

**FLORENCE COPPER INC.
FLORENCE COPPER PROJECT
FOURTH QUARTER 2001 MONITORING REPORT
U.I.C. PERMIT AZ396000001
AND
A.P.P. PERMIT 101704**

JANUARY 28, 2002

MERRILL MINING, LLC

PMB 315

3232 Cobb Parkway

Atlanta, Georgia 30339

404-495-9577 Fax: 404-495-9578

ADRIN TAYLOR
SENIOR VICE PRESIDENT

January 28, 2002

Mr. Martin Zeleznik
Ground Water Office WTR-0
U.S. Environmental Protection Agency Region IX
Water Management Division (WTR-9)
75 Hawthorne Street
San Francisco, California 94105-3901

**RE: MONITORING REPORT FOR UIC PERMIT NUMBER AZ396000001-
FOURTH QUARTER 2001**

Dear Mr. Zeleznik,

The referenced permit was modified on December 5, 2001, to reflect the change of ownership of Florence In-Situ Mine Site from BHP Copper Inc. to Florence Copper Inc. All permits were transferred to Florence Copper Inc. at that time. Florence Copper Inc. intends to continue maintaining the site in the same manner as BHP Copper or in an improved capacity where feasible.

This document fulfills UIC permit condition Part II G.2 of the permit, which requires Florence Copper Inc. to submit short, accurate quarterly reports concerning monitoring activities. This report summarizes monitoring activities from September 1, 2001, through December 31, 2001. All records regarding the nature of the injected fluid, along with instrument calibration, analytical analyses, and field records are maintained either at the Florence Project site or by Brown and Caldwell at their offices in Phoenix, Arizona. Summary sets of documentation are included, however complete sets are available at any time upon request.

Florence Copper, Inc., continues with the reclamation component of its leach field test work. There was no injection of leach fluids during the referenced monitoring period and the recovery of injected solutions is proceeding as expected. To date, over 99.9 percent of the sulfate injected as lixiviant have been recovered. Although sulfate is not a regulated ion, it is being used as an indicator ion in the geochemical test program and is being monitored along with other ions of interest. The wells will continue to be pumped

as required to maintain compliance with all permit conditions. The sulfate concentration in all of the wells in the well field are now well below the 750 ppm trigger point required for closure of the wells. All but the four original injector wells used in the test are of neutral pH and background sulfate levels. Florence Copper Inc. will continue this test work in order to continue its geochemical evaluation of the system and will continue to maintain the well field in good operable condition, should Florence Copper Inc. decide to proceed with leaching activities.

EPA notified the previous permit holder, BHP Copper, Inc., during this year period that permit alert levels have been modified and as such the values reported in this self-monitoring report reflect those changes. Under Section G.2 (a through i) the following items are reported to the EPA for the fourth quarter 2001.

(a) A map showing the current status of the mine

Figure 1 shows the current monitoring area including the POC wells and the wellfield. Figure 2 shows the approximate layout of the wellfield and denotes the four well pairs. There are 4 injection/recovery wells and 9 pumping wells. Four observation wells were installed to demonstrate net inward hydraulic gradient for the 90 days of operations required by the permit. Solution injection began on October 31, 1997, and ceased in early 1998.

(b) A table and graph showing daily cumulative injection flows and extraction flows in each active mine bloc over the reporting period.

Daily average flowrates for each well are recorded and combined to show the net flow in and out of the leach system in Figure 1 and the supporting data of Attachment 1. There has been no injection since early 1998. The wellfield is under a continuous extraction flow so a net positive water balance was maintained at all times during this quarter meeting permit conditions.

(c) A table and graph comparing average daily head in the four observation wells

Figures 2 through 5 and the supporting data compare the average daily water levels in the four observation wells with the nearest inward neighbor. Readings are either taken by continuous down hole measurements recorded on the system computer or done manually. The Figures show the hydraulic gradients were maintained throughout the quarter meeting the permit conditions.

Fourth Quarter 2001 Self Monitoring Report
UIC Permit No. AZ396000001

(d) A table showing POC monitoring wells analytical results and alert levels

The attached report *Florence Project Quarterly Compliance Monitoring Report -Fourth Quarter 2001* by Brown and Caldwell and sealed by Mr. Jim Oliver, Registered Professional Geologist contains the Point of Compliance (POC) monitoring records and results. Brown and Caldwell along with Project personnel conducted compliance sampling during the period October 15 and December 11, 2001. Quarterly parameters were conducted for 29 of the 31 POC monitor wells. POC monitor wells M32-UBF and M33-UBF were dry and could not be sampled. Well M26-O had a reported exceedance of the magnesium alert level during the sampling event; however, the results of the verification sampling indicated that the alert level had not been exceeded. The results are discussed in the report.

(e) Results of the monthly analyses of organic in the injectate

No solvent extraction plant is in use nor was there any solution injected during the monitoring period.

(f) Results of monitoring by 40 CFR 146.33 (b)(1)

No solutions were injected during this period.

(g) Results of the mechanical integrity tests

No wells were drilled or installed during this monitoring period.

(h) Results of the annular conductivity monitoring

Annular conductivity measurements are required for all wells used to inject solution. There was no injection of any fluids; however, annular conductivity was taken for the wells and the data enclosed. No unusual conditions were noted during the period.

(i) Well and core hole plugging and abandonment.

No injection or recovery wells or core holes were abandoned during the report period.

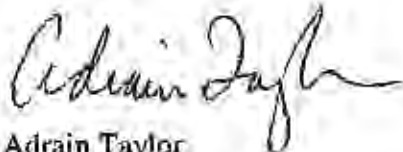
(j) A summary of closure operations during the reporting period.

There were no closure operations during the period.

Fourth Quarter 2001 Self Monitoring Report
UIC Permit No. AZ396009001

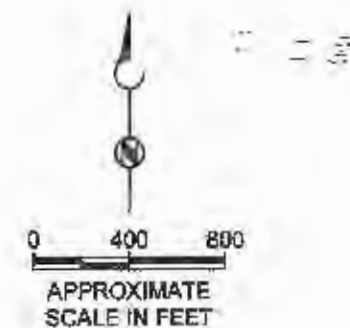
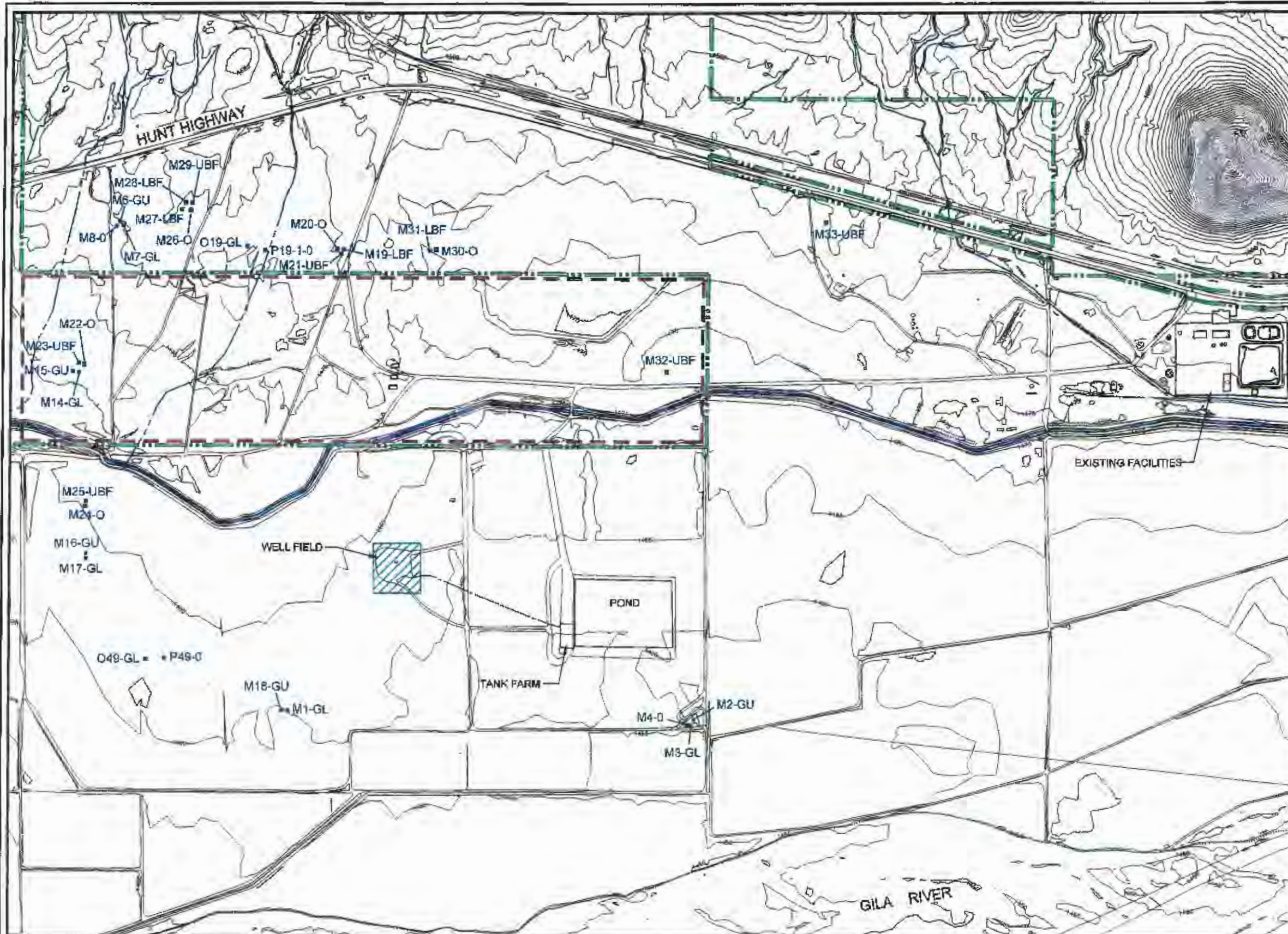
A copy of the quarterly monitoring report submitted to ADEQ has been included for your review and files. Florence Copper Inc. believes that you will find this report complete and in compliance with all permit conditions. Please contact me at (404) 495-9577 should you have any questions regarding this report.

