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MANAGEMENT, INC.**

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NYSDEC - REG. #
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Re: 102nd Street Landfill Site, Niagara Falls, NY
2002 Annual Report

On behalf of Miller Springs Remediation Management, Inc. (Occidental Chemical Corporation) and Olin Corporation enclosed is a copy of the 102nd Street (Site) Annual Report.

Site Operation and Maintenance (O&M) was initiated April of 2002 following the Certificate of Competition from the United States Environmental Protection Agency (EPA).

This is the first in a series of yearly submission that will cover the O&M activities that occurred on Site during the year from January through December.

Sincerely,

George Luxbacher, P.E., Ph.D.
Miller Springs Remediation Management, Inc.

Michael Bellotti, P.G.
Olin Corporation

c.c. Mr. Gary Kline, NYSDEC (5 copies)
Mr. Donald Tubridy, MSRM
Mr. Brian Downie, MSRM
MR. Jim Thornton, CRA

**102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK**

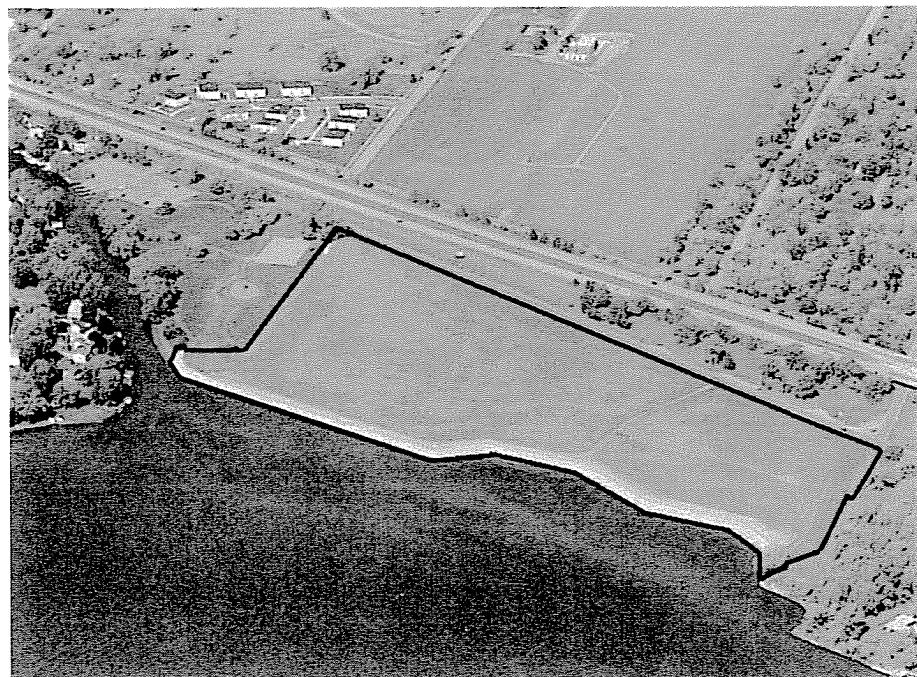
ANNUAL REPORT 2002



Miller Springs Remediation Management, Inc and Olin Corporation

**102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK**

ANNUAL REPORT 2002



Miller Springs Remediation Management, Inc and Olin Corporation

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EXECUTIVE SUMMARY

The following report describes the Operation and Maintenance (O&M) activities for 2002 for the 102nd Street Landfill Site (Site) located in Niagara Falls, New York. The Site covers approximately 22.1 acres and consists of two separate properties owned by Occidental Chemical Corporation (OxyChem) (15.6 acres) and Olin Corporation (6.5 acres). Both OxyChem's and Olin's responsibilities at the Site are currently handled by Miller Springs Remediation Management, Inc. (MSRM), an affiliate of OxyChem.

During 2002, the Remedial Action System Components at 102nd Street performed very well. The leachate collection system removed 635,574 gallons of APL from the site. Water level monitoring showed that an inward gradient was maintained for 100% of the time at seven of the well pairs and more than 60% of the time at two other well pairs. Only one well pair (number 7) on the north side of the site indicated that an inward gradient was not being maintained in that location, however analytical results indicate no chemistry outside of the slurry wall at PCM-07.

It should also be noted that the Buffalo Avenue storm sewer immediately adjacent to PCM-07 has an invert elevation of 563.5 above mean sea level (amsl) which is below the average water level in PCM-07 (approximately 565 amsl). It is possible that groundwater infiltration into the sewer at this location is depressing the groundwater elevations outside of the slurry wall.

In 2002, 1,490 gallons of NAPL were removed from the NAPL Recovery Wells on the Site.

1.0 INTRODUCTION

This report describes the Operation and Maintenance (O&M) Activities for 2002 for the 102nd Street Landfill Site (Site) located in Niagara Falls, New York. The Site covers approximately 22.1 acres and consists of two separate properties owned by Occidental Chemical Corporation (15.6 acres) and Olin Corporation (6.5 acres). The Site is bordered by the Niagara River to the south, Buffalo Avenue to the north, Griffon Park to the west, and privately owned land to the east. A perimeter fence restricts Site access. Authorized vehicular traffic access is provided from Buffalo Avenue by fence gates.



The RA system components at the Site that have associated O&M activities are as follows:

- a landfill cap;
- a perimeter slurry wall;
- an aqueous phase liquid (APL) collection and discharge system;
- a non-aqueous phase liquid (NAPL) recovery system;
- post-RA system performance monitoring;
- a perimeter fence; and
- shallow water environment monitoring.

Remedial construction at the site was completed in 1999 and groundwater pumping began March of the same year. Although groundwater pumping was not required to begin until the remedial work was approved by the United States Environmental Protection Agency (EPA) and the New York State Department of Environmental Conservation (DEC), the owners agreed that dewatering of the site would be advantageous and began voluntarily pumping from the Wet Wells.

The Final Close Out Report for the site was issued on August 13, 1999 and comments were received on July 11, 2000. Final responses to the comments were submitted to the agencies on September 22, 2000.

Final revisions to the Operations and Maintenance Manual were submitted to the agencies on August 17, 2001 and final approval of the manual was received on October 24, 2001.

The Certificate of Completion for the site was submitted to the agencies on January 14, 2002 and was accepted by the agencies on March 13, 2002, signifying that all remedial work had been completed. As a result, the formal initiation of O&M for the site occurred in April 2002.

This report is the first Annual Report for the Site, covering all O&M activities. Except for water level and pumping information, this initial report will only cover the period after the Certificate of Completion was approved and O&M activities begun.

2.0 MONITORING AND TESTING

2.1 MONITORING PLAN

2.1.1 WATER LEVEL MONITORING

Water levels in the piezometers and monitoring wells were taken monthly throughout 2002 in accordance with the O&M Plan.

Water level data has been converted to elevation and is listed on the Annual Report Form, which is attached. The data for 2001 and 2002 have also been graphed to show the groundwater elevation trends. A plan view of the well pair locations and graphs are included in Appendix A. Additionally **Table 2.1** shows the elevations for each of the pairings and the gradients achieved for the yearly events.

The hydraulic monitoring program currently consists of monthly measurements (for the first 2 years of O&M, quarterly thereafter) of water levels in 20 monitoring wells located outside (10, PCM series) and inside (10, PZ series) of the slurry wall. Listed below and shown in **Figure 1** are the pairings that are used to monitor the gradients in and around the slurry wall.

<u>Pair</u>	<u>Outside</u>	<u>Inside</u>	<u>Location</u>
1	PCM-01	PZ-01	West Side
2	PCM-02	PZ-02	Southwest Side
3	PCM-03	PZ-03	South Side
4	PCM-04	PZ-04	South Side
5	PCM-05	PZ-05	Southeast Side
6	PCM-06	PZ-06	Northeast Side
7	PCM-07	PZ-07	North Side
8	PCM-08	PZ-08	North Side
9	PCM-09	PZ-09	North Side
10	PCM-10	PZ-10	Northwest Side

Inward gradients towards the landfill were prevalent at well pairs 1 and 2 on the west side of the site. On the south side of the site, along the Niagara River, well pairs 3 and 5 consistently showed an inward gradient but well pair 4 showed an inward gradient only about one-half of the time. On the east side of the site, well pair 6 showed a consistent inward gradient. On the north side of the site, along Buffalo Avenue, well pair 8 showed an inward gradient but well pair 7 generally showed an outward gradient. Well pair 10 showed an inward gradient approximately two-thirds of the time and well pair 9 did not have enough acceptable data to define any gradient direction. For the purposes

of graphing, the water level in either PCM-09 or PZ-09 was generally considered to be just below the bottom of the well if the monitoring indicated the well was dry.

Based upon the results it is recommended that PZ-09 and PCM-09 be drilled 6' deeper and equipped with 10' long screens to ensure that there will be measurable water levels in the wells. Presently these wells are equipped with 4' long screens, PZ-09 is 14.39' deep and PCM-09 is 11.12' deep.

2.1.2 GROUNDWATER QUALITY MONITORING

The groundwater quality monitoring program consists of ten (10) Overburden Monitoring Wells (OMWS) PCM-01 – PCM-10 and three (3) Bedrock Wells PCB-M-01 – PCB-M-03 sampled quarterly for the first 2 years, semi-annual for 8 years and annually thereafter.

Groundwater quality monitoring began with the collection of the first samples in late May and early June. Additional sampling was completed in August and December. The results of these sampling events were distributed to the agencies in August 2002, October 2002, and March 2003 and therefore, have not been included with this report. However, Table 2.2 shows the results from each of the monitoring events for each sampled well.

The first sampling event showed small amounts of pesticides in PCM-01 and some semi-volatiles and volatiles (especially chlorobenzene) in PCM-03, PCM-04, and PCM-05. All bedrock wells were non-detect for all parameters.

The second sampling event showed nearly the same results except that PCM-01 was non-detect for all pesticides. Again, the bedrock wells were non-detect for all parameters.

The third round of sampling was similar to the second round. The bedrock wells were again non-detect for all parameters.

2.1.3 NAPL PRESENCE MONITORING

NAPL presence monitoring began in April immediately after the Certificate of Completion was approved. Per the O&M Manual, NAPL presence was checked each

month for the first three months and quarterly after. The results of this monitoring are presented in the Annual Report Form, which is attached.

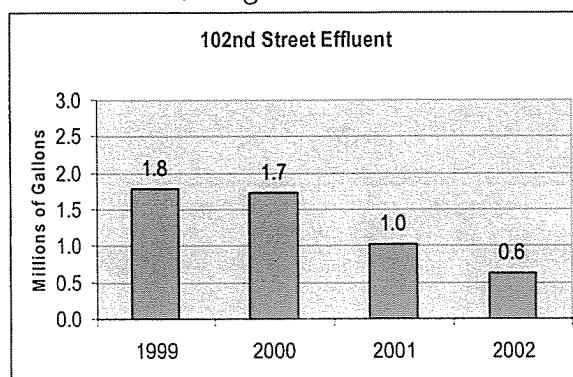
NAPL was found in wells NR-01, NR-02, NR-03, NR-05, and NR-08. No NAPL was present in wells NR-04, NR-07, and NR-10.

3.0 OPERATION OF 102ND STREET LANDFILL SYSTEMS

3.1 APL COLLECTION AND DISCHARGE SYSTEM OPERATION

The individual APL pumps in the APL collection wet wells operated throughout 2002 on level control. All well pumps were set to start up at an elevation of 562.6 (1' below the average Niagara River water level) and shut down when elevations in the wells reached 562.1. These are the same operating conditions as were used in 2001.

