



LEACHATE PUMPING REPORT

**102nd Street Landfill Site
Niagara Falls, New York**

**Prepared for:
Miller Springs Remediation Management, Inc.
and Olin Corporation**

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Niagara Falls, New York

Prepared for:
Miller Springs Remediation Management, Inc.
and Olin Corporation

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1.0 BACKGROUND

The 102nd Street Landfill Site (Site) is an area consisting of approximately 22.1 acres along the shore of the Niagara River adjacent to Griffon Park. It is owned by Occidental Chemical Corporation (OxyChem) (15.6 acres) and Olin Corporation (Olin) (6.5 acres). The Site was operated as an industrial waste disposal site by both of the companies and their predecessors. OxyChem operated its landfill from approximately 1943 until 1970 and Olin operated its landfill from 1948 until 1970. OxyChem's responsibilities at the Site are currently handled by Miller Springs Remediation Management, Inc. (MSRM), a subsidiary of Glenn Springs Holdings, Inc. (GSHI) and an affiliate of OxyChem.

The Remedial Design Work Plan (RDWP) for the Site was approved by the United States Environmental Protection Agency (USEPA) in 1992. This work plan included the construction of a slurry wall encompassing the Site, capping the Site with a compound liner consisting of a compacted soil layer and a synthetic, flexible membrane liner, and recovery and treatment of aqueous phase liquids (APL). Work began at the Site in 1996 and construction was completed in 1999.

2.0 APL COLLECTION AND REMOVAL

APL (leachate) is collected and removed from the Site in order to maintain an inward gradient of groundwater across the slurry wall. At present, it is anticipated that the groundwater levels inside of the slurry wall will be kept at a level at least 1-foot below the groundwater level outside of the slurry wall. This goal will be attained after dewatering of the landfill within the slurry wall; approximately 24 months of pumping are required to complete the dewatering.

At the present time, (and as expected during dewatering) in some areas around the Site the groundwater level inside of the slurry wall is higher than outside. Even in this case the low permeability of the slurry wall will prevent the movement of groundwater from the Site. Applying Darcy's Law, at the current maximum differential (2.84 feet between PZ-4 and PCM-4 on March 2, 2000), it would take 30.5 years for groundwater to pass through the slurry wall.

3.0 COLLECTION SYSTEM

The APL collection system is composed of a perforated high density polyethylene (HDPE) pipe in a trench filled with stone. Leachate is collected and transported to four Wet Wells. Each Wet Well is equipped with a pump and collected leachate is pumped through a common header to the Love Canal Treatment Facility located north of the Site. After the leachate has been treated at Love Canal it is discharged to the City of Niagara Falls Sanitary Sewer System and treated again at the City Treatment Plant on Buffalo Avenue.

4.0 LEACHATE PUMPING AT THE SITE

Leachate pumping began at the Site on March 9, 1999. The pumps in Wet Wells 3 and 4 were started that day and the pumps in Wet Wells 1 and 2 were started on April 13, 1999, after the water levels in these wet wells had been lowered adequately to allow for the installation of the pumps and permit startup.

Initially, the leak detection instrumentation was not fully operational and the system was not run unattended; pumps were started at the Site in the morning and shut down at the end of the day. The pumps were operating from 5 to 8 hours per day, generally pumping between 10,000 to 16,000 gallons per day.

During a conference call between the owners and the USEPA on December 8, 1999 it was decided that pumping should be extended to a 24-hour per day schedule. It was hoped that this would help accelerate the dewatering of the Site and the establishment of an inward gradient. By this time all leak detection instrumentation had been fully installed and tested and was completely operational.

On December 8, 1999, the pumps in all Wet Wells were placed in the automatic operation mode. On December 9, 1999, the pump in Wet Well 4 shut down on low level (at elevation 562.1 feet, 1.5 feet below the average river elevation of 563.6 feet) and on December 10, 1999, the pumps in Wet Wells 3 and 1 also shut down on low level. As the water in the wet wells recharged to elevation 562.6 feet (1 foot below the average river water elevation) the pumps would switch back on.

Pumping has continued on automatic during the week and the pumps have generally been shut down on weekends when both the Love Canal and 102nd Street sites are unattended.

Occasionally it has been necessary to shut down the pumps due to maintenance requirements, equipment failures, and high levels at Love Canal or in the City Sewer system. Over the past 12 months the system has been shut down for a total of 36 days for reasons as listed below:

- | | | |
|------|--|---------|
| i) | electrical tie-ins for new pumps at 102 nd Street | 2 days; |
| ii) | Love Canal levels too high | 8 days; |
| iii) | public tour of Love Canal facility | 1 day; |
| iv) | personnel not available at Love Canal | 2 days; |
| v) | lightning damage | 2 days; |

- vi) maintenance at Love Canal 17 days;
- vii) leak detection alarm due to water leaking into manholes 2 days; and
- viii) City requested shutdown due to high level in sewer 2 days.

During the 12 months that ended on March 9, 2000, nearly 2.2 million gallons of leachate had been pumped from the Site. A complete log of pumping activities is attached as Appendix A.

5.0 RECHARGE OF THE GROUNDWATER COLLECTION SYSTEM

The groundwater collection system recharges mainly due to the migration of the existing mounded groundwater levels within the slurry wall to the collection system and not due to infiltration through the cap. At the present time the site is still being dewatered and the groundwater levels, while flattening, are still above steady state conditions. It has been estimated that it will take at least 2 years of pumping to reach equilibrium. Once equilibrium has been reached calculations show that the infiltration may be as low as 400 gallons per day.

The recharge of the leachate collection system over the last 12 weeks can be obtained from the data in the Leachate Pumping Log as outlined below.

On December 15, 1999, the pumps were running on automatic and the amount of leachate pumped that day was only 5,911.5 gallons. This small value indicates that the system was shutting down on low level for a large amount of time and the collection system was nearly completely dewatered. On March 7, 2000, the system operated on automatic and again only pumped 7,305.9 gallons, indicating that the system was shutting down on low levels and had been largely dewatered. From December 15, 1999 until March 7, 2000 (83 days), the system pumped 534,114.4 gallons of leachate which yields a recharge rate of approximately 6,435 gallons per day.

6.0 GROUNDWATER LEVELS

Groundwater at the Site has been monitored in two ways. Initially, weekly measurements were made in the Wet Wells to determine if the levels in the wells were lower than the river elevation. While this data was useful while the collection system was being dewatered, it was no longer applicable after the wells started shutting down on low levels. As a result this data has not been included in this report.

Secondly, since pumping began groundwater measurements have been taken in the monitoring wells and piezometers to determine the overall groundwater gradient on-site. Data for each well pair has been placed on a line chart to show when an inward gradient was reached. Charts are included as Appendix B. A map showing the location of well pairs is attached as Figure 1.

From the charts it can be seen that as of March 1, 2000, an inward gradient has been obtained at well pairs 1, 2, 5, 6, 8, 9, and 10. An inward gradient has not yet been established between the two well pairs along the Niagara River (3 and 4) and one well pair along Buffalo Avenue. It should be noted that all groundwater levels inside the slurry wall are well below the elevation of the top of the slurry wall clay cap; 571.0 feet.

Well level data has also been used to create two groundwater contour maps of the Site (Figures 2 and 3). Figure 2 shows the groundwater contours as of April 7, 1999, when pumping had just started and Figure 3 shows contours on March 2, 2000, after approximately 1 year of dewatering. From these figures it can be clearly observed that the groundwater levels within the Site are being lowered.

