

**FLORENCE COPPER INC.
FLORENCE COPPER PROJECT
THIRD QUARTER 2003 MONITORING REPORT
U.I.C. PERMIT AZ396000001
AND
A.P.P. PERMIT 101704**

October 28, 2003

MERRILL MINING, LLC
975 Johnson Ferry Road, Suite 450
Atlanta, Georgia 30342
404-495-9577 Fax: 404-495-9578

**HUGH NOWELL
CORPORATE COUNSEL**

October 28, 2003

Mr. Martin Zeleznik
Ground Water Office WTR-0
US 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
THIRD QUARTER 2003 REPORT**

Dear Mr. Zeleznik,

This report is submitted in accordance with the reporting requirements of Parts II.G.2.(a) through (j) of the referenced permit. It pertains to monitoring activities conducted at the Florence In-Situ Mine Site from July 1 through September 30, 2003. Copies of records required by Part II.G.1 are maintained at the Mine Site along with other information that is summarized in the following:

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

Figure 1 shows the current monitoring area including the Point of Compliance (POC) wells and the wellfield. Figure 2 shows the approximate layout of the wellfield and denotes the four well pairs. There are four injection/recovery wells and nine pumping wells. Five observation wells were installed to demonstrate net inward hydraulic gradient for the 90 days required by the permit. Solution injection began on October 31, 1997, and ceased on February 8, 1998.

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

Daily flowrates for each well have been recorded to show the relationship of flow into and out of the wellfield. The flow rates have been combined and are shown in Figure 1 of Attachment I. Note that injection last occurred in early 1998 and that water has been continuously withdrawn since that time.

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

Figures 2 through 5 of Attachment 1 and the supporting data compare the average daily water levels in the five observation wells with their 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.

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

The attached report *Florence Project Quarterly Compliance Monitoring Report – Third Quarter 2003* by Brown and Caldwell and sealed by Ms. Tekla King, Registered Professional Geologist (Attachment 2), contains the POC monitoring records and results. Brown and Caldwell, along with Project personnel, conducted compliance sampling during the period July 7 through July 9 and July 29, 2003.

Quarterly and biennial 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. All results were below the Alert Levels (ALs) or Aquifer Quality Limits (AQLs). The results are discussed in the report.

During the Second Quarter of 2003, well M29-UBF had a reported TDS concentration of 3,200 mg/l, which exceeded the alert level of 2,751 mg/l. Because the final results were obtained from the laboratory after the quarter had ended, verification sampling was not performed during the quarter. The Third Quarter sampling provided the verification sampling for the TDS exceedance. The Third Quarter result of 1,500 mg/l was below the AL and therefore the exceedance was not verified. No further contingency sampling will be required.

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

Organic analyses are not required because no solution was injected during the reporting period.

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

No solution was injected.

(g) Results of the mechanical integrity tests

No mechanical integrity test was required.

Mr. Martin Zeleznik

October 28, 2003

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(h) Results of the annular conductivity monitoring

Although injection ceased in early 1998, annular conductivity measurements have continued to the present time. A graph showing measurement results for this reporting period is presented in Attachment 1, Figure 6. No unusual conditions were noted.

(i) Well and core hole plugging and abandonment.

None of the existing wells and 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 reporting period.

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.

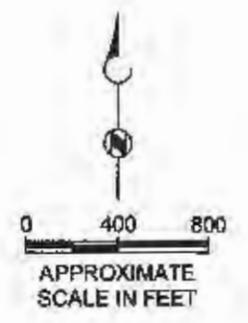
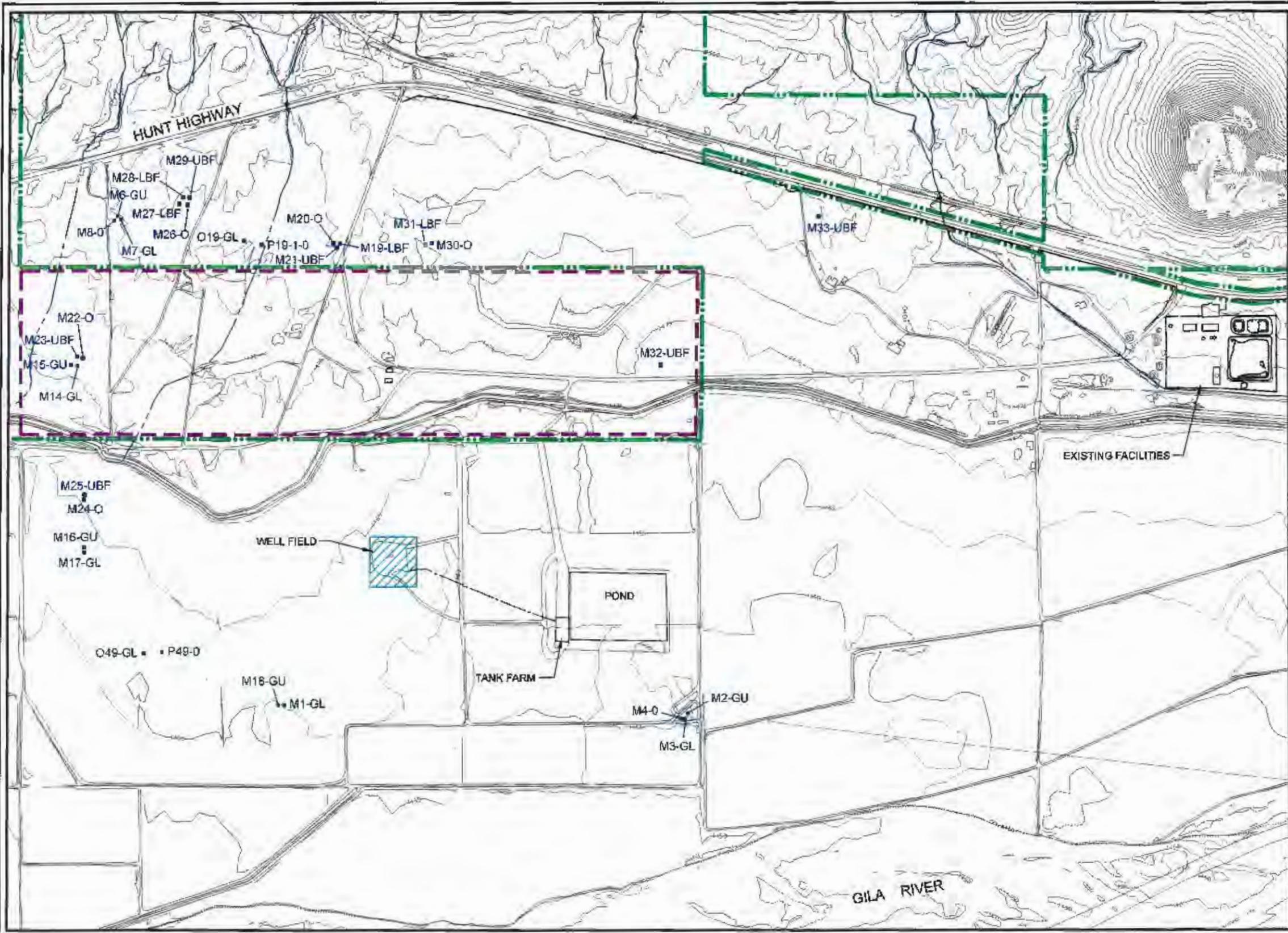
Sincerely,