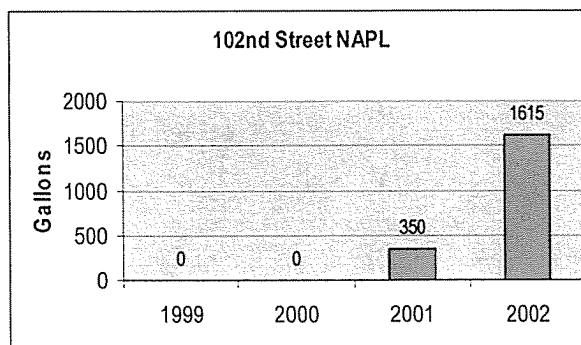
A total of 635,574 gallons of APL were removed from the site and pumped to the Love



Canal Treatment Facility (LCTF). There the APL was treated and released to the City of Niagara Falls Sanitary Sewer System. 5.2 million gallons have been removed from the Site since pumping was initiated in March of 1999.

3.2 NAPL COLLECTION SYSTEM OPERATION

A total of 1,615 gallons of material were removed from the NAPL Recovery Wells at the



site in 2002. This material was transported to the Love Canal Facility where 125 gallons of APL were decanted from the drums and introduced into Love Canal collection system for treatment at the LCTF. The remaining 1,490 gallons of NAPL were shipped to the Clean Harbors Facility in Deer Park, Texas for incineration.

4.0 SITE MAINTENANCE AND INSPECTIONS

4.1 SITE INSPECTIONS

A Semi-Annual Site Inspection was held on October 24, 2002. The inspection was conducted by Abul Barkat of the NYS DEC, Brian Downie from MSRM, and Jim Thornton from Conestoga-Rovers & Associates (CRA). Notes from this inspection are attached in Appendix A.

The inspection covered all portions of the landfill remediation including the APL Collection System, APL Discharge System, Landfill Cap, Bulkhead, and Storm Sewer. A few items requiring maintenance were noted and are listed on the form.



conditions would be monitored to determine if the reinstallation of the gate would be necessary.

One major item of concern that was noted during the inspection was that the ductile iron flap gate covering the end of the 48" diameter storm sewer had broken off and was lying in the river next to the shore. The original plan called for the gate to be reinstalled on the sewer but further study showed that the gate could possibly become jammed shut with ice and debris. It was agreed that the flap gate would remain off and the sewer

Summarized below are items that were noted at the last Inspection (October 24, 2002), and their status:

Item	Action	Date	Status
Flapper on storm sewer.	Flapper recovered from river.	Nov-2002	Ongoing. Investigation on silt.
Mow Cap.	Cut grass every Fall.	Sept-2002	Done, Continue Annually.
Repair 2 spots on crib-wall.	Repaired wall.	Mar-2003	Done.
Pump out forcemain manholes.	Manholes pumped out.	Nov-2002	Done, Check Semi-Annual

4.2 SHALLOW WATER ENVIRONMENT MONITORING

An inspection of the Shallow Water Environment was completed by Chris Hart of CRA and Ken Roblee of the NYSDEC on August 21, 2002. At that time both parties agreed that the criterion of 80% aerial coverage was met.

A detailed inspection of the area was made on August 26, 2002 to document the exact aerial coverage of the vegetation. A complete report of the monitoring results for the past 6 years will be issued to the Agencies within the next few months.

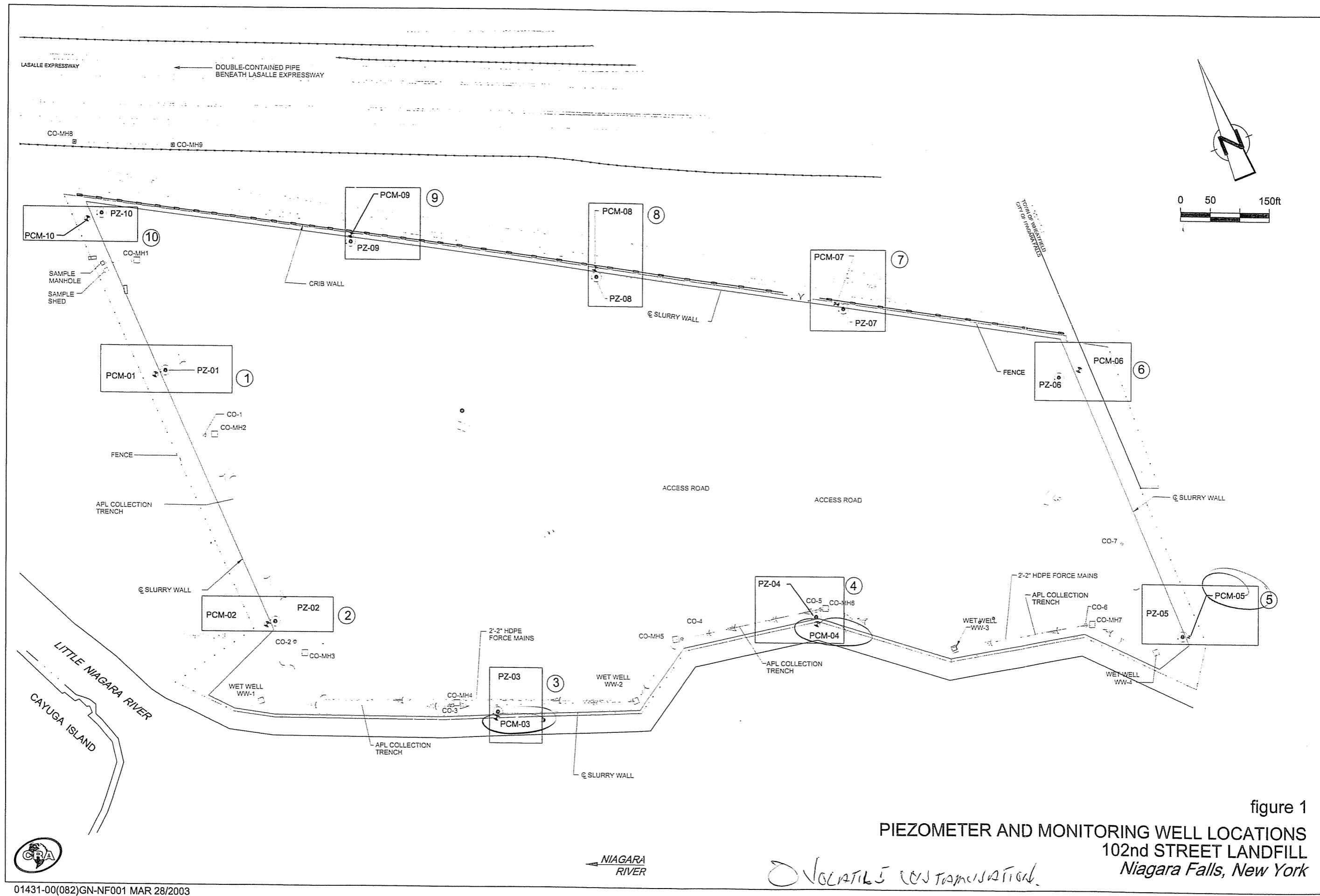
4.3 MAINTENANCE

Maintenance performed in 2002 included pumping out accumulated water from the forcemain cleanout manholes located on the landfill. Other maintenance included

mowing the landfill vegetation to inhibit the growth of woody material and refitting the covers on the collection system cleanouts for easier access.



FIGURES



PIEZOMETER AND MONITORING WELL LOCATIONS
102nd STREET LANDFILL
Niagara Falls, New York

TABLES

Table 2.1
102nd Street Site
Gradients PCM Wells (Outside) vs. PZ Wells (Inside) Elevations

Wells	TOC	Elevations	Depth	1/3/02	2/6/02	3/6/02	4/5/02	5/7/02	6/12/02	7/1/02	8/1/02	9/3/02	10/1/02	11/1/02	12/4/02	Inward Gradients
PCM-01	578.24	549.05	566.16	566.99	567.1	567.04	566.94	566.84	566.74	566.83	565.98	565.79	565.84	565.84	565.82	
PZ-01	582.21	549.64	564.66	566.8	564.63	564.46	564.57	564.81	564.51	564.59	564.71	564.61	564.71	564.71	564.27	
Gradients		-1.5	-0.19	-2.47	-2.58	-2.37	-2.03	-2.23	-2.24	-1.27	-1.18	-1.13	-1.13	-1.13	-1.55	12
PCM-02	577.24	547.9	566.2	566.82	566.94	567.09	566.76	567.91	566.74	566.77	565.94	565.69	565.59	565.59	565.86	
PZ-02	577.92	548.43	562.56	562.43	562.47	562.77	562.82	562.77	562.92	563.14	563.1	562.07	562.97	562.97	562.62	
Gradients		-3.64	-4.39	-4.47	-4.32	-3.94	-5.14	-3.82	-3.63	-2.84	-3.63	-2.62	-2.62	-2.62	-3.24	12
PCM-03	576.81	545.15	563.02	563.21	561.02	563.41	563.55	563.89	563.65	563.91	563.86	563.91	563.41	563.41	562.81	
PZ-03	576.88	545.63	561.88	561.88	561.89	562.22	562.32	562.27	562.4	562.68	562.58	562.18	562.53	562.53	562.1	
Gradients		-1.14	-1.33	0.87	-1.19	-1.23	-1.62	-1.25	-1.23	-1.28	-1.73	-0.88	-0.88	-0.88	-0.71	11
PCM-04	575.73	547.74	563.13	563.42	563.18	563.61	563.7	564.01	563.87	563.98	564.09	563.98	563.4	563.4	563	
PZ-04	576.96	545.63	563.48	563.15	563.17	563.25	563.36	563.34	563.5	563.36	563.48	563.21	563.36	563.36	563.01	
Gradients		0.35	-0.27	-0.01	-0.36	-0.34	-0.67	-0.37	-0.62	-0.61	-0.77	-0.04	-0.04	-0.04	0.01	10
PCM-05	575.93	550	564.15	565.49	565.25	565.83	565.18	564.57	564.32	564.35	563.28	563.21	563.03	563.03	563.58	
PZ-05	576.87	550.5	561.67	561.75	561.78	563.17	562.21	562.19	562.27	562.44	562.39	562.15	562.33	562.33	562.06	
Gradients		-2.48	-3.74	-3.47	-2.66	-2.97	-2.38	-2.05	-1.91	-0.89	-1.06	-0.7	-0.7	-0.7	-1.52	12
PCM-06	580.25	566.5	567.73	567.25	567.55	567.43	567.47	567.42	567.64	567.64	568.05	567.81	568.15	568.15		
PZ-06	584.66	564.05	565.48	565.61	565.62	565.48	565.54	565.54	565.5	565.69	565.47	565.48	565.48	565.48	565.44	
Gradients		-2.25	-1.64	-2.1	-2.07	-1.89	-1.93	-1.92	-1.95	-1.03	-2.57	-2.33	-2.33	-2.33	-2.71	
PCM-07	578.8	557.63	565.45	565.72	565.76	566.02	566.2	562.29	564.4	564.43	562	564.36	565.1	565.1	565.3	
PZ-07	579.1	564.8	566.14	566.12	566.2	566.1	566.3	566.3	566.35	566.59	566.58	566.52	566.38	566.38	566.2	
Gradients		0.69	0.4	0.44	0.08	0	4.01	1.95	2.16	4.58	2.16	2.16	2.16	2.16	0	0
PCM-08	579.32	564.43	569.27	569.07	569.32	569.71	569.52	568.49	568.22	568.32	566.49	566.49	566.44	566.44	566.33	
PZ-08	580.99	565.38	566.66	566.58	566.58	566.49	566.53	566.54	566.49	566.55	566.58	566.52	566.38	566.38	566.2	
Gradients		-2.61	-2.49	-2.74	-3.22	-2.99	-1.95	-1.73	-1.77	-2.06	-3.93	-3.13	-3.13	-3.13	-2.84	11
PCM-09	578.99	567.87	566.64	566.41	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	dry	
PZ-09	580.67	566.28	-1.23	-1.46	-1.59	-1.59	-1.58	-1.59	-1.59	-1.59	-1.3	-1.59	-1.59	-1.59	-1.59	12
Gradients																
PCM-10	579.4	556.39	566.55	567.23	567.26	567.45	566.87	566.9	566.8	566.83	565.82	565.63	565.7	565.7	566.04	
PZ-10	581.65	561.56	566.25	564.06	566.26	566.2	566.25	566.25	566.25	566.33	566.2	566.2	566.17	566.17	566.12	
Gradients		-0.3	-3.17	-1	-1.25	-0.62	-0.65	-0.55	-0.5	-0.38	0.57	0.47	0.47	0.47	0.08	8

Notes:

TOC: Top of Casing
 Depth: Elevation to bottom of Well
 Dry: No water level detected in well, depth elevation used in place of absent elevation.