Sincerely,

A handwritten signature in cursive script, appearing to read "Adrain Taylor".

Adrain Taylor
Senior Vice President

Attachments



EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- STATE LEASE LAND BOUNDARY
- O19-GL POC MONITORING WELL
- ENLARGED AREA ON FIGURE 2

EXISTING FACILITIES

WELL FIELD

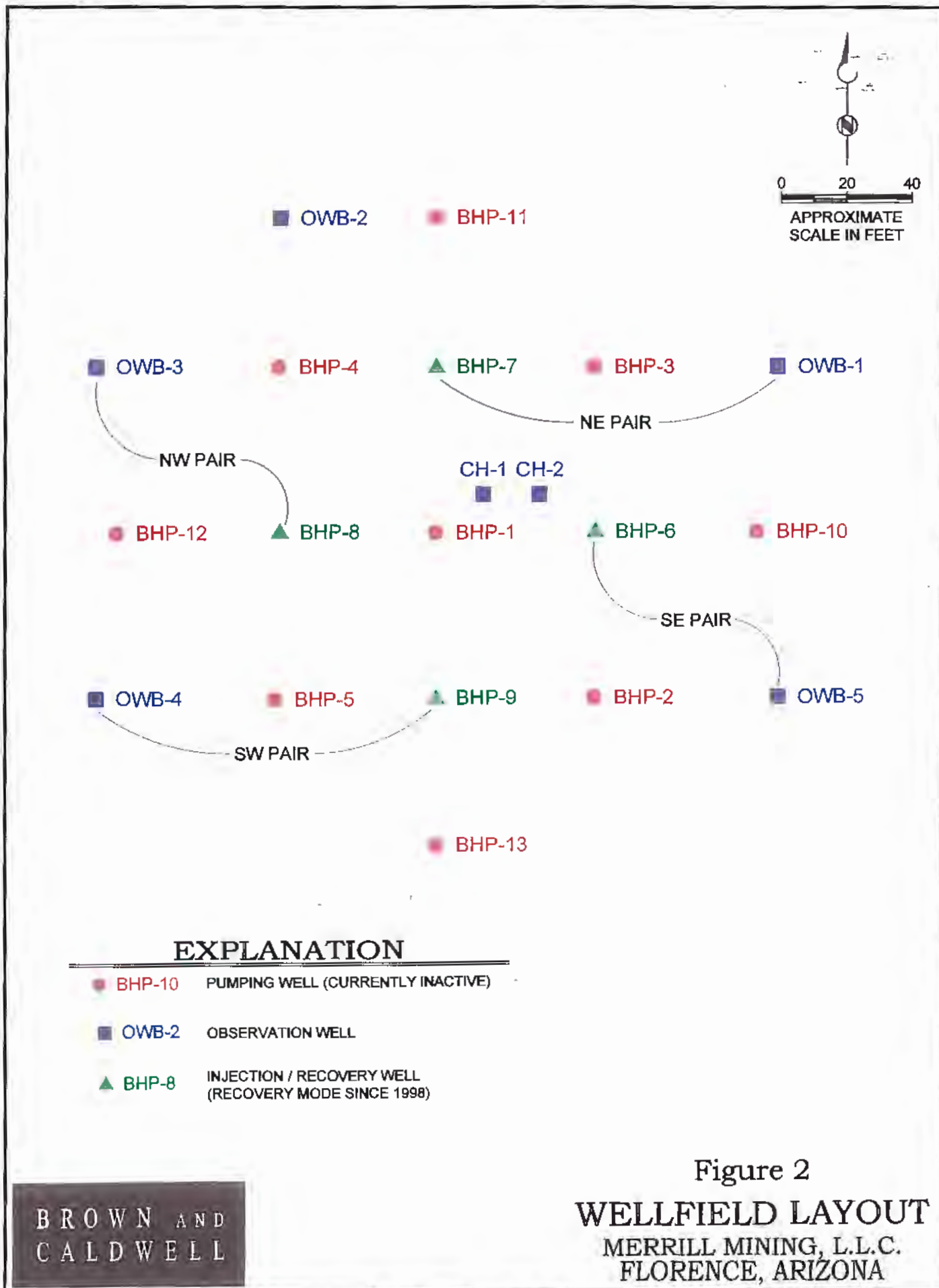
POND

TANK FARM

GILA RIVER

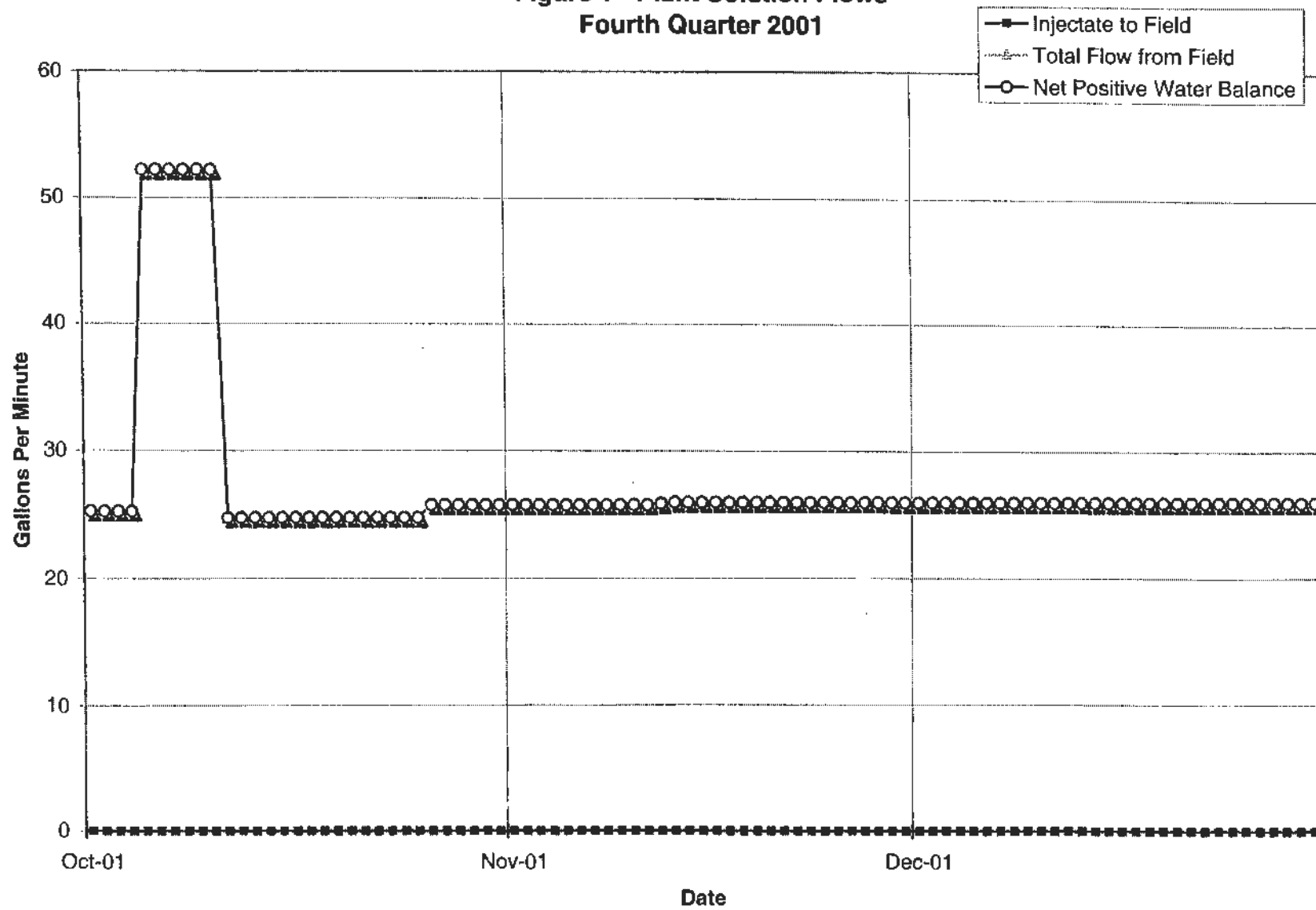
**BROWN AND
CALDWELL**

Figure 1
MONITORING AREA
MERRILL MINING, L.L.C.
FLORENCE, ARIZONA



ATTACHMENT 1
MINE OPERATIONS MONITORING

**Figure 1 - Plant Solution Flows
Fourth Quarter 2001**



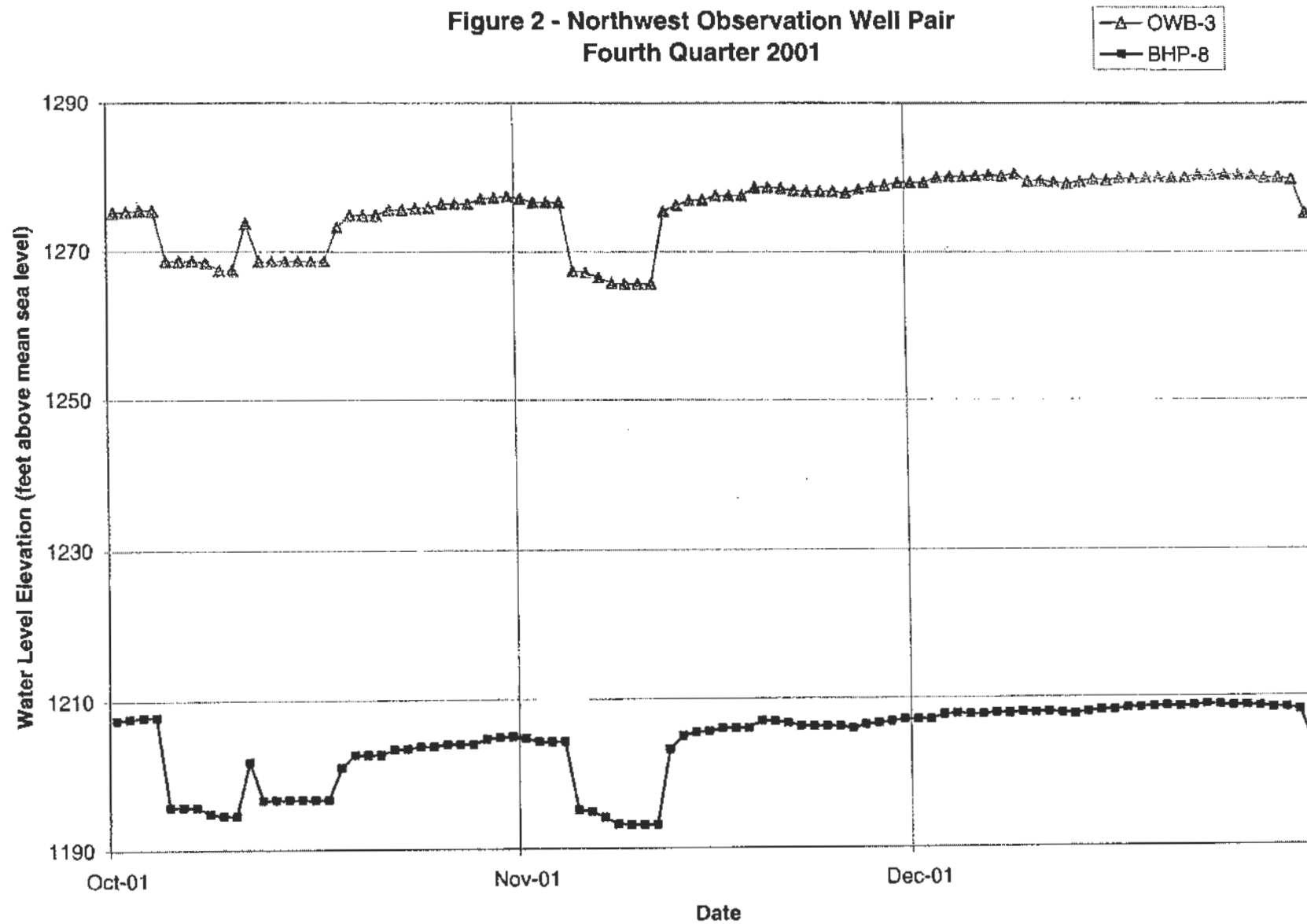
Plant Solution Flows - Daily Averages
Fourth Quarter 2001

Date	Injectate to Field (gpm)	BHP-6 (gpm)	BHP-7 (gpm)	BHP-8 (gpm)	BHP-9 (gpm)	Total Flow from Field (gpm)	Net Positive Water Balance (gpm)	Maintained Hydrologic Control (Yes/No)
10/1/01	0		17	8.3		25.3	25.3	Yes
10/2/01	0		17	8.3		25.3	25.3	Yes
10/3/01	0		17	8.3		25.3	25.3	Yes
10/4/01	0		17	8.3		25.3	25.3	Yes
10/5/01	0	14.3	16.6	8.2	13.1	52.2	52.2	Yes
10/6/01	0	14.3	16.6	8.2	13.1	52.2	52.2	Yes
10/7/01	0	14.3	16.6	8.2	13.1	52.2	52.2	Yes
10/8/01	0	14.3	16.6	8.2	13.1	52.2	52.2	Yes
10/9/01	0	14.3	16.6	8.2	13.1	52.2	52.2	Yes
10/10/01	0	14.3	16.6	8.2	13.1	52.2	52.2	Yes
10/11/01	0		16.6	8.2		24.8	24.8	Yes
10/12/01	0		16.6	8.2		24.8	24.8	Yes
10/13/01	0		16.6	8.2		24.8	24.8	Yes
10/14/01	0		16.6	8.2		24.8	24.8	Yes
10/15/01	0		16.6	8.2		24.8	24.8	Yes
10/16/01	0		16.6	8.2		24.8	24.8	Yes
10/17/01	0		16.6	8.2		24.8	24.8	Yes
10/18/01	0		16.6	8.2		24.8	24.8	Yes
10/19/01	0		16.6	8.2		24.8	24.8	Yes
10/20/01	0		16.6	8.2		24.8	24.8	Yes
10/21/01	0		16.6	8.2		24.8	24.8	Yes
10/22/01	0		16.6	8.2		24.8	24.8	Yes
10/23/01	0		16.6	8.2		24.8	24.8	Yes
10/24/01	0		16.6	8.2		24.8	24.8	Yes
10/25/01	0		16.6	8.2		24.8	24.8	Yes
10/26/01	0		17.2	8.6		25.8	25.8	Yes
10/27/01	0		17.2	8.6		25.8	25.8	Yes
10/28/01	0		17.2	8.6		25.8	25.8	Yes
10/29/01	0		17.2	8.6		25.8	25.8	Yes
10/30/01	0		17.2	8.6		25.8	25.8	Yes
10/31/01	0		17.2	8.6		25.8	25.8	Yes
11/1/01	0		17.2	8.6		25.8	25.8	Yes
11/2/01	0		17.2	8.6		25.8	25.8	Yes
11/3/01	0		17.2	8.6		25.8	25.8	Yes