Hugh Nowell
Corporate Counsel

BAS:lld
Attachments

cc: Florence Copper File



EXPLANATION

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

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

**BROWN AND
 CALDWELL**

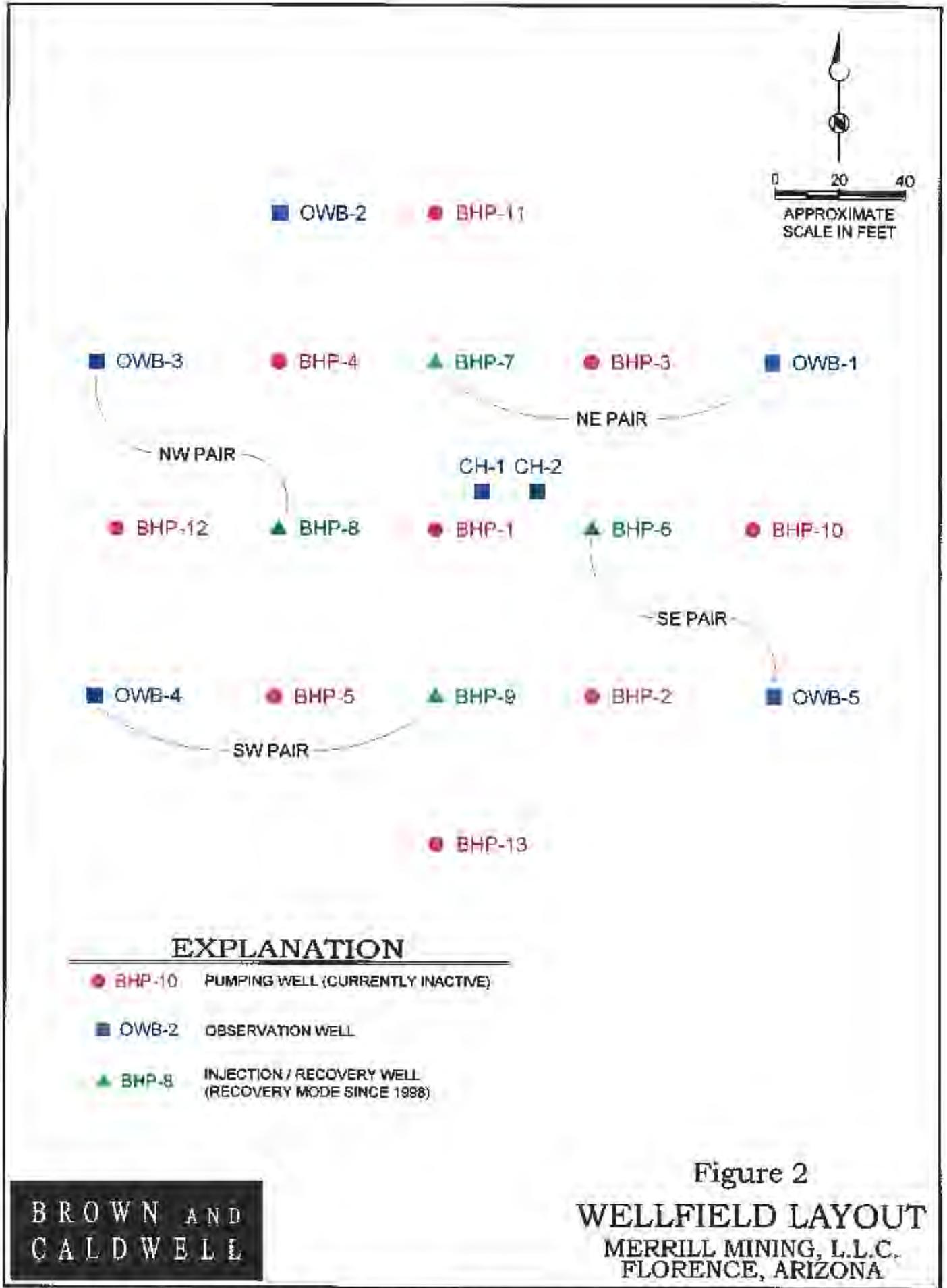


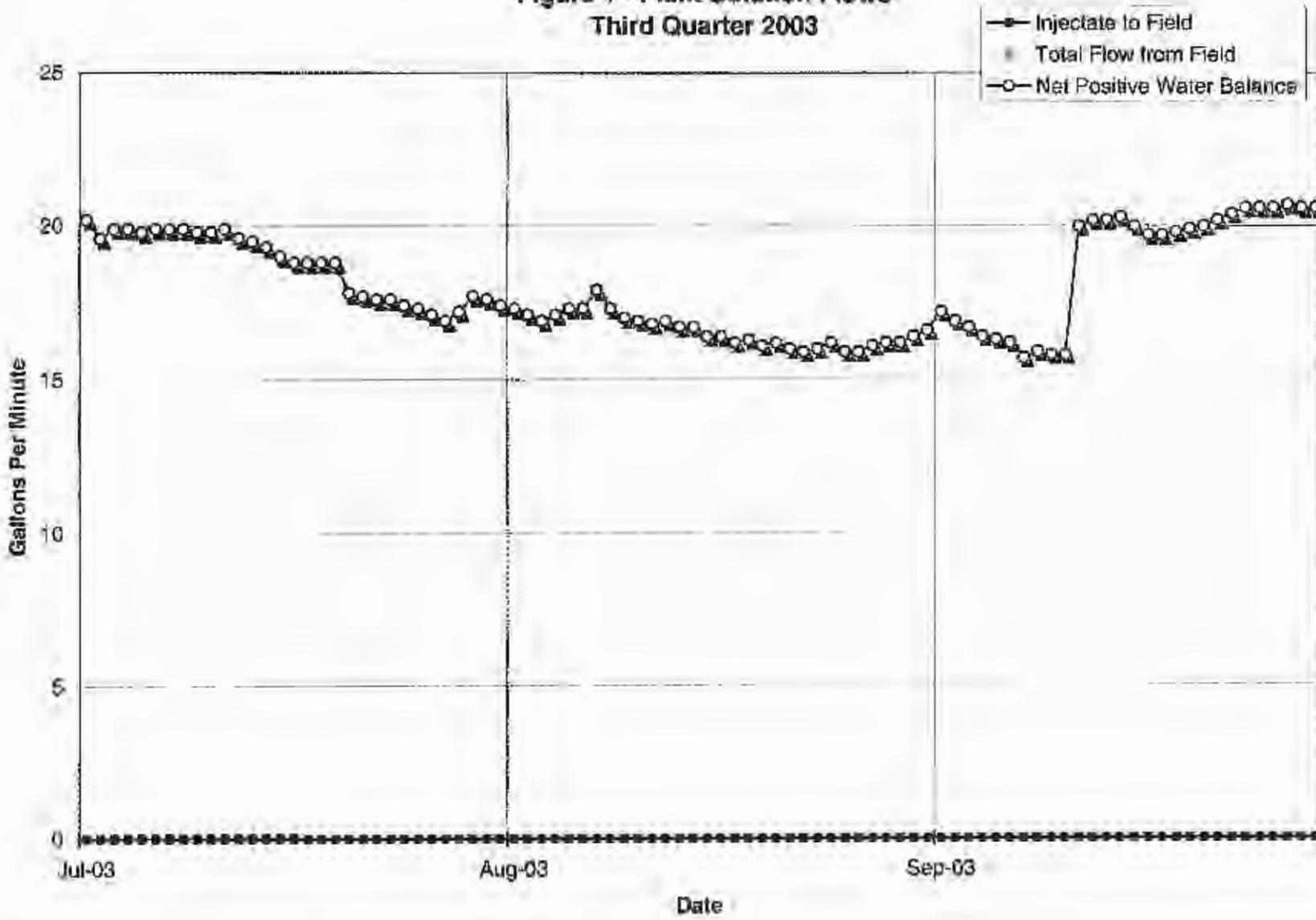
Figure 2

WELLFIELD LAYOUT
 MERRILL MINING, L.L.C.,
 FLORENCE, ARIZONA

**BROWN AND
 CALDWELL**

ATTACHMENT 1
MINE OPERATIONS MONITORING

**Figure 1 - Plant Solution Flows
Third Quarter 2003**



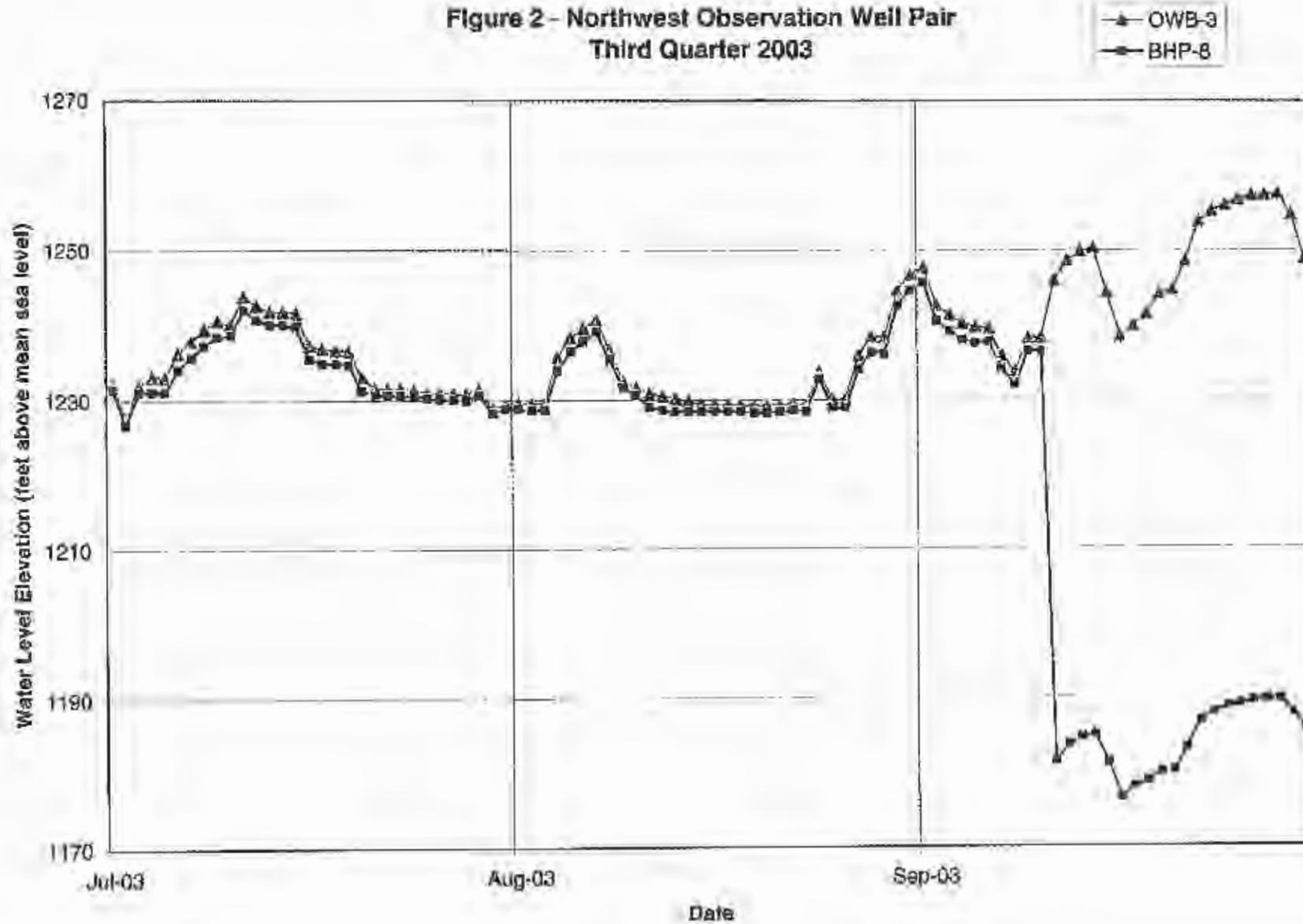
**Plant Solution Flows - Daily Averages
Third Quarter 2003**

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)
7/1/2003	0	0.0	8.2	0.0	12.0	20.2	20.2	Yes
7/2/2003	0	0.0	7.9	0.0	11.7	19.6	19.6	Yes
7/3/2003	0	0.0	8.0	0.0	11.9	19.9	19.9	Yes
7/4/2003	0	0.0	8.0	0.0	11.9	19.9	19.9	Yes
7/5/2003	0	0.0	7.8	0.0	12.0	19.8	19.8	Yes
7/6/2003	0	0.0	7.8	0.0	12.1	19.9	19.9	Yes
7/7/2003	0	0.0	7.8	0.0	12.1	19.9	19.9	Yes
7/8/2003	0	0.0	7.8	0.0	12.1	19.9	19.9	Yes
7/9/2003	0	0.0	7.6	0.0	12.2	19.8	19.8	Yes
7/10/2003	0	0.0	7.6	0.0	12.2	19.8	19.8	Yes
7/11/2003	0	0.0	7.5	0.0	12.4	19.9	19.9	Yes
7/12/2003	0	0.0	7.3	0.0	12.3	19.6	19.6	Yes
7/13/2003	0	0.0	7.2	0.0	12.3	19.5	19.5	Yes
7/14/2003	0	0.0	7.0	0.0	12.3	19.3	19.3	Yes
7/15/2003	0	0.0	6.8	0.0	12.2	19.0	19.0	Yes
7/16/2003	0	0.0	6.6	0.0	12.2	18.8	18.8	Yes
