 83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
RW-5	553.11	549.75	547.09	552.87	552 17	551.45	552 19	547.85	547.77	546.47	556.88	556.77	554.31	549 65	546 38	551.87	548 60	547.47
PN-8A	563.91	564.01	563.96	564.77	564.53	563.94	564.06	563.96	563.93	563.76	564.25	564.56	564.42	564.60	564 57	564 45	563.92	564 26
PR-10*	558.41	558.62	558.50	559.06	559 17	558.91	559.27	559,26	559,61	559.21	559.22	559.07	559.32	559.42	558.37	558.42	558.57	NM
PR-11*	561.02	561.18	560.99	564.07	562.50	561.39	562.80	562 61	564.04	562.82	564.10	564.29	564.24	564.30	564.37	564.19	563.33	563.90
RW-5 A-zone Target	557.30	557 30	557 30	557 30	557 30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30	557.30

Notes
Elevations are reported in feet above mean seal level (msl)
*Passive relief well installed September 2002.
NI - Not Installed

Prepared by : AWE 4/1/07
Checked by CMB 4/5/07

Figure A-5
RW-5 Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by. CMB 4/5/07

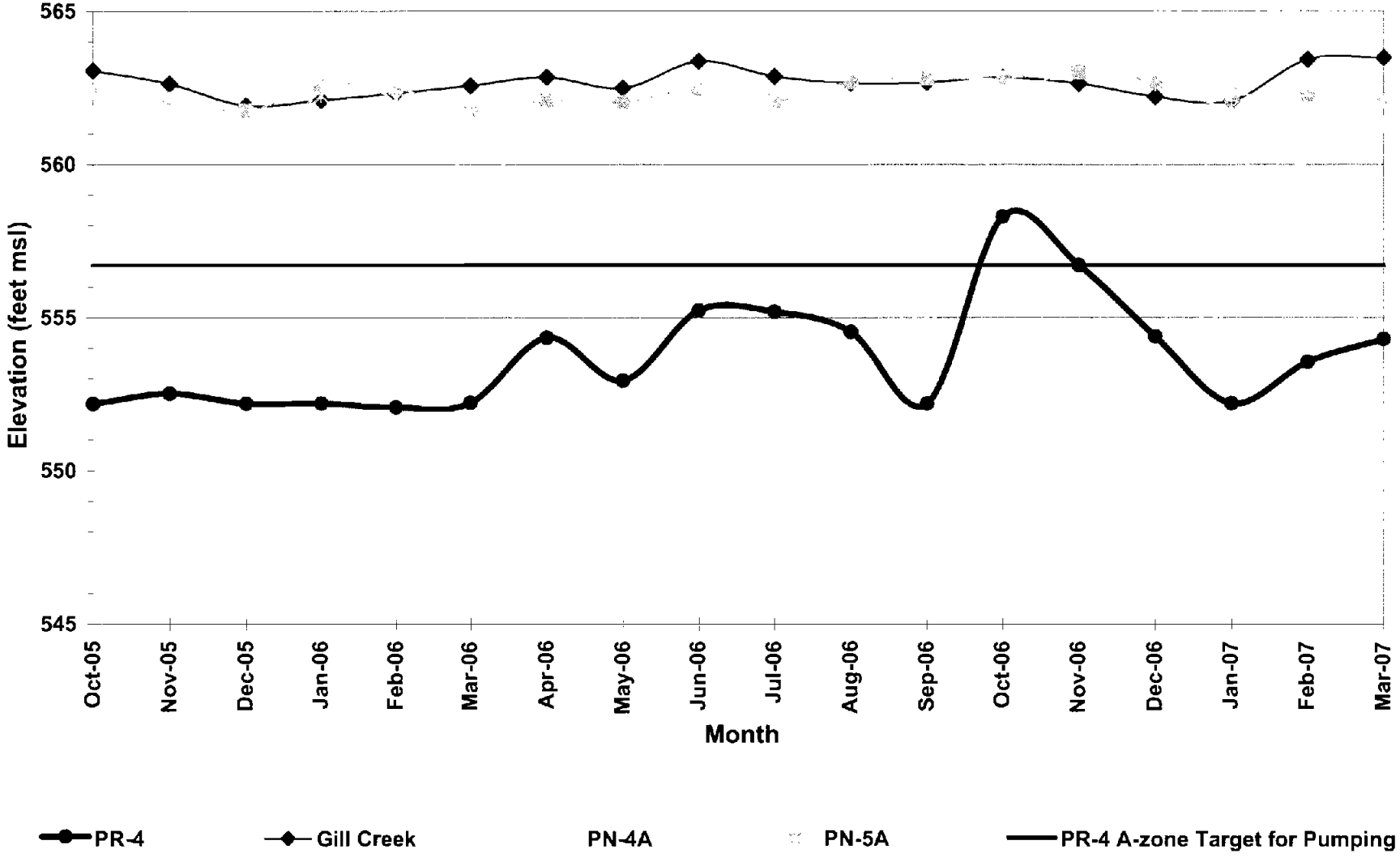
Table A-6
A-Zone
PR-4 and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Gill Creek - Stilling Well	563.04	562.61	561.90	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
PR-4	552.17	552.51	552.18	552.19	552.06	552.21	554.34	552.93	555.23	555.19	554.53	552.19	558.29	556.71	554.38	552.20	553.55	554.30
PN-4A	561.49	561.40	560.44	562.23	562.13	559.74	560.78	561.02	561.37	560.52	561.82	562.08	561.96	563.26	562.60	561.84	561.96	561.33
PN-5A	562.37	562.12	561.73	562.57	562.48	561.74	562.06	562.03	562.44	562.06	562.68	562.79	562.80	562.99	562.68	562.27	562.29	562.08
PR-4 A-zone Target	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70	556.70

Notes:
Elevations are reported in feet above mean seal level (msl)

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Figure A-6
PR-4 Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

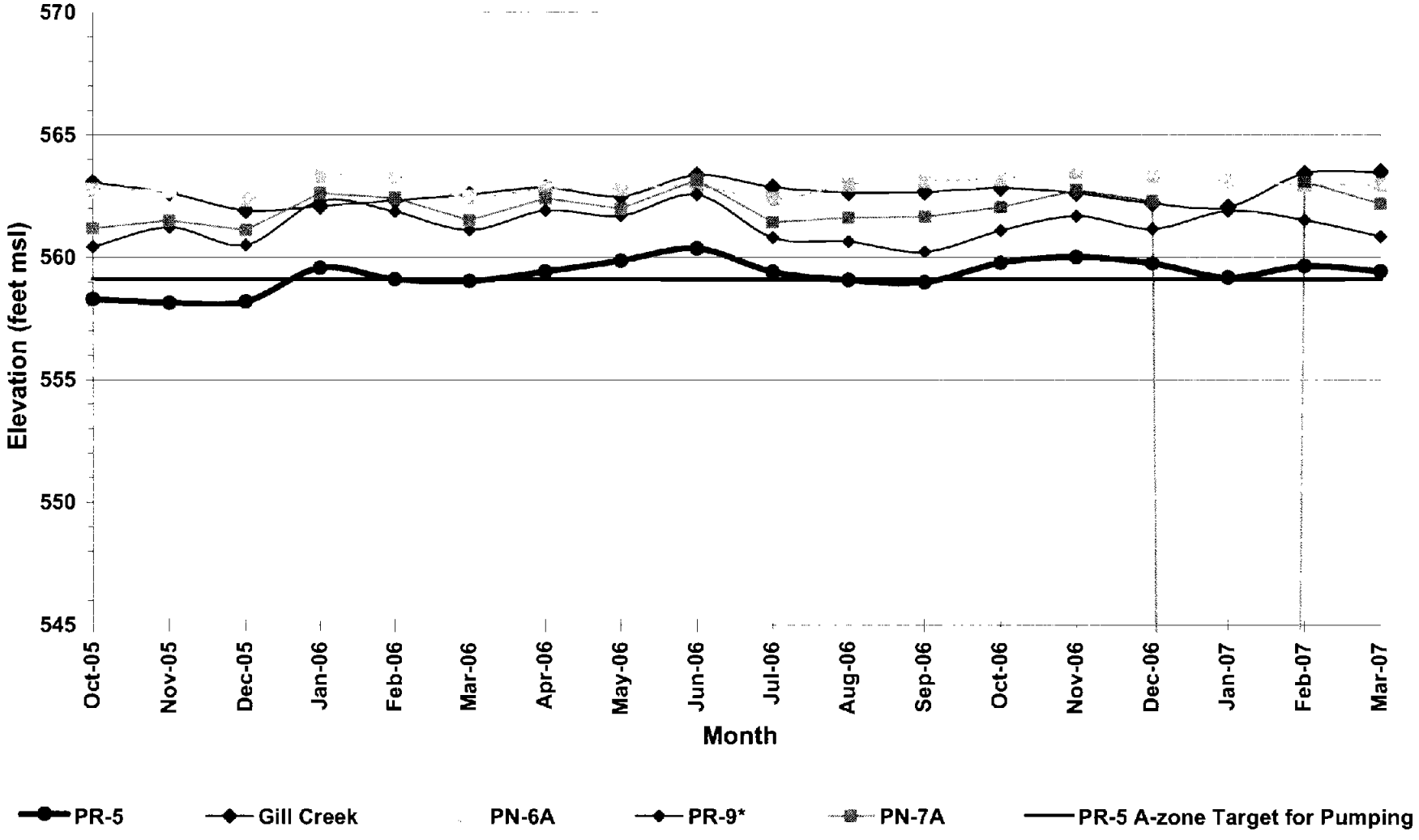
Table A-7
A-Zone
PR-5 and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Gill Creek - Stilling Well	563.04	562.61	561.90	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562 20	562.06	563 42	563 48
PR-5	558.27	558.12	558.18	559 56	559 09	559.01	559.41	559.85	560.35	559.40	559.07	558.97	559.77	560.00	559.75	559.17	559 64	559.42
PN-7A	561.16	561.48	561.09	562.61	562.40	561.49	562.39	561.97	563.15	561 42	561 61	561.64	562.03	562.73	562.29	NM	563.08	562.17
PR-9*	560.41	561.21	560.49	562 29	561 85	561.10	561 90	561.68	562.54	560.79	560.64	560.21	561.08	561 67	561 15	561.89	561.51	560.84
PN-6A	562.72	562.70	562.35	563 31	563 23	562.44	562.80	562.80	562.90	562.36	562.97	563.13	563.21	563.46	563.31	563.11	562.96	562.95
PR-5 A-zone Target	559.10	559.10	559 10	559 10	559 10	559 10	559 10	559.10	559.10	559.10	559.10	559.10	559.10	559 10	559 10	559.10	559.10	559.10