Flooded: Water level detected to TOC in well, TOC elevation used in place of absent elevation.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Unit	Well	PCBM-01	PCBM-01	PCBM-01	PCBM-01	PCBM-01
				Date:	PCBM-01-502	PCBM-01-802	PCBM-12-802	PCBM-01-1202	Duplicate
<i>Volatiles</i>									
1,2,3-Trichlorobenzene	5	10	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
1,2,4-Trichlorobenzene	5	10	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
1,2-Dichlorobenzene	3	10	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
1,4-Dichlorobenzene	3	10	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
2-Chlorotoluene	5	5	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
Benzene	1	5	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
Chlorobenzene	5	5	µg/L	5U	5.00 U	5.00 U	5.00 U	1.00 U	
<i>Semi-Volatiles</i>									
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5U	5.00 U	5.00 U	5.00 U	5.05 U	
2,4,5-Trichlorophenol	1	50	µg/L	10U	10.0 U	10.0 U	10.0 U	10.1 U	
2,4-Dichlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.1 U	
2,5-Dichlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.1 U	
2-Chlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.1 U	
4-Chlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.1 U	
Phenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.1 U	
<i>Pesticides</i>									
alpha-BHC	0.01	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
beta-BHC	0.04	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
delta-BHC	0.04	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
gamma-BHC (Lindane)	0.05	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U	
<i>Metals</i>									
Arsenic	25	50	µg/L	50 U	8.35 J	10.0 U	10.0 U	10.0 U	

Notes:

- Not Applicable
- BHC Benzene Hexachlororide
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA Criteria	Survey Level	Well Sample ID: PCBM-02-602 Date: 6/4/2002	PCBM-02	PCBM-02	PCBM-02	PCBM-02
				Init	PCBM-02-802 8/29/2002	PCBM-02-1202 12/12/2002	PCBM-02
<i>Volatiles</i>							
1,2,3-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	1.00 U	1.00 U
1,2,4-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	1.00 U	1.00 U
1,2-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	1.00 U	1.00 U
1,4-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	1.00 U	1.00 U
2-Chlorotoluene	5	5	µg/L	5 U	5.00 U	1.78 U	1.00 U
Benzene	1	5	µg/L	5 U	5.00 U	1.00 U	1.00 U
Chlorobenzene	5	5	µg/L	5 U	5.00 U	1.00 U	1.00 U
<i>Semi-Volatiles</i>							
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5 U	5.00 U	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	µg/L	10 U	10.0 U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U
2,5-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U
2-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U
4-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U
Phenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U
<i>Pesticides</i>							
alpha-BHC	0.01	10	µg/L	0.051 U	0.0500 U	0.0500 U	0.0500 U
beta-BHC	0.04	10	µg/L	0.051 U	0.0500 U	0.0500 U	0.0500 U
delta-BHC	0.04	10	µg/L	0.051 U	0.0500 U	0.0500 U	0.0500 U
gamma-BHC (Lindane)	0.05	10	µg/L	0.051 U	0.0500 U	0.0500 U	0.0500 U
<i>Metals</i>							
Arsenic	25	50	µg/L	10 U	10.0 U	10.0 U	10.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Init	Well	PCBM-03	PCBM-03	PCBM-03
				Sample ID:	PCBM-03-502	PCBM-03-802	PCBM-03-1202
				Date:	6/3/2002	8/30/2002	12/13/2002
Volatiles							
1,2,3-Trichlorobenzene	5	10	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.00 U	
1,2,4-Trichlorobenzene	5	10	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.00 U	
1,2-Dichlorobenzene	3	10	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.00 U	
1,4-Dichlorobenzene	3	10	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.00 U	
2-Chlorotoluene	5	5	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.08 U	
Benzene	1	5	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.00 U	
Chlorobenzene	5	5	$\mu\text{g}/\text{L}$	5 U	5.00 U	1.00 U	
Semi-Volatiles							
1,2,4,5-Tetrachlorobenzene	5	10	$\mu\text{g}/\text{L}$	5 U	5.00 U	5.00 U	
2,4,5-Trichlorophenol	1	50	$\mu\text{g}/\text{L}$	10 U	10.0 U	10.0 U	
2,4-Dichlorophenol	1	10	$\mu\text{g}/\text{L}$	10 U	10.0 U	10.0 U	
2,5-Dichlorophenol	1	10	$\mu\text{g}/\text{L}$	10 U	10.0 U	10.0 U	
2-Chlorophenol	1	10	$\mu\text{g}/\text{L}$	10 U	10.0 U	10.0 U	
4-Chlorophenol	1	10	$\mu\text{g}/\text{L}$	10 U	10.0 U	10.0 U	
Phenol	1	10	$\mu\text{g}/\text{L}$	10 U	9.86 J	10.0 U	
Pesticides							
alpha-BHC	0.01	10	$\mu\text{g}/\text{L}$	0.05 U	0.0500 U	0.0500 U	
beta-BHC	0.04	10	$\mu\text{g}/\text{L}$	0.05 U	0.0500 U	0.0500 U	
delta-BHC	0.04	10	$\mu\text{g}/\text{L}$	0.05 U	0.0500 U	0.0500 U	
gamma-BHC (Lindane)	0.05	10	$\mu\text{g}/\text{L}$	0.05 U	0.0500 U	0.0500 U	
Metals							
Arsenic	25	50	$\mu\text{g}/\text{L}$	50 U	9.20 J	10.0 U	

Notes:
 - Not Applicable
 BHC Benzene Hexachlororide
 J Estimated
 U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA	Survey Level	Well	PCM-01	PCM-01	PCM-01
				Sample ID:	PCM-01-502 Date: 6/3/2002	PCM-01-802 8/29/2002
<i>Volatiles</i>						
1,2,3-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	1.00 U
1,2,4-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	1.00 U
1,2-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	1.00 U
1,4-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	1.00 U
2-Chlorotoluene	5	5	µg/L	5 U	5.00 U	1.00 U
Benzene	1	5	µg/L	5 U	5.00 U	1.00 U
Chlorobenzene	5	5	µg/L	5 U	5.00 U	1.00 U
<i>Semi-Volatiles</i>						
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5 U	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	µg/L	10 U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U
2,5-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U
2-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U
4-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U
Phenol	1	10	µg/L	10 U	10.0 U	10.0 U
<i>Pesticides</i>						
alpha-BHC	0.01	10	µg/L	0.0146 J	0.0500 U	0.0500 U
beta-BHC	0.04	10	µg/L	0.141	0.0500 U	0.0500 U
delta-BHC	0.04	10	µg/L	0.864	0.0500 U	0.0500 U
gamma-BHC (Lindane)	0.05	10	µg/L	0.0103 J	0.0500 U	0.0500 U
<i>Metals</i>						
Arsenic	25	50	µg/L	50 U	100 U	20.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Unit	Well	PCM-02	PCM-02	PCM-02	PCM-02
				Date:	PCM-12-502 6/3/2002	PCM-02-502 6/3/2002	Duplicate	PCM-02-802 8/28/2002
Volatiles								
1,2,3-Trichlorobenzene	5	10	µg/L	5U	5U	5U	5.00 U	1.00 U
1,2,4-Trichlorobenzene	5	10	µg/L	5U	5U	5U	5.00 U	1.00 U
1,2-Dichlorobenzene	3	10	µg/L	5U	5U	5U	5.00 U	1.00 U
1,4-Dichlorobenzene	3	10	µg/L	5U	5U	5U	5.00 U	1.00 U
2-Chlorotoluene	5	5	µg/L	5U	5U	5U	5.00 U	1.00 U
Benzene	1	5	µg/L	5U	5U	5U	5.00 U	1.00 U
Chlorobenzene	5	5	µg/L	5U	5U	5U	5.00 U	1.00 U
Semi-Volatiles								
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5U	5U	5U	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	µg/L	10U	10U	10U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	µg/L	10U	10U	10U	10.0 U	10.0 U
2,5-Dichlorophenol	1	10	µg/L	10U	10U	10U	10.0 U	10.0 U
2-Chlorophenol	1	10	µg/L	10U	10U	10U	10.0 U	10.0 U
4-Chlorophenol	1	10	µg/L	10U	10U	10U	10.0 U	10.0 U
Phenol	1	10	µg/L	10U	10U	10U	10.0 U	10.0 U
Pesticides								
alpha-BHC	0.01	10	µg/L	0.05 U	0.05 U	0.05 U	0.0500 U	0.0505 U
beta-BHC	0.04	10	µg/L	0.0072 J	0.05 U	0.05 U	0.0500 U	0.0505 U
delta-BHC	0.04	10	µg/L	0.0384 J	0.05 U	0.05 U	0.0500 U	0.0505 U
gamma-BHC (Lindane)	0.05	10	µg/L	0.05 U	0.05 U	0.05 U	0.0500 U	0.0505 U
Metals								
Arsenic	25	50	µg/L	10 U	10 U	10 U	10.0 U	10.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Well Sample ID: PCM-03-502 Date: 5/31/2002	Unit	PCM-03	PCM-03-802 8/28/2002	PCM-03-1202 12/12/2002	PCM-03 12/12/2002 Duplicate
					PCM-03	PCM-03-802 8/28/2002	PCM-03-1202 12/12/2002	PCM-03 12/12/2002 Duplicate
Volatiles								
1,2,3-Trichlorobenzene	5	10	$\mu\text{g/L}$	125 U	100 U	100 U	100 U	100 U
1,2,4-Trichlorobenzene	5	10	$\mu\text{g/L}$	125 U	100 U	100 U	100 U	100 U
1,2-Dichlorobenzene	3	10	$\mu\text{g/L}$	71.1 J	63.4 J	86.9	84.7	
1,4-Dichlorobenzene	3	10	$\mu\text{g/L}$	217	199	291	281	
2-Chlorotoluene	5	5	$\mu\text{g/L}$	125 U	100 U	9.36 U	9.91 U	
Benzene	1	5	$\mu\text{g/L}$	82.6 J	82.4 J	133	131	
Chlorobenzene	5	5	$\mu\text{g/L}$	3600	3810	3590	3790	
Semi-Volatiles								
1,2,4,5-Tetrachlorobenzene	5	10	$\mu\text{g/L}$	5 U	5.00 UJ	5.00 U	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	$\mu\text{g/L}$	10 U	10.0 U	10.0 U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	$\mu\text{g/L}$	17.1	10.0 U	3.20 J	10.0 U	
2,5-Dichlorophenol	1	10	$\mu\text{g/L}$	10 U	10.0 U	10.0 U	10.0 U	
2-Chlorophenol	1	10	$\mu\text{g/L}$	42.7	4.51 J	5.40 J	4.20 J	
4-Chlorophenol	1	10	$\mu\text{g/L}$	84.7	15.4	10.0 U	10.0 U	
Phenol	1	10	$\mu\text{g/L}$	5.1 J	10.0 U	10.0 U	10.0 U	
Pesticides								
alpha-BHC	0.01	10	$\mu\text{g/L}$	0.05 U	0.0500 U	0.0505 U	0.0501 U	
beta-BHC	0.04	10	$\mu\text{g/L}$	0.05 U	0.0820	0.107	0.0870	
delta-BHC	0.04	10	$\mu\text{g/L}$	0.05 U	0.679	0.666 J	0.353 J	
gamma-BHC (Lindane)	0.05	10	$\mu\text{g/L}$	0.05 U	0.0500 U	0.0505 U	0.0500 U	
Metals								
Arsenic	25	50	$\mu\text{g/L}$	10 U	10.0 U	10.0 U	10.0 U	