7/17/2003	0	0.0	6.6	0.0	12.2	18.8	18.8	Yes
7/18/2003	0	0.0	6.6	0.0	12.2	18.8	18.8	Yes
7/19/2003	0	0.0	6.6	0.0	12.2	18.8	18.8	Yes
7/20/2003	0	0.0	5.8	0.0	12.0	17.8	17.8	Yes
7/21/2003	0	0.0	5.7	0.0	12.0	17.7	17.7	Yes
7/22/2003	0	0.0	5.6	0.0	12.0	17.6	17.6	Yes
7/23/2003	0	0.0	5.6	0.0	12.0	17.6	17.6	Yes
7/24/2003	0	0.0	5.4	0.0	12.0	17.4	17.4	Yes
7/25/2003	0	0.0	5.4	0.0	11.9	17.3	17.3	Yes
7/26/2003	0	0.0	5.2	0.0	11.9	17.1	17.1	Yes
7/27/2003	0	0.0	5.0	0.0	11.9	16.9	16.9	Yes
7/28/2003	0	0.0	5.2	0.0	12.0	17.2	17.2	Yes
7/29/2003	0	0.0	5.7	0.0	12.0	17.7	17.7	Yes
7/30/2003	0	0.0	5.7	0.0	11.9	17.6	17.6	Yes
7/31/2003	0	0.0	5.5	0.0	11.9	17.4	17.4	Yes
8/1/2003	0	0.0	5.3	0.0	12.0	17.3	17.3	Yes
8/2/2003	0	0.0	5.2	0.0	11.9	17.1	17.1	Yes
8/3/2003	0	0.0	5.0	0.0	11.9	16.9	16.9	Yes
8/4/2003	0	0.0	5.0	0.0	12.1	17.1	17.1	Yes
8/5/2003	0	0.0	5.1	0.0	12.2	17.3	17.3	Yes
8/6/2003	0	0.0	5.1	0.0	12.2	17.3	17.3	Yes
8/7/2003	0	0.0	5.6	0.0	12.3	17.9	17.9	Yes
8/8/2003	0	0.0	5.2	0.0	12.1	17.3	17.3	Yes
8/9/2003	0	0.0	5.1	0.0	11.9	17.0	17.0	Yes
8/10/2003	0	0.0	4.9	0.0	12.0	16.9	16.9	Yes
8/11/2003	0	0.0	4.8	0.0	12.0	16.8	16.8	Yes
8/12/2003	0	0.0	4.9	0.0	12.0	16.9	16.9	Yes
8/13/2003	0	0.0	4.7	0.0	12.0	16.7	16.7	Yes
8/14/2003	0	0.0	4.7	0.0	12.0	16.7	16.7	Yes
8/15/2003	0	0.0	4.5	0.0	11.9	16.4	16.4	Yes
8/16/2003	0	0.0	4.5	0.0	11.9	16.4	16.4	Yes
8/17/2003	0	0.0	4.3	0.0	11.9	16.2	16.2	Yes