Notes
Elevations are reported in feet above mean seal level (msl)
* Passive relief well installed September 2002.
NM - Not Measured

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Figure A-7
PR-5 Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by. CMB 4/5/07

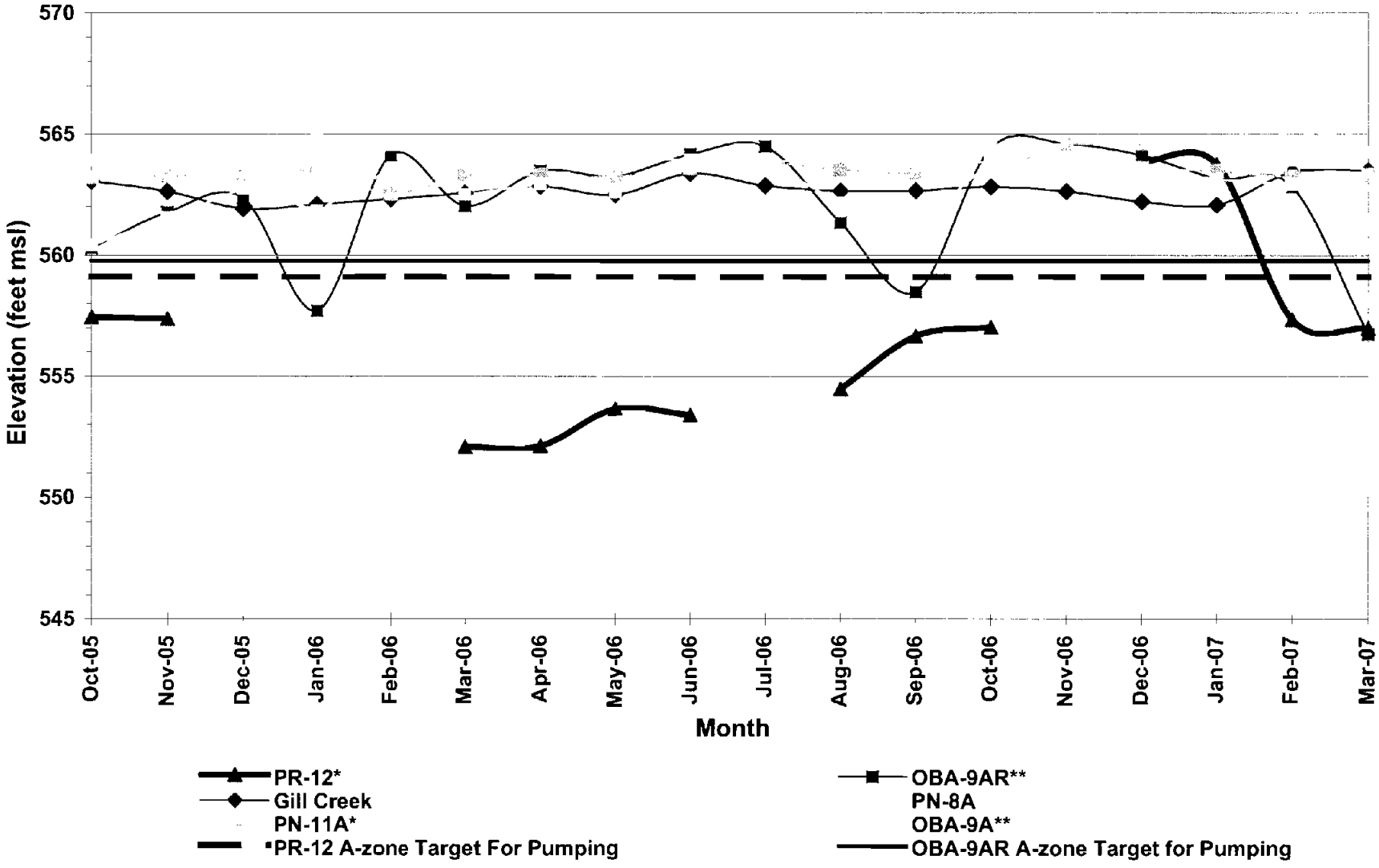
Table A-8
A-Zone
PR-12 and OBA-9AR and Adjacent Monitoring Point Water Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
Gill Creek -Stilling Well	563.04	562.61	561.90	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
PN-8A	563.91	564.01	563.96	564.77	564.53	563.94	564.06	563.96	563.93	563.76	564.25	564.56	564.42	564.60	564.57	564.45	563.92	564.26
PR-12*	557.43	557.36	NM	NM	NM	552.08	552.12	553.65	553.39	DRY	554.47	556.65	557.02	NM	563.89	563.74	557.34	556.96
PN-11A*	563.22	563.25	563.27	563.46	562.53	563.27	563.28	563.23	563.59	563.81	563.52	563.39	563.88	564.06	563.59	563.46	563.22	563.30
OBA-9A**	560.39	561.53	562.73	561.82	563.55	562.49	562.92	562.59	563.63	563.83	562.16	561.18	563.85	564.04	563.58	563.12	562.91	561.14
OBA-9AR**	560.27	561.75	562.34	557.70	564.11	562.02	563.46	563.24	564.15	564.48	561.33	558.47	564.42	564.58	564.11	563.15	562.80	556.73
PR-12 A-zone Target	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10	559.10
OBA-9AR A-zone Target	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75	559.75

Notes
Elevations are reported in feet above mean seal level (msl)
* Passive relief well installed September 2002.
** Well added to quarterly monitoring program in October 2002.
NM - Not Measured

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Figure A-8
PR-12 and OBA-9AR Drawdown and Adjacent A-Zone Water Table Surface



msl - mean sea level

Prepared by AWE 4/1/07
Checked by: CMB 4/5/07

Table B-1
B-Zone
RW-1 and Adjacent Monitoring Point Peizometric Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
RW-1	553.41	557.93	555.81	556.31	556.28	556.14	555.41	555.11	552.87	554.07	552.92	552.88	558.10	552.97	557.47	556.68	557.38	557.15
Gill Creek -Stilling Well	563.04	562.61	561.90	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
OBA-23B	557.67	557.97	557.62	558.62	558.34	557.90	558.02	558.07	558.13	558.22	558.56	558.63	558.68	558.59	558.60	558.28	558.23	558.18
PN-10B	557.63	557.91	557.54	558.53	558.24	557.85	557.95	558.02	558.11	558.15	558.49	558.50	558.56	558.47	558.39	558.10	558.05	558.09
PN-1B	557.90	558.09	557.76	558.71	558.49	558.06	558.21	558.21	558.28	558.34	558.70	558.77	558.80	558.75	558.71	558.36	558.37	558.34
RW-1 B-zone Target	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559	559

Notes:

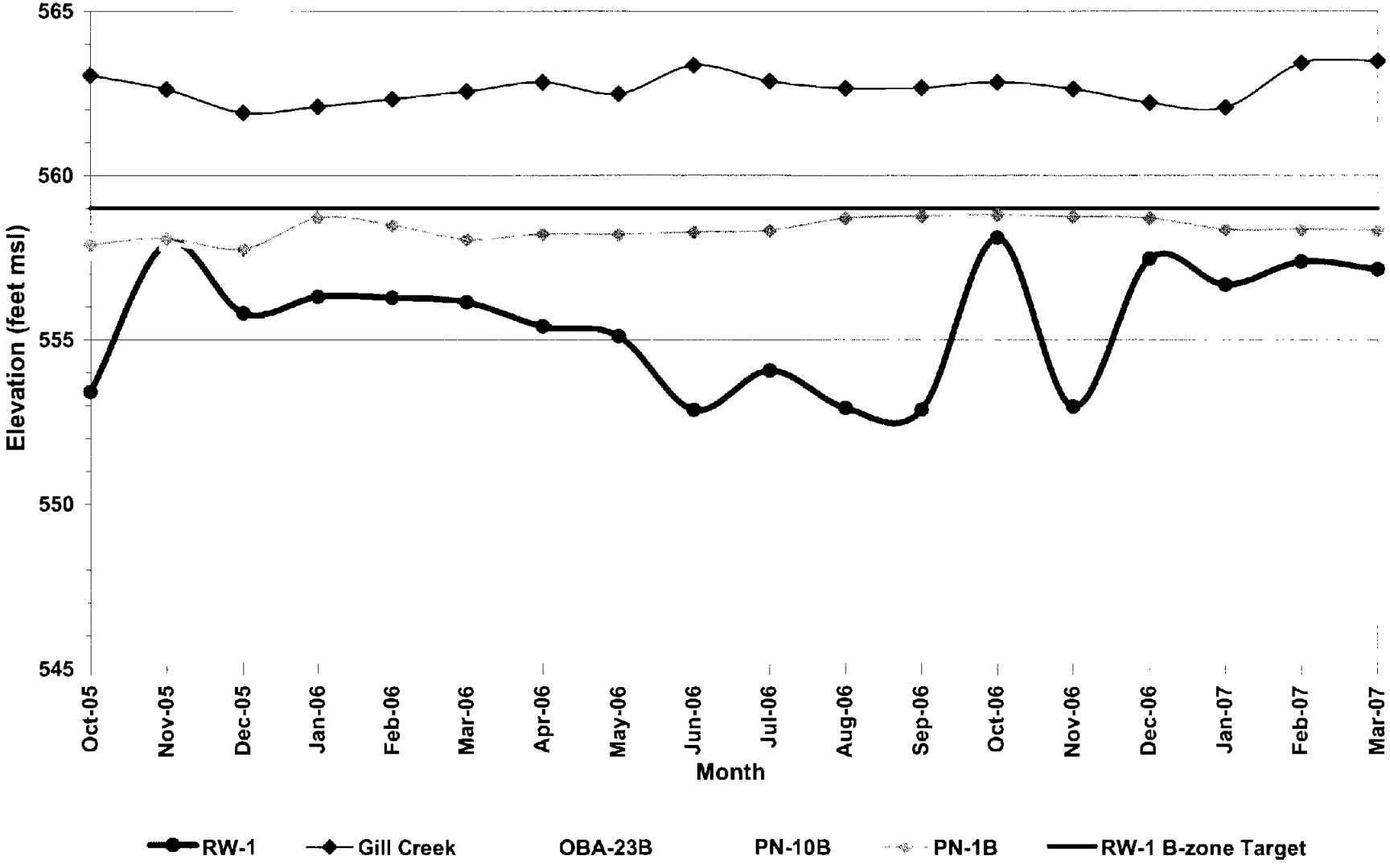
Elevations are reported in feet above mean seal level (msl)