*By the
water entrance.*

FIGURES

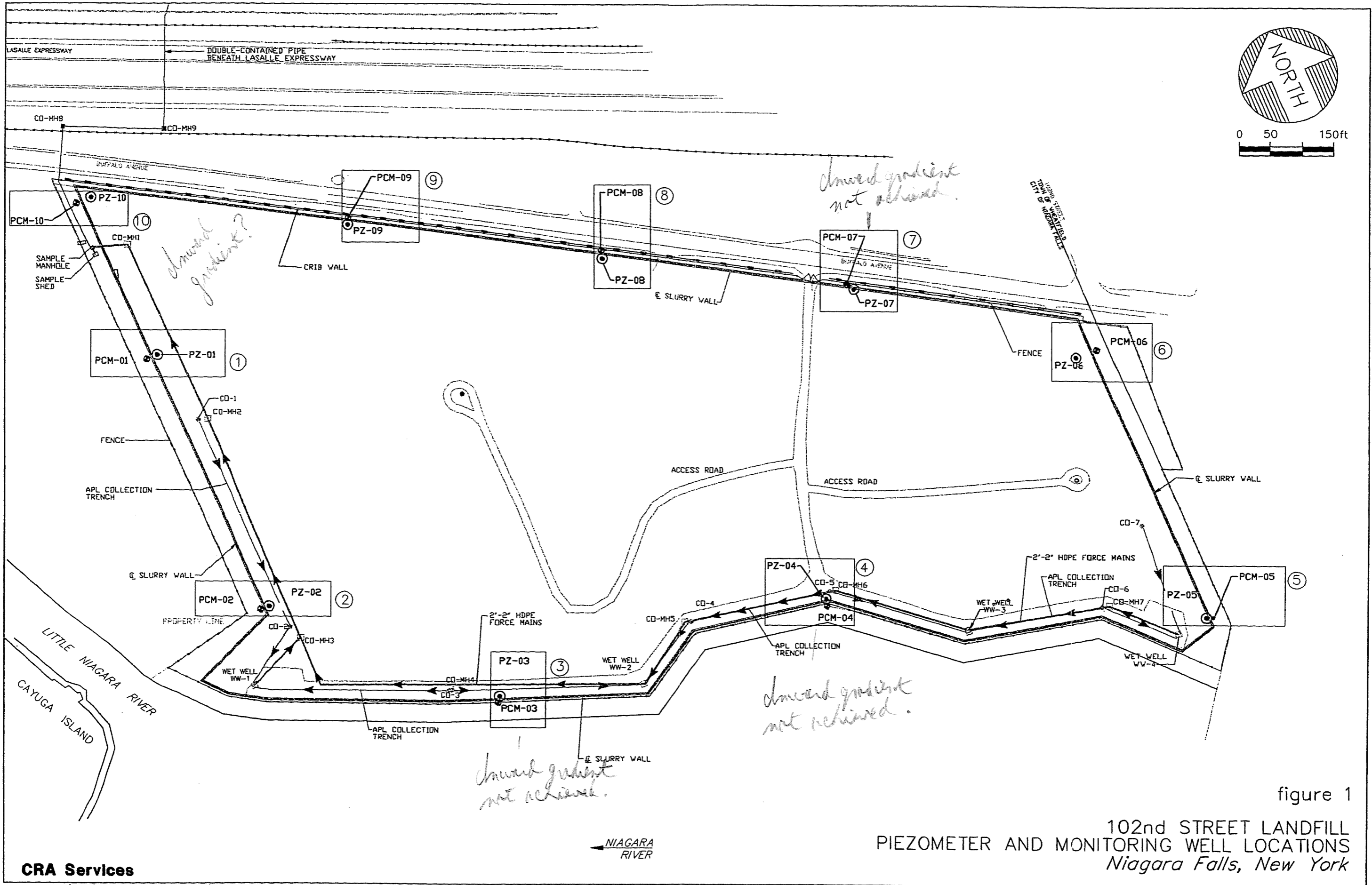


figure 1
 102nd STREET LANDFILL
 PIEZOMETER AND MONITORING WELL LOCATIONS
 Niagara Falls, New York