11/4/01	0		17.2	8.6		25.8	25.8	Yes
11/5/01	0		17.2	8.6		25.8	25.8	Yes
11/6/01	0		17.2	8.6		25.8	25.8	Yes
11/7/01	0		17.2	8.6		25.8	25.8	Yes
11/8/01	0		17.2	8.6		25.8	25.8	Yes
11/9/01	0		17.2	8.6		25.8	25.8	Yes
11/10/01	0		17.2	8.6		25.8	25.8	Yes
11/11/01	0		17.2	8.6		25.8	25.8	Yes
11/12/01	0		17.6	8.3		25.9	25.9	Yes
11/13/01	0		17.6	8.4		26	26	Yes
11/14/01	0		17.6	8.4		26	26	Yes
11/15/01	0		17.6	8.4		26	26	Yes
11/16/01	0		17.6	8.4		26	26	Yes
11/17/01	0		17.6	8.4		26	26	Yes

Plant Solution Flows - Daily Averages
Fourth Quarter 2001

Date	Injectate to Field (gpm)	BHP-6 (gpm)	BHP-7 (gpm)	BHP-8 (gpm)	BHP-9 (gpm)	Total Flow from Field (gpm)	Net Positive Water Balance (gpm)	Maintained Hydrologic Control (Yes/No)
11/18/01	0		17.6	8.4		26	26	Yes
11/19/01	0		17.6	8.4		26	26	Yes
11/20/01	0		17.6	8.4		26	26	Yes
11/21/01	0		17.6	8.4		26	26	Yes
11/22/01	0		17.6	8.4		26	26	Yes
11/23/01	0		17.6	8.4		26	26	Yes
11/24/01	0		17.6	8.4		26	26	Yes
11/25/01	0		17.6	8.4		26	26	Yes
11/26/01	0		17.6	8.4		26	26	Yes
11/27/01	0		17.6	8.4		26	26	Yes
11/28/01	0		17.6	8.4		26	26	Yes
11/29/01	0		17.6	8.4		26	26	Yes
11/30/01	0		17.6	8.4		26	26	Yes
12/1/01	0		17.6	8.4		26	26	Yes
12/2/01	0		17.6	8.4		26	26	Yes
12/3/01	0		17.6	8.4		26	26	Yes
12/4/01	0		17.6	8.4		26	26	Yes
12/5/01	0		17.6	8.4		26	26	Yes
12/6/01	0		17.6	8.4		26	26	Yes
12/7/01	0		17.6	8.4		26	26	Yes
12/8/01	0		17.6	8.4		26	26	Yes
12/9/01	0		17.6	8.4		26	26	Yes
12/10/01	0		17.6	8.4		26	26	Yes
12/11/01	0		17.6	8.4		26	26	Yes
12/12/01	0		17.6	8.4		26	26	Yes
12/13/01	0		17.6	8.4		26	26	Yes
12/14/01	0		17.6	8.4		26	26	Yes
12/15/01	0		17.6	8.4		26	26	Yes
12/16/01	0		17.6	8.4		26	26	Yes
12/17/01	0		17.6	8.4		26	26	Yes
12/18/01	0		17.6	8.4		26	26	Yes
12/19/01	0		17.6	8.4		26	26	Yes
12/20/01	0		17.6	8.4		26	26	Yes
12/21/01	0		17.6	8.4		26	26	Yes
12/22/01	0		17.6	8.4		26	26	Yes
12/23/01	0		17.6	8.4		26	26	Yes
12/24/01	0		17.6	8.4		26	26	Yes
12/25/01	0		17.6	8.4		26	26	Yes
12/26/01	0		17.6	8.4		26	26	Yes
12/27/01	0		17.6	8.4		26	26	Yes
12/28/01	0		17.6	8.4		26	26	Yes
12/29/01	0		17.6	8.4		26	26	Yes
12/30/01	0		17.6	8.4		26	26	Yes
12/31/01	0		17.6	8.4		26	26	Yes