Gill Creek level data is provided only for reference and does not effect B-zone capture.

Prepared by : AWE 4/1/07

Checked by: CMB 4/5/07

Figure B-1
RW-1 Drawdown and Adjacent B-Zone Potentiometric Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by. CMB 4/5/07

Table B-2
B-Zone
RW-2 and Adjacent Monitoring Point Peizometric Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
RW-2	551.89	551.97	552.17	552.50	556.09	553.38	557.66	557.51	557.39	557.45	557.68	557.56	557.52	557.38	557.28	557.29	557.31	557.25
Gill Creek -Stilling Well	563.04	562.61	561.83	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
OBA-16B	557.64	557.69	557.54	558.10	558.02	557.77	558.00	558.00	558.05	558.09	558.31	558.23	558.26	558.18	558.10	557.88	557.82	557.86
PN-2B	557.55	557.51	557.44	557.77	557.68	557.45	557.73	557.73	557.71	557.80	557.97	557.81	557.90	557.75	557.69	557.61	557.60	557.67
PN-9B	558.16	558.12	558.10	558.22	558.17	558.02	558.34	558.27	558.24	558.37	558.52	558.32	558.41	558.20	558.09	558.10	558.14	558.07
RW-2 B-zone Target	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556

Notes.

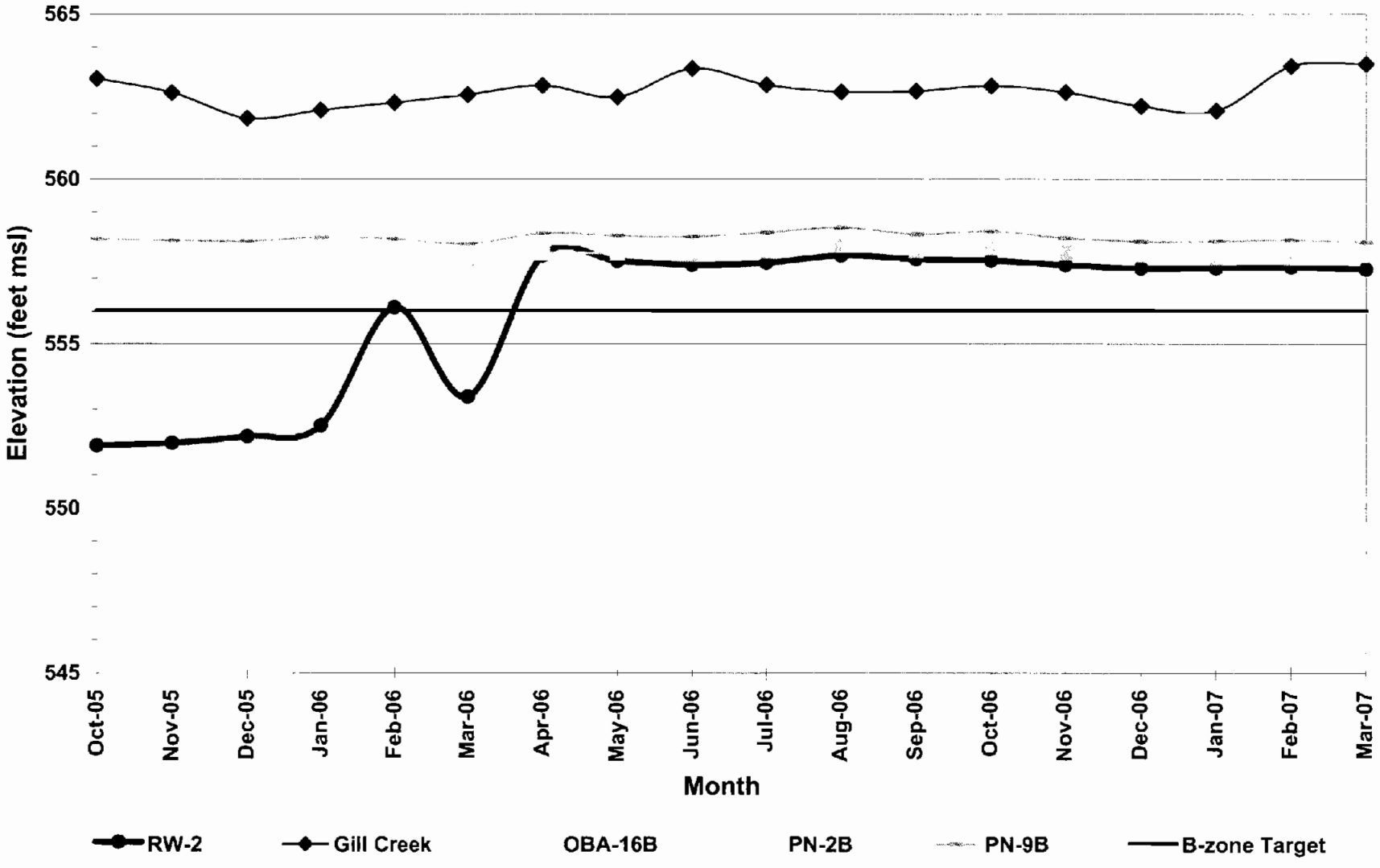
Elevations are reported in feet above mean seal level (msl)

Gill Creek level data is provided only for reference and does not effect B-zone capture.

Prepared by : AWF 4/1/07

Checked by: CMB 4/5/07

Figure B-2
RW-2 Drawdown and Adjacent B-Zone Potentiometric Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by CMB 4/5/07

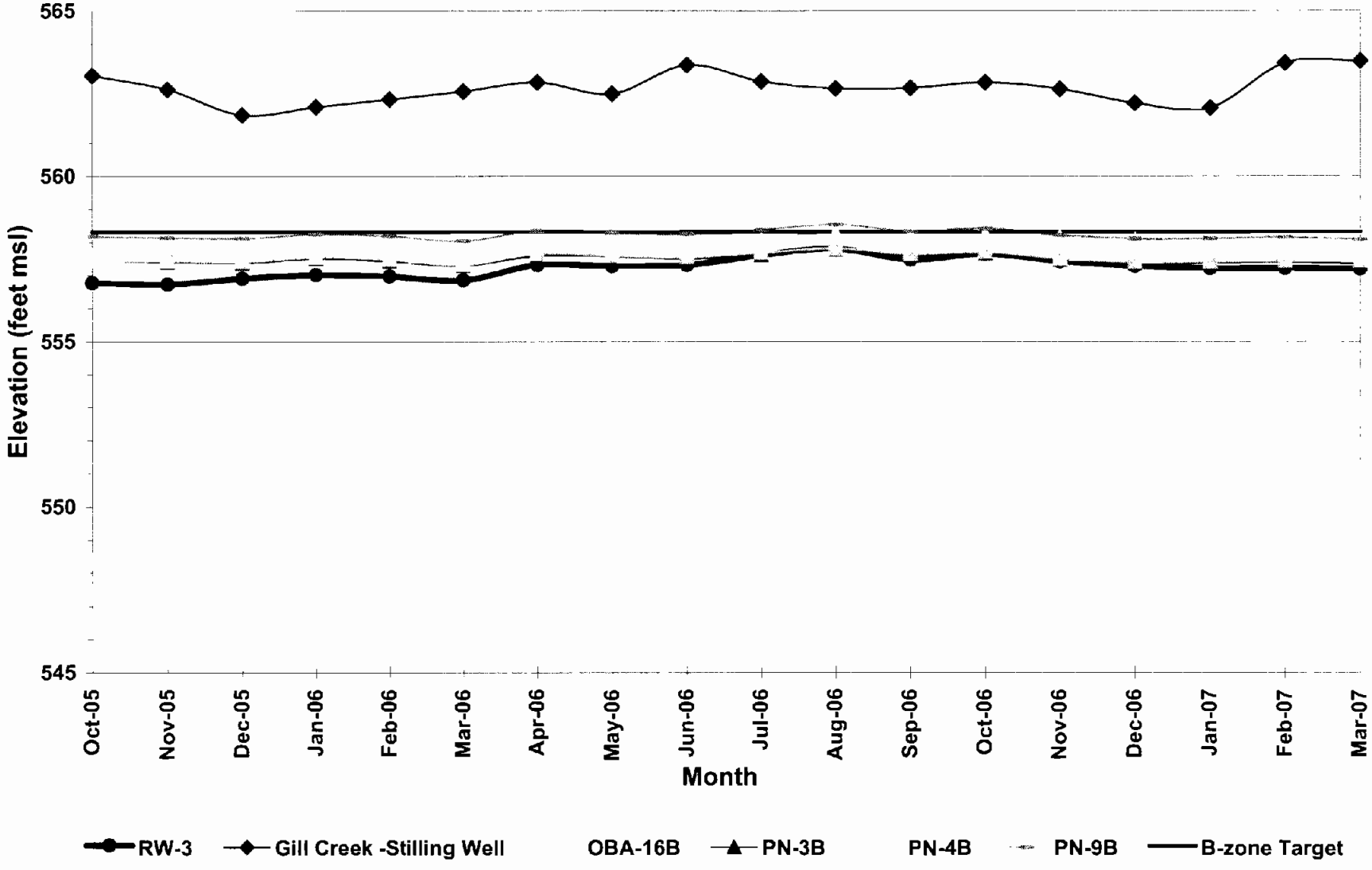
Table B-3
B-Zone
RW-3 and Adjacent Monitoring Point Peizometric Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
RW-3	556.76	556.71	556.89	557.00	556.95	556 84	557.30	557.27	557.30	557.60	557.79	557.46	557.63	557.41	557.27	557.20	557.20	557.18
Gill Creek - Stilling Well	563.04	562.61	561.83	562.08	562.31	562.55	562.83	562 48	563.35	562 86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
OBA-16B	557.64	557.69	557.54	558.10	558.02	557.77	558.00	558 00	558.05	558 09	558.31	558.23	558.26	558.18	558.10	557.88	557.82	557.86
PN-3B	557.44	557.39	557.36	557.49	557.41	557.28	557.57	557.56	557.49	557 61	557.77	557 59	557.65	557.45	557.35	557.35	557.39	557.33
PN-4B	557.44	557.42	557.40	557.53	557.46	557 31	557.64	557 58	557.54	557 67	557.80	557.63	557.69	557.48	557.38	557.40	557.42	557.43
PN-9B	558.16	558.12	558.10	558.22	558.17	558.02	558.34	558 27	558.24	558.37	558.52	558.32	558.41	558.20	558.09	558.10	558.14	558.07
B-zone Target	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3	558.3