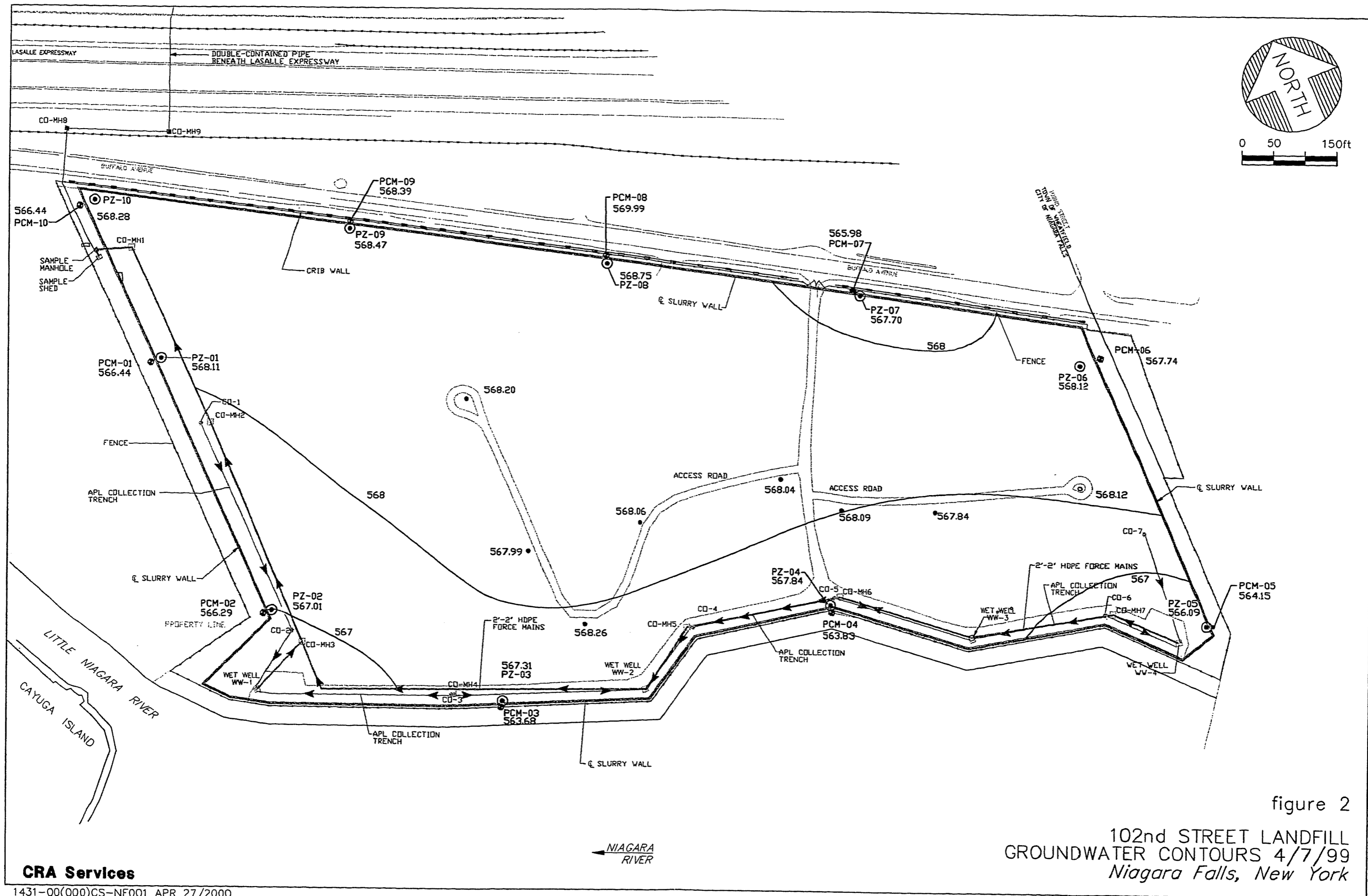


figure 2

102nd STREET LANDFILL
 GROUNDWATER CONTOURS 4/7/99
 Niagara Falls, New York

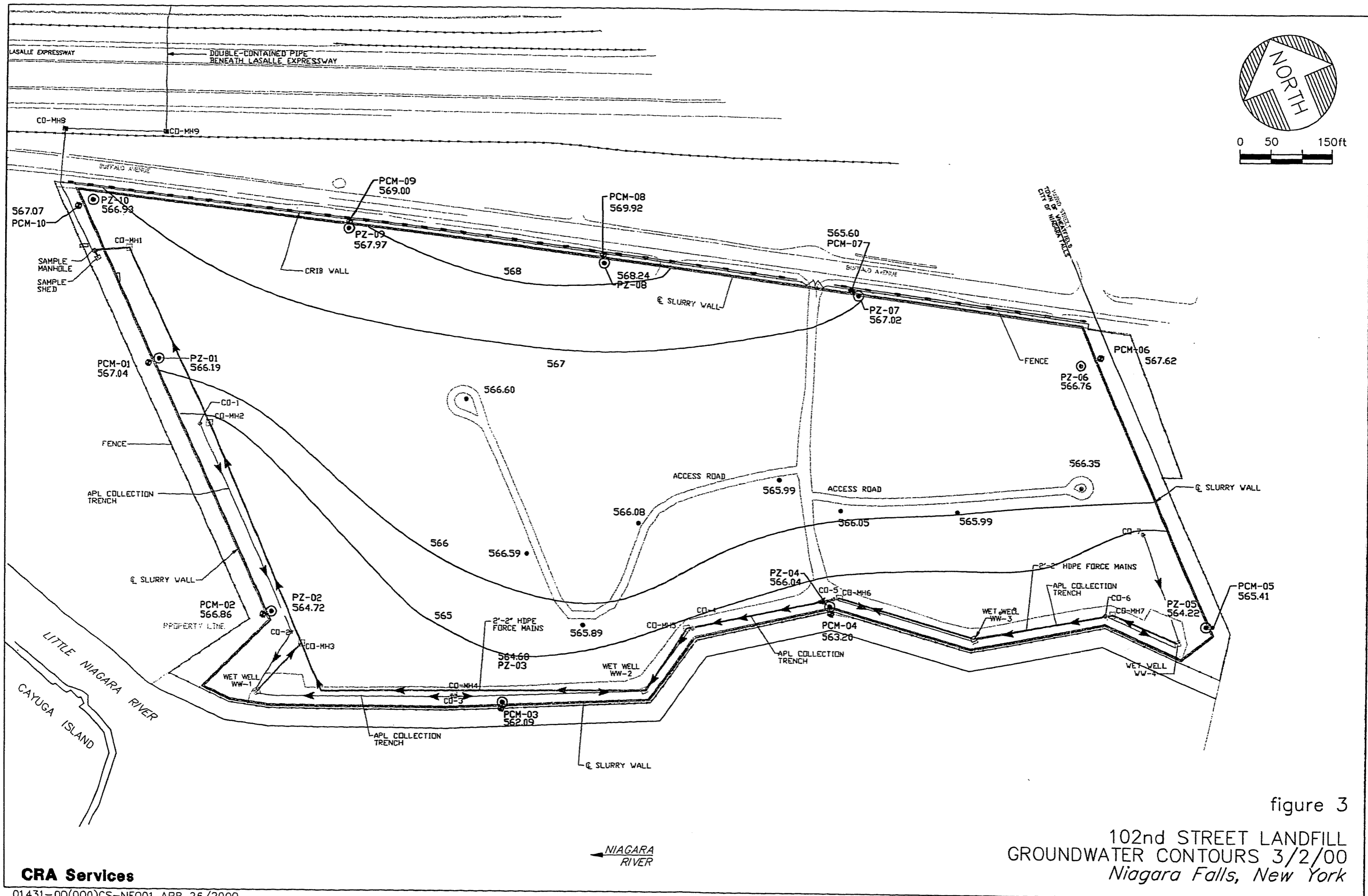


figure 3

102nd STREET LANDFILL
 GROUNDWATER CONTOURS 3/2/00
 Niagara Falls, New York

APPENDIX A
LEACHATE PUMPING LOGS

102ND STREET LEACHATE PUMPING LOG

DATE	AMOUNT PUMPED (GALLONS)	TOTAL PUMPED TO DATE (GALLONS)	COMMENTS
3/6 - 3/8	80.5	80.5	Pumped during calibration of flow meters.
3/9/99	3,711.5	3,792.0	Pumps in Wet Wells 3 and 4 started.
3/10/99	1,573.8	5,365.8	Wet Wells 3 and 4.
3/11/99	5,230.1	10,595.9	Wet Wells 3 and 4.
3/12/99	0.0	10,595.9	Electrical tie-in work prevented pumping.
3/15/99	0.0	10,595.9	Electrical tie-in work prevented pumping.
3/16/99	10,094.2	20,690.1	Wet Wells 3 and 4.
3/17/99	7,994.3	28,684.4	Wet Wells 3 and 4.
3/18/99	0.0	28,684.4	Levels at Love Canal were too high to pump.
3/19/99	190.0	28,874.4	Levels at Love Canal were too high to pump. Small amount of pumping to check computer.
3/22/99	9,356.9	38,231.3	Wet Wells 3 and 4.
3/23/99	0.0	38,231.3	Personnel not available to operate LCTF.
3/24/99	9,042.8	47,274.1	Wet Wells 3 and 4.
3/25/99	8,196.4	55,470.5	Wet Wells 3 and 4.
3/26/99	3,330.5	58,801.0	Wet Wells 3 and 4.
3/29/99	9,579.9	68,380.9	Wet Wells 3 and 4.
3/30/99	10,370.1	78,751.0	Wet Wells 3 and 4.
3/31/99	9,086.8	87,837.8	Wet Wells 3 and 4.
4/1/99	9,751.6	97,589.4	Wet Wells 3 and 4.
4/5/99	10,301.5	107,890.9	Wet Wells 3 and 4.
4/6/99	10,176.7	118,067.6	Wet Wells 3 and 4.
4/7/99	9,996.8	128,064.4	Wet Wells 3 and 4.
4/8/99	10,697.8	138,762.2	Wet Wells 3 and 4.
4/9/99	8,712.2	147,474.4	Wet Wells 3 and 4.
4/12/99	11,649.6	159,124.0	Wet Wells 3 and 4.
4/13/99	15,538.2	174,662.2	All wet wells pumping.
4/14/99	15,296.0	189,958.2	All wet wells pumping.
4/15/99	16,088.2	206,046.4	All wet wells pumping.
4/16/99	10,516.7	216,563.1	All wells. Some computer problems.
4/19/99	10,810.0	227,373.1	All wet wells pumping.
4/20/99	12,771.2	240,144.3	All wet wells pumping.

4/21/99	13,792.3	253,936.6	All wet wells pumping.
4/22/99	9,043.3	262,979.9	Some delays due to high levels at Love Canal
4/23/99	7,547.1	270,527.0	Some delays due to high levels at Love Canal
4/26/99	14,008.0	284,535.0	All wet wells pumping.
4/27/99	12,555.0	297,090.0	All wet wells pumping.
4/28/99	16,316.5	313,406.5	All wet wells pumping.
4/29/99	15,239.5	328,646.0	All wet wells pumping.
4/30/99	17,856.4	346,502.4	All wet wells pumping.
5/3/99	17,092.5	363,594.9	All wet wells pumping.
5/4/99	14,684.4	378,279.3	All wet wells pumping.
5/5/99	16,155.5	394,434.8	All wet wells pumping.
5/6/99	15,425.2	409,860.0	All wet wells pumping.
5/7/99	13,294.4	423,154.4	All wet wells pumping.
5/10/99	16,603.0	439,757.4	All wet wells pumping.
5/11/99	15,882.4	455,639.8	All wet wells pumping.
5/12/99	15,822.1	471,461.9	All wet wells pumping.
5/13/99	8,568.4	480,030.3	All wet wells pumping.
5/14/99	13,178.7	493,209.0	All wet wells pumping.
5/17/99	13,755.5	506,964.5	All wet wells pumping.
5/18/99	14,913.1	521,877.6	All wet wells pumping.
5/19/99	11,342.4	533,220.0	All wet wells pumping.
5/20/99	14,190.6	547,410.6	All wet wells pumping.
5/21/99	12,577.9	559,988.5	All wet wells pumping.
5/24/99	9,853.2	569,841.7	All wet wells pumping.
5/25/99	14,012.1	583,853.8	All wet wells pumping.
5/26/99	14,048.2	597,902.0	All wet wells pumping.
5/27/99	14,780.3	612,682.3	All wet wells pumping.
5/28/99	11,530.4	624,212.7	All wet wells pumping.
6/1/99	15,551.2	639,763.9	All wet wells pumping.
6/2/99	16,138.2	655,902.1	All wet wells pumping.
6/3/99	14,953.2	670,855.3	All wet wells pumping.
6/4/99	14,131.7	684,987.0	All wet wells pumping.
6/7/99	14,667.1	699,654.1	All wet wells pumping.
6/8/99	15,332.6	714,986.7	All wet wells pumping.
6/9/99	5,746.3	720,733.0	All wet wells pumping.

6/10/99	14,722.4	735,455.4	All wet wells pumping.
6/11/99	12,467.1	747,922.5	All wet wells pumping.
6/14/99	12,746.3	760,668.8	All wet wells pumping.
6/15/99	16,468.3	777,137.1	All wet wells pumping.
6/16/99	12,550.4	789,687.5	All wet wells pumping.
6/17/99	11,358.9	801,046.4	All wet wells pumping.
6/18/99	7,574.1	808,620.5	All wet wells pumping.
6/21/99	9,866.6	818,487.1	All wet wells pumping.
6/22/99	17,140.5	835,627.6	All wet wells pumping.
6/23/99	12,329.9	847,957.5	All wet wells pumping.
6/24/99	11,106.7	859,064.2	All wet wells pumping.
6/25/99	6,926.5	865,990.7	All wet wells pumping.
6/28/99	9,777.6	875,768.3	All wet wells pumping.
6/29/99	8,286.4	884,054.7	All wet wells pumping.
6/30/99	0.0	884,054.7	Personnel not available to operate LCTF.
7/1/99	12,086.5	896,141.2	All wet wells pumping.
7/2/99	11,039.7	907,180.9	All wet wells pumping.
7/6/99	12,371.1	919,552.0	All wet wells pumping.
7/7/99	0.0	919,552.0	Lightning damage prevented pumping.
7/8/99	0.0	919,552.0	Lightning damage prevented pumping.
7/9/99	2,963.5	922,515.5	Decreased pumping due to lightning damage.
7/22/99	490.6	923,006.1	Decreased pumping due to lightning damage.
8/9/99	9,044.8	932,050.9	All wet wells pumping.
8/10/99	7,226.0	939,276.9	All wet wells pumping.
8/11/99	15,619.4	954,896.3	All wet wells pumping.
8/12/99	11,998.2	966,894.5	All wet wells pumping.
8/13/99	0.0	966,894.5	No Pumping - Maintenance at Love Canal
8/16/99	12,606.8	979,501.3	All wet wells pumping.
8/17/99	6,024.4	985,525.7	All wet wells pumping.
8/18/99	4,288.8	989,814.5	All wet wells pumping.
8/19/99	12,292.7	1,002,107.2	All wet wells pumping.
8/20/99	7,102.7	1,009,209.9	All wet wells pumping.
8/23/99	0.0	1,009,209.9	No Pumping - Maintenance at Love Canal
8/24/99	13,680.6	1,022,890.5	All wet wells pumping.
8/25/99	9,788.8	1,032,679.3	All wet wells pumping.