Plant Solution Flows - Daily Averages
Third Quarter 2003

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)
8/18/2003	0	0.0	4.4	0.0	11.9	16.3	16.3	Yes
8/19/2003	0	0.0	4.2	0.0	11.9	16.1	16.1	Yes
8/20/2003	0	0.0	4.3	0.0	11.9	16.2	16.2	Yes
8/21/2003	0	0.0	4.1	0.0	11.9	16.0	16.0	Yes
8/22/2003	0	0.0	4.1	0.0	11.8	15.9	15.9	Yes
8/23/2003	0	0.0	4.2	0.0	11.8	16.0	16.0	Yes
8/24/2003	0	0.0	4.2	0.0	12.0	16.2	16.2	Yes
8/25/2003	0	0.0	4.0	0.0	11.9	15.9	15.9	Yes
8/26/2003	0	0.0	4.0	0.0	11.9	15.9	15.9	Yes
8/27/2003	0	0.0	4.1	0.0	12.0	16.1	16.1	Yes
8/28/2003	0	0.0	4.1	0.0	12.1	16.2	16.2	Yes
8/29/2003	0	0.0	4.1	0.0	12.1	16.2	16.2	Yes
8/30/2003	0	0.0	4.1	0.0	12.3	16.4	16.4	Yes
8/31/2003	0	0.0	4.2	0.0	12.4	16.6	16.6	Yes
9/1/2003	0	0.0	4.8	0.0	12.4	17.2	17.2	Yes
9/2/2003	0	0.0	4.5	0.0	12.4	16.9	16.9	Yes
9/3/2003	0	0.0	4.3	0.0	12.4	16.7	16.7	Yes
9/4/2003	0	0.0	4.1	0.0	12.3	16.4	16.4	Yes
9/5/2003	0	0.0	4.0	0.0	12.3	16.3	16.3	Yes
9/6/2003	0	0.0	3.9	0.0	12.3	16.2	16.2	Yes
9/7/2003	0	0.0	3.6	0.0	12.1	15.7	15.7	Yes
9/8/2003	0	0.0	3.7	0.0	12.2	15.9	15.9	Yes
9/9/2003	0	0.0	3.5	0.0	12.3	15.8	15.8	Yes
9/10/2003	0	0.0	3.5	0.0	12.3	15.8	15.8	Yes
9/11/2003	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
9/12/2003	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
9/13/2003	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
9/14/2003	0	0.0	0.0	7.6	12.7	20.3	20.3	Yes
9/15/2003	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
9/16/2003	0	0.0	0.0	7.4	12.3	19.7	19.7	Yes
9/17/2003	0	0.0	0.0	7.4	12.3	19.7	19.7	Yes
9/18/2003	0	0.0	0.0	7.4	12.4	19.8	19.8	Yes
9/19/2003	0	0.0	0.0	7.5	12.4	19.9	19.9	Yes
9/20/2003	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
9/21/2003	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
9/22/2003	0	0.0	0.0	7.7	12.7	20.4	20.4	Yes
9/23/2003	0	0.0	0.0	7.8	12.8	20.6	20.6	Yes
9/24/2003	0	0.0	0.0	7.8	12.8	20.6	20.6	Yes
9/25/2003	0	0.0	0.0	7.8	12.8	20.6	20.6	Yes
9/26/2003	0	0.0	0.0	7.8	12.9	20.7	20.7	Yes
9/27/2003	0	0.0	0.0	7.8	12.8	20.6	20.6	Yes
9/28/2003	0	0.0	0.0	7.8	12.8	20.6	20.6	Yes
9/29/2003	0	0.0	0.0	7.8	12.8	20.6	20.6	Yes
9/30/2003	0	0.0	0.0	7.7	12.7	20.4	20.4	Yes

Figure 2 - Northwest Observation Well Pair
Third Quarter 2003



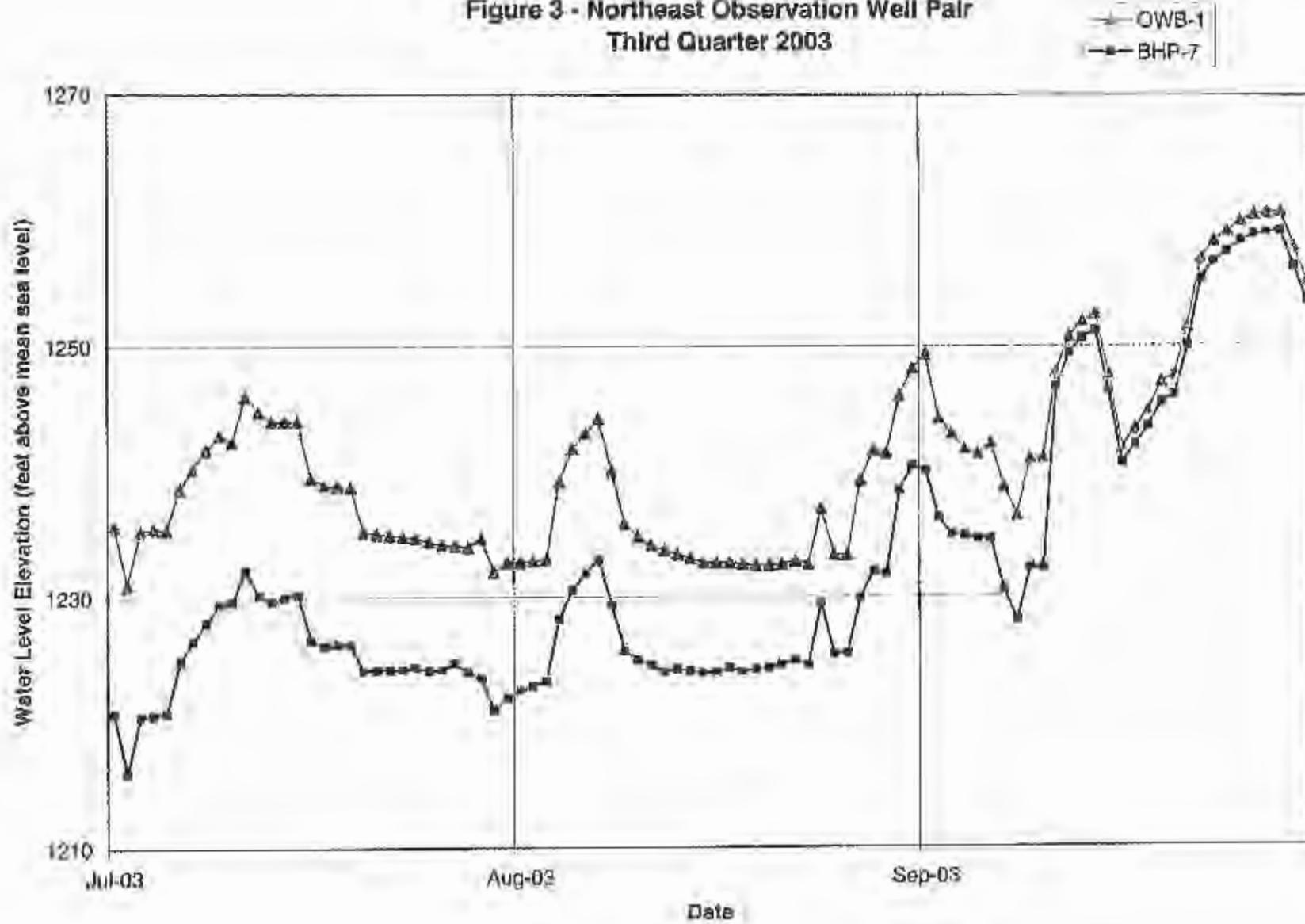
**Northwest Observation Well Pair
Third Quarter 2003**

Date	BHP-8	OWB-3	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
7/1/2003	1231.5	1232.4	-0.9	Yes
7/2/2003	1226.8	1227.7	-0.9	Yes
7/3/2003	1231.1	1232	-0.9	Yes
7/4/2003	1231.2	1233.2	-2	Yes
7/5/2003	1231.1	1233.1	-2	Yes
7/6/2003	1234.2	1236.3	-2.1	Yes
7/7/2003	1235.8	1237.9	-2.1	Yes
7/8/2003	1237.3	1239.4	-2.1	Yes
7/9/2003	1238.5	1240.6	-2.1	Yes
7/10/2003	1238.7	1240	-1.3	Yes
7/11/2003	1242	1243.9	-1.9	Yes
7/12/2003	1240.7	1242.6	-1.9	Yes
7/13/2003	1240	1241.8	-1.8	Yes
7/14/2003	1240	1241.8	-1.8	Yes
7/15/2003	1239.8	1241.6	-1.8	Yes
7/16/2003	1235.5	1237.3	-1.8	Yes
7/17/2003	1235	1236.9	-1.9	Yes
7/18/2003	1234.9	1236.7	-1.8	Yes
7/19/2003	1234.3	1236.6	-1.8	Yes
7/20/2003	1231.5	1233.1	-1.8	Yes
7/21/2003	1230.8	1231.7	-0.9	Yes
7/22/2003	1230.7	1231.6	-0.9	Yes
7/23/2003	1230.7	1231.5	-0.8	Yes
7/24/2003	1230.6	1231.4	-0.8	Yes
7/25/2003	1230.3	1231.1	-0.8	Yes
7/26/2003	1230.2	1231	-0.8	Yes
7/27/2003	1230.1	1230.9	-0.8	Yes
7/28/2003	1230	1230.8	-0.8	Yes
7/29/2003	1230.7	1231.5	-0.8	Yes
7/30/2003	1228.2	1228.8	-0.6	Yes
7/31/2003	1228.9	1229.6	-0.7	Yes
8/1/2003	1228.9	1229.6	-0.7	Yes
8/2/2003	1228.6	1229.5	-0.9	Yes
8/3/2003	1228.7	1229.6	-0.9	Yes
8/4/2003	1234	1235.7	-1.7	Yes
8/5/2003	1236.42	1238.3	-1.88	Yes
8/6/2003	1237.8	1239.5	-1.7	Yes
8/7/2003	1239	1240.7	-1.7	Yes
8/8/2003	1235.4	1236.6	-1.2	Yes
8/9/2003	1231.7	1232.5	-0.8	Yes
8/10/2003	1230.7	1231.6	-0.9	Yes
8/11/2003	1229	1230.9	-1.9	Yes
8/12/2003	1228.6	1230.5	-1.9	Yes
8/13/2003	1228.4	1230.2	-1.8	Yes
8/14/2003	1228.4	1229.8	-1.4	Yes
8/15/2003	1228.5	1229.4	-0.9	Yes