Figure 2 - Northwest Observation Well Pair
Fourth Quarter 2001



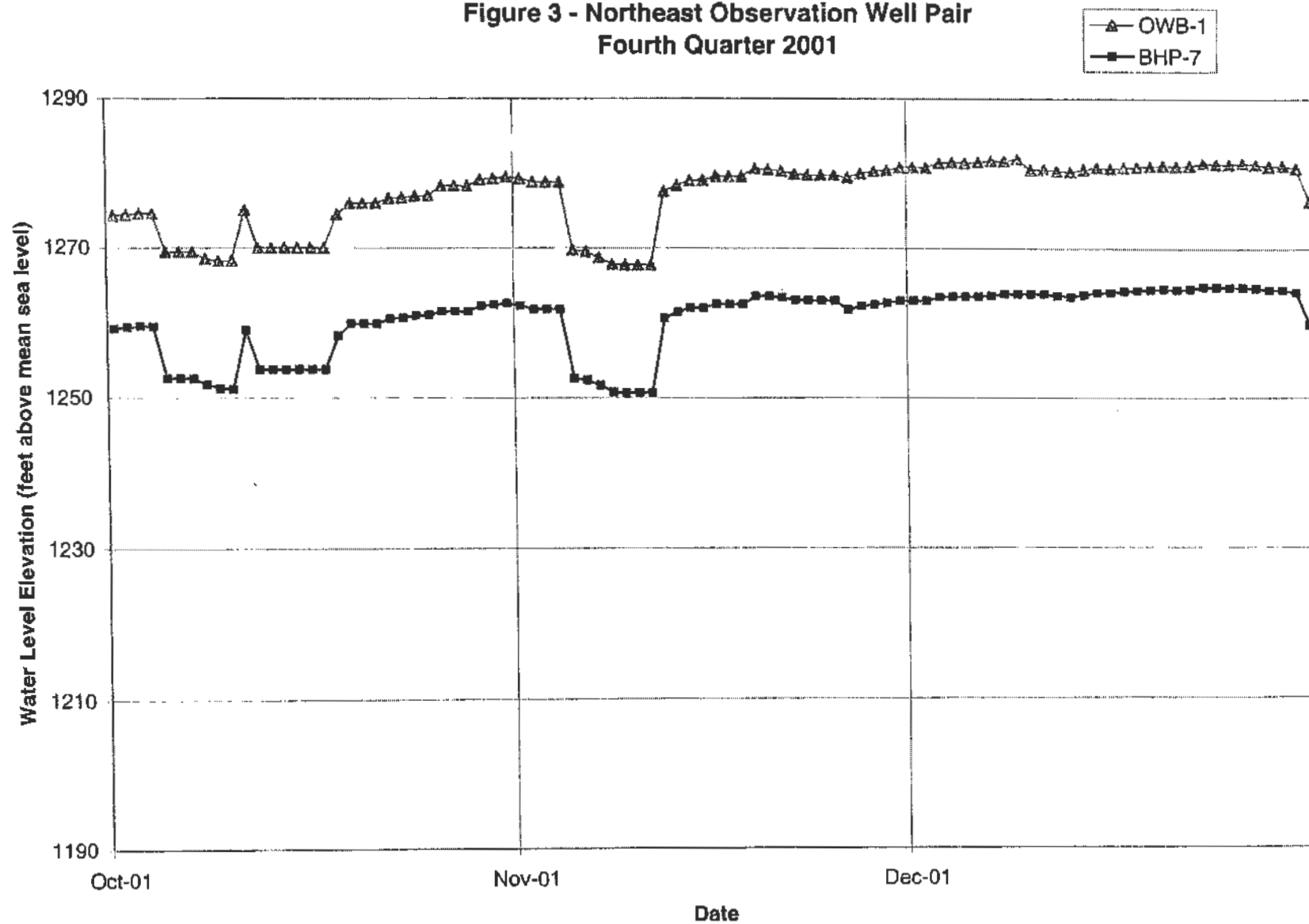
**Northwest Observation Well Pair
Fourth Quarter 2001**

Date	BHP-8	OWB-3	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
10/1/01	1207.4	1275.2	-67.8	Yes
10/2/01	1207.6	1275.3	-67.7	Yes
10/3/01	1207.8	1275.5	-67.7	Yes
10/4/01	1207.8	1275.5	-67.7	Yes
10/5/01	1195.7	1268.7	-73	Yes
10/6/01	1195.7	1268.7	-73	Yes
10/7/01	1195.7	1268.7	-73	Yes
10/8/01	1194.8	1268.5	-73.7	Yes
10/9/01	1194.5	1267.5	-73	Yes
10/10/01	1194.5	1267.5	-73	Yes
10/11/01	1201.75	1273.85	-72.1	Yes
10/12/01	1196.6	1268.7	-72.1	Yes
10/13/01	1196.6	1268.7	-72.1	Yes
10/14/01	1196.6	1268.7	-72.1	Yes
10/15/01	1196.6	1268.7	-72.1	Yes
10/16/01	1196.6	1268.7	-72.1	Yes
10/17/01	1196.6	1268.7	-72.1	Yes
10/18/01	1200.9	1273.3	-72.4	Yes
10/19/01	1202.6	1274.9	-72.3	Yes
10/20/01	1202.6	1274.9	-72.3	Yes
10/21/01	1202.6	1274.9	-72.3	Yes
10/22/01	1203.3	1275.6	-72.3	Yes
10/23/01	1203.4	1275.6	-72.2	Yes
10/24/01	1203.7	1275.8	-72.1	Yes
10/25/01	1203.7	1275.9	-72.2	Yes
10/26/01	1204	1276.4	-72.4	Yes
10/27/01	1204	1276.4	-72.4	Yes
10/28/01	1204	1276.4	-72.4	Yes
10/29/01	1204.7	1277.1	-72.4	Yes
10/30/01	1204.9	1277.2	-72.3	Yes
10/31/01	1205	1277.4	-72.4	Yes
11/1/01	1204.8	1277.1	-72.3	Yes
11/2/01	1204.3	1276.6	-72.3	Yes
11/3/01	1204.3	1276.6	-72.3	Yes
11/4/01	1204.3	1276.6	-72.3	Yes
11/5/01	1195.1	1267.4	-72.3	Yes
11/6/01	1194.9	1267.2	-72.3	Yes
11/7/01	1194.1	1266.5	-72.4	Yes
11/8/01	1193.2	1265.7	-72.5	Yes
11/9/01	1193.1	1265.6	-72.5	Yes
11/10/01	1193.1	1265.6	-72.5	Yes
11/11/01	1193.1	1265.6	-72.5	Yes
11/12/01	1203.2	1275.4	-72.2	Yes
11/13/01	1205	1276.2	-71.2	Yes
11/14/01	1205.5	1276.9	-71.4	Yes
11/15/01	1205.6	1276.95	-71.35	Yes

**Northwest Observation Well Pair
Fourth Quarter 2001**

Date	BHP-8	OWB-3	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
11/16/01	1206	1277.5	-71.5	Yes
11/17/01	1206	1277.5	-71.5	Yes
11/18/01	1206	1277.5	-71.5	Yes
11/19/01	1207	1278.6	-71.6	Yes
11/20/01	1206.9	1278.65	-71.75	Yes
11/21/01	1206.7	1278.5	-71.8	Yes
11/22/01	1206.3	1278.2	-71.9	Yes
11/23/01	1206.2	1278.1	-71.9	Yes
11/24/01	1206.2	1278.1	-71.9	Yes
11/25/01	1206.2	1278.1	-71.9	Yes
11/26/01	1205.9	1277.9	-72	Yes
11/27/01	1206.4	1278.4	-72	Yes
11/28/01	1206.6	1278.7	-72.1	Yes
11/29/01	1206.8	1278.9	-72.1	Yes
11/30/01	1207.1	1279.3	-72.2	Yes
12/1/01	1207.1	1279.3	-72.2	Yes
12/2/01	1207.1	1279.3	-72.2	Yes
12/3/01	1207.7	1280	-72.3	Yes
12/4/01	1207.8	1280.1	-72.3	Yes
12/5/01	1207.7	1280.1	-72.4	Yes
12/6/01	1207.7	1280.2	-72.5	Yes
12/7/01	1207.9	1280.3	-72.4	Yes
12/8/01	1207.8	1280.2	-72.4	Yes
12/9/01	1208	1280.5	-72.5	Yes
12/10/01	1207.9	1279.5	-71.6	Yes
12/11/01	1208	1279.6	-71.6	Yes
12/12/01	1207.85	1279.4	-71.55	Yes
12/13/01	1207.7	1279.2	-71.5	Yes
12/14/01	1208	1279.5	-71.5	Yes
12/15/01	1208.2	1279.8	-71.6	Yes
12/16/01	1208.2	1279.7	-71.5	Yes
12/17/01	1208.4	1279.9	-71.5	Yes
12/18/01	1208.5	1279.9	-71.4	Yes
12/19/01	1208.6	1279.95	-71.35	Yes
12/20/01	1208.7	1280.1	-71.4	Yes
12/21/01	1208.6	1280	-71.4	Yes
12/22/01	1208.7	1280.1	-71.4	Yes
12/23/01	1208.9	1280.4	-71.5	Yes
12/24/01	1208.8	1280.4	-71.6	Yes
12/25/01	1208.7	1280.45	-71.75	Yes
12/26/01	1208.7	1280.5	-71.8	Yes
12/27/01	1208.6	1280.35	-71.75	Yes
12/28/01	1208.4	1280	-71.6	Yes
12/29/01	1208.4	1280.1	-71.7	Yes
12/30/01	1208.1	1279.8	-71.7	Yes
12/31/01	1203.6	1275.3	-71.7	Yes