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Well	PCM-03	PCM-03	PCM-03	PCM-03
				Sample ID:	PCM-03-502	PCM-03-892	Date: 5/31/2002
<i>Volatiles</i>							
1,2,3-Trichlorobenzene	5	10	$\mu\text{g/L}$	125 U	100 U	10.0 U	10.0 U
1,2,4-Trichlorobenzene	5	10	$\mu\text{g/L}$	125 U	100 U	10.0 U	10.0 U
1,2-Dichlorobenzene	3	10	$\mu\text{g/L}$	71.1 J	63.4 J	86.9	84.7
1,4-Dichlorobenzene	3	10	$\mu\text{g/L}$	217	199	291	281
2-Chlorotoluene	5	5	$\mu\text{g/L}$	125 U	100 U	9.36 U	9.91 U
Benzene	1	5	$\mu\text{g/L}$	82.6 J	82.4 J	133	131
Chlorobenzene	5	5	$\mu\text{g/L}$	3600	3810	3590	3790
<i>Semi-Volatiles</i>							
1,2,4,5-Tetrachlorobenzene	5	10	$\mu\text{g/L}$	5 U	5.00 UJ	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	$\mu\text{g/L}$	10 U	10.0 U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	$\mu\text{g/L}$	17.1	10.0 U	3.20 J	10.0 U
2,5-Dichlorophenol	1	10	$\mu\text{g/L}$	10 U	10.0 U	10.0 U	10.0 U
2-Chlorophenol	1	10	$\mu\text{g/L}$	42.7	4.51 J	5.40 J	4.20 J
4-Chlorophenol	1	10	$\mu\text{g/L}$	84.7	15.4	10.0 U	10.0 U
Phenol	1	10	$\mu\text{g/L}$	5.1 J	10.0 U	10.0 U	10.0 U
<i>Pesticides</i>							
alpha-BHC	0.01	10	$\mu\text{g/L}$	0.05 U	0.0500 U	0.0505 U	0.0501 U
beta-BHC	0.04	10	$\mu\text{g/L}$	0.05 U	0.0820	0.107	0.0870
delta-BHC	0.04	10	$\mu\text{g/L}$	0.05 U	0.679	0.666 J	0.353 J
gamma-BHC (Lindane)	0.05	10	$\mu\text{g/L}$	0.05 U	0.0500 U	0.0505 U	0.0500 U
<i>Metals</i>							
Arsenic	25	50	$\mu\text{g/L}$	10 U	10.0 U	10.0 U	10.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachlororide
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Well Sample ID: Date:	PCM-04	PCM-04	PCM-04	PCM-04
				PCM-04-602 6/4/2002	PCM-04-802 8/30/2002	PCM-04-1202 12/10/2002	PCM-04
Volatiles							
1,2,3-Trichlorobenzene	5	10	μg/L	5 U	5.00 U	20.0 U	
1,2,4-Trichlorobenzene	5	10	μg/L	5 U	5.00 U	20.0 U	
1,2-Dichlorobenzene	3	10	μg/L	66.9	52.5	27.2	
1,4-Dichlorobenzene	3	10	μg/L	261	272	154	
2-Chlorotoluene	5	5	μg/L	5 U	5.00 U	20.0 U	
Benzene	1	5	μg/L	228 J	218	143	
Chlorobenzene	5	5	μg/L	6080	6290	4210	
Semi-Volatiles							
1,2,4,5-Tetrachlorobenzene	5	10	μg/L	5 U	5.00 U	5.05 U	
2,4,5-Trichlorophenol	1	50	μg/L	10 U	10.0 U	10.1 U	
2,4-Dichlorophenol	1	10	μg/L	6.19 J	4.69 J	10.1 U	
2,5-Dichlorophenol	1	10	μg/L	10 U	10.0 U	10.1 U	
2-Chlorophenol	1	10	μg/L	19.3	18.8	12.4 J	
4-Chlorophenol	1	10	μg/L	48.6	37.3	32.6 J	
Phenol	1	10	μg/L	3.6 J	10.0 U	10.1 U	
Pesticides							
alpha-BHC	0.01	10	μg/L	0.05 U	0.0500 U	0.0505 U	
beta-BHC	0.04	10	μg/L	0.05 U	0.0500 U	0.0505 U	
delta-BHC	0.04	10	μg/L	0.05 U	0.0500 U	0.0505 U	
gamma-BHC (indane)	0.05	10	μg/L	0.05 U	0.0500 U	0.0505 U	
Metals							
Arsenic	25	50	μg/L	10 U	10.0 U	10.0 U	

Notes:
 - Not Applicable
 BHC Benzene Hexachloride
 J Estimated
 U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Well	PCM-05	PCM-05	PCM-05	PCM-05
				Sample ID:	PCM-05-602	PCM-05-802	Date: 8/29/2002
Volatiles							
1,2,3-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	1.00 U	
1,2,4-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	1.00 U	
1,2-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	1.00 U	
1,4-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	1.00 U	
2-Chlorotoluene	5	5	µg/L	5 U	5.00 U	2.00 U	
Benzene	1	5	µg/L	5.91	2.79 J	1.23	
Chlorobenzene	5	5	µg/L	96.8	69.9	47.8	
Semi-Volatiles							
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5 U	5.00 U	5.00 U	
2,4,5-Trichlorophenol	1	50	µg/L	10 U	10.0 U	10.0 U	
2,4-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	
2,5-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	
2-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	
4-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	
Phenol	1	10	µg/L	10 U	10.0 U	10.0 U	
Pesticides							
alpha-BHC	0.01	10	µg/L	0.05 U	0.050 U	0.0505 U	
beta-BHC	0.04	10	µg/L	0.05 U	0.050 U	0.0505 U	
delta-BHC	0.04	10	µg/L	0.05 U	0.050 U	0.0505 U	
gamma-BHC (Lindane)	0.05	10	µg/L	0.05 U	0.050 U	0.0505 U	
Metals							
Arsenic	25	50	µg/L	10 U	10.0 U	10.0 U	

Notes:

- Not Applicable
- BHC Benzene Hexachlororide
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Well Sample ID: Date:	PCM-06 Dry	PCM-06 Dry	PCM-06 Dry
Volatiles						
1,2,3-Trichlorobenzene	5	10		μg/L		
1,2,4-Trichlorobenzene	5	10		μg/L		
1,2-Dichlorobenzene	3	10		μg/L		
1,4-Dichlorobenzene	3	10		μg/L		
2-Chlorotoluene	5	5		μg/L		
Benzene	1	5		μg/L		
Chlorobenzene	5	5		μg/L		
Semi-Volatiles						
1,2,4,5-Tetrachlorobenzene	5	10		μg/L		
2,4,5-Trichlorophenol	1	50		μg/L		
2,4-Dichlorophenol	1	10		μg/L		
2,5-Dichlorophenol	1	10		μg/L		
2-Chlorophenol	1	10		μg/L		
4-Chlorophenol	1	10		μg/L		
Phenol	1	10		μg/L		
Pesticides						
alpha-BHC	0.01	10		μg/L		
beta-BHC	0.04	10		μg/L		
delta-BHC	0.04	10		μg/L		
gamma-BHC (Lindane)	0.05	10		μg/L		
Metals						
Arsenic	25	50		μg/L		

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA GW Criteria	Survey Level	Unit	Well	PCM-07-502	PCM-07-802	PCM-07	PCM-07-1202
				Date:	6/3/2002	8/29/2002	8/29/2002	12/18/2002
Volatiles								
1,2,3-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
1,2,4-Trichlorobenzene	5	10	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
1,2-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
1,4-Dichlorobenzene	3	10	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
2-Chlorotoluene	5	5	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
Benzene	1	5	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
Chlorobenzene	5	5	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
Semi-Volatiles								
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5 U	5.00 U	5.00 U	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
2,5-Dichlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
2-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
4-Chlorophenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
Phenol	1	10	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
Pesticides								
alpha-BHC	0.01	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0510 U	0.0510 U
beta-BHC	0.04	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0510 U	0.0510 U
delta-BHC	0.04	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0510 U	0.0510 U
gamma-BHC (Lindane)	0.05	10	µg/L	0.0081 J	0.0500 U	0.0500 U	0.0510 U	0.0510 U
Metals								
Arsenic	25	50	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDEC Class GA	Survey Level	Well Sample ID:	PCM-08	PCM-08	PCM-08
				PCM-08-602	Dry	PCM-08-1202
		Date:	6/4/2002	Aug-2002	12/13/2002	
		Unit				
Volatiles						
1,2,3-Trichlorobenzene	5	10	µg/L	5 U	-	1.00 U
1,2,4-Trichlorobenzene	5	10	µg/L	5 U	-	1.00 U
1,2-Dichlorobenzene	3	10	µg/L	5 U	-	1.00 U
1,4-Dichlorobenzene	3	10	µg/L	5 U	-	1.00 U
2-Chlorotoluene	5	5	µg/L	5 U	-	1.47 U
Benzene	1	5	µg/L	5 U	-	1.00 U
Chlorobenzene	5	5	µg/L	5 U	-	1.00 U
Semi-Volatiles						
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	-	-	5.00 U
2,4,5-Trichlorophenol	1	50	µg/L	-	-	10.0 U
2,4-Dichlorophenol	1	10	µg/L	-	-	10.0 U
2,5-Dichlorophenol	1	10	µg/L	-	-	10.0 U
2-Chlorophenol	1	10	µg/L	-	-	10.0 U
4-Chlorophenol	1	10	µg/L	-	-	10.0 U
Phenol	1	10	µg/L	-	-	10.0 U
Pesticides						
alpha-BHC	0.01	10	µg/L	-	-	0.0500 U
beta-BHC	0.04	10	µg/L	-	-	0.0500 U
delta-BHC	0.04	10	µg/L	-	-	0.0500 U
gamma-BHC (Lindane)	0.05	10	µg/L	-	-	0.0500 U
Metals						
Arsenic	25	50	µg/L	10 U	-	10.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

Table 2.2
102nd Street Site
Historical Analytical Results
Bedrock (PCBM) and Overburden (PCM)

Parameter	NYSDLC Class GA	Survey Criteria	Level	Unit	Well	PCM-10	PCM-10	PCM-10
					Sample ID:	PCM-10-602 Date: 6/4/2002	PCM-10-302 8/29/2002	PCM-10-1202 12/18/2002
Volatiles								
1,2,3-Trichlorobenzene	5	10	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
1,2,4-Trichlorobenzene	5	10	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
1,2-Dichlorobenzene	3	10	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
1,4-Dichlorobenzene	3	10	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
2-Chlorotoluene	5	5	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
Benzene	1	5	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
Chlorobenzene	5	5	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
Semi-Volatiles								
1,2,4,5-Tetrachlorobenzene	5	10	µg/L	5U	5.00 U	5.00 U	5.00 U	5.00 U
2,4,5-Trichlorophenol	1	50	µg/L	10U	10.0 U	10.0 U	10.0 U	10.0 U
2,4-Dichlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.0 U
2,5-Dichlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.0 U
2-Chlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.0 U
4-Chlorophenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.0 U
Phenol	1	10	µg/L	10U	10.0 U	10.0 U	10.0 U	10.0 U
Pesticides								
alpha-BHC	0.01	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
beta-BHC	0.04	10	µg/L	0.0662 U	0.0677 U	0.0677 U	0.0677 U	0.0677 U
delta-BHC	0.04	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
gamma-BHC (Lindane)	0.05	10	µg/L	0.05 U	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Metals								
Arsenic	25	50	µg/L	10 U	10.0 U	10.0 U	10.0 U	10.0 U
							20.0 U	20.0 U

Notes:

- Not Applicable
- BHC Benzene Hexachloride
- J Estimated
- U Non-Detected at associated value.