8/26/99	10,907.1	1,043,586.4	All wet wells pumping.
8/27/99	3,302.7	1,046,889.1	All wet wells pumping.
8/30/99	11,011.2	1,057,900.3	All wet wells pumping.
8/31/99	0.0	1,057,900.3	Did not run due to tours through the area.
9/1/99	7,918.1	1,065,818.4	All wet wells pumping.
9/2/99	3,828.7	1,069,647.1	All wet wells pumping.
9/3/99	7,376.1	1,077,023.2	All wet wells pumping.
9/7/99	14,031.9	1,091,055.1	All wet wells pumping.
9/8/99	12,486.1	1,103,541.2	All wet wells pumping.
9/9/99	10,168.5	1,113,709.7	All wet wells pumping.
9/10/99	12,562.1	1,126,271.8	All wet wells pumping.
9/13/99	5,600.7	1,131,872.5	All wet wells pumping.
9/14/99	0.0	1,131,872.5	Did not operate
9/15/99	0.0	1,131,872.5	Did not operate
9/16/99	9,471.9	1,141,344.4	All wet wells pumping.
9/17/99	9,187.0	1,150,531.4	All wet wells pumping.
9/20/99	6,334.3	1,156,865.7	All wet wells pumping.
9/21/99	13,035.2	1,169,900.9	All wet wells pumping.
9/22/99	12,916.1	1,182,817.0	All wet wells pumping.
9/23/99	5,454.4	1,188,271.4	All wet wells pumping.
9/24/99	13,730.3	1,202,001.7	All wet wells pumping.
9/27/99	6,773.8	1,208,775.5	All wet wells pumping.
9/28/99	16,652.3	1,225,427.8	All wet wells pumping.
9/29/99	0.0	1,225,427.8	Did not operate - maint. at L.C.
9/30/99	0.0	1,225,427.8	Did not operate - maint. at L.C.
10/1/99	1,325.7	1,226,753.5	All wet wells pumping.
10/4/99	0.0	1,226,753.5	Did not operate - maint. at L.C.
10/5/99	0.0	1,226,753.5	Did not operate - maint. at L.C.
10/6/99	0.0	1,226,753.5	Did not operate - maint. at L.C.
10/7/99	0.0	1,226,753.5	Did not operate - maint. at L.C.
10/8/99	6,439.8	1,233,193.3	All wet wells pumping.
10/11/99	0.0	1,233,193.3	Did not operate - maint. at L.C.
10/12/99	0.0	1,233,193.3	Did not operate - maint. at L.C.
10/13/99	0.0	1,233,193.3	Did not operate - maint. at L.C.
10/14/99	0.0	1,233,193.3	Did not operate - maint. at L.C.

10/15/99	0.0	1,233,193.3	Did not operate - maint. at L.C.
10/18/99	3,875.7	1,237,069.0	All wet wells pumping.
10/19/99	0.0	1,237,069.0	Did not operate - maint. at L.C.
10/20/99	0.0	1,237,069.0	Did not operate - maint. at L.C.
10/21/99	14,311.5	1,251,380.5	All wet wells pumping.
10/22/99	12,453.2	1,263,833.7	All wet wells pumping.
10/25/99	15,394.2	1,279,227.9	All wet wells pumping.
10/26/99	7,948.6	1,287,176.5	All wet wells pumping.
10/27/99	21,385.8	1,308,562.3	All wet wells pumping.
10/28/99	8,914.5	1,317,476.8	All wet wells pumping.
10/29/99	15,513.8	1,332,990.6	All wet wells pumping.
11/1/99	0.0	1,332,990.6	No pumping. High levels at L.C.
11/2/99	0.0	1,332,990.6	No pumping. High levels at L.C.
11/3/99	0.0	1,332,990.6	No pumping. High levels at L.C.
11/4/99	0.0	1,332,990.6	No pumping. High levels at L.C.
11/5/99	8,407.0	1,341,397.6	All wet wells pumping.
11/8/99	12,542.0	1,353,939.6	All wet wells pumping.
11/9/99	6,307.2	1,360,246.8	All wet wells pumping.
11/10/99	11,514.4	1,371,761.2	All wet wells pumping.
11/11/99	16,083.9	1,387,845.1	All wet wells pumping.
11/12/99	12,552.5	1,400,397.6	All wet wells pumping.
11/15/99	16,421.1	1,416,818.7	All wet wells pumping.
11/16/99	11,326.6	1,428,145.3	All wet wells pumping.
11/17/99	6,462.9	1,434,608.2	All wet wells pumping.
11/18/99	9,390.7	1,443,998.9	All wet wells pumping.
11/19/99	9,642.7	1,453,641.6	All wet wells pumping.
11/22/99	3,132.3	1,456,773.9	All wet wells pumping.
11/23/99	1,809.6	1,458,583.5	All wet wells pumping.
11/24/99	6,074.6	1,464,658.1	All wet wells pumping.
11/25/99	0.0	1,464,658.1	Thanksgiving Holiday
11/26/99	0.0	1,464,658.1	Thanksgiving Holiday
11/29/99	3,404.8	1,468,062.9	All wet wells pumping.
11/30/99	12,582.4	1,480,645.3	All wet wells pumping.
12/1/99	0.0	1,480,645.3	Did not run. Operators attending training.
12/2/99	5,972.6	1,486,617.9	Ran part time. High levels at Love Canal

12/3/99	12,780.0	1,499,397.9	All wet wells pumping.
12/6/99	16,158.7	1,515,556.6	All wet wells pumping.
12/7/99	15,921.7	1,531,478.3	All wet wells pumping.
12/8/99	35,224.4	1,566,702.7	Wells pumping on auto.
12/9/99	30,707.3	1,597,410.0	On auto. WW-4 shut down on low level.
12/10/99	12,857.8	1,610,267.8	On auto. WW-4, 3, and 1 shut down on low level.
12/13/99	22,921.3	1,633,189.1	On auto.
12/14/99	12,637.2	1,645,826.3	On auto. Wells shut down automatically.
12/15/99	5,911.5	1,651,737.8	On auto. Wells shut down automatically.
12/16/99	6,369.9	1,658,107.7	On auto. Wells shut down automatically.
12/17/99	9,203.6	1,667,311.3	On auto. Wells shut down automatically.
12/20/99	18,623.7	1,685,935.0	On auto. Wells shut down automatically.
12/21/99	22,232.9	1,708,167.9	On auto. Wells shut down automatically.
12/22/99	14,678.6	1,722,846.5	On auto. Wells shut down automatically.
12/23/99	6,145.1	1,728,991.6	On auto. Wells shut down automatically.
12/24/99	0.0	1,728,991.6	Shut down for Holiday
12/27/99	22,061.5	1,751,053.1	On auto. Wells shut down automatically.
12/28/99	18,627.0	1,769,680.1	On auto. Wells shut down automatically.
12/29/99	5,872.9	1,775,553.0	On auto. Wells shut down automatically.
12/30/99	2,679.8	1,778,232.8	On auto. Wells shut down automatically.
12/31/99	0.0	1,778,232.8	Shut down for Holiday
1/3/00	25,279.2	1,803,512.0	On auto. Wells shut down automatically.
1/4/00	12,346.8	1,815,858.8	On auto. Wells shut down automatically.
1/5/00	8,431.6	1,824,290.4	On auto. Wells shut down automatically.
1/6/00	10,519.6	1,834,810.0	On auto. Wells shut down automatically.
1/7/00	7,495.7	1,842,305.7	On auto. Wells shut down automatically.
1/10/00	17,094.4	1,859,400.1	On auto. Wells shut down automatically.
1/11/00	9,044.8	1,868,444.9	On auto. Wells shut down automatically.
1/12/00	9,629.4	1,878,074.3	On auto. Wells shut down automatically.
1/13/00	5,158.4	1,883,232.7	On auto. Wells shut down automatically.
1/14/00	8,295.1	1,891,527.8	On auto. Wells shut down automatically.
1/17/00	17,610.2	1,909,138.0	On auto. Wells shut down automatically.
1/18/00	9,894.6	1,919,032.6	On auto. Wells shut down automatically.
1/19/00	7,706.5	1,926,739.1	On auto. Wells shut down automatically.
1/20/00	5,283.1	1,932,022.2	On auto. Wells shut down automatically.