**Northwest Observation Well Pair
Third Quarter 2003**

Date	RHP-8	OWB-3	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
8/16/2003	1228.5	1229.4	-0.9	Yes
8/17/2003	1228.5	1229.4	-0.9	Yes
8/18/2003	1228.4	1229.3	-0.9	Yes
8/19/2003	1228.3	1229.2	-0.9	Yes
8/20/2003	1228.3	1229.2	-0.9	Yes
8/21/2003	1228.4	1229.3	-0.9	Yes
8/22/2003	1228.6	1229.5	-0.9	Yes
8/23/2003	1228.5	1229.3	-0.8	Yes
8/24/2003	1232.7	1233.7	-1	Yes
8/25/2003	1228.9	1230	-1.1	Yes
8/26/2003	1228.9	1230	-1.1	Yes
8/27/2003	1234	1235.9	-1.9	Yes
8/28/2003	1236.3	1238.3	-2	Yes
8/29/2003	1236.1	1238.2	-2.1	Yes
8/30/2003	1242.5	1244.4	-1.9	Yes
8/31/2003	1244.5	1246.6	-2.1	Yes
9/1/2003	1245.5	1247.6	-2.1	Yes
9/2/2003	1240.4	1242.5	-2.1	Yes
9/3/2003	1239.1	1241.2	-2.1	Yes
9/4/2003	1237.9	1240	-2.1	Yes
9/5/2003	1237.5	1239.6	-2.1	Yes
9/6/2003	1237.6	1239.4	-1.8	Yes
9/7/2003	1234.1	1235.8	-1.7	Yes
9/8/2003	1231.9	1233.6	-1.7	Yes
9/9/2003	1236.4	1238.1	-1.7	Yes
9/10/2003	1236.3	1238.2	-1.9	Yes
9/11/2003	1181.5	1245.8	-64.3	Yes
9/12/2003	1183.7	1248.5	-64.8	Yes
9/13/2003	1184.6	1249.7	-65.1	Yes
9/14/2003	1185	1250.3	-65.3	Yes
9/15/2003	1181.3	1244.2	-62.9	Yes
9/16/2003	1176.6	1238.3	-61.7	Yes
9/17/2003	1178.1	1239.8	-61.7	Yes
9/18/2003	1178.8	1241.3	-62.5	Yes
9/19/2003	1180	1244	-64	Yes
9/20/2003	1180.3	1244.6	-64.3	Yes
9/21/2003	1183.3	1248.5	-65.2	Yes
9/22/2003	1186.8	1253.8	-67	Yes
9/23/2003	1187.9	1255.2	-67.3	Yes
9/24/2003	1188.7	1256	-67.3	Yes
9/25/2003	1189	1256.8	-67.8	Yes
9/26/2003	1189.5	1257.3	-67.8	Yes
9/27/2003	1189.7	1257.4	-67.7	Yes
9/28/2003	1189.7	1257.5	-67.8	Yes
9/29/2003	1187.8	1254.7	-66.9	Yes
9/30/2003	1185.8	1248.8	-63	Yes

Figure 3 - Northeast Observation Well Pair
Third Quarter 2003



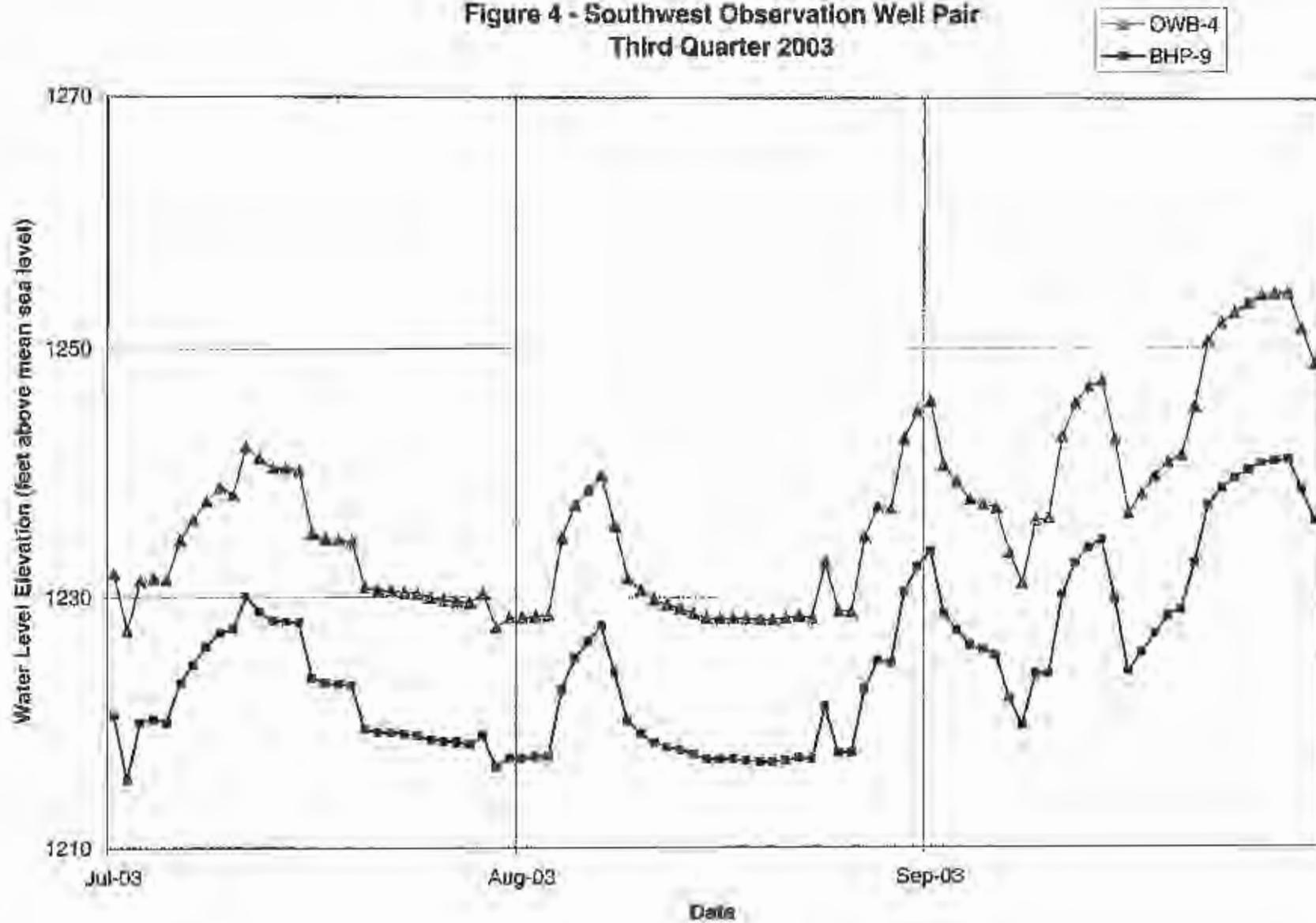
**Northeast Observation Well Pair
Third Quarter 2003**