Notes:
Elevations are reported in feet above mean seal level (msl)
Gill Creek level data is provided only for reference and does not effect B-zone capture.

Prepared by : AWF 4/1/07
Checked by: CMB 4/5/07

Figure B-3
RW-3 Drawdown and Adjacent B-Zone Potentiometric Surface



msl - mean sea level

Prepared by AWE 4/1/07
Checked by: CMB 4/5/07

Table B-4
B-Zone
RW-4, PR-4 and Adjacent Monitoring Point Peizometric Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
RW-4	556.49	556 56	556.66	557.08	556.85	556 16	557.19	556.90	556.49	557.30	557.52	557.49	557.56	555.61	555.99	554.79	557.06	557.00
Gill Creek - Stilling Well	563.04	562 61	561.83	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
PR-4	552.17	552.51	552.18	552.19	552.06	552.21	554.34	552 93	555.23	555.19	554.53	552.19	558.29	556.71	554.38	552.20	553.55	554.30
PN-6B	557.49	557 39	557.36	557.50	557.41	557.30	557.55	557 56	557.49	557.60	557.80	557.64	557.68	557.44	557.36	557.37	557.39	557.42
PN-4B	557.44	557.42	557.40	557.53	557.46	557.31	557.64	557.58	557.54	557.67	557.80	557.63	557.69	557.48	557.38	557.40	557.42	557.43
PN-5B	557.49	557 43	557.42	557.57	557.54	557.39	557.71	557 66	557.66	557.73	557.89	557.70	557.76	557.54	557.44	557.46	557.48	557.49
PR-6*	560.25	560.14	560.18	560.36	560.49	559.91	560.15	560.04	560.28	559.89	560.10	559.88	559.97	559.93	560.59	560.20	559.97	560.52
PR-7*	562.41	562.34	562.02	563.79	562.95	562.09	562.38	562.34	562.54	562.10	562.65	562.78	562.78	563.80	562.69	562.56	562.25	562.33
PR-8*	562.27	562.03	561.80	562.66	562.63	562.03	562.45	562.38	562.55	562.05	562.46	562.52	562.69	562.92	562.76	562.60	562.45	562.51
B-zone Target	558.10	558.10	558.10	558.10	558.10	558 10	558.10	558.10	558.10	558 10	558.10	558.10	558.10	558.10	558.10	558.10	558.10	558.10

Notes:

Elevations are reported in feet above mean seal level (msl)

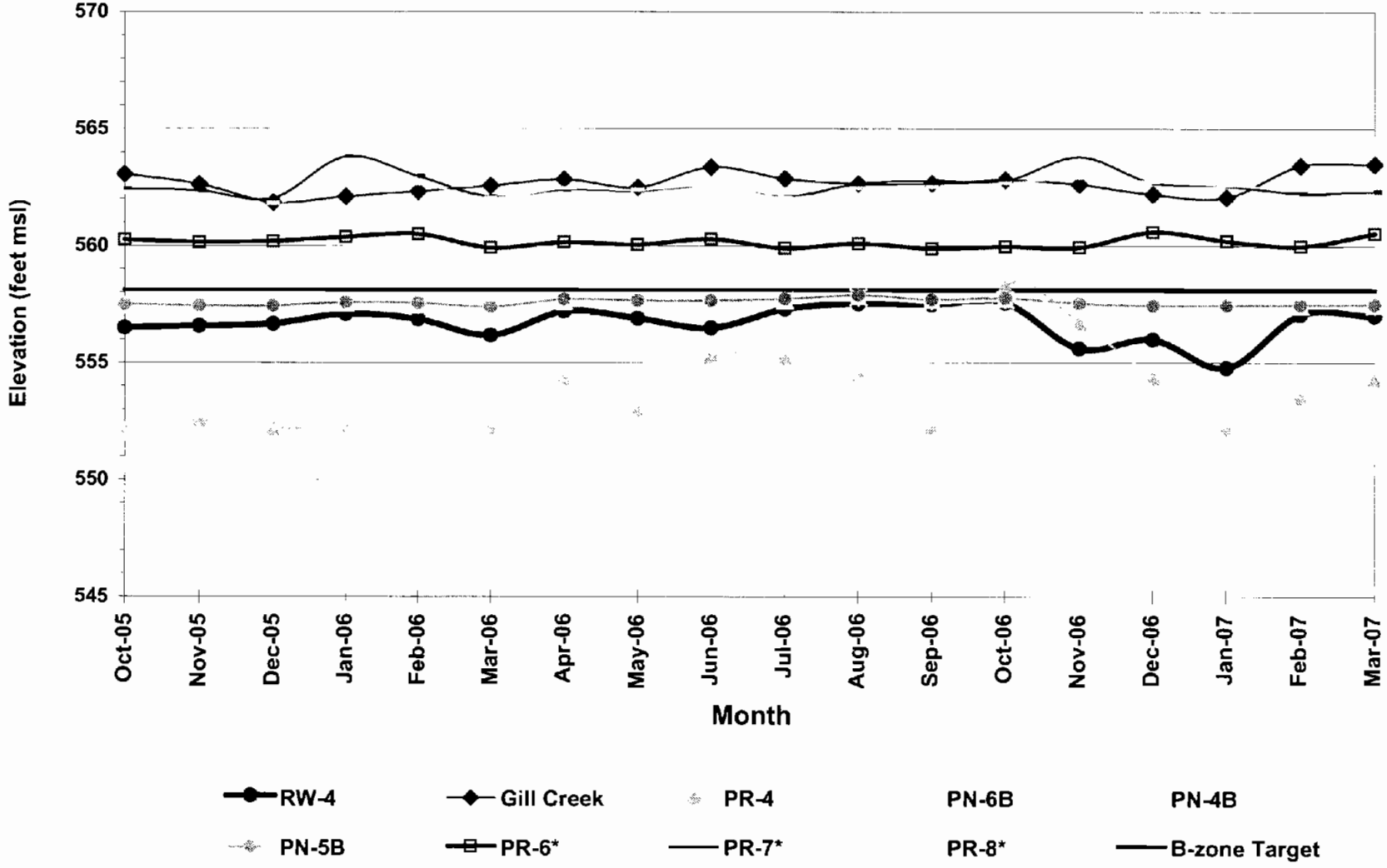
Gill Creek level data is provided only for reference and does not effect B-zone capture.

*Installed September 2002

Prepared by . AWE 4/1/07

Checked by: CMB 4/5/07

Figure B-4
RW-4 and PR-4 Drawdown and Adjacent B-Zone Potentiometric Surface



msl - mean sea level

Prepared by : AWE 4/1/07
Checked by: CMB 4/5/07

Table B-5
B-Zone
RW-5 and Adjacent Monitoring Point Peizometric Elevations

Location ID	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07
RW-5	553.11	549.75	547.09	552.87	552.17	551.45	552.19	547.85	547.77	546.47	556.88	556.77	554.31	549.65	546.38	551.87	548.60	547.47
Gill Creek - Stilling Well	563.04	562.61	561.83	562.08	562.31	562.55	562.83	562.48	563.35	562.86	562.64	562.66	562.82	562.62	562.20	562.06	563.42	563.48
PN-7B	557.53	557.50	557.54	557.93	558.15	558.12	558 42	558.44	558.53	558.51	558.58	558.39	558 47	558.49	558.33	558 16	558.25	558.09
PN-8B	557.44	557.37	557.35	557.49	557.42	557.34	557.58	557.61	557.57	557.73	557.84	557.67	557 68	557.53	557.43	557.41	557.36	557.37
PR-9*	560.41	561.21	560.49	562.29	561.85	561.10	561 90	561.68	562.54	560.79	560.64	560.21	561.08	561.67	561.15	561.89	561.51	560.84
PR-10*	558.41	558.62	558.50	559.06	559.17	558.91	559 27	559.26	559.61	559.21	559.22	559.07	559 32	559.42	558.37	558.42	558.57	NM
PR-11*	561.02	561.18	560.99	564.07	562.50	561.39	562 80	562.61	564.04	562.82	564.10	564.29	564.24	564.30	564.37	564.19	563.33	563.90
PR-12*	557.43	557.36	NM	NM	NM	552.08	552.12	553.65	553.39	DRY	554.47	556.65	557.02	NM	563.89	563 74	557.34	556.96
B-zoneTarget	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557.5	557 5	557.5	557.5	557.5	557.5	557.5	557.5

Notes:

Elevations are reported in feet above mean seal level (msl)

Gill Creek level data is provided only for reference and does not effect B-zone capture.