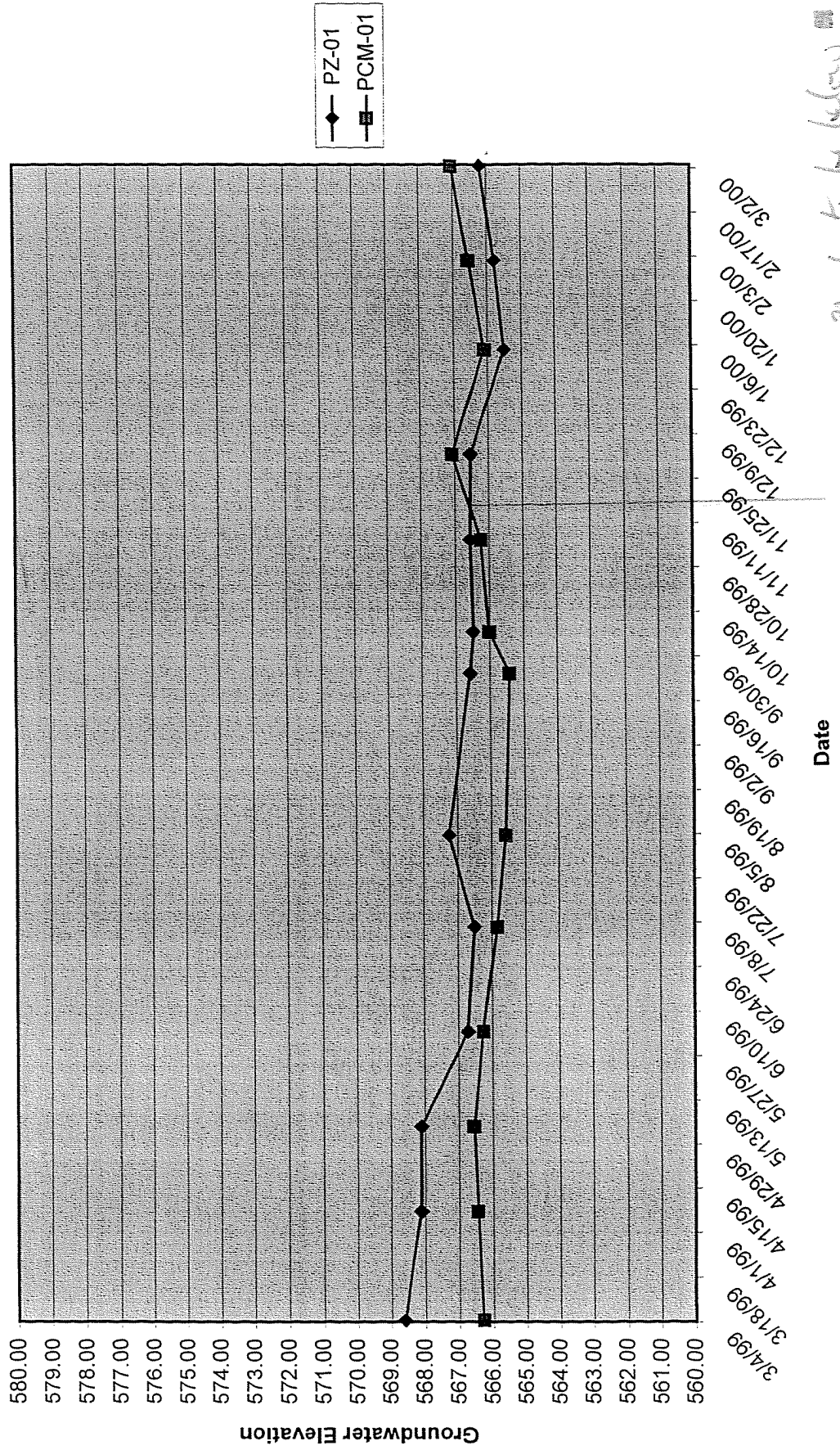
1/21/00	8,141.4	1,940,163.6	On auto. Wells shut down automatically.
1/24/00	15,984.8	1,956,148.4	On auto. Wells shut down automatically.
1/25/00	7,549.4	1,963,697.8	On auto. Wells shut down automatically.
1/26/00	1,321.8	1,965,019.6	On auto. Wells shut down automatically.
1/27/00	4,710.2	1,969,729.8	On auto. Wells shut down automatically.
1/28/00	6,940.6	1,976,670.4	On auto. Wells shut down automatically.
1/31/00	16,998.8	1,993,669.2	On auto. Wells shut down automatically.
2/1/00	2,324.3	1,995,993.5	On auto. Wells shut down automatically.
2/2/00	8,567.5	2,004,561.0	On auto. Wells shut down automatically.
2/3/00	10,686.0	2,015,247.0	On auto. Wells shut down automatically.
2/4/00	11,243.7	2,026,490.7	On auto. Wells shut down automatically.
2/7/00	1,715.0	2,028,205.7	On auto. Wells shut down automatically.
2/8/00	1,214.7	2,029,420.4	On auto. Wells shut down automatically.
2/9/00	9,429.7	2,038,850.1	On auto. Wells shut down automatically.
2/10/00	10,805.6	2,049,655.7	On auto. Wells shut down automatically.
2/11/00	14,007.1	2,063,662.8	On auto. Wells shut down automatically.
2/14/00	9,055.0	2,072,717.8	On auto. Wells shut down automatically.
2/15/00	14,574.0	2,087,291.8	On auto. Wells shut down automatically.
2/16/00	3,841.0	2,091,132.8	On auto. Wells shut down automatically.
2/17/00	8,965.4	2,100,098.2	On auto. Wells shut down automatically.
2/18/00	3,894.2	2,103,992.4	On auto. Wells shut down automatically.
2/21/00	0.0	2,103,992.4	Manhole leaking set off leak detection.
2/22/00	0.0	2,103,992.4	Manhole leaking set off leak detection.
2/23/00	1,585.0	2,105,577.4	On auto. Wells shut down automatically.
2/24/00	0.0	2,105,577.4	City restricted discharge due to snow melt.
2/25/00	0.0	2,105,577.4	City restricted discharge due to snow melt.
2/28/00	0.0	2,105,577.4	High levels at Love Canal.
2/29/00	0.0	2,105,577.4	High levels at Love Canal./ Leak Detection
3/1/00	24,280.1	2,129,857.5	On auto. Wells shut down automatically.
3/2/00	19,271.9	2,149,129.4	On auto. Wells shut down automatically.
3/3/00	12,788.0	2,161,917.4	On auto. Wells shut down automatically.
3/6/00	16,628.9	2,178,546.3	On auto. Wells shut down automatically.
3/7/00	7,305.9	2,185,852.2	On auto. Wells shut down automatically.
3/8/00	46.0	2,185,898.2	On auto. Wells shut down automatically.
3/9/00	11,572.0	2,197,470.2	On auto. Wells shut down automatically.

3/10/00	3,079.8	2,200,550.0	On auto. Wells shut down automatically.
3/13/00	16,125.7	2,216,675.7	On auto. Wells shut down automatically.
3/14/00	5,871.6	2,222,547.3	On auto. Wells shut down automatically.
3/15/00	7,391.0	2,229,938.3	On auto. Wells shut down automatically.
3/16/00	6,501.2	2,236,439.5	On auto. Wells shut down automatically.
3/17/00	5,750.0	2,242,189.5	On auto. Wells shut down automatically.
3/20/00	4,435.9	2,246,625.4	On auto. Wells shut down automatically.
3/21/00	15,428.0	2,262,053.4	On auto. Wells shut down automatically.
3/22/00	7,613.3	2,269,666.7	On auto. Wells shut down automatically.
3/23/00	5,787.4	2,275,454.1	On auto. Wells shut down automatically.
3/24/00	7,039.9	2,282,494.0	On auto. Wells shut down automatically.
3/27/00	15,064.2	2,297,558.2	On auto. Wells shut down automatically.
3/28/00	5,629.4	2,303,187.6	On auto. Wells shut down automatically.
3/29/00	5,060.0	2,308,247.6	On auto. Wells shut down automatically.
3/30/00	5,300.3	2,313,547.9	On auto. Wells shut down automatically.
3/31/00	7,028.2	2,320,576.1	On auto. Wells shut down automatically.