Date	BHP-7	OWB-1	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
7/1/2003	1220.7	1235.7	-15	Yes
7/2/2003	1216	1231	-15	Yes
7/3/2003	1220.5	1235.3	-14.8	Yes
7/4/2003	1220.6	1235.5	-14.9	Yes
7/5/2003	1220.8	1235.4	-14.6	Yes
7/6/2003	1224.9	1238.6	-13.7	Yes
7/7/2003	1226.5	1240.2	-13.7	Yes
7/8/2003	1228	1241.7	-13.7	Yes
7/9/2003	1229.4	1242.9	-13.5	Yes
7/10/2003	1229.7	1242.4	-12.7	Yes
7/11/2003	1232.2	1246	-13.8	Yes
7/12/2003	1230.2	1244.8	-14.6	Yes
7/13/2003	1229.7	1244	-14.3	Yes
7/14/2003	1230	1244	-14	Yes
7/15/2003	1230.2	1244	-13.8	Yes
7/16/2003	1226.6	1239.4	-12.8	Yes
7/17/2003	1226.1	1238.9	-12.8	Yes
7/18/2003	1226.2	1238.8	-12.6	Yes
7/19/2003	1226.2	1238.7	-12.5	Yes
7/20/2003	1224.1	1235.2	-11.1	Yes
7/21/2003	1224.2	1235	-10.8	Yes
7/22/2003	1224.2	1234.9	-10.7	Yes
7/23/2003	1224.2	1234.8	-10.6	Yes
7/24/2003	1224.4	1234.7	-10.3	Yes
7/25/2003	1224.1	1234.4	-10.3	Yes
7/26/2003	1224.2	1234.2	-10	Yes
7/27/2003	1224.7	1234.1	-9.4	Yes
7/28/2003	1224	1234	-10	Yes
7/29/2003	1223.5	1234.7	-11.2	Yes
7/30/2003	1221	1232	-11	Yes
7/31/2003	1222	1232.8	-10.8	Yes
8/1/2003	1222.5	1232.8	-10.3	Yes
8/2/2003	1222.9	1232.9	-10	Yes
8/3/2003	1223.3	1233	-9.7	Yes
8/4/2003	1228.3	1239.1	-10.8	Yes
8/5/2003	1230.6	1241.8	-11.2	Yes
8/6/2003	1231.9	1243	-11.1	Yes
8/7/2003	1233	1244.2	-11.2	Yes
8/8/2003	1229.4	1240	-10.6	Yes
8/9/2003	1225.7	1235.8	-10.1	Yes
8/10/2003	1225	1234.8	-9.8	Yes
8/11/2003	1224.6	1234.1	-9.5	Yes
8/12/2003	1224	1233.7	-9.7	Yes
8/13/2003	1224.2	1233.4	-9.2	Yes
8/14/2003	1224.1	1233.1	-9	Yes
8/15/2003	1223.9	1232.7	-8.8	Yes

**Northeast Observation Well Pair
Third Quarter 2003**

Date	BHP-7	OWB-1	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
8/16/2003	1224	1232.7	-8.7	Yes
8/17/2003	1224.3	1232.7	-8.4	Yes
8/18/2003	1224	1232.6	-8.6	Yes
8/19/2003	1224.2	1232.5	-8.3	Yes
8/20/2003	1224.3	1232.5	-8.2	Yes
8/21/2003	1224.6	1232.6	-8	Yes
8/22/2003	1224.9	1232.8	-7.9	Yes
8/23/2003	1224.5	1232.6	-8.1	Yes
8/24/2003	1229.5	1237	-7.5	Yes
8/25/2003	1225.4	1233.3	-7.9	Yes
8/26/2003	1225.5	1233.3	-7.8	Yes
8/27/2003	1229.9	1239.2	-9.3	Yes
8/28/2003	1232	1241.6	-9.6	Yes
8/29/2003	1231.8	1241.4	-9.6	Yes
8/30/2003	1238.4	1246	-7.6	Yes
8/31/2003	1240.3	1248.2	-7.9	Yes
9/1/2003	1240	1249.3	-9.3	Yes
9/2/2003	1236.2	1244.2	-8	Yes
9/3/2003	1234.9	1242.9	-8	Yes
9/4/2003	1234.8	1241.7	-6.9	Yes
9/5/2003	1234.6	1241.3	-6.7	Yes
9/6/2003	1234.5	1242.2	-7.7	Yes
9/7/2003	1230.5	1238.6	-8.1	Yes
9/8/2003	1228.1	1236.4	-8.3	Yes
9/9/2003	1232.3	1240.9	-8.6	Yes
9/10/2003	1232.2	1241	-8.8	Yes
9/11/2003	1246.7	1248	-1.3	Yes
9/12/2003	1249.4	1250.7	-1.3	Yes
9/13/2003	1250.6	1251.9	-1.3	Yes
9/14/2003	1251.2	1252.5	-1.3	Yes
9/15/2003	1246.4	1247.7	-1.3	Yes
9/16/2003	1240.5	1241.8	-1.3	Yes
9/17/2003	1242	1243.3	-1.3	Yes
9/18/2003	1243.5	1244.8	-1.3	Yes
9/19/2003	1245.5	1247.1	-1.6	Yes
9/20/2003	1246.1	1247.7	-1.6	Yes
9/21/2003	1250	1251.6	-1.6	Yes
9/22/2003	1255.3	1256.9	-1.6	Yes
9/23/2003	1256.7	1258.3	-1.6	Yes
9/24/2003	1257.5	1259.1	-1.6	Yes
9/25/2003	1258.3	1259.9	-1.6	Yes
9/26/2003	1258.8	1260.4	-1.6	Yes
9/27/2003	1259	1260.6	-1.6	Yes
9/28/2003	1259.1	1260.7	-1.6	Yes
9/29/2003	1256.3	1257.9	-1.6	Yes
9/30/2003	1253.5	1255.1	-1.6	Yes

Figure 4 - Southwest Observation Well Pair
Third Quarter 2003



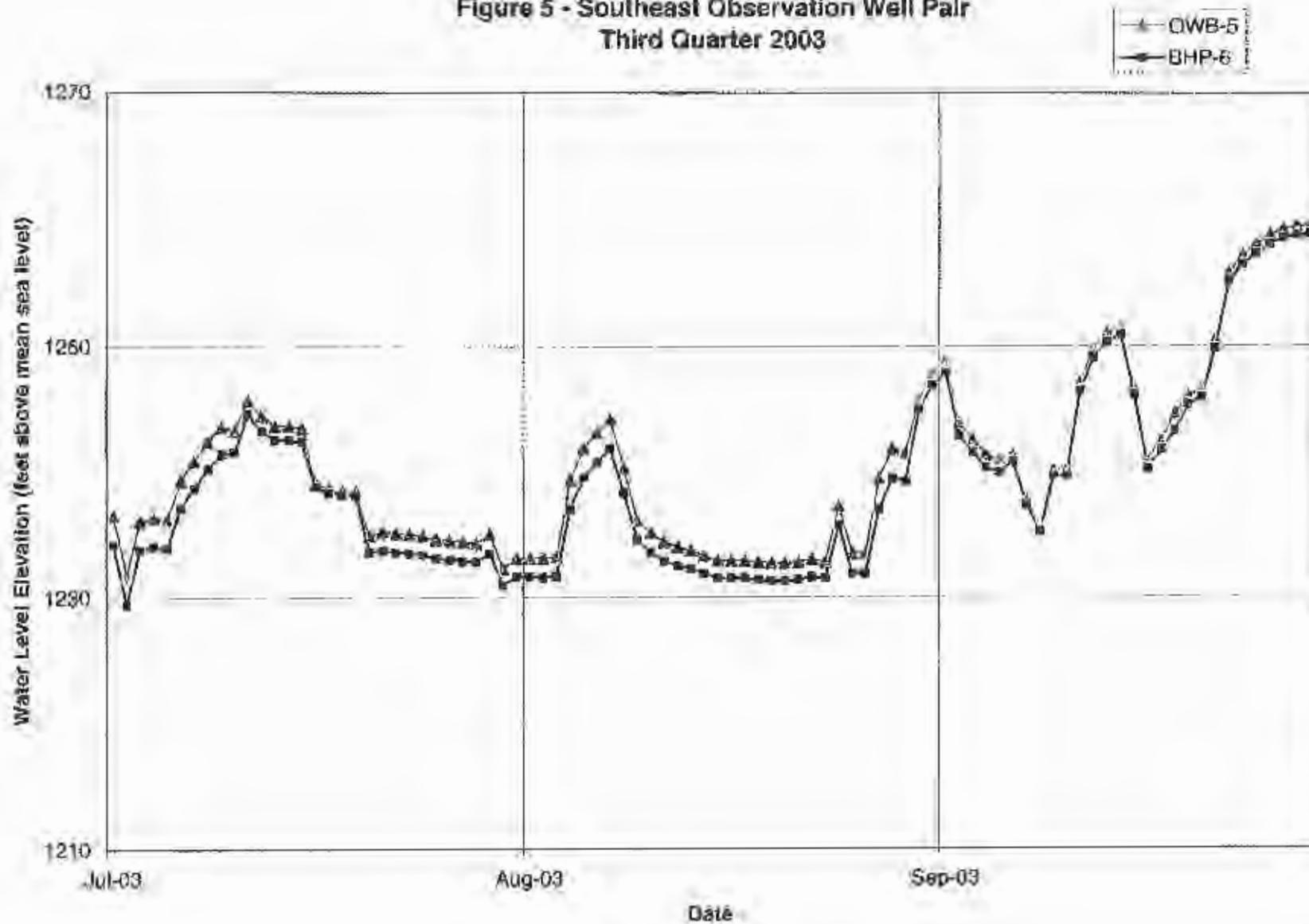
**Southwest Observation Well Pair
Third Quarter 2003**