APPENDIX A

ANNUAL OPERATION AND MAINTENANCE REPORT
102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2002

MONITORING - Water Level Measurements

<i>Month</i>	<i>Day</i>	<i>Inspector</i>	<i>PCM-01</i>	<i>PZ-01</i>	<i>PCM-02</i>	<i>PZ-02</i>	<i>PCM-03</i>	<i>PZ-03</i>	<i>PCM-04</i>
January	01/03/2002	T. Blackmon	566.16	564.66	566.20	562.56	563.02	561.88	563.13
February	02/06/2002	T. Blackmon	566.99	566.80	566.82	562.43	563.21	561.88	563.42
March	03/06/2002	T. Blackmon	567.10	564.63	566.94	562.47	561.02	561.89	563.18
April	04/05/2002	T. Blackmon	567.04	564.46	567.09	562.77	563.41	562.22	563.61
May	05/07/2002	T. Blackmon	566.94	564.57	566.76	562.82	563.55	562.32	563.70
June	06/12/2002	T. Blackmon	566.84	564.81	567.91	562.77	563.89	562.27	564.01
July	07/01/2002	T. Blackmon	566.74	564.51	566.74	562.92	563.65	562.40	563.87
August	08/01/2002	T. Blackmon	566.83	564.59	566.77	563.14	563.91	562.68	563.98
September	09/03/2002	T. Blackmon	565.98	564.71	565.94	563.10	563.86	562.58	564.09
October	10/01/2002	T. Blackmon	565.79	564.61	565.69	562.07	563.91	562.18	563.98
November	11/01/2002	T. Blackmon	565.84	564.71	565.59	562.97	563.41	562.53	563.40
December	12/04/2002	T. Blackmon	565.82	564.27	565.86	562.62	562.81	562.10	563.00

<i>Month</i>	<i>Day</i>	<i>Inspector</i>	<i>PZ-04</i>	<i>PCM-05</i>	<i>PZ-05</i>	<i>PCM-06</i>	<i>PZ-06</i>	<i>PCM-07</i>	<i>PZ-07</i>
January	01/03/2002	T. Blackmon	563.48	564.15	561.67	567.73	565.48	565.45	566.14
February	02/06/2002	T. Blackmon	563.15	565.49	561.75	567.25	565.61	565.72	566.12
March	03/06/2002	T. Blackmon	563.17	565.25	561.78	567.72	565.62	565.76	566.20
April	04/05/2002	T. Blackmon	563.25	565.83	563.17	567.55	565.48	566.02	566.10
May	05/07/2002	T. Blackmon	563.36	565.18	562.21	567.43	565.54	566.20	566.20
June	06/12/2002	T. Blackmon	563.34	564.57	562.19	567.47	565.54	562.29	566.30
July	07/01/2002	T. Blackmon	563.50	564.32	562.27	567.42	565.50	564.40	566.35
August	08/01/2002	T. Blackmon	563.36	564.35	562.44	567.64	565.69	564.43	566.59
September	09/03/2002	T. Blackmon	563.48	563.28	562.39	dry	565.47	562.00	566.58
October	10/01/2002	T. Blackmon	563.21	563.21	562.15	568.05	565.48	564.36	566.52
November	11/01/2002	T. Blackmon	563.36	563.03	562.33	567.81	565.48	565.10	566.38
December	12/04/2002	T. Blackmon	563.01	563.58	562.06	568.15	565.44	565.30	566.20

<i>Month</i>	<i>Day</i>	<i>Inspector</i>	<i>PCM-08</i>	<i>PZ-08</i>	<i>PCM-09</i>	<i>PZ-09</i>	<i>PCM-10</i>	<i>PZ-10</i>
January	01/03/2002	T. Blackmon	569.27	566.66	dry	566.64	566.55	566.25
February	02/06/2002	T. Blackmon	569.07	566.58	dry	566.41	567.23	564.06
March	03/06/2002	T. Blackmon	569.32	566.58	dry	dry	567.26	566.26
April	04/05/2002	T. Blackmon	569.71	566.49	dry	dry	567.45	566.20
May	05/07/2002	T. Blackmon	569.52	566.53	dry	566.29	566.87	566.25
June	06/12/2002	T. Blackmon	568.49	566.54	dry	dry	566.90	566.25
July	07/01/2002	T. Blackmon	568.22	566.49	dry	dry	566.80	566.25
August	08/01/2002	T. Blackmon	568.32	566.55	dry	dry	566.83	566.33
September	09/03/2002	T. Blackmon	dry	566.49	dry	566.57	565.82	566.20
October	10/01/2002	T. Blackmon	570.37	566.44	dry	dry	565.63	566.20
November	11/01/2002	T. Blackmon	569.52	566.39	dry	dry	565.70	566.17
December	12/04/2002	T. Blackmon	569.17	566.33	dry	dry	566.04	566.12

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT

102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2002

GROUNDWATER - Quality Monitoring

<i>Quarter</i>	<i>Date Sample Taken</i>	<i>Inspector</i>	<i>Comments</i>
1st	NA		
2nd		T. Blackmon	Samples taken on 5/31, 6/3 and 6/4/02
3rd		T. Blackmon	Samples taken on 8/28, 8/29, and 8/30/02
4th		T. Blackmon	Samples taken on 12/10, 12/12, 12/13, 12/17, and 12/18/02

Results of analyses were previously sent under separate cover.

NAPL PRESENCE - Monitoring

	<i>Date</i>	<i>Inspector</i>
1st Month	04/05/2002	T. Blackmon
2nd Month	05/07/2002	T. Blackmon
3rd Month	06/12/2002	T. Blackmon
2nd Quarter	NA	
3rd Quarter	09/03/2002	T. Blackmon
4th Quarter	12/04/2002	T. Blackmon

NR-01	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
1.61	0.00
4.14	0.00
4.00	0.00
3.88	0.00
2.12	0.00

NR-02	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
3.38	0.00
3.48	0.00
2.08	270.00
3.48	1345.00
3.68	0.00

NR-03	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
0.00	0.00
0.00	0.00
1.63	0.00
0.00	0.00
0.23	0.00

	<i>Date</i>	<i>Inspector</i>
1st Month	04/05/2002	T. Blackmon
2nd Month	05/07/2002	T. Blackmon
3rd Month	06/12/2002	T. Blackmon
2nd Quarter	NA	
3rd Quarter	09/03/2002	T. Blackmon
4th Quarter	12/04/2002	T. Blackmon

NR-04	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

NR-05	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
0.00	0.00
2.70	0.00
1.15	0.00
3.55	0.00
3.44	0.00

NR-07	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

	<i>Date</i>	<i>Inspector</i>
1st Month	04/05/2002	T. Blackmon
2nd Month	05/07/2002	T. Blackmon
3rd Month	06/12/2002	T. Blackmon
2nd Quarter	NA	
3rd Quarter	09/03/2002	T. Blackmon
4th Quarter	12/04/2002	T. Blackmon

NR-08	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
1.98	0.00
2.38	0.00
2.52	0.00
2.43	0.00
2.58	0.00

NR-10	
<i>Depth of NAPL</i>	<i>Gallons Removed</i>
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT
102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2002

OPERATION

APL COLLECTION AND DISCHARGE SYSTEM

<i>APL Flow for Previous Year (gallons)</i>	<i>APL Flow for Current Year (gallons)</i>
1,023,151	635,574

NAPL REMOVAL SYSTEM

	<i>NAPL Removed for Previous Year (2001) (gallons)</i>	<i>NAPL Removed for Current Year (2002) (gallons)</i>
NR-01	55	0
NR-02	200	1490
NR-03	40	0
NR-04	0	0
NR-05	40	0
NR-07	0	0
NR-08	0	0
NR-10	0	0
Total	335	1490

Where was NAPL treated/disposed?

Facility Clean Harbors Deer Park, Texas Date _____
Facility _____ Date _____
Facility _____ Date _____
Facility _____ Date _____

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT
102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2002

INSPECTION AND MAINTENANCE

Scheduled inspections performed:

	<i>Date</i>	<i>Inspectors</i>
April	<u>NA</u>	
October	<u>10/24/2002</u>	A. Barkat (DEC), B. Downie (MSRM), J. Thornton (CRA)

Was maintenance required?

	<i>Yes</i>	<i>No</i>
April	<input type="checkbox"/>	<input type="checkbox"/>
October	<input checked="" type="checkbox"/>	<input type="checkbox"/>

What maintenance was required?

Maintenance Required	Date Performed
Pump out forcemain manholes.	<u>11/2</u>
Mow vegetation on landfill.	<u>9/2</u>
Remove storm sewer flap gate from river.	<u>11/2</u>
Reinstall flap gate on storm sewer.	<u>Pending</u>
Repair crib wall along Buffalo Avenue.	<u>3/3</u>
Refit covers on collection system cleanouts to allow for easier access.	<u>11/2</u>

Attach additional sheets as necessary.

Describe any maintenance activity that required an activity specific work plan and health and safety plan.