APPENDIX B

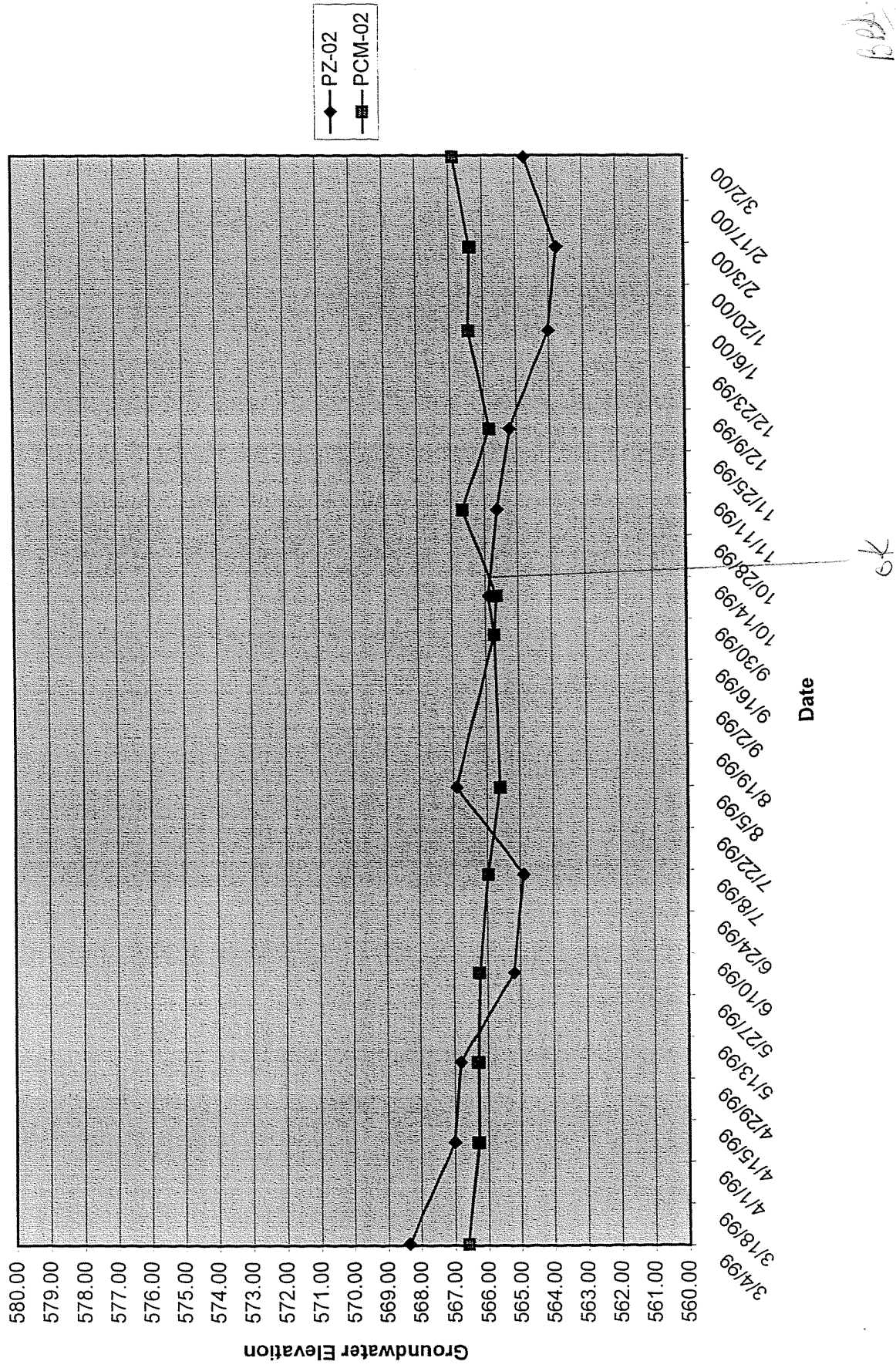
LINE CHARTS

Groundwater Levels Well Pair 1



Approved: *[Signature]*
 Number to be below: *[Signature]* OK
 OK
 6/27/00

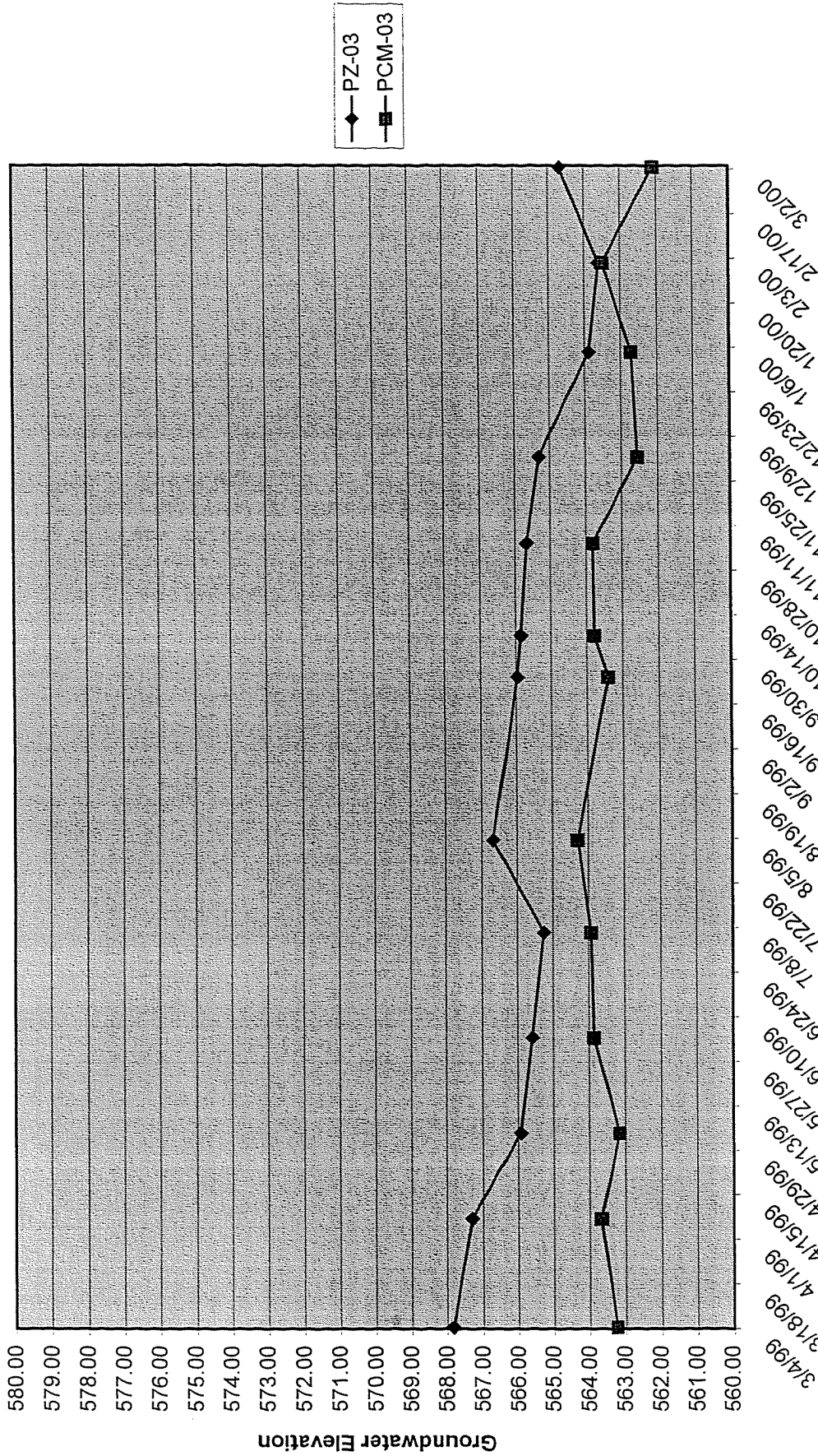
Groundwater Levels Well Pair 2



1688
01/21/00

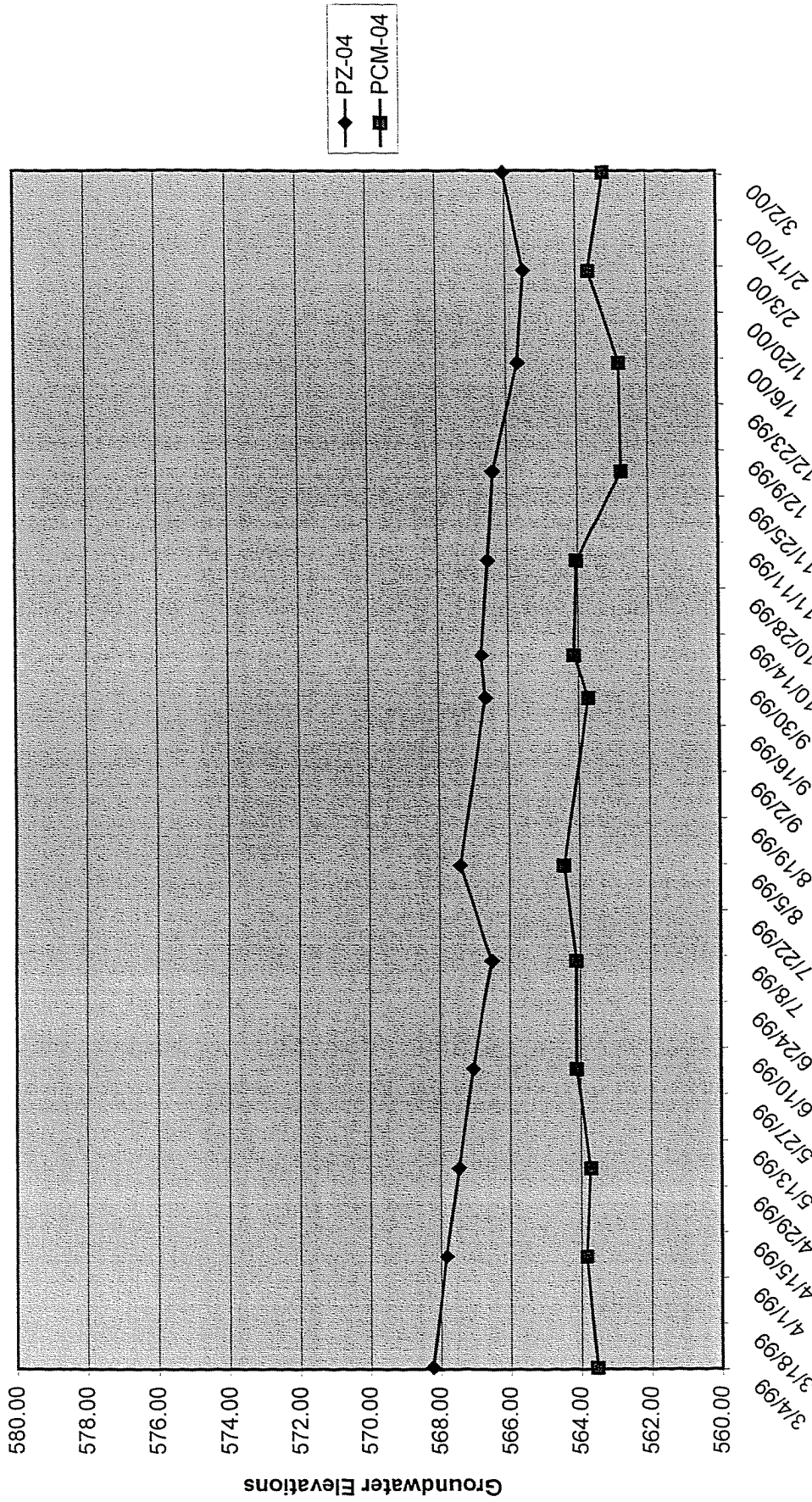
7K