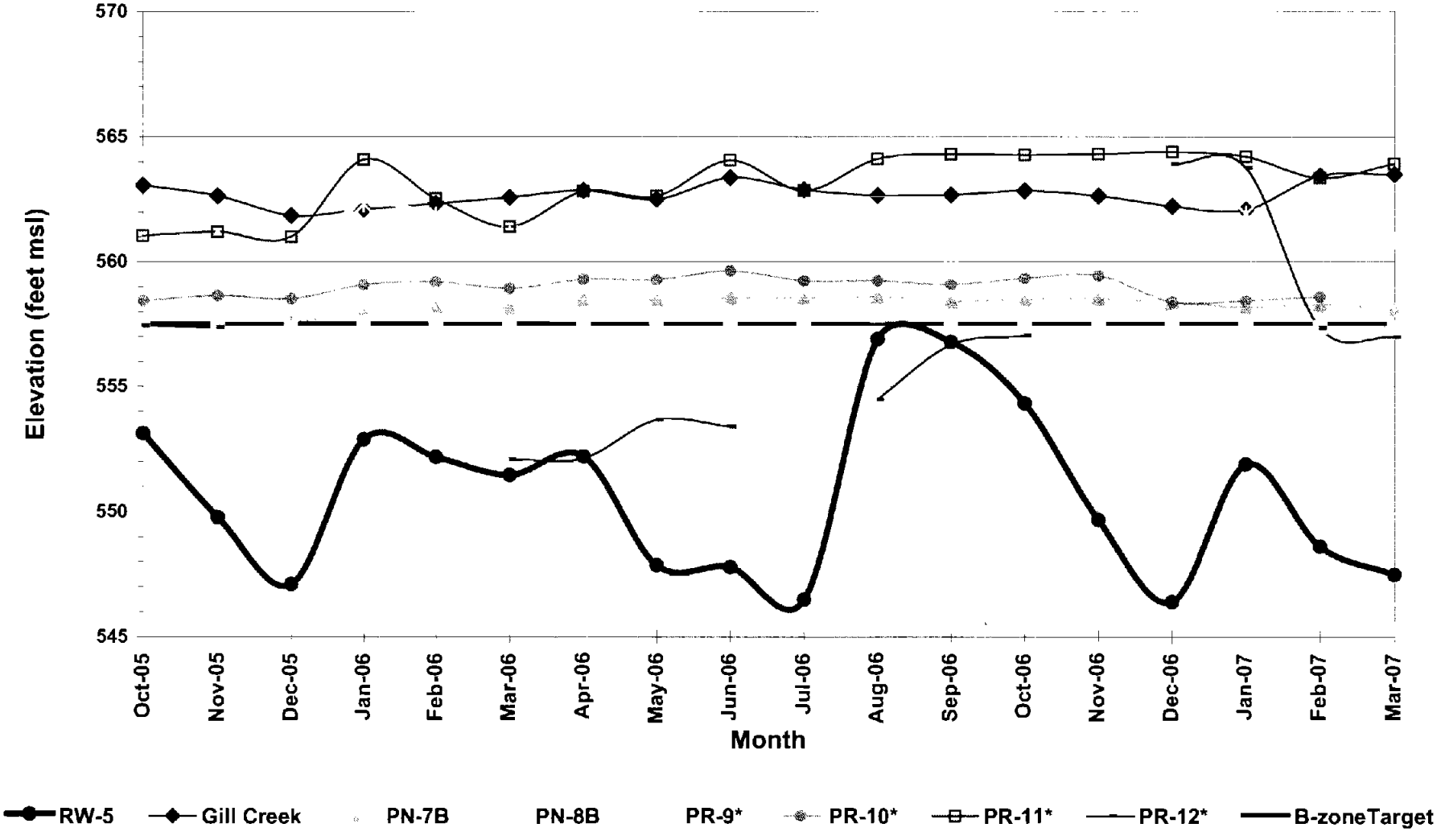
*Installed September 2002

NI - Not Installed

Prepared by . AWE 4/1/07

Checked by: CMB 4/5/07

Figure B-5
RW-5 Drawdown and Adjacent B-Zone Potentiometric Surface



msl - mean sea level

Prepared by AWE 4/1/07
Checked by: CMB 4/5/07

Olin Niagara Falls
Plant 2 Area Remediation

Summary: Contaminant Mass and Groundwater Extracted

Since system start-up: December - 1997

Quarter	organics lb		Ann. Tot.	mercury lb		Ann. Tot	pesticides lb		Ann. Tot.	g.w. extracted gal	Ann. Tot.
Startup/Q1-98 [est]	27.81			0.02			0.2			210,000	
Q2-98	154.5			0.1			1.3			1,175,799	
Q3-98	595.5			0.6			4.9			2,583,159	
Q4-98	1273.1			0.1			5.2			4,054,996	
			2,051			1			12		8,023,954
Q1-99	817.3			0.05			8.5			4,233,521	
Q2-99	1034.7			0.05			7.1			3,991,584	
Q3-99	1188.2			0.1			8.7			5,219,207	
Q4-99	976.3			0.02			6.9			6,366,935	
			4,017			0.22			31		19,811,247
Q1-00	1422.9			0.06			6.2			6,757,602	
Q2-00	1514.9			0.06			10.3			6,663,345	
Q3-00	1071.6			0.06			18.6			6,007,756	
Q4-00	1260.7			0.03			9.7			6,803,495	
			5,270			0.21			45		26,232,198
Q1-01	1406.2			0.06			8.9			7,379,548	
Q2-01	2704.8			0.04			11.9			8,474,363	
Q3-01	1576.8			0.05			9.5			7,607,539	
Q4-01	637.0			0.05			8.4			5,642,388	
			6,325			0.20			39		29,103,838
Q1-02	1319.8			0.06			6.9			6,781,550	
Q2-02	530.7			0.08			7.2			8,693,727	
Q3-02	1251.8			0.07			6.0			5,950,649	
Q4-02	490.8			0.07			3.5			5,385,584	
			3,593			0.28			24		26,811,510
Q1-03	922.6			0.58			3.6			5,151,629	
Q2-03	1884.7			0.06			5.2			7,276,723	
Q3-03	1611			0.1			0.0			6,598,467	
Q4-03	1954.4			0.1			8.5			6,735,421	
			6,373			0.84			17		25,762,240
Q1-04	1479.6			0.04			4.8			5,846,144	
Q2-04	2158.2			0.08			5.7			6,826,643	
Q3-04	1880.3	[a]		0 05	[a]		5.6	[a]		6,262,226	
Q4-04	3665.6			0.18			5.5			7,152,900	
			9,184			0.35			22		26,087,913
Q1-05	2648.9	[a]		0.14	[a]		4 3	[a]		5,870,533	
Q2-05	1168			0.04			3.5			5,910,496	
Q3-05	860.2	[a]		0.04	[a]		2.8	[a]		7,113,517	
Q4-05	887.8			0.09			6.7			5,271,114	
			5,565			0.31			17		24,165,660
Q1-06	1056			0.02			3.2			5,139,061	
Q2-06	1160			0.04			4.5			8,872,651	
Q3-06	1169			0.02			4.2			8,253,471	
Q4-06	1175.0			0.04			4.9			8,959,291	
			4,560			0.12			17		31,224,474
Q1-07	1409.0			0.02			4.0			7,250,389	
Q2-07											
Q3-07											
Q4-07											
			1,409			0.02			4		7,250,389
TOTAL			**48,346**			**3**			**227**		**224,473,423**

[a] estimated loading based on replication of previous quarter's constituent concentrations.
Flow data are actual for each quarter

Olin Niagara Falls Plant Site: Plant 2 Area Remediation
Groundwater Contaminant Mass Removed
Q1-07

ORGANICS

WELL	conc [A] mg/l	conv liter / gal	conv lb /mg	conversion lb/gallon	conversion gal/lb	flow gal/qtr	MASS lb/qtr
RW1	33.800	3.8	2.20E-06	0.00028257	1190476.19	272,044	77
RW2	0.556	3.8	2.20E-06	0.00000465	1190476.19	3,848,671	18
RW3	6.675	3.8	2.20E-06	0.00005580	1190476.19	955,033	53
RW4	16.980	3.8	2.20E-06	0.00014195	1190476.19	1,191,218	169
PR4	12.030	3.8	2.20E-06	0.00010057	1190476.19	186,053	19
RW5	80.800	3.8	2.20E-06	0.00067549	1190476.19	57,928	39
PR12	167.800	3.8	2.20E-06	0.00140281	1190476.19	737,131	1034
OBA9AR	6.940	3.8	2.20E-06	0.00005802	1190476.19	2,311	0.13
TOTAL							**1,409**