Date	BHP-9	OWB-4	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
7/1/2003	1220.6	1231.9	-11.3	Yes
7/2/2003	1215.5	1227.4	-11.9	Yes
7/3/2003	1220.1	1231.3	-11.2	Yes
7/4/2003	1220.3	1231.5	-11.2	Yes
7/5/2003	1220.1	1231.4	-11.3	Yes
7/6/2003	1223.2	1234.6	-11.4	Yes
7/7/2003	1224.7	1236.2	-11.5	Yes
7/8/2003	1226.1	1237.7	-11.6	Yes
7/9/2003	1227.2	1238.9	-11.7	Yes
7/10/2003	1227.5	1238.2	-10.7	Yes
7/11/2003	1230.1	1242.1	-12	Yes
7/12/2003	1228.9	1241.2	-12.3	Yes
7/13/2003	1228.2	1240.4	-12.2	Yes
7/14/2003	1228.1	1240.4	-12.3	Yes
7/15/2003	1228	1240.2	-12.2	Yes
7/16/2003	1223.6	1235.1	-11.5	Yes
7/17/2003	1223.2	1234.7	-11.5	Yes
7/18/2003	1223.1	1234.6	-11.5	Yes
7/19/2003	1223	1234.5	-11.5	Yes
7/20/2003	1219.5	1230.8	-11.3	Yes
7/21/2003	1219.3	1230.6	-11.3	Yes
7/22/2003	1219.3	1230.5	-11.2	Yes
7/23/2003	1219.2	1230.4	-11.2	Yes
7/24/2003	1219	1230.3	-11.3	Yes
7/25/2003	1218.7	1230	-11.3	Yes
7/26/2003	1218.6	1229.8	-11.2	Yes
7/27/2003	1218.5	1229.7	-11.2	Yes
7/28/2003	1218.3	1229.6	-11.3	Yes
7/29/2003	1219	1230.3	-11.3	Yes
7/30/2003	1216.5	1227.6	-11.1	Yes
7/31/2003	1217.2	1228.4	-11.2	Yes
8/1/2003	1217.2	1228.4	-11.2	Yes
8/2/2003	1217.3	1228.5	-11.2	Yes
8/3/2003	1217.4	1228.6	-11.2	Yes
8/4/2003	1222.7	1234.7	-12	Yes
8/5/2003	1225.2	1237.4	-12.2	Yes
8/6/2003	1226.5	1238.6	-12.1	Yes
8/7/2003	1227.7	1239.8	-12.1	Yes
8/8/2003	1224	1235.7	-11.7	Yes
8/9/2003	1220.2	1231.5	-11.3	Yes
8/10/2003	1219.2	1230.5	-11.3	Yes
8/11/2003	1218.5	1229.8	-11.3	Yes
8/12/2003	1218.1	1229.4	-11.3	Yes
8/13/2003	1217.9	1229.1	-11.2	Yes
8/14/2003	1217.5	1228.7	-11.2	Yes
8/15/2003	1217.1	1228.3	-11.2	Yes

**Southwest Observation Well Pair
Third Quarter 2003**

Date	BHP-9	OWB-4	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
8/16/2003	1217.1	1228.3	-11.2	Yes
8/17/2003	1217.1	1228.3	-11.2	Yes
8/18/2003	1217	1228.3	-11.3	Yes
8/19/2003	1216.9	1228.2	-11.3	Yes
8/20/2003	1216.9	1228.2	-11.3	Yes
8/21/2003	1217	1228.3	-11.3	Yes
8/22/2003	1217.2	1228.5	-11.3	Yes
8/23/2003	1217.1	1228.3	-11.2	Yes
8/24/2003	1221.3	1232.7	-11.4	Yes
8/25/2003	1217.6	1228.9	-11.3	Yes
8/26/2003	1217.6	1228.8	-11.2	Yes
8/27/2003	1222.7	1234.8	-12.1	Yes
8/28/2003	1225	1237.2	-12.2	Yes
8/29/2003	1224.8	1237	-12.2	Yes
8/30/2003	1230.4	1242.7	-12.3	Yes
8/31/2003	1232.4	1244.9	-12.5	Yes
9/1/2003	1233.6	1245.8	-12.2	Yes
9/2/2003	1228.7	1240.5	-11.8	Yes
9/3/2003	1227.4	1239.2	-11.8	Yes
9/4/2003	1226.2	1237.8	-11.6	Yes
9/5/2003	1225.8	1237.4	-11.6	Yes
9/6/2003	1225.4	1237.1	-11.7	Yes
9/7/2003	1221.9	1233.5	-11.6	Yes
9/8/2003	1219.8	1231.1	-11.3	Yes
9/9/2003	1223.9	1236.1	-12.2	Yes
9/10/2003	1223.9	1236.3	-12.4	Yes
9/11/2003	1230.1	1242.9	-12.8	Yes
9/12/2003	1232.7	1245.6	-12.9	Yes
9/13/2003	1233.9	1246.9	-13	Yes
9/14/2003	1234.5	1247.4	-12.9	Yes
9/15/2003	1229.8	1242.6	-12.8	Yes
9/16/2003	1224.1	1236.7	-12.6	Yes
9/17/2003	1225.6	1238.2	-12.6	Yes
9/18/2003	1227	1239.7	-12.7	Yes
9/19/2003	1228.5	1240.8	-12.3	Yes
9/20/2003	1229	1241.4	-12.4	Yes
9/21/2003	1232.7	1243.3	-12.6	Yes
9/22/2003	1237.3	1250.6	-13.3	Yes
9/23/2003	1238.7	1252	-13.3	Yes
9/24/2003	1239.5	1252.8	-13.3	Yes
9/25/2003	1240.2	1253.6	-13.4	Yes
9/26/2003	1240.7	1254.2	-13.5	Yes
9/27/2003	1240.9	1254.3	-13.4	Yes
9/28/2003	1241	1254.4	-13.4	Yes
9/29/2003	1238.6	1251.6	-13	Yes
9/30/2003	1236.1	1248.8	-12.7	Yes