Form Completed By:

J.C. Thornton

NAME

SIGNATURE

DATE

FORM 1

ANNUAL OPERATION AND MAINTENANCE REPORT
102ND STREET LANDFILL SITE
NIAGARA FALLS, NEW YORK

YEAR: 2002

Send completed copies of this form to the following for review:

George Luxbacher
Glenn Springs Holdings, Inc.
2480 Fortune Drive, Suite 300
Lexington, KY 40509

and

Lorraine Miller
Olin Corporation
P.O. Box 248
1186 Lower River Road
Charleston, TN 37310

and

Mike Bellotti
Olin Corporation
P.O. Box 248
1186 Lower River Road
Charleston, TN 37310

After review is complete, send 5 copies to the following:

Chief-New York Remedial Branch
Emergency and Remedial Response Division
U.S. Environmental Protection Agency - Region II
290 Broadway, 20th Floor
New York, NY 10007-1866
Attn: 102nd Street Landfill Superfund Site Manager

and

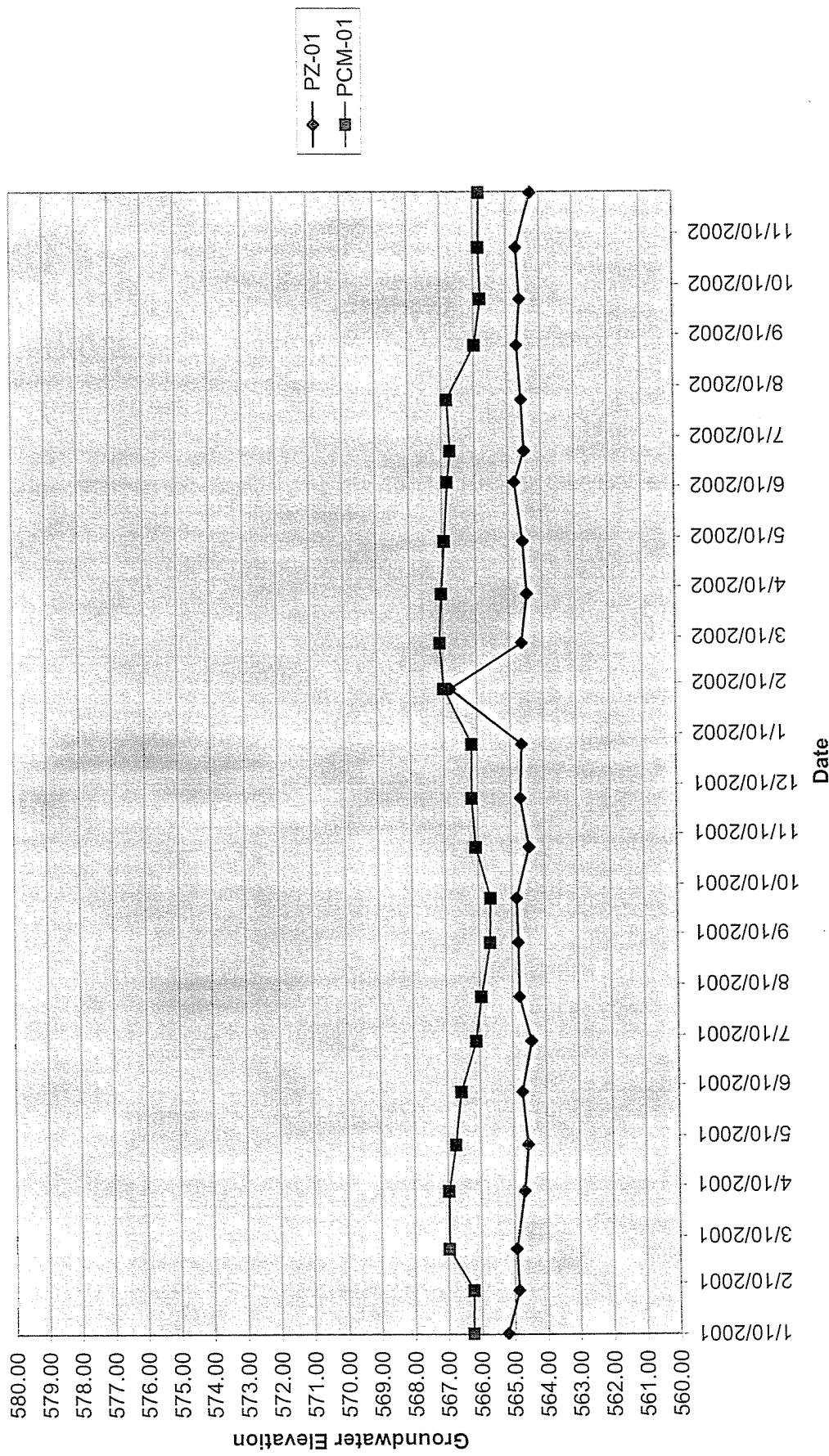
Director, Division of Environmental Remediation
New York State Dept. of Environmental Conservation
625 Broadway
8th Floor
Albany, NY 12233-7252

and

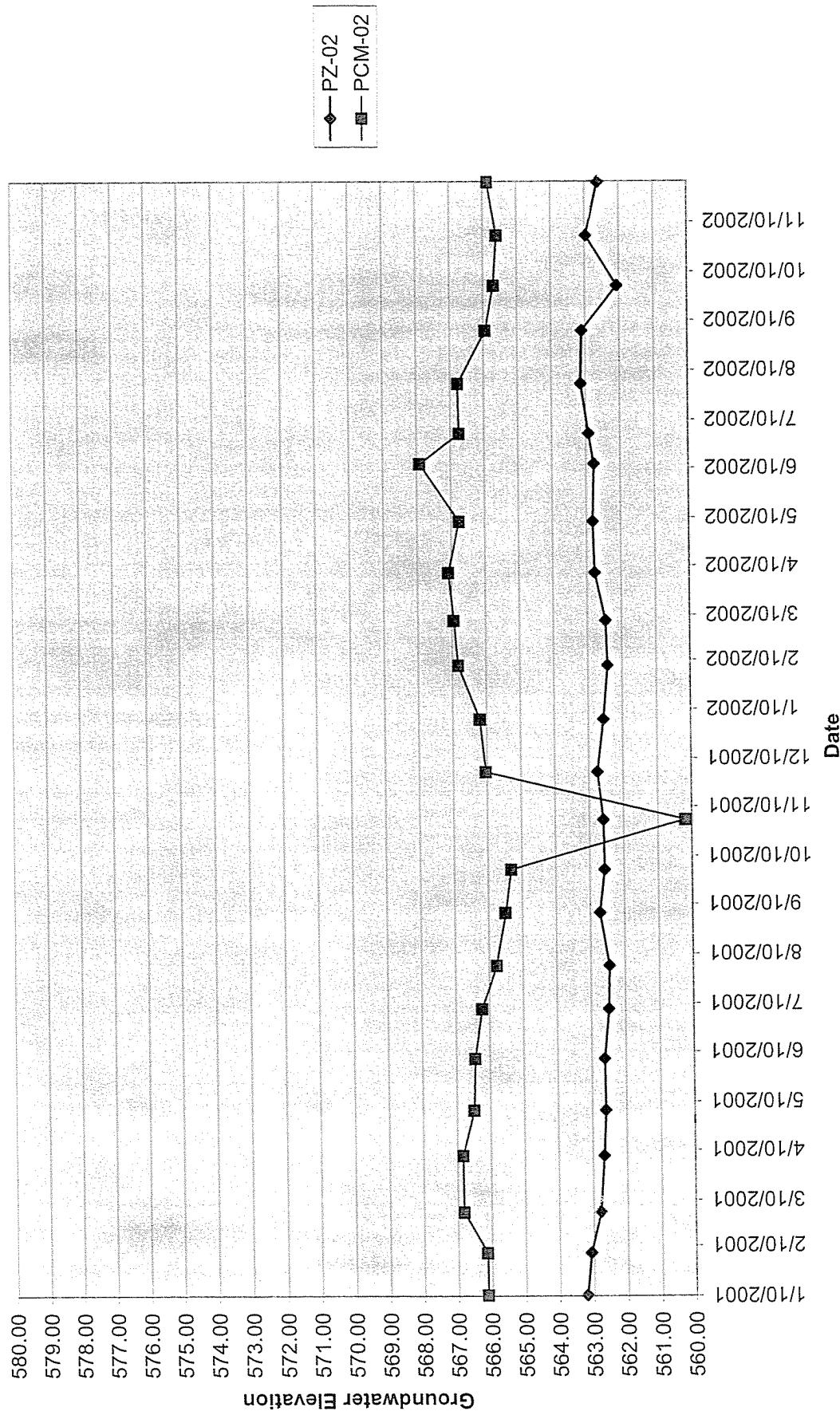
Regional Remediation Engineer
New York State Dept. of Environmental Conservation
270 Michigan Avenue
Buffalo, NY 14203-2999