MERCURY

WELL	conc [A] mg/l	conv liter / gal	conv lb /mg	conversion lb/gallon	conversion gal/lb	flow gal/qtr	MASS lb/qtr
RW1	0.0032	3.8	2.20E-06	0.00000003	1190476.19	272,044	0.007
RW2	0.0000	3.8	2.20E-06	0.00000000	1190476.19	3,848,671	0.000
RW3	0.0002	3.8	2.20E-06	0.00000000	1190476.19	955,033	0.002
RW4	0.0007	3.8	2.20E-06	0.00000001	1190476.19	1,191,218	0.007
PR4	0.0003	3.8	2.20E-06	0.00000000	1190476.19	186,053	0.000
RW5	0.0006	3.8	2.20E-06	0.00000001	1190476.19	57,928	0.000
PR12	0.0008	3.8	2.20E-06	0.00000001	1190476.19	737,131	0.005
OBA9AR	0.0000	3.8	2.20E-06	0.00000000	1190476.19	2,311	0.000
TOTAL							**0.02**

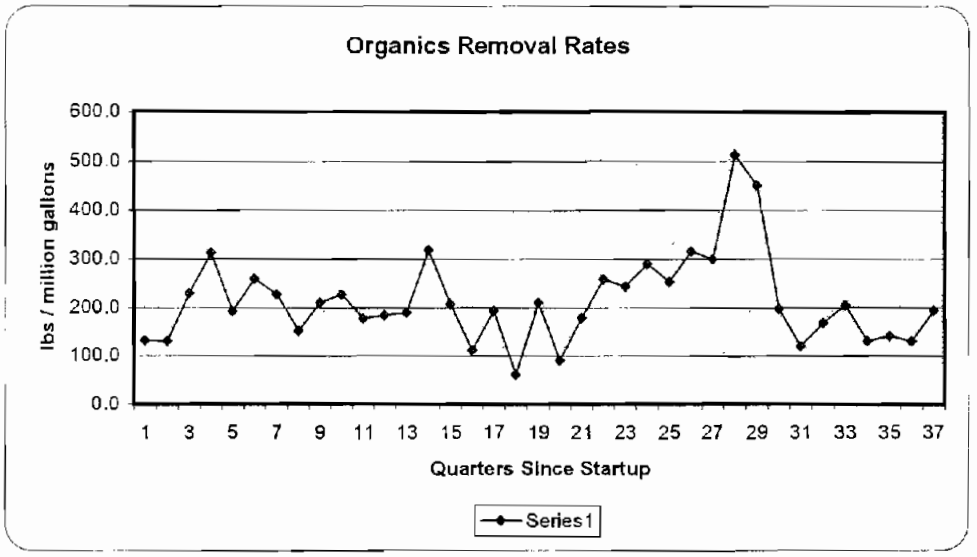
PESTICIDES

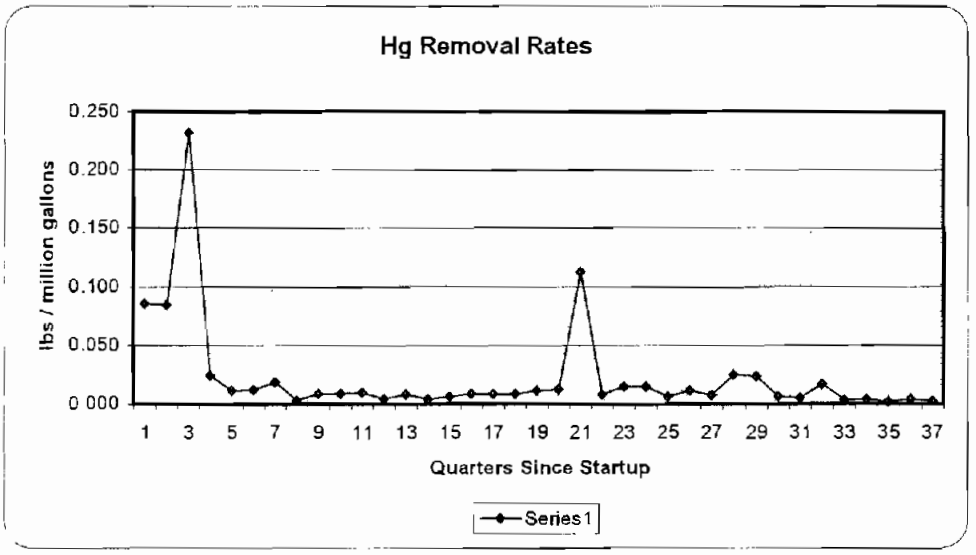
WELL	conc [A] mg/l	conv liter / gal	conv lb /mg	conversion lb/gallon	conversion gal/lb	flow gal/qtr	MASS lb/qtr
RW1	0.0219	3.8	2.20E-06	0.00000018	1190476.19	272,044	0.05
RW2	0.0008	3.8	2.20E-06	0.00000001	1190476.19	3,848,671	0.03
RW3	0.1024	3.8	2.20E-06	0.00000086	1190476.19	955,033	0.82
RW4	0.1077	3.8	2.20E-06	0.00000090	1190476.19	1,191,218	1.07
PR4	0.4160	3.8	2.20E-06	0.00000348	1190476.19	186,053	0.65
RW5	0.3800	3.8	2.20E-06	0.00000318	1190476.19	57,928	0.18
PR12	0.1990	3.8	2.20E-06	0.00000166	1190476.19	737,131	1.23
OBA9AR	0.3010	3.8	2.20E-06	0.00000252	1190476.19	2,311	0.01
TOTAL							**4.0**

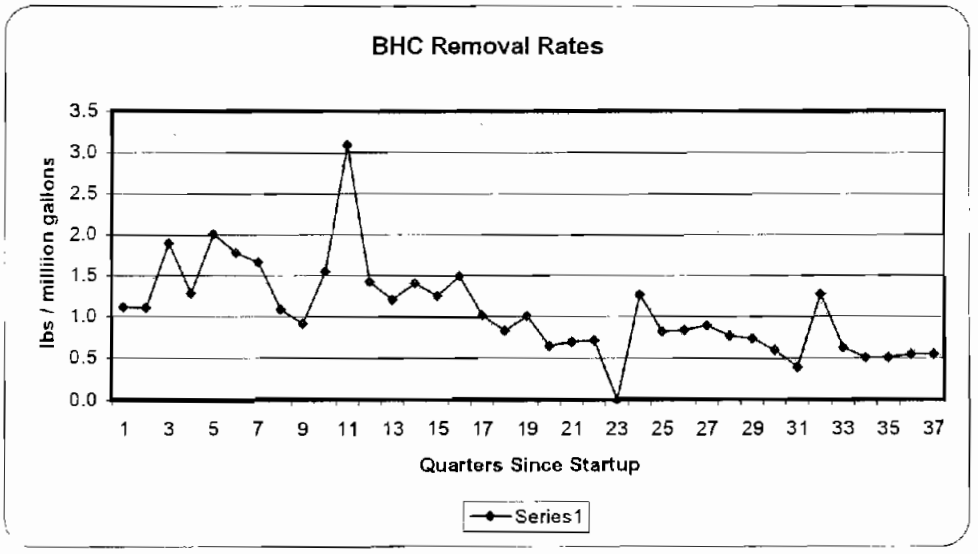
[A] = Total of parameter group in quarterly sample from recovery well discharge header.

7,250,389
total flow (gal)

Olin Niagara Falls
Plant 2 Area Remediation







Olin Niagara Falls Plant Site
Influent / Effluent Stripper Data
February - 2007

LocationID	AnalyticalMethod	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units
Effluent Stripper	SW8260B	1,1,1-TRICHLOROETHANE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	1,1,2,2-TETRACHLOROETHANE	600	D	Y	3	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	1,1,2-TRICHLOROETHANE		U	N	1	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	1,1-DICHLOROETHYLENE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	1,2,4-TRICHLOROBENZENE	19		Y	0.6	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	1,2-DICHLOROBENZENE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	1,4-DICHLOROBENZENE		U	N	0.48	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	BENZENE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	CARBON TETRACHLORIDE		U	N	0.48	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	CHLOROBENZENE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	CHLOROMETHANE		U	N	0.48	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	CIS-1,2-DICHLOROETHENE	22		Y	0.48	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	DICHLOROMETHANE		U	N	0.92	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	M-DICHLOROBENZENE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	TETRACHLOROETHENE	23		Y	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	TRICHLOROETHYLENE	100		Y	0.4	2/7/2007	Normal	ug/l
Effluent Stripper	SW8260B	VINYL CHLORIDE		U	N	0.96	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,1,1-TRICHLOROETHANE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,1,2,2-TETRACHLOROETHANE	2500		Y	33	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,1,2-TRICHLOROETHANE		U	N	56	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,1-DICHLOROETHYLENE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,2,4-TRICHLOROBENZENE	600		Y	33	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,2-DICHLOROBENZENE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	1,4-DICHLOROBENZENE		U	N	27	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	BENZENE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	CARBON TETRACHLORIDE		U	N	27	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	CHLOROBENZENE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	CHLOROMETHANE		U	N	27	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	CIS-1,2-DICHLOROETHENE	1500		Y	27	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	DICHLOROMETHANE		U	N	51	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	M-DICHLOROBENZENE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	TETRACHLOROETHENE	4600		Y	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	TRICHLOROETHYLENE	14000		Y	22	2/7/2007	Normal	ug/l
Influent Stripper	SW8260B	VINYL CHLORIDE		U	N	53	2/7/2007	Normal	ug/l

Olin Niagara Falls Plant Site
Recovery Well Header Data - Organics
February - 2007