Groundwater Levels Well Pair 3



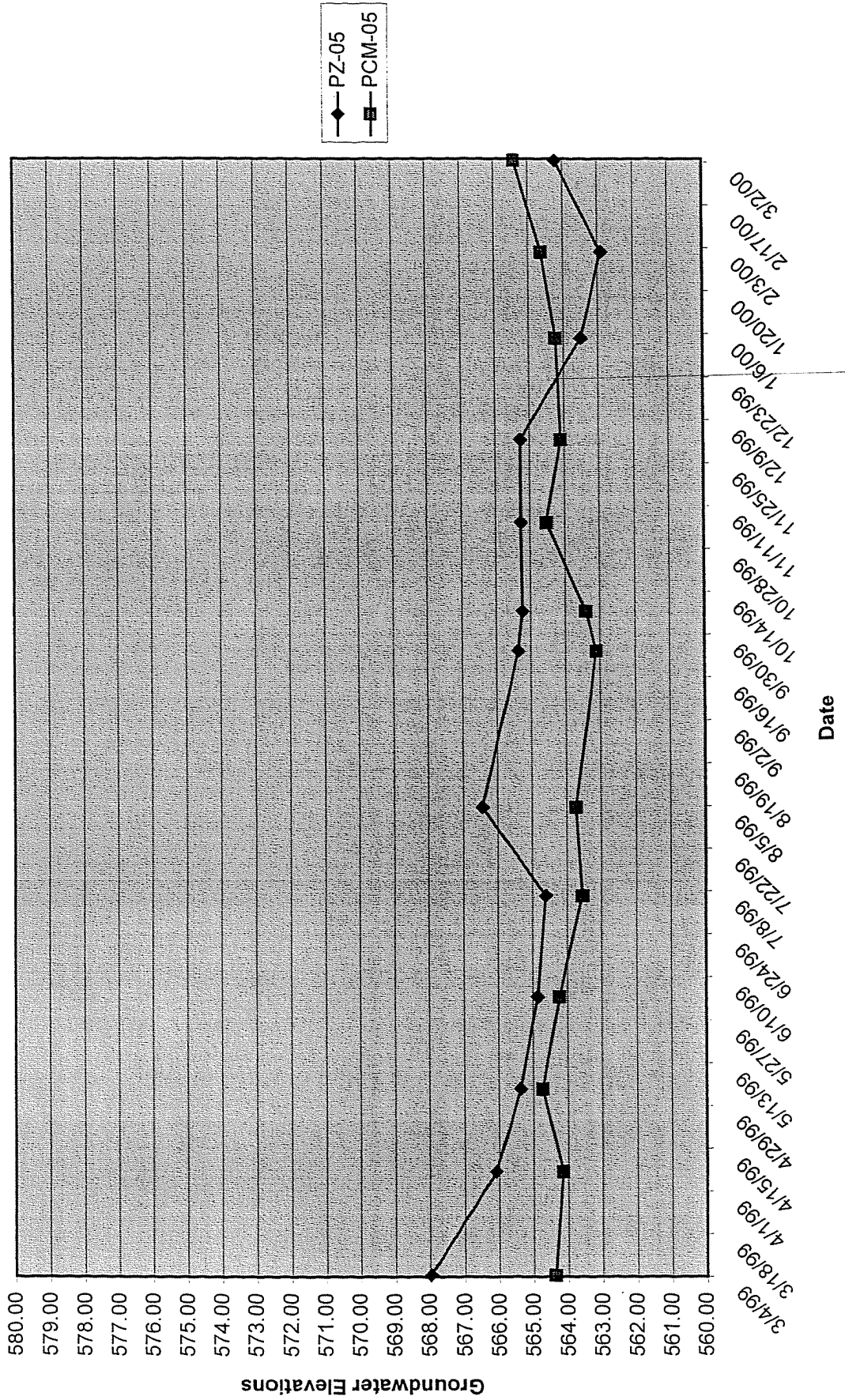
Monitor. ♦ May mean 9' below due to river proximity. Check on location of river gauge. BPS 4/27/00.

Groundwater Levels Well Pair 4



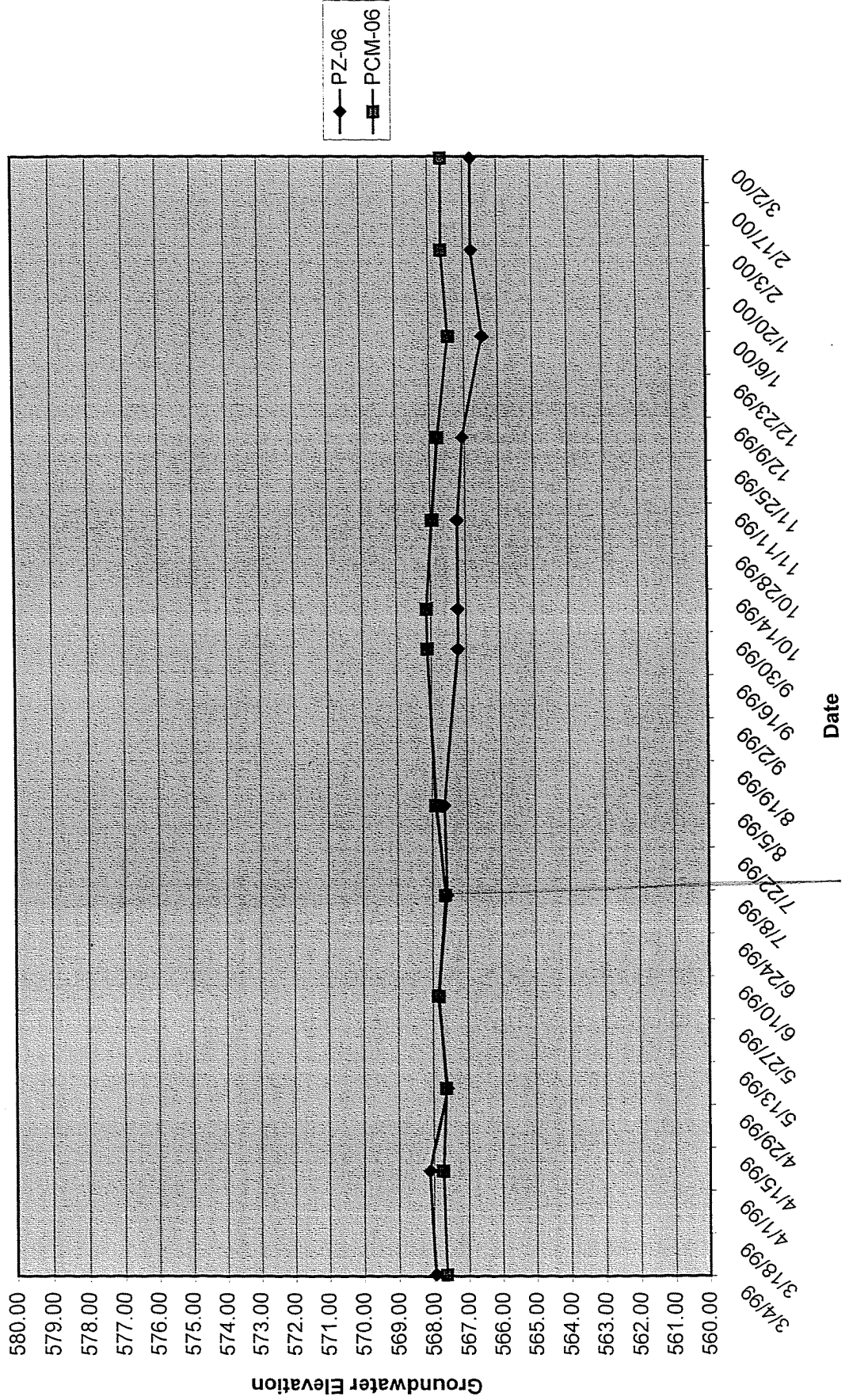
Monitor.
 May remain below due
 to higher porosity. Check
 location of main gas.
 6/27/00