Figure 3 - Northeast Observation Well Pair
Fourth Quarter 2001



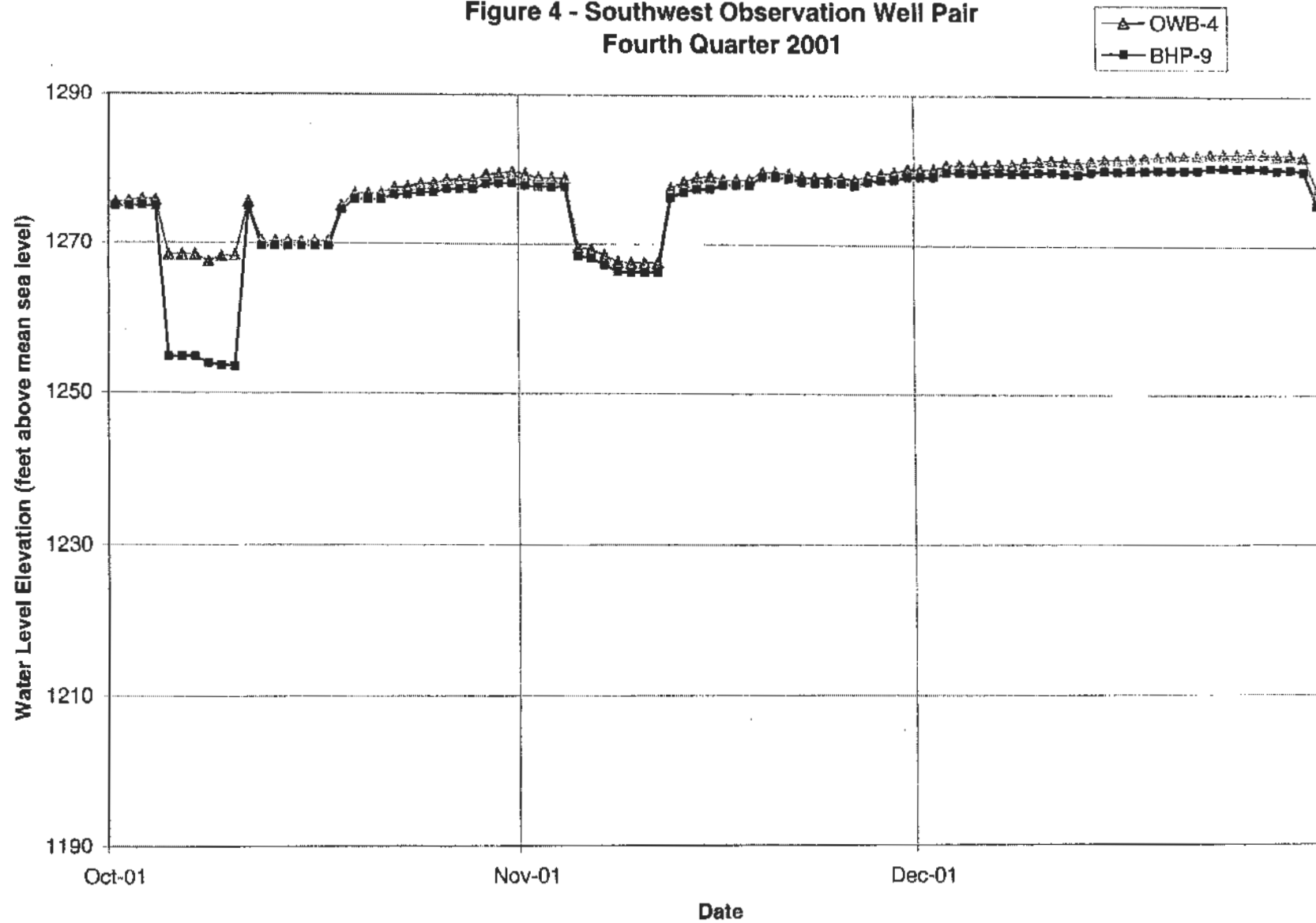
**Northeast Observation Well Pair
Fourth Quarter 2001**

Date	BHP-7	OWB-1	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
10/1/01	1259	1274.3	-15.3	Yes
10/2/01	1259.2	1274.4	-15.2	Yes
10/3/01	1259.4	1274.6	-15.2	Yes
10/4/01	1259.3	1274.6	-15.3	Yes
10/5/01	1252.5	1269.4	-16.9	Yes
10/6/01	1252.5	1269.4	-16.9	Yes
10/7/01	1252.5	1269.4	-16.9	Yes
10/8/01	1251.7	1268.5	-16.8	Yes
10/9/01	1251.2	1268.2	-17	Yes
10/10/01	1251.1	1268.3	-17.2	Yes
10/11/01	1258.9	1275.1	-16.2	Yes
10/12/01	1253.7	1270	-16.3	Yes
10/13/01	1253.7	1270	-16.3	Yes
10/14/01	1253.7	1270	-16.3	Yes
10/15/01	1253.7	1270	-16.3	Yes
10/16/01	1253.7	1270	-16.3	Yes
10/17/01	1253.7	1270	-16.3	Yes
10/18/01	1258.1	1274.5	-16.4	Yes
10/19/01	1259.7	1276	-16.3	Yes
10/20/01	1259.7	1276	-16.3	Yes
10/21/01	1259.7	1276	-16.3	Yes
10/22/01	1260.4	1276.7	-16.3	Yes
10/23/01	1260.5	1276.75	-16.25	Yes
10/24/01	1260.8	1277	-16.2	Yes
10/25/01	1260.9	1277.05	-16.15	Yes
10/26/01	1261.4	1278.4	-17	Yes
10/27/01	1261.4	1278.4	-17	Yes
10/28/01	1261.4	1278.4	-17	Yes
10/29/01	1262.2	1279.2	-17	Yes
10/30/01	1262.3	1279.4	-17.1	Yes
10/31/01	1262.5	1279.6	-17.1	Yes
11/1/01	1262.2	1279.4	-17.2	Yes
11/2/01	1261.7	1278.9	-17.2	Yes
11/3/01	1261.7	1278.9	-17.2	Yes
11/4/01	1261.7	1278.9	-17.2	Yes
11/5/01	1252.5	1269.7	-17.2	Yes
11/6/01	1252.3	1269.5	-17.2	Yes
11/7/01	1251.6	1268.7	-17.1	Yes
11/8/01	1250.7	1267.8	-17.1	Yes
11/9/01	1250.6	1267.7	-17.1	Yes
11/10/01	1250.6	1267.7	-17.1	Yes
11/11/01	1250.6	1267.7	-17.1	Yes
11/12/01	1260.5	1277.7	-17.2	Yes
11/13/01	1261.3	1278.5	-17.2	Yes
11/14/01	1261.9	1279.1	-17.2	Yes
11/15/01	1261.9	1279.2	-17.3	Yes

**Northeast Observation Well Pair
Fourth Quarter 2001**

Date	BHP-7	OWB-1	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
11/16/01	1262.4	1279.7	-17.3	Yes
11/17/01	1262.4	1279.7	-17.3	Yes
11/18/01	1262.4	1279.7	-17.3	Yes
11/19/01	1263.5	1280.7	-17.2	Yes
11/20/01	1263.5	1280.6	-17.1	Yes
11/21/01	1263.3	1280.4	-17.1	Yes
11/22/01	1263	1280	-17	Yes
11/23/01	1262.9	1279.85	-16.95	Yes
11/24/01	1262.9	1279.85	-16.95	Yes
11/25/01	1262.9	1279.85	-16.95	Yes
11/26/01	1261.7	1279.6	-17.9	Yes
11/27/01	1262.2	1280.1	-17.9	Yes
11/28/01	1262.4	1280.4	-18	Yes
11/29/01	1262.6	1280.5	-17.9	Yes
11/30/01	1262.9	1280.9	-18	Yes
12/1/01	1262.9	1280.9	-18	Yes
12/2/01	1262.9	1280.9	-18	Yes
12/3/01	1263.4	1281.5	-18.1	Yes
12/4/01	1263.5	1281.6	-18.1	Yes
12/5/01	1263.5	1281.55	-18.05	Yes
12/6/01	1263.5	1281.6	-18.1	Yes
12/7/01	1263.6	1281.8	-18.2	Yes
12/8/01	1263.8	1281.75	-17.95	Yes
12/9/01	1263.8	1282	-18.2	Yes
12/10/01	1263.8	1280.6	-16.8	Yes
12/11/01	1263.8	1280.65	-16.85	Yes
12/12/01	1263.6	1280.45	-16.85	Yes
12/13/01	1263.4	1280.3	-16.9	Yes
12/14/01	1263.7	1280.6	-16.9	Yes
12/15/01	1264	1280.9	-16.9	Yes
12/16/01	1264	1280.75	-16.75	Yes
12/17/01	1264.2	1280.9	-16.7	Yes
12/18/01	1264.3	1281	-16.7	Yes
12/19/01	1264.4	1281.1	-16.7	Yes
12/20/01	1264.5	1281.2	-16.7	Yes
12/21/01	1264.4	1281.1	-16.7	Yes
12/22/01	1264.5	1281.2	-16.7	Yes
12/23/01	1264.8	1281.5	-16.7	Yes
12/24/01	1264.8	1281.4	-16.6	Yes
12/25/01	1264.7	1281.4	-16.7	Yes
12/26/01	1264.7	1281.5	-16.8	Yes
12/27/01	1264.6	1281.4	-16.8	Yes
12/28/01	1264.4	1281.1	-16.7	Yes
12/29/01	1264.4	1281.2	-16.8	Yes
12/30/01	1264.1	1280.9	-16.8	Yes
12/31/01	1259.7	1276.4	-16.7	Yes