FORM 1

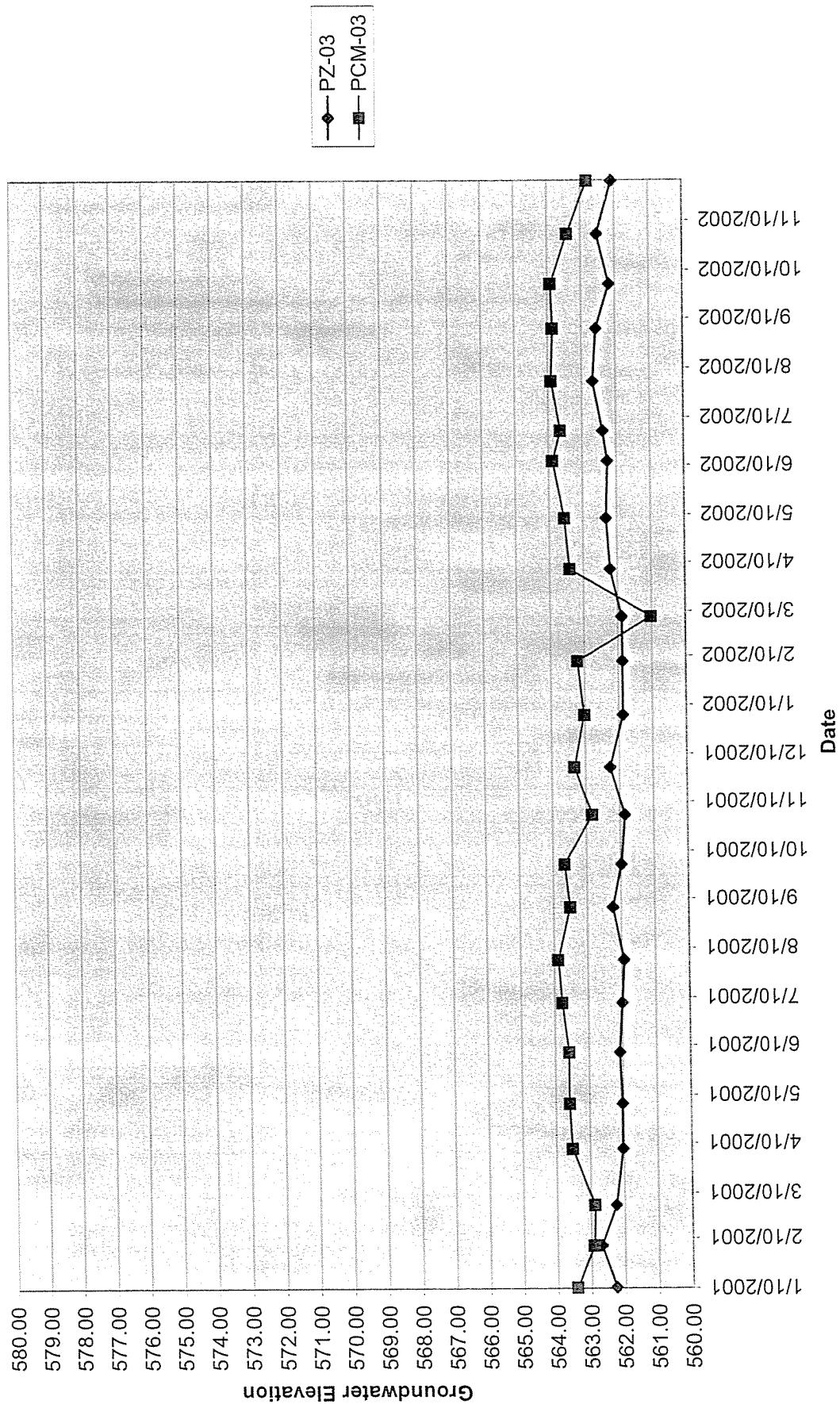
Groundwater Levels Well Pair 1



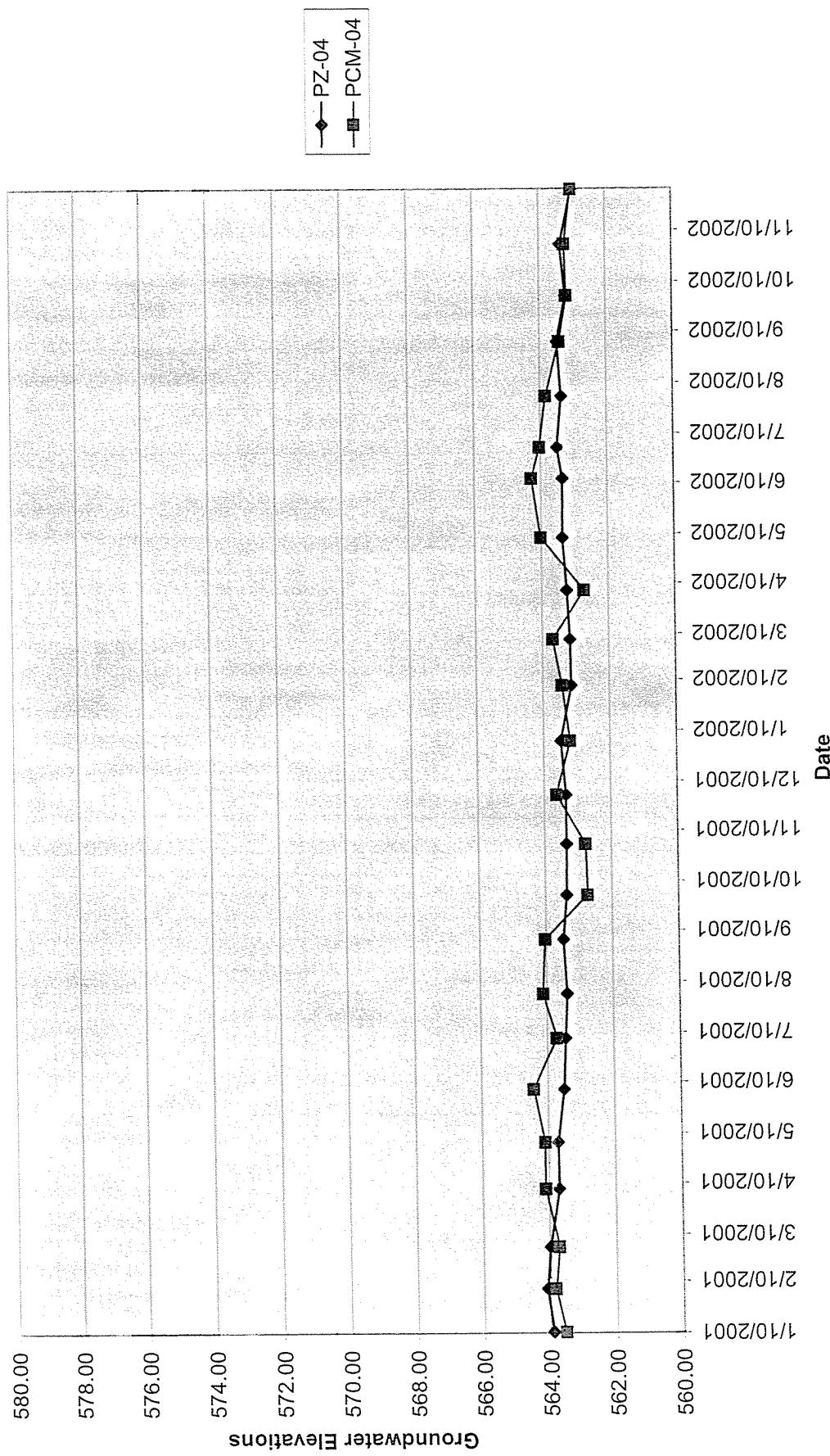
Groundwater Levels Well Pair 2



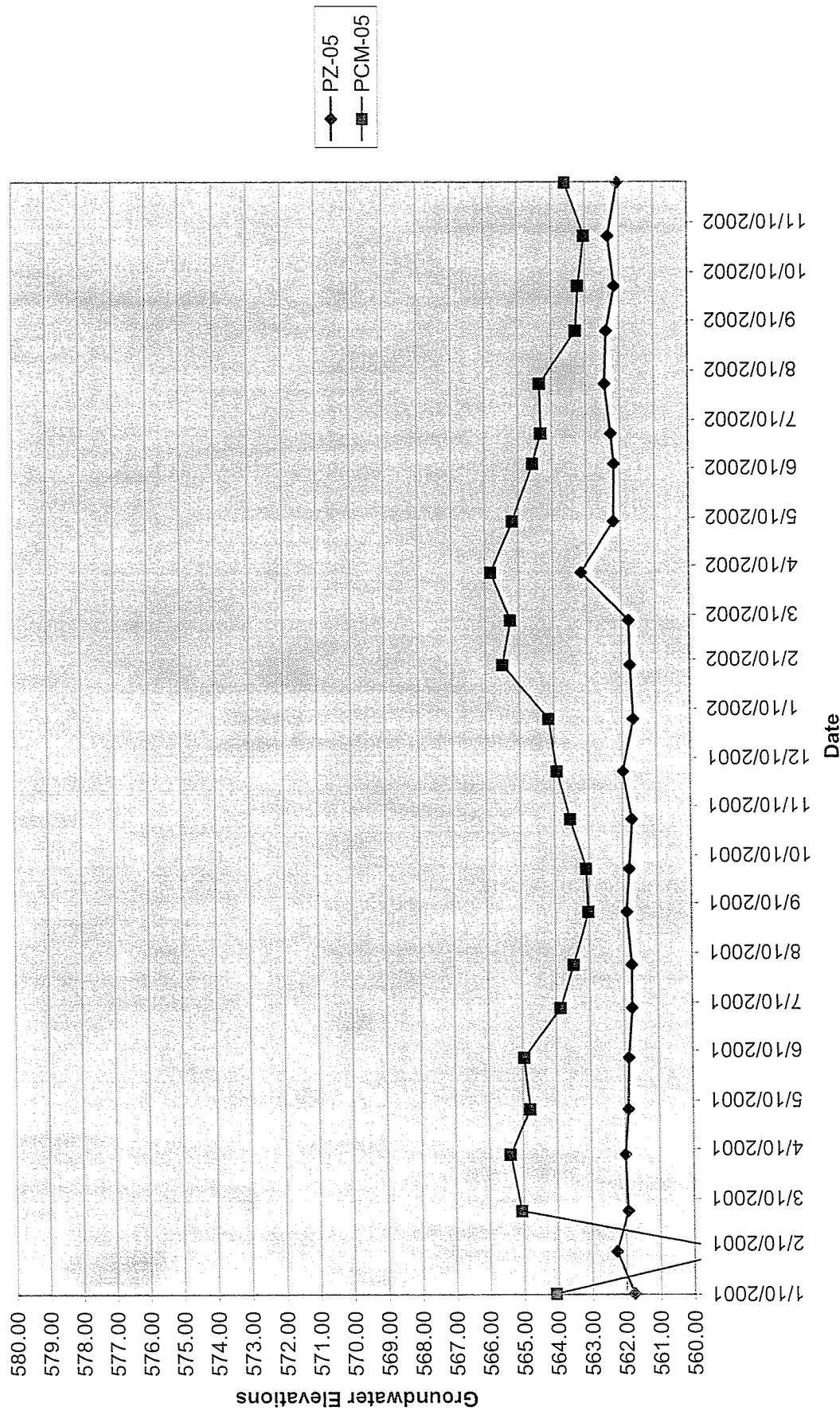
Groundwater Levels Well Pair 3



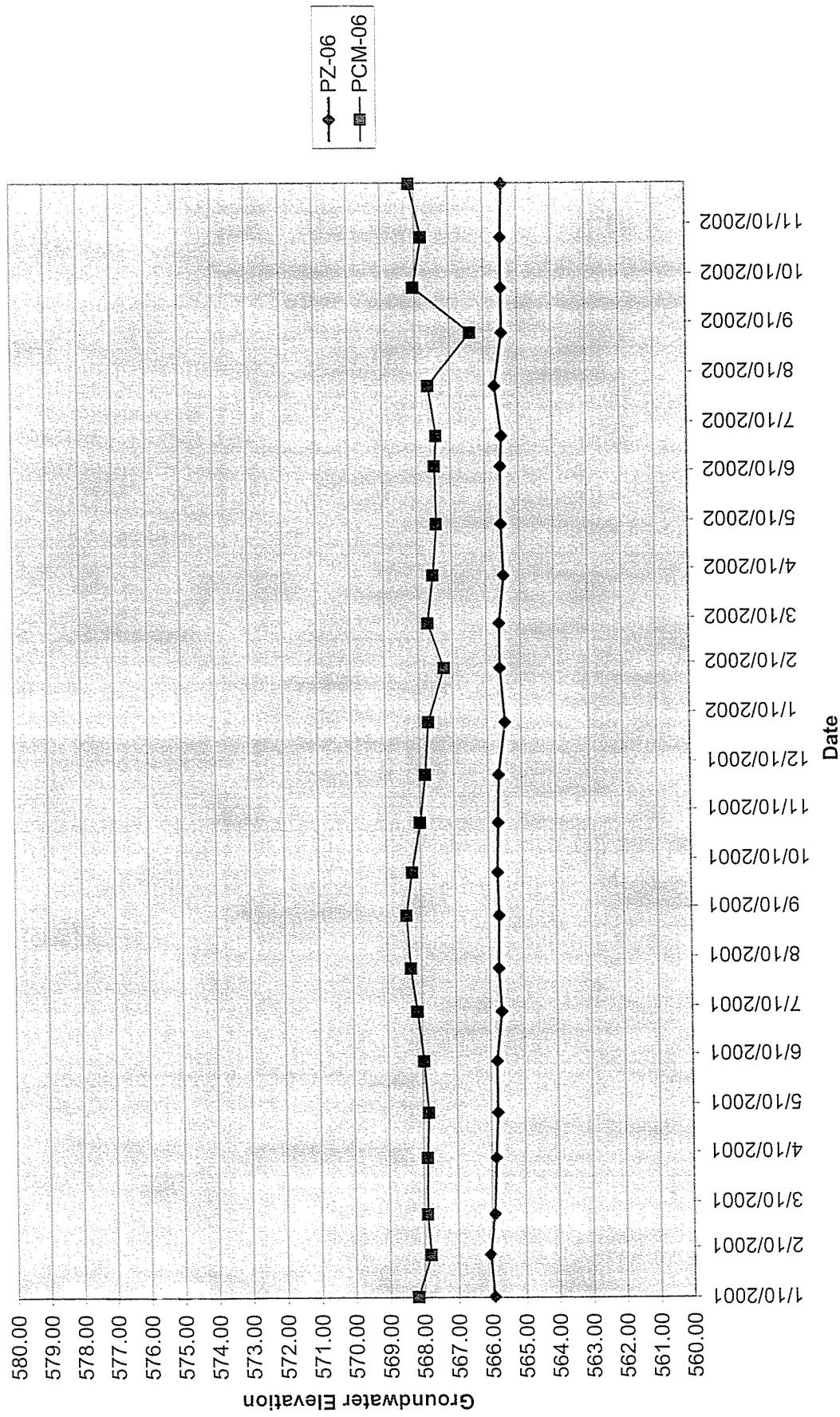
Groundwater Levels Well Pair 4