Groundwater Levels Well Pair 5



6/2/00
1/2/00

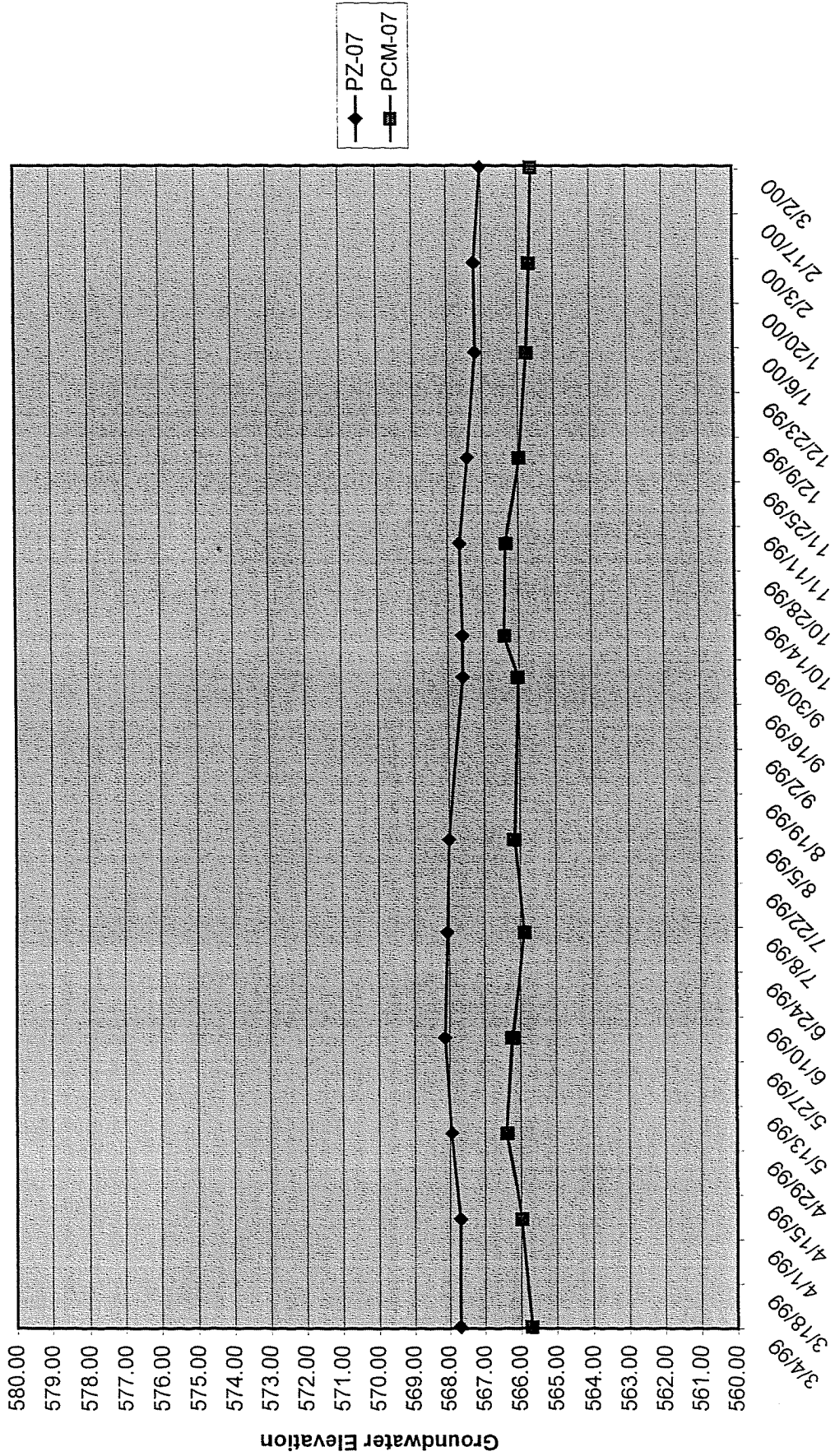
Groundwater Levels Well Pair 6



BSA
 6/21/00

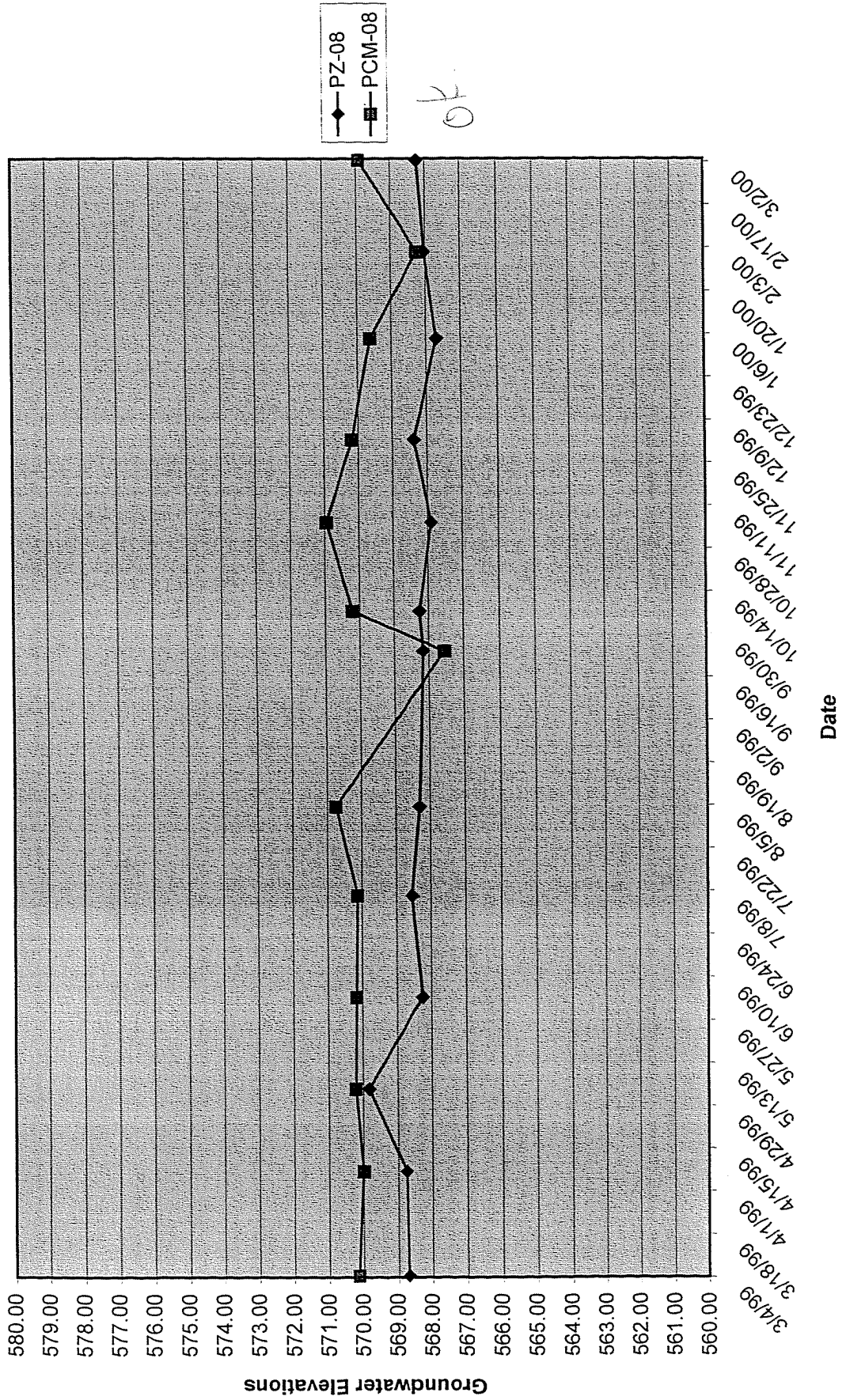
70

Groundwater Levels Well Pair 7



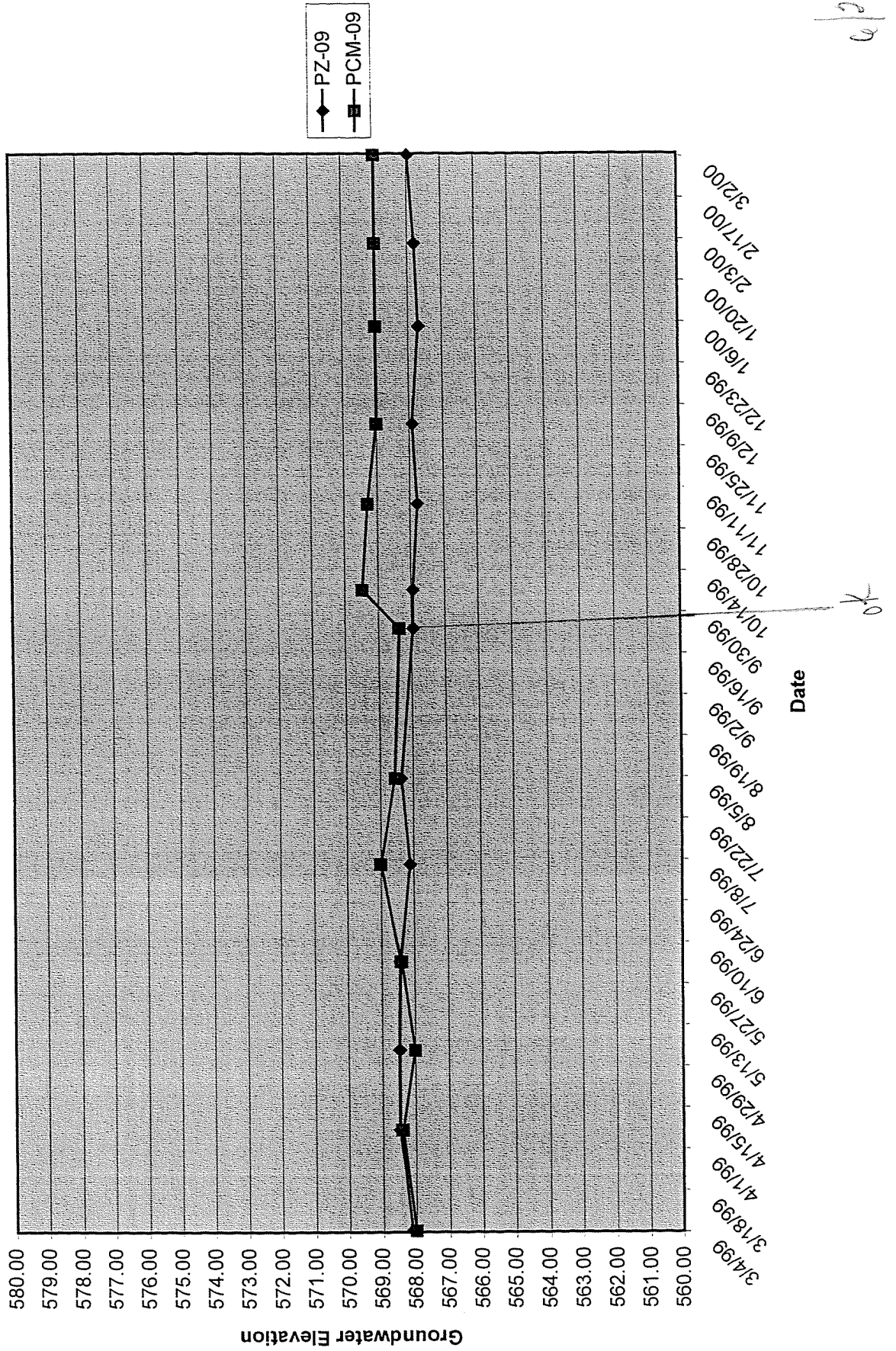
Monitor.
 Check along Buffalo Ave on site that would impact elevations. 8/8/00
 9/29/00

Groundwater Levels Well Pair 8



OK

Groundwater Levels Well Pair 9



OK
 10/14/99
 B.P.S.

Groundwater Levels - Well Pair 10