Figure 4 - Southwest Observation Well Pair
Fourth Quarter 2001



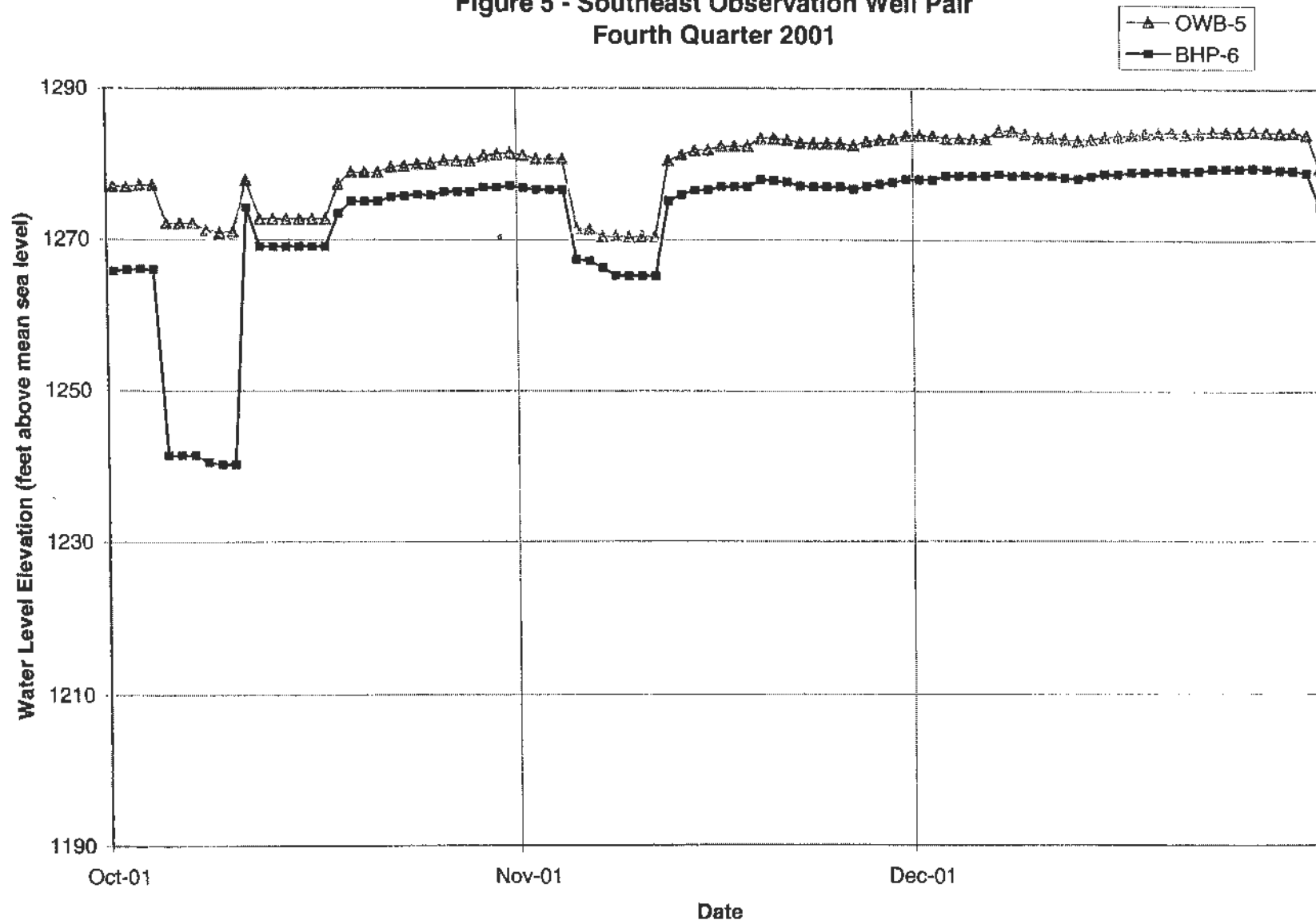
**Southwest Observation Well Pair
Fourth Quarter 2001**

Date	BHP-9	OWB-4	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
10/1/01	1274.9	1275.4	-0.5	Yes
10/2/01	1274.9	1275.55	-0.65	Yes
10/3/01	1275	1275.8	-0.8	Yes
10/4/01	1274.9	1275.75	-0.85	Yes
10/5/01	1254.8	1268.4	-13.6	Yes
10/6/01	1254.8	1268.4	-13.6	Yes
10/7/01	1254.8	1268.4	-13.6	Yes
10/8/01	1253.9	1267.5	-13.6	Yes
10/9/01	1253.6	1268.2	-14.6	Yes
10/10/01	1253.5	1268.3	-14.8	Yes
10/11/01	1274.9	1275.5	-0.6	Yes
10/12/01	1269.6	1270.3	-0.7	Yes
10/13/01	1269.6	1270.3	-0.7	Yes
10/14/01	1269.6	1270.3	-0.7	Yes
10/15/01	1269.6	1270.3	-0.7	Yes
10/16/01	1269.6	1270.3	-0.7	Yes
10/17/01	1269.6	1270.3	-0.7	Yes
10/18/01	1274.5	1275	-0.5	Yes
10/19/01	1275.9	1276.65	-0.75	Yes
10/20/01	1275.9	1276.65	-0.75	Yes
10/21/01	1275.9	1276.65	-0.75	Yes
10/22/01	1276.5	1277.45	-0.95	Yes
10/23/01	1276.5	1277.6	-1.1	Yes
10/24/01	1276.8	1277.9	-1.1	Yes
10/25/01	1276.8	1278	-1.2	Yes
10/26/01	1277.3	1278.5	-1.2	Yes
10/27/01	1277.3	1278.5	-1.2	Yes
10/28/01	1277.3	1278.5	-1.2	Yes
10/29/01	1278	1279.2	-1.2	Yes
10/30/01	1278	1279.4	-1.4	Yes
10/31/01	1278.1	1279.6	-1.5	Yes
11/1/01	1277.8	1279.3	-1.5	Yes
11/2/01	1277.6	1278.8	-1.2	Yes
11/3/01	1277.6	1278.8	-1.2	Yes
11/4/01	1277.6	1278.8	-1.2	Yes
11/5/01	1268.4	1269.55	-1.15	Yes
11/6/01	1268.1	1269.3	-1.2	Yes
11/7/01	1267.2	1268.5	-1.3	Yes
11/8/01	1266.3	1267.6	-1.3	Yes
11/9/01	1266.2	1267.5	-1.3	Yes
11/10/01	1266.2	1267.5	-1.3	Yes
11/11/01	1266.2	1267.5	-1.3	Yes
11/12/01	1276.2	1277.5	-1.3	Yes
11/13/01	1276.9	1278.3	-1.4	Yes
11/14/01	1277.4	1278.9	-1.5	Yes
11/15/01	1277.4	1279.05	-1.65	Yes

**Southwest Observation Well Pair
Fourth Quarter 2001**

Date	BHP-9	OWB-4	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
11/16/01	1277.9	1278.6	-0.7	Yes
11/17/01	1277.9	1278.6	-0.7	Yes
11/18/01	1277.9	1278.6	-0.7	Yes
11/19/01	1279	1279.65	-0.65	Yes
11/20/01	1279	1279.6	-0.6	Yes
11/21/01	1278.8	1279.4	-0.6	Yes
11/22/01	1278.4	1279	-0.6	Yes
11/23/01	1278.2	1278.9	-0.7	Yes
11/24/01	1278.2	1278.9	-0.7	Yes
11/25/01	1278.2	1278.9	-0.7	Yes
11/26/01	1277.9	1278.65	-0.75	Yes
11/27/01	1278.4	1279.15	-0.75	Yes
11/28/01	1278.6	1279.45	-0.85	Yes
11/29/01	1278.7	1279.65	-0.95	Yes
11/30/01	1279.1	1280.1	-1	Yes
12/1/01	1279.1	1280.1	-1	Yes
12/2/01	1279.1	1280.1	-1	Yes
12/3/01	1279.7	1280.7	-1	Yes
12/4/01	1279.7	1280.8	-1.1	Yes
12/5/01	1279.6	1280.7	-1.1	Yes
12/6/01	1279.6	1280.7	-1.1	Yes
12/7/01	1279.7	1280.9	-1.2	Yes
12/8/01	1279.6	1280.8	-1.2	Yes
12/9/01	1279.6	1281.1	-1.5	Yes
12/10/01	1279.7	1281.3	-1.6	Yes
12/11/01	1279.8	1281.4	-1.6	Yes
12/12/01	1279.6	1281.25	-1.65	Yes
12/13/01	1279.5	1281	-1.5	Yes
12/14/01	1279.8	1281.3	-1.5	Yes
12/15/01	1280	1281.55	-1.55	Yes
12/16/01	1279.9	1281.5	-1.6	Yes
12/17/01	1280	1281.65	-1.65	Yes
12/18/01	1280	1281.8	-1.8	Yes
12/19/01	1280.1	1281.9	-1.8	Yes
12/20/01	1280.1	1282.1	-2	Yes
12/21/01	1280.05	1282	-1.95	Yes
12/22/01	1280.1	1282.1	-2	Yes
12/23/01	1280.4	1282.3	-1.9	Yes
12/24/01	1280.4	1282.3	-1.9	Yes
12/25/01	1280.3	1282.25	-1.95	Yes
12/26/01	1280.4	1282.4	-2	Yes
12/27/01	1280.3	1282.3	-2	Yes
12/28/01	1280.1	1282.1	-2	Yes
12/29/01	1280.2	1282.2	-2	Yes
12/30/01	1279.9	1281.9	-2	Yes
12/31/01	1275.4	1277.4	-2	Yes