LocationID	AnalyticalMethod	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units	Result	Total
OBA-9AR	SW8260B	1,1,1-TRICHLOROETHANE		U	N	17	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	1,1,2,2-TETRACHLOROETHANE	410		Y	25	2/7/2007	Normal	ug/l	410	
OBA-9AR	SW8260B	1,1,2-TRICHLOROETHANE		U	N	42	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	1,1-DICHLOROETHYLENE		U	N	17	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	1,2,4-TRICHLOROBENZENE	710		Y	25	2/7/2007	Normal	ug/l	710	
OBA-9AR	SW8260B	1,2-DICHLOROBENZENE	330		Y	17	2/7/2007	Normal	ug/l	330	
OBA-9AR	SW8260B	1,4-DICHLOROBENZENE	340		Y	20	2/7/2007	Normal	ug/l	340	
OBA-9AR	SW8260B	BENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	CARBON TETRACHLORIDE		U	N	20	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	CHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	CHLOROMETHANE		U	N	20	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	CIS-1,2-DICHLOROETHENE	850		Y	20	2/7/2007	Normal	ug/l	850	
OBA-9AR	SW8260B	DICHLOROMETHANE		U	N	38	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	M-DICHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	TETRACHLOROETHENE	1100		Y	17	2/7/2007	Normal	ug/l	1,100	
OBA-9AR	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	17	2/7/2007	Normal	ug/l	-	
OBA-9AR	SW8260B	TRICHLOROETHYLENE	3200		Y	17	2/7/2007	Normal	ug/l	3,200	
OBA-9AR	SW8260B	VINYL CHLORIDE		U	N	40	2/7/2007	Normal	ug/l	-	6,940
PR-12	SW8260B	1,1,1-TRICHLOROETHANE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	1,1,2,2-TETRACHLOROETHANE	20000		Y	380	2/7/2007	Normal	ug/l	20,000	
PR-12	SW8260B	1,1,2-TRICHLOROETHANE		U	N	620	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	1,1-DICHLOROETHYLENE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	1,2,4-TRICHLOROBENZENE	2800		Y	380	2/7/2007	Normal	ug/l	2,800	
PR-12	SW8260B	1,2-DICHLOROBENZENE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	1,4-DICHLOROBENZENE		U	N	300	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	BENZENE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	CARBON TETRACHLORIDE		U	N	300	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	CHLOROBENZENE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	CHLOROMETHANE		U	N	300	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	CIS-1,2-DICHLOROETHENE	9000		Y	300	2/7/2007	Normal	ug/l	9,000	
PR-12	SW8260B	DICHLOROMETHANE		U	N	580	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	M-DICHLOROBENZENE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	TETRACHLOROETHENE	36000		Y	250	2/7/2007	Normal	ug/l	36,000	
PR-12	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	250	2/7/2007	Normal	ug/l	-	
PR-12	SW8260B	TRICHLOROETHYLENE	100000		Y	250	2/7/2007	Normal	ug/l	100,000	
PR-12	SW8260B	VINYL CHLORIDE		U	N	600	2/7/2007	Normal	ug/l	-	167,800
PR-4	SW8260B	1,1,1-TRICHLOROETHANE		U	N	17	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	1,1,2,2-TETRACHLOROETHANE		U	N	25	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	1,1,2-TRICHLOROETHANE		U	N	42	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	1,1-DICHLOROETHYLENE		U	N	17	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	1,2,4-TRICHLOROBENZENE	2500		Y	25	2/7/2007	Normal	ug/l	2,500	
PR-4	SW8260B	1,2-DICHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	1,4-DICHLOROBENZENE	210		Y	20	2/7/2007	Normal	ug/l	210	
PR-4	SW8260B	BENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	CARBON TETRACHLORIDE		U	N	20	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	CHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	

Olin Niagara Falls Plant Site
Recovery Well Header Data - Organics
February - 2007

LocationID	AnalyticalMethod	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units	Result	Total
PR-4	SW8260B	CHLOROMETHANE		U	N	20	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	CIS-1,2-DICHLOROETHENE	1600		Y	20	2/7/2007	Normal	ug/l	1,600	
PR-4	SW8260B	DICHLOROMETHANE		U	N	38	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	M-DICHLOROBENZENE	300		Y	17	2/7/2007	Normal	ug/l	300	
PR-4	SW8260B	TETRACHLOROETHENE	1800		Y	17	2/7/2007	Normal	ug/l	1,800	
PR-4	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	17	2/7/2007	Normal	ug/l	-	
PR-4	SW8260B	TRICHLOROETHYLENE	5400		Y	17	2/7/2007	Normal	ug/l	5,400	
PR-4	SW8260B	VINYL CHLORIDE	220		Y	40	2/7/2007	Normal	ug/l	220	**12,030**
RW-1	SW8260B	1,1,1-TRICHLOROETHANE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	1,1,2,2-TETRACHLOROETHANE		U	N	83	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	1,1,2-TRICHLOROETHANE		U	N	140	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	1,1-DICHLOROETHYLENE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	1,2,4-TRICHLOROBENZENE	7400		Y	83	2/7/2007	Normal	ug/l	7,400	
RW-1	SW8260B	1,2-DICHLOROBENZENE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	1,4-DICHLOROBENZENE		U	N	67	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	BENZENE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	CARBON TETRACHLORIDE		U	N	67	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	CHLOROBENZENE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	CHLOROMETHANE		U	N	67	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	CIS-1,2-DICHLOROETHENE	3400		Y	67	2/7/2007	Normal	ug/l	3,400	
RW-1	SW8260B	DICHLOROMETHANE		U	N	130	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	M-DICHLOROBENZENE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	TETRACHLOROETHENE	3400		Y	56	2/7/2007	Normal	ug/l	3,400	
RW-1	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	56	2/7/2007	Normal	ug/l	-	
RW-1	SW8260B	TRICHLOROETHYLENE	19000		Y	56	2/7/2007	Normal	ug/l	19,000	
RW-1	SW8260B	VINYL CHLORIDE	640		Y	130	2/7/2007	Normal	ug/l	640	**33,840**
RW-2	SW8260B	1,1,1-TRICHLOROETHANE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	1,1,2,2-TETRACHLOROETHANE	18		Y	0.75	2/7/2007	Normal	ug/l	18	
RW-2	SW8260B	1,1,2-TRICHLOROETHANE		U	N	1.2	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	1,1-DICHLOROETHYLENE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	1,2,4-TRICHLOROBENZENE	24		Y	0.75	2/7/2007	Normal	ug/l	24	
RW-2	SW8260B	1,2-DICHLOROBENZENE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	1,4-DICHLOROBENZENE		U	N	0.6	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	BENZENE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	CARBON TETRACHLORIDE		U	N	0.6	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	CHLOROBENZENE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	CHLOROMETHANE		U	N	0.6	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	CIS-1,2-DICHLOROETHENE	84		Y	0.6	2/7/2007	Normal	ug/l	84	
RW-2	SW8260B	DICHLOROMETHANE		U	N	1.2	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	M-DICHLOROBENZENE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	TETRACHLOROETHENE	160		Y	0.5	2/7/2007	Normal	ug/l	160	
RW-2	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	0.5	2/7/2007	Normal	ug/l	-	
RW-2	SW8260B	TRICHLOROETHYLENE	270		Y	0.5	2/7/2007	Normal	ug/l	270	
RW-2	SW8260B	VINYL CHLORIDE		U	N	1.2	2/7/2007	Normal	ug/l	-	**556**
RW-3	SW8260B	1,1,1-TRICHLOROETHANE		U	N	5	2/7/2007	Normal	ug/l	-	

Olin Niagara Falls Plant Site
Recovery Well Header Data - Organics
February - 2007

LocationID	AnalyticalMethod	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units	Result	Total
RW-3	SW8260B	1,1,2,2-TETRACHLOROETHANE	54		Y	7.5	2/7/2007	Normal	ug/l	54	
RW-3	SW8260B	1,1,2-TRICHLOROETHANE		U	N	12	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	1,1-DICHLOROETHYLENE		U	N	5	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	1,2,4-TRICHLOROBENZENE	1000		Y	7.5	2/7/2007	Normal	ug/l	1,000	
RW-3	SW8260B	1,2-DICHLOROBENZENE	75		Y	5	2/7/2007	Normal	ug/l	75	
RW-3	SW8260B	1,4-DICHLOROBENZENE	110		Y	6	2/7/2007	Normal	ug/l	110	
RW-3	SW8260B	BENZENE		U	N	5	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	CARBON TETRACHLORIDE		U	N	6	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	CHLOROBENZENE	86		Y	5	2/7/2007	Normal	ug/l	86	
RW-3	SW8260B	CHLOROMETHANE		U	N	6	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	CIS-1,2-DICHLOROETHENE	830		Y	6	2/7/2007	Normal	ug/l	830	
RW-3	SW8260B	DICHLOROMETHANE		U	N	12	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	M-DICHLOROBENZENE	100		Y	5	2/7/2007	Normal	ug/l	100	
RW-3	SW8260B	TETRACHLOROETHENE	1300		Y	5	2/7/2007	Normal	ug/l	1,300	
RW-3	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	5	2/7/2007	Normal	ug/l	-	
RW-3	SW8260B	TRICHLOROETHYLENE	2600		Y	5	2/7/2007	Normal	ug/l	2,600	
RW-3	SW8260B	VINYL CHLORIDE	150		Y	12	2/7/2007	Normal	ug/l	150	**6,305**
RW-3	SW8260B	1,1,1-TRICHLOROETHANE		U	N	5	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	1,1,2,2-TETRACHLOROETHANE	56		Y	7.5	2/7/2007	Duplicate	ug/l	56	
RW-3	SW8260B	1,1,2-TRICHLOROETHANE		U	N	12	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	1,1-DICHLOROETHYLENE		U	N	5	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	1,2,4-TRICHLOROBENZENE	1100		Y	7.5	2/7/2007	Duplicate	ug/l	1,100	
RW-3	SW8260B	1,2-DICHLOROBENZENE	79		Y	5	2/7/2007	Duplicate	ug/l	79	
RW-3	SW8260B	1,4-DICHLOROBENZENE	110		Y	6	2/7/2007	Duplicate	ug/l	110	
RW-3	SW8260B	BENZENE		U	N	5	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	CARBON TETRACHLORIDE		U	N	6	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	CHLOROBENZENE	90		Y	5	2/7/2007	Duplicate	ug/l	90	
RW-3	SW8260B	CHLOROMETHANE		U	N	6	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	CIS-1,2-DICHLOROETHENE	870		Y	6	2/7/2007	Duplicate	ug/l	870	
RW-3	SW8260B	DICHLOROMETHANE		U	N	12	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	M-DICHLOROBENZENE	110		Y	5	2/7/2007	Duplicate	ug/l	110	
RW-3	SW8260B	TETRACHLOROETHENE	1400		Y	5	2/7/2007	Duplicate	ug/l	1,400	
RW-3	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	5	2/7/2007	Duplicate	ug/l	-	
RW-3	SW8260B	TRICHLOROETHYLENE	2700		Y	5	2/7/2007	Duplicate	ug/l	2,700	
RW-3	SW8260B	VINYL CHLORIDE	160		Y	12	2/7/2007	Duplicate	ug/l	160	**6,675**
RW-4	SW8260B	1,1,1-TRICHLOROETHANE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	1,1,2,2-TETRACHLOROETHANE	320		Y	25	2/7/2007	Normal	ug/l	320	
RW-4	SW8260B	1,1,2-TRICHLOROETHANE		U	N	42	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	1,1-DICHLOROETHYLENE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	1,2,4-TRICHLOROBENZENE	880		Y	25	2/7/2007	Normal	ug/l	880	
RW-4	SW8260B	1,2-DICHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	1,4-DICHLOROBENZENE		U	N	20	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	BENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	CARBON TETRACHLORIDE		U	N	20	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	CHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	CHLOROMETHANE		U	N	20	2/7/2007	Normal	ug/l	-	