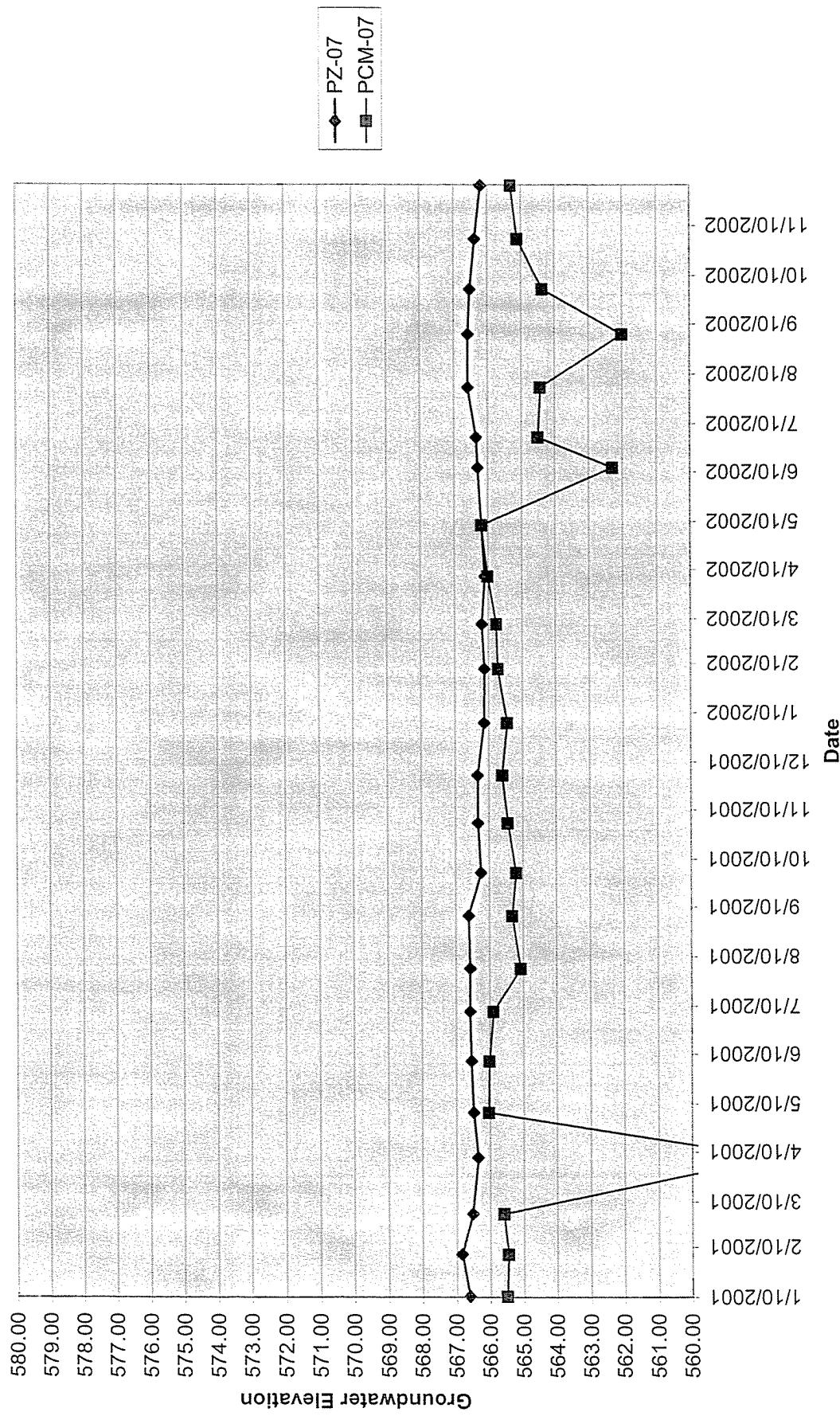
Groundwater Levels Well Pair 5



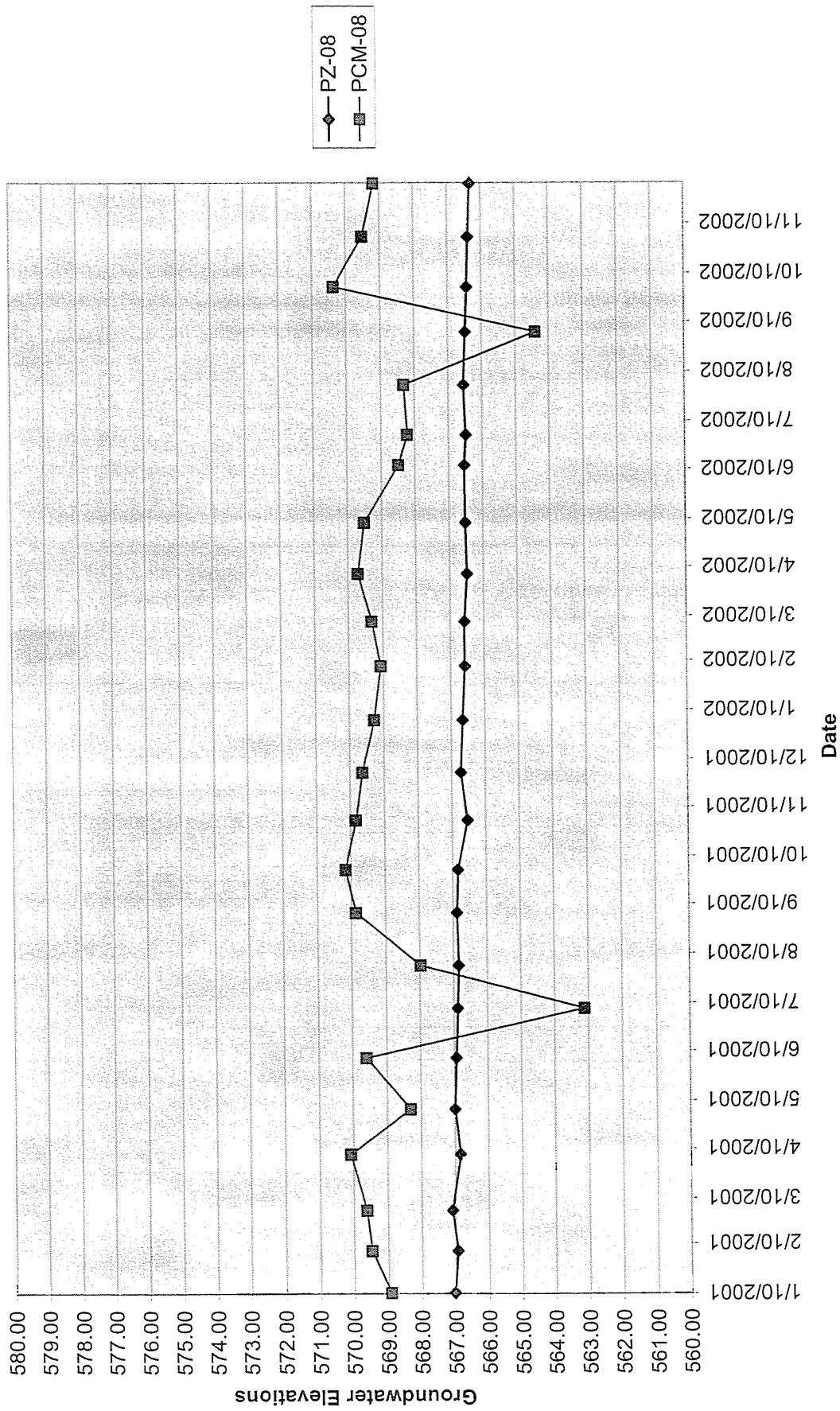
Groundwater Levels Well Pair 6



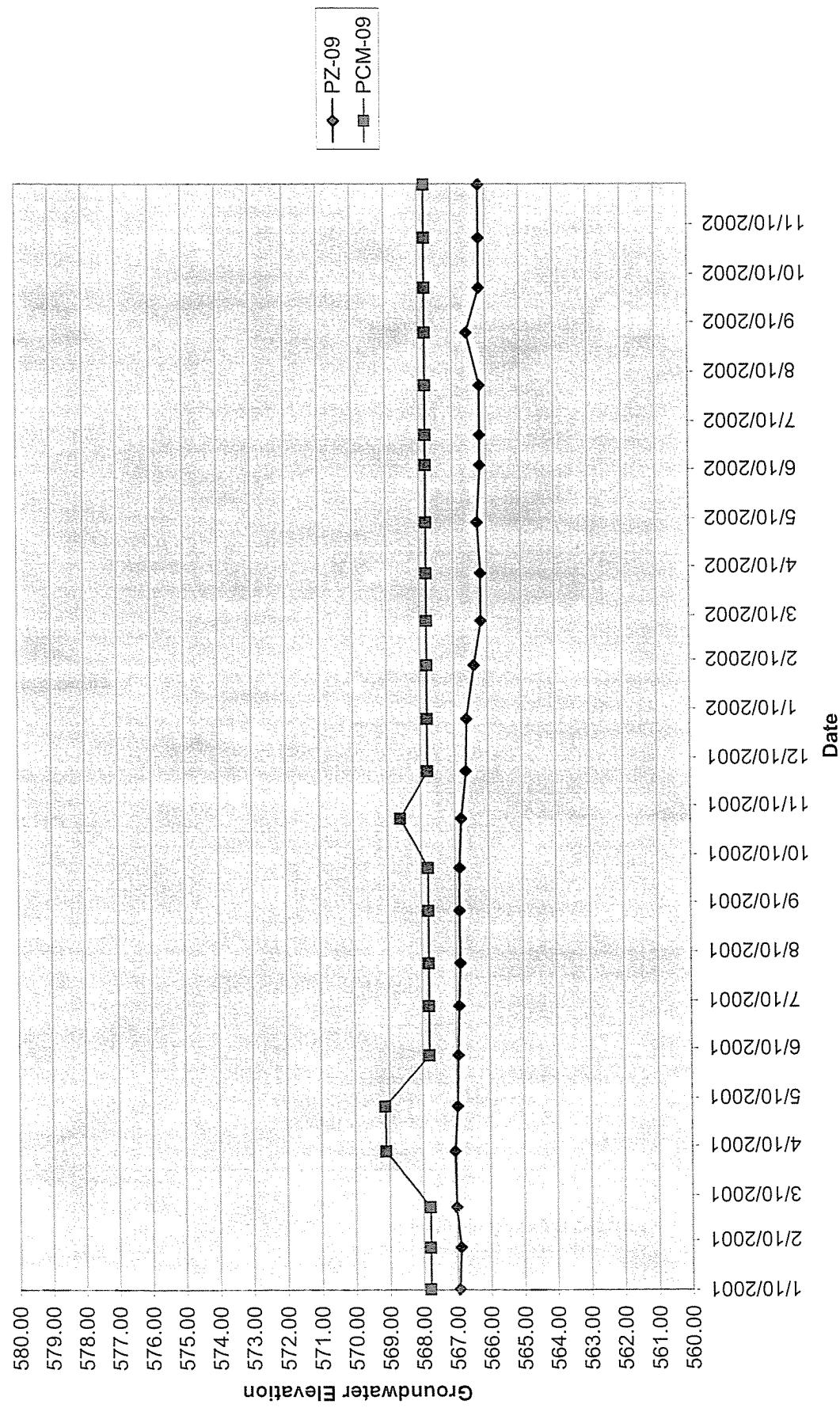
Groundwater Levels Well Pair 7



Groundwater Levels Well Pair 8



Groundwater Levels Well Pair 9



Groundwater Levels - Well Pair 10