Figure 5 - Southeast Observation Well Pair
Fourth Quarter 2001



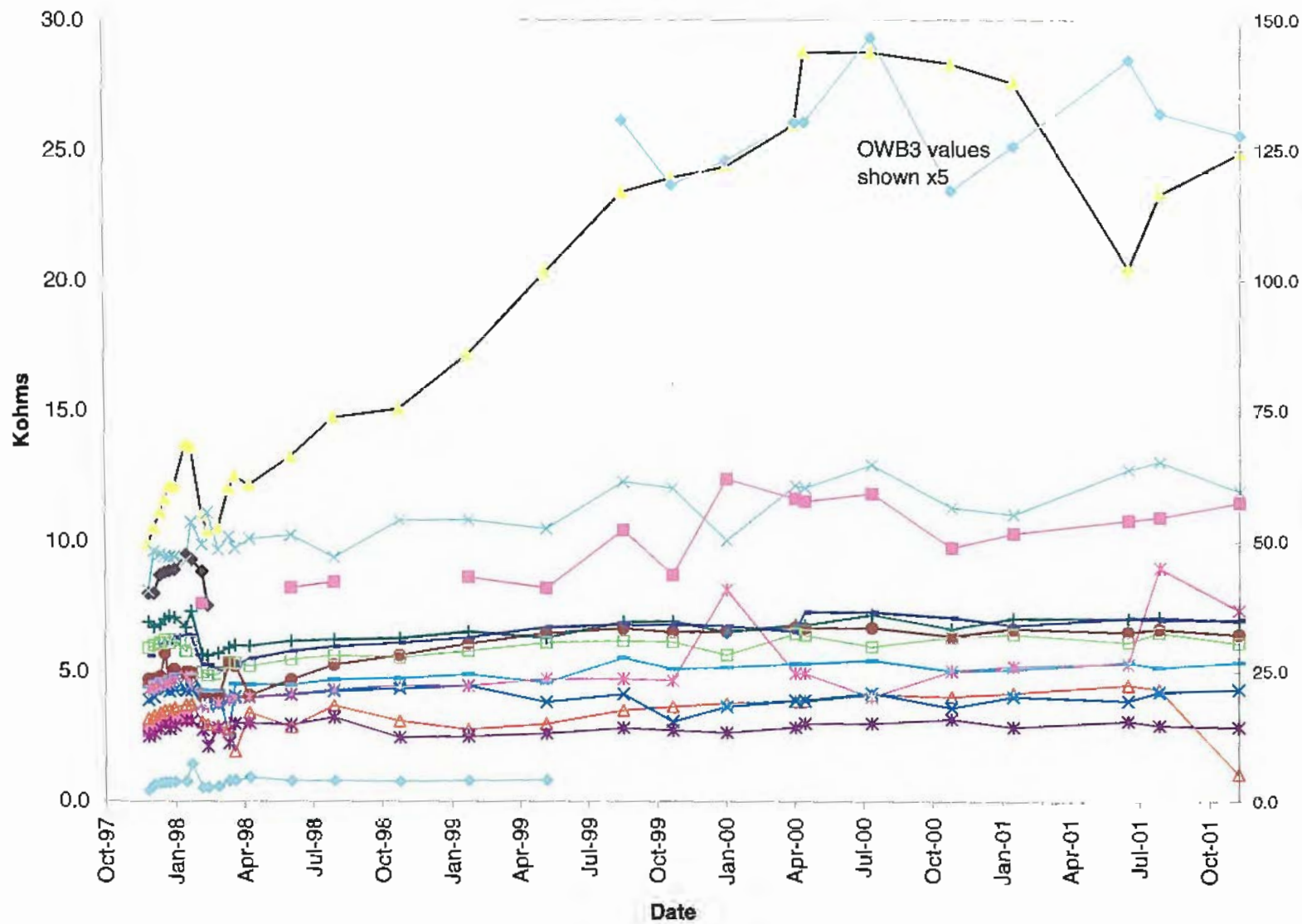
**Southeast Observation Well Pair
Fourth Quarter 2001**

Date	BHP-6	OWB-5	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
10/1/01	1265.8	1277	-11.2	Yes
10/2/01	1266	1277	-11	Yes
10/3/01	1266.1	1277.2	-11.1	Yes
10/4/01	1266	1277.2	-11.2	Yes
10/5/01	1241.4	1272.1	-30.7	Yes
10/6/01	1241.4	1272.1	-30.7	Yes
10/7/01	1241.4	1272.1	-30.7	Yes
10/8/01	1240.5	1271.2	-30.7	Yes
10/9/01	1240.2	1270.9	-30.7	Yes
10/10/01	1240.2	1271	-30.8	Yes
10/11/01	1274.15	1277.85	-3.7	Yes
10/12/01	1269.1	1272.7	-3.6	Yes
10/13/01	1269.1	1272.7	-3.6	Yes
10/14/01	1269.1	1272.7	-3.6	Yes
10/15/01	1269.1	1272.7	-3.6	Yes
10/16/01	1269.1	1272.7	-3.6	Yes
10/17/01	1269.1	1272.7	-3.6	Yes
10/18/01	1273.4	1277.3	-3.9	Yes
10/19/01	1275	1278.9	-3.9	Yes
10/20/01	1275	1278.9	-3.9	Yes
10/21/01	1275	1278.9	-3.9	Yes
10/22/01	1275.6	1279.6	-4	Yes
10/23/01	1275.7	1279.7	-4	Yes
10/24/01	1275.9	1280	-4.1	Yes
10/25/01	1275.8	1280	-4.2	Yes
10/26/01	1276.3	1280.45	-4.15	Yes
10/27/01	1276.3	1280.45	-4.15	Yes
10/28/01	1276.3	1280.45	-4.15	Yes
10/29/01	1276.9	1281.1	-4.2	Yes
10/30/01	1276.9	1281.3	-4.4	Yes
10/31/01	1277.1	1281.5	-4.4	Yes
11/1/01	1276.8	1281.2	-4.4	Yes
11/2/01	1276.6	1280.7	-4.1	Yes
11/3/01	1276.6	1280.7	-4.1	Yes
11/4/01	1276.6	1280.7	-4.1	Yes
11/5/01	1267.4	1271.5	-4.1	Yes
11/6/01	1267.2	1271.3	-4.1	Yes
11/7/01	1266.3	1270.4	-4.1	Yes
11/8/01	1265.3	1270.5	-5.2	Yes
11/9/01	1265.2	1270.4	-5.2	Yes
11/10/01	1265.2	1270.4	-5.2	Yes
11/11/01	1265.2	1270.4	-5.2	Yes
11/12/01	1275.1	1280.5	-5.4	Yes
11/13/01	1275.9	1281.2	-5.3	Yes
11/14/01	1276.5	1281.8	-5.3	Yes
11/15/01	1276.55	1281.9	-5.35	Yes

**Southeast Observation Well Pair
Fourth Quarter 2001**

Date	BHP-6	OWB-5	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
11/16/01	1277	1282.4	-5.4	Yes
11/17/01	1277	1282.4	-5.4	Yes
11/18/01	1277	1282.4	-5.4	Yes
11/19/01	1277.9	1283.4	-5.5	Yes
11/20/01	1277.8	1283.4	-5.6	Yes
11/21/01	1277.6	1283.2	-5.6	Yes
11/22/01	1277.1	1282.8	-5.7	Yes
11/23/01	1277	1282.75	-5.75	Yes
11/24/01	1277	1282.75	-5.75	Yes
11/25/01	1277	1282.75	-5.75	Yes
11/26/01	1276.7	1282.5	-5.8	Yes
11/27/01	1277.1	1283	-5.9	Yes
11/28/01	1277.4	1283.2	-5.8	Yes
11/29/01	1277.6	1283.4	-5.8	Yes
11/30/01	1278	1283.8	-5.8	Yes
12/1/01	1278	1283.8	-5.8	Yes
12/2/01	1278	1283.8	-5.8	Yes
12/3/01	1278.5	1283.4	-4.9	Yes
12/4/01	1278.5	1283.45	-4.95	Yes
12/5/01	1278.5	1283.4	-4.9	Yes
12/6/01	1278.5	1283.4	-4.9	Yes
12/7/01	1278.7	1284.5	-5.8	Yes
12/8/01	1278.5	1284.5	-6	Yes
12/9/01	1278.6	1284	-5.4	Yes
12/10/01	1278.5	1283.6	-5.1	Yes
12/11/01	1278.5	1283.6	-5.1	Yes
12/12/01	1278.3	1283.4	-5.1	Yes
12/13/01	1278.1	1283.2	-5.1	Yes
12/14/01	1278.5	1283.4	-4.9	Yes
12/15/01	1278.8	1283.7	-4.9	Yes
12/16/01	1278.8	1283.8	-5	Yes
12/17/01	1279	1284	-5	Yes
12/18/01	1279	1284.1	-5.1	Yes
12/19/01	1279.1	1284.2	-5.1	Yes
12/20/01	1279.2	1284.3	-5.1	Yes
12/21/01	1279.1	1284.1	-5	Yes
12/22/01	1279.2	1284.2	-5	Yes
12/23/01	1279.5	1284.4	-4.9	Yes
12/24/01	1279.5	1284.4	-4.9	Yes
12/25/01	1279.5	1284.4	-4.9	Yes
12/26/01	1279.6	1284.45	-4.85	Yes
12/27/01	1279.5	1284.4	-4.9	Yes
12/28/01	1279.3	1284.2	-4.9	Yes
12/29/01	1279.3	1284.3	-5	Yes
12/30/01	1279	1284	-5	Yes
12/31/01	1274.5	1279.5	-5	Yes

Annular Resistivity in Kohms



BROWN AND CALDWELL

p:\gen\florence\21622 (MM)\Quarterlies\Operational Monitoring\Annular Resistivity.xls:Chart1

1/28/02

ATTACHMENT 2

POC QUARTERLY COMPLIANCE MONITORING REPORT

3636 North Central Avenue
Suite 200
Phoenix, AZ 85012-1931

Tel: (602) 222-4444
Fax: (602) 222-4466

January 4, 2002



Mr. Adrian Taylor
Senior Vice President
Vanguard Properties, Inc.
3232 Cobb Parkway
PMB 315
Atlanta, Georgia 30339

15-21622/004

Subject: Florence Project
Quarterly Compliance Monitoring Report

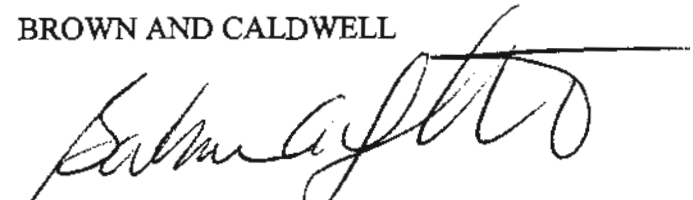
Dear Mr. Taylor:

Please find enclosed a final copy of the Florence Project Quarterly Compliance Monitoring Report for the Fourth Quarter 2001. This report is provided for inclusion in the quarterly submittals required by the Arizona Department of Environmental Quality (ADEQ) and the United States Environmental Protection Agency (USEPA) under Aquifer Protection Permit (APP) Number 101704 and Underground Injection Control (UIC) Permit Number AZ396000001.