Olin Niagara Falls Plant Site
Recovery Well Header Data - Organics
February - 2007

LocationID	AnalyticalMethod	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units	Result	Total
RW-4	SW8260B	CIS-1,2-DICHLOROETHENE	1500		Y	20	2/7/2007	Normal	ug/l	1,500	
RW-4	SW8260B	DICHLOROMETHANE		U	N	38	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	M-DICHLOROBENZENE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	TETRACHLOROETHENE	4500		Y	17	2/7/2007	Normal	ug/l	4,500	
RW-4	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	17	2/7/2007	Normal	ug/l	-	
RW-4	SW8260B	TRICHLOROETHYLENE	9600		Y	17	2/7/2007	Normal	ug/l	9,600	
RW-4	SW8260B	VINYL CHLORIDE	180		Y	40	2/7/2007	Normal	ug/l	180	**16,980**
RW-5	SW8260B	1,1,1-TRICHLOROETHANE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	1,1,2,2-TETRACHLOROETHANE	7700		Y	170	2/7/2007	Normal	ug/l	7,700	
RW-5	SW8260B	1,1,2-TRICHLOROETHANE		U	N	280	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	1,1-DICHLOROETHYLENE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	1,2,4-TRICHLOROBENZENE	4200		Y	170	2/7/2007	Normal	ug/l	4,200	
RW-5	SW8260B	1,2-DICHLOROBENZENE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	1,4-DICHLOROBENZENE		U	N	130	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	BENZENE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	CARBON TETRACHLORIDE		U	N	130	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	CHLOROBENZENE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	CHLOROMETHANE		U	N	130	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	CIS-1,2-DICHLOROETHENE	4900		Y	130	2/7/2007	Normal	ug/l	4,900	
RW-5	SW8260B	DICHLOROMETHANE		U	N	260	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	M-DICHLOROBENZENE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	TETRACHLOROETHENE	20000		Y	110	2/7/2007	Normal	ug/l	20,000	
RW-5	SW8260B	TRANS-1,2-DICHLOROETHENE		U	N	110	2/7/2007	Normal	ug/l	-	
RW-5	SW8260B	TRICHLOROETHYLENE	44000		Y	110	2/7/2007	Normal	ug/l	44,000	
RW-5	SW8260B	VINYL CHLORIDE		U	N	270	2/7/2007	Normal	ug/l	-	**80,800**

Olin Niagara Falls Plant Site
Recovery Well Header Data - BHC
February - 2007

LocationID	nalyticalMethc	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units	Result	Total
OBA-9AR	SW8081A	alpha-BHC	150		Y	18	2/7/2007	Normal	ug/l	150	
OBA-9AR	SW8081A	beta-BHC	21	J	Y	11	2/7/2007	Normal	ug/l	21	
OBA-9AR	SW8081A	delta-BHC		U	N	12	2/7/2007	Normal	ug/l	0	
OBA-9AR	SW8081A	gamma-BHC	130		Y	14	2/7/2007	Normal	ug/l	130	301
PR-12	SW8081A	alpha-BHC	100		Y	18	2/7/2007	Normal	ug/l	100	
PR-12	SW8081A	beta-BHC	13	J	Y	11	2/7/2007	Normal	ug/l	13	
PR-12	SW8081A	delta-BHC		U	N	12	2/7/2007	Normal	ug/l	0	
PR-12	SW8081A	gamma-BHC	86		Y	14	2/7/2007	Normal	ug/l	86	199
PR-4	SW8081A	alpha-BHC	170		Y	18	2/7/2007	Normal	ug/l	170	
PR-4	SW8081A	beta-BHC	14	J	Y	11	2/7/2007	Normal	ug/l	14	
PR-4	SW8081A	delta-BHC	22	J	Y	12	2/7/2007	Normal	ug/l	22	
PR-4	SW8081A	gamma-BHC	210		Y	14	2/7/2007	Normal	ug/l	210	416
RW-1	SW8081A	alpha-BHC	17		Y	3.6	2/7/2007	Normal	ug/l	17	
RW-1	SW8081A	beta-BHC	4.9	J	Y	2.2	2/7/2007	Normal	ug/l	4.9	
RW-1	SW8081A	delta-BHC		U	N	2.3	2/7/2007	Normal	ug/l	0	
RW-1	SW8081A	gamma-BHC		U	N	2.9	2/7/2007	Normal	ug/l	0	21.9
RW-2	SW8081A	alpha-BHC	0.33		Y	0.036	2/7/2007	Normal	ug/l	0.33	
RW-2	SW8081A	beta-BHC	0.16		Y	0.022	2/7/2007	Normal	ug/l	0.16	
RW-2	SW8081A	delta-BHC	0.080		Y	0.023	2/7/2007	Normal	ug/l	0.08	
RW-2	SW8081A	gamma-BHC	0.21		Y	0.029	2/7/2007	Normal	ug/l	0.21	0.78
RW-3	SW8081A	alpha-BHC	53		Y	3.6	2/7/2007	Normal	ug/l	53	
RW-3	SW8081A	beta-BHC	3.4	J	Y	2.2	2/7/2007	Normal	ug/l	3.4	
RW-3	SW8081A	delta-BHC	6.0		Y	2.3	2/7/2007	Normal	ug/l	6	
RW-3	SW8081A	gamma-BHC	40		Y	2.9	2/7/2007	Normal	ug/l	40	102.4
RW-3	SW8081A	alpha-BHC	45		Y	7.2	2/7/2007	Duplicate	ug/l	45	
RW-3	SW8081A	beta-BHC		U	N	4.4	2/7/2007	Duplicate	ug/l	0	
RW-3	SW8081A	delta-BHC	5.2	J	Y	4.6	2/7/2007	Duplicate	ug/l	5.2	
RW-3	SW8081A	gamma-BHC	35		Y	5.8	2/7/2007	Duplicate	ug/l	35	85.2
RW-4	SW8081A	alpha-BHC	55		Y	3.6	2/7/2007	Normal	ug/l	55	
RW-4	SW8081A	beta-BHC	4.3	J	Y	2.2	2/7/2007	Normal	ug/l	4.3	
RW-4	SW8081A	delta-BHC	5.4		Y	2.3	2/7/2007	Normal	ug/l	5.4	
RW-4	SW8081A	gamma-BHC	43		Y	2.9	2/7/2007	Normal	ug/l	43	107.7
RW-5	SW8081A	alpha-BHC	190		Y	36	2/7/2007	Normal	ug/l	190	
RW-5	SW8081A	beta-BHC		U	N	22	2/7/2007	Normal	ug/l	0	
RW-5	SW8081A	delta-BHC		U	N	23	2/7/2007	Normal	ug/l	0	
RW-5	SW8081A	gamma-BHC	190		Y	29	2/7/2007	Normal	ug/l	190	380

Olin Niagara Falls Plant Site
Mercury Header Data
February - 2007

LocationID	AnalyticalMethod	ParameterName	Result	LabFlag	Detect Flag	DetectionLimit	SampleDate	SampleType	Units	Total or Dissolved
OBA-9AR	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	T
PR-12	SW7470	MERCURY	0.00084		Y	0.000067	2/7/2007	Normal	mg/l	T
PR-4	SW7470	MERCURY	0.00030		Y	0.000067	2/7/2007	Normal	mg/l	T
RW-1	SW7470	MERCURY	0.0032		Y	0.000067	2/7/2007	Normal	mg/l	T
RW-2	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	T
RW-3	SW7470	MERCURY	0.00022		Y	0.000067	2/7/2007	Normal	mg/l	T
RW-3	SW7470	MERCURY		U	N	0.000067	2/7/2007	Duplicate	mg/l	T
RW-4	SW7470	MERCURY	0.00067		Y	0.000067	2/7/2007	Normal	mg/l	T
RW-5	SW7470	MERCURY	0.00063		Y	0.000067	2/7/2007	Normal	mg/l	T
OBA-9AR	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	D
PR-12	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	D
PR-4	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	D
RW-1	SW7470	MERCURY	0.00092		Y	0.000067	2/7/2007	Normal	mg/l	D
RW-2	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	D
RW-3	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	D
RW-3	SW7470	MERCURY		U	N	0.000067	2/7/2007	Duplicate	mg/l	D
RW-4	SW7470	MERCURY		U	N	0.000067	2/7/2007	Normal	mg/l	D
RW-5	SW7470	MERCURY	0.00024		Y	0.000067	2/7/2007	Normal	mg/l	D