If you should have any questions regarding this report, please do not hesitate to contact me at (602) 222-4476.

Very truly yours,

BROWN AND CALDWELL



Barbara A. Sylvester, E.I.T.
Engineer II

BAS:sdw
Attachment

**FLORENCE MINE PROJECT
QUARTERLY COMPLIANCE MONITORING REPORT
FOURTH QUARTER 2001**



Primary Sampling Activities

Quarterly compliance monitoring was conducted for the Florence Mine project on October 15 through October 18, November 11, and December 11, 2001 (Fourth Quarter 2001). Groundwater sampling and analysis was conducted in accordance with the requirements of Aquifer Protection Permit (APP) Permit Number 101704, Part IIE.3.d (Compliance Monitoring). Level I parameters, as listed in Part IV Table III.B of the APP were analyzed from the designated Point of Compliance (POC) wells. The Level I parameters are magnesium, sulfate, fluoride, and total dissolved solids (TDS).

During the Fourth Quarter 2001 sampling event, 29 POC wells were sampled and a total of 116 constituents were analyzed. Two POC wells, M32-UBF and M33-UBF, were dry and could not be sampled. Of the 116 constituents analyzed, one had a reported concentration exceeding the approved alert levels (ALs). Well M26-O had a reported magnesium concentration of 1.1 milligrams per liter (mg/l), which exceeded the alert level of 0.53 mg/l.

Analyses of the samples were conducted by Nevada Environmental Laboratories (NEL). Analytical results for the POC wells for the indicator parameters are provided in Table 1 and field parameters measured during sampling are indicated in Table 2.

AL Exceedances and Verification Sampling

As required in Part II.F.4 of the APP (AL, aquifer quality limit [AQL], and discharge limit (DL) contingencies), verification sampling of well M26-O was conducted on December 11, 2001. Magnesium did not exceed the AL in the verification sample. Since no exceedances were verified, no further investigation or reporting is required.

Contingency Sampling Plan to be Implemented During First Quarter 2002

There were no AL exceedances verified during this quarterly sampling. No contingency sampling plan is required during the first quarter of 2002.

Results of Contingency Sampling Plan Implemented from Third Quarter 2001

There were no AL exceedances during the Third Quarter 2001. Therefore, no contingency sampling plan was implemented.

Issues

There were no other issues to report during the Fourth Quarter 2001.

Table 1. Quarterly Summary of Analytical Results, Level I Parameters, in milligrams per liter (mg/L)

Well ID	Sample Date	Magnesium		Sulfate		Fluoride		Total Dissolved Solids	
		Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level
M1-GL	Oct 18 2001	19.0	31	73	109	0.76	1.3	603	1028
M1-GL (Dup)	Oct 18 2001	19.0	31	47	109	0.76	1.3	634	1028
M2-GU	Oct 18 2001	16.0	39	120	275	0.94	1.4	596	1496
M3-GL	Oct 18 2001	19.0	36	110	187	0.74	1.3	633	1157
M4-O	Nov 05 2001	4.4	15	66	405	2.6	5.1	401	1072
M6-GU	Oct 16 2001	2.7	5.1	45	86	0.73	1.3	355	620
M7-GL	Oct 17 2001	<0.25	0.45	27	82	0.95	1.7	235	464
M8-O	Oct 16 2001	<0.25	0.75	65	122	2.1	3.6	347	609
M14-GL	Oct 16 2001	3.5	23	51	144	0.62	1.4	423	874
M15-GU	Oct 16 2001	24.0	44	67	126	0.52	1.2	753	1359
M16-GU	Oct 17 2001	26.0	52	150	248	0.6	1.1	882	1635
M17-GL	Oct 17 2001	5.4	9.3	110	209	0.81	1.6	430	831
M18-GU	Oct 18 2001	17.0	36	150	288	1.0	1.6	641	1323
M19-LBF	Oct 15 2001	11.0	21	47	89	0.47	0.92	459	794
M20-O	Oct 17 2001	8.6	14	59	112	0.79	1.7	437	809
M20-O (Dup)	Oct 17 2001	8.3	14	57	112	0.82	1.7	436	809
M21-UBF	Oct 15 2001	34.0	87	260	487	0.68	1.1	1110	2867
M22-O	Oct 16 2001	5.3	8.6	46	86	0.74	1.3	406	1094
M23-UBF	Oct 16 2001	40.0	69	260	411	0.7	1.3	1350	2392
M24-O	Oct 17 2001	10.0	19	630	1364	1.1	2.5	1280	2363
M25-UBF	Oct 17 2001	24.0	76	200	387	0.78	1.6	890	2683
M26-O	Oct 15 2001	1.1	0.53	57	105	1.7	3.4	298	556
M26-O	Dec 11 2001	0.41	0.53	NA	105	NA	3.4	NA	556
M27-LBF	Oct 15 2001	28.0	51	120	179	<0.4	0.79	948	1745
M28-LBF	Oct 15 2001	1.5	2.6	42	81	0.82	1.6	323	610
M29-UBF	Oct 15 2001	43.0	84	290	465	0.65	1.1	1350	2751
M29-UBF (Dup)	Oct 15 2001	43.0	84	280	465	0.65	1.1	1320	2751
M30-O	Oct 16 2001	10.0	18	50	102	0.74	1.6	477	824
M31-LBF	Oct 16 2001	24.0	46	230	330	0.76	1.3	919	1665
M31-LBF (Dup)	Oct 16 2001	24.0	46	230	330	0.76	1.3	930	1665
O19-GL	Oct 17 2001	9.5	17	49	99	0.63	1.4	404	770
O49-GL	Oct 15 2001	8.6	18	65	159	0.58	0.89	475	849
P19-1-O	Oct 17 2001	6.1	12	54	107	1.5	2.8	404	767
P49-O	Oct 15 2001	3.1	6.2	100	181	1.1	2	427	801
Laboratory Detection Limit		0.25		0.1		0.4		25.0	
Arizona Aquifer Water Quality Standard		-		-		4		-	

Notes: Bold indicates result exceeds alert level
 < = less than the laboratory practical quantitation limit

Table 2. Quarterly Summary of Water Quality Field Parameters

Well ID	Sample Date	Temperature (°C)	Temperature (°F)	pH	Conductivity (µmhos/cm)
M1-GL	Oct 18 2001	21.9	71.4	7.38	1045
M2-GU	Oct 18 2001	20.0	68.0	7.34	940
M3-GL	Oct 18 2001	21.7	71.1	7.38	1045
M4-O	Nov 05 2001	23.5	74.3	7.17	650
M6-GU	Oct 16 2001	25.0	77.0	8.51	681
M7-GL	Oct 17 2001	23.8	74.8	9.34	492
M8-O	Oct 16 2001	29.1	84.4	8.86	666
M14-GL	Oct 16 2001	27.1	80.8	8.35	840
M15-GU	Oct 16 2001	24.9	76.8	7.50	1323
M16-GU	Oct 17 2001	24.4	75.9	7.34	1519
M17-GL	Oct 17 2001	28.2	82.8	8.25	851
M18-GU	Oct 18 2001	19.3	66.7	7.34	985
M19-LBF	Oct 15 2001	22.8	73.0	7.59	763
M20-O	Oct 17 2001	23.7	74.7	7.48	759
M21-UBF	Oct 15 2001	22.1	71.8	7.05	1739
M22-O	Oct 16 2001	28.2	82.8	8.04	766
M23-UBF	Oct 16 2001	22.1	71.8	7.04	2177
M24-O	Oct 17 2001	30.2	86.4	7.68	2004
M25-UBF	Oct 17 2001	21.2	70.2	7.17	1385
M26-O	Oct 15 2001	28.9	84.0	8.53	588
M26-O	Dec 11 2001	28.7	83.7	8.26	589
M27-LBF	Oct 15 2001	23.3	73.9	7.43	1559
M28-LBF	Oct 15 2001	26.2	79.2	8.29	670
M29-UBF	Oct 15 2001	22.5	72.5	7.01	2243
M30-O	Oct 16 2001	24.1	75.4	7.46	779
M31-LBF	Oct 16 2001	22.3	72.1	7.25	1389
O19-GL	Oct 17 2001	23.9	75.0	7.68	758
O49-GL	Oct 15 2001	25.9	78.6	7.77	883
P19-1-O	Oct 17 2001	24.5	76.1	7.57	737
P49-O	Oct 15 2001	27.7	81.9	7.62	797