Figure 5 - Southeast Observation Well Pair
Third Quarter 2003



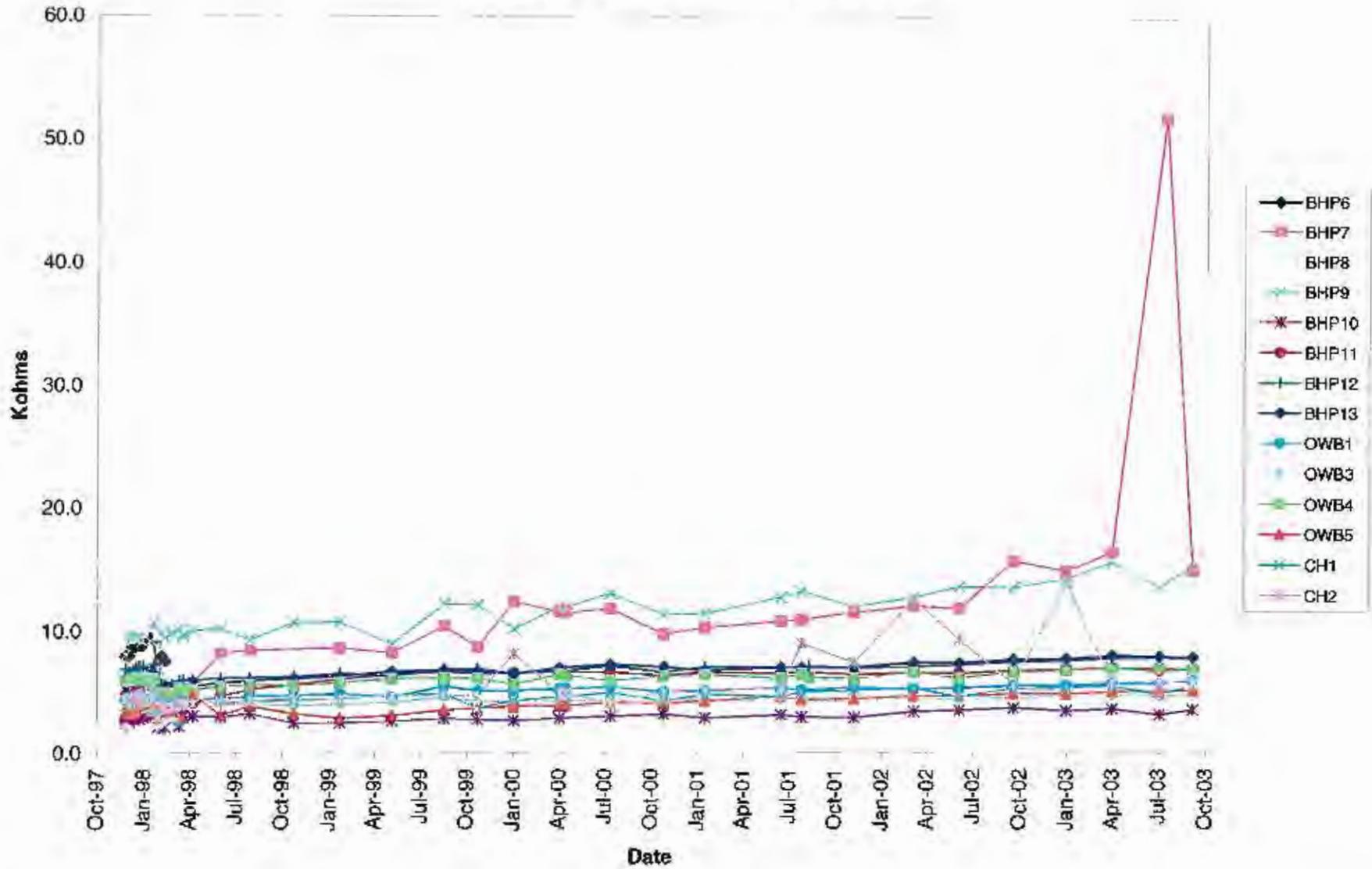
Southeast Observation Well Pair
Third Quarter 2003

Date	BHP-6	OWB-5	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
7/1/2003	1234.2	1236.5	-2.3	Yes
7/2/2003	1229.5	1231.8	-2.3	Yes
7/3/2003	1233.8	1236.1	-2.3	Yes
7/4/2003	1234	1236.3	-2.3	Yes
7/5/2003	1233.9	1236.2	-2.3	Yes
7/6/2003	1237.1	1239.3	-2.2	Yes
7/7/2003	1238.7	1240.9	-2.2	Yes
7/8/2003	1240.2	1242.4	-2.2	Yes
7/9/2003	1241.4	1243.6	-2.2	Yes
7/10/2003	1241.6	1243.3	-1.7	Yes
7/11/2003	1244.6	1245.7	-1.1	Yes
7/12/2003	1243.3	1244.5	-1.2	Yes
7/13/2003	1242.6	1243.7	-1.1	Yes
7/14/2003	1242.6	1243.7	-1.1	Yes
7/15/2003	1242.4	1243.5	-1.1	Yes
7/16/2003	1238.8	1239.1	-0.3	Yes
7/17/2003	1238.3	1238.6	-0.3	Yes
7/18/2003	1238.2	1238.5	-0.3	Yes
7/19/2003	1238.1	1238.4	-0.3	Yes
7/20/2003	1233.6	1234.9	-1.3	Yes
7/21/2003	1233.7	1235.2	-1.5	Yes
7/22/2003	1233.6	1235.1	-1.5	Yes
7/23/2003	1233.5	1235	-1.5	Yes
7/24/2003	1233.4	1234.9	-1.5	Yes
7/25/2003	1233.1	1234.6	-1.5	Yes
7/26/2003	1233	1234.5	-1.5	Yes
7/27/2003	1232.9	1234.4	-1.5	Yes
7/28/2003	1232.8	1234.3	-1.5	Yes
7/29/2003	1233.5	1235	-1.5	Yes
7/30/2003	1231	1232.3	-1.3	Yes
7/31/2003	1231.7	1233.1	-1.4	Yes
8/1/2003	1231.7	1233.1	-1.4	Yes
8/2/2003	1231.6	1233.1	-1.5	Yes
8/3/2003	1231.7	1233.2	-1.5	Yes
8/4/2003	1237	1239.3	-2.3	Yes
8/5/2003	1239.5	1241.9	-2.4	Yes
8/6/2003	1240.8	1243.1	-2.3	Yes
8/7/2003	1241.9	1244.2	-2.3	Yes
8/8/2003	1238.3	1240.3	-2	Yes
8/9/2003	1234.6	1236.1	-1.5	Yes
8/10/2003	1233.6	1235.1	-1.5	Yes
8/11/2003	1232.9	1234.4	-1.5	Yes
8/12/2003	1232.5	1234	-1.5	Yes
8/13/2003	1232.3	1233.7	-1.4	Yes
8/14/2003	1231.9	1233.3	-1.4	Yes
8/15/2003	1231.5	1232.9	-1.4	Yes

**Southeast Observation Well Pair
Third Quarter 2003**

Date	BHP-6	OWB-5	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
8/16/2003	1231.5	1232.9	-1.4	Yes
8/17/2003	1231.5	1232.9	-1.4	Yes
8/18/2003	1231.4	1232.8	-1.4	Yes
8/19/2003	1231.3	1232.7	-1.4	Yes
8/20/2003	1231.3	1232.7	-1.4	Yes
8/21/2003	1231.4	1232.8	-1.4	Yes
8/22/2003	1231.6	1233	-1.4	Yes
8/23/2003	1231.5	1232.8	-1.3	Yes
8/24/2003	1235.7	1237.2	-1.5	Yes
8/25/2003	1231.9	1233.5	-1.6	Yes
8/26/2003	1231.9	1233.5	-1.6	Yes
8/27/2003	1237	1239.4	-2.4	Yes
8/28/2003	1239.4	1241.8	-2.4	Yes
8/29/2003	1239.2	1241.5	-2.3	Yes
8/30/2003	1244.9	1245.7	-0.8	Yes
8/31/2003	1246.9	1247.9	-1	Yes
9/1/2003	1247.9	1248.9	-1	Yes
9/2/2003	1242.8	1243.8	-1	Yes
9/3/2003	1241.5	1242.5	-1	Yes
9/4/2003	1240.3	1241.3	-1	Yes
9/5/2003	1239.9	1240.9	-1	Yes
9/6/2003	1240.8	1241.3	-0.5	Yes
9/7/2003	1237.3	1237.8	-0.5	Yes
9/8/2003	1235.1	1235.6	-0.5	Yes
9/9/2003	1239.6	1240.1	-0.5	Yes
9/10/2003	1239.6	1240.2	-0.6	Yes
9/11/2003	1246.4	1247.1	-0.7	Yes
9/12/2003	1249.1	1249.8	-0.7	Yes
9/13/2003	1250.3	1251	-0.7	Yes
9/14/2003	1250.9	1251.6	-0.7	Yes
9/15/2003	1246.1	1246.8	-0.7	Yes
9/16/2003	1240.2	1240.9	-0.7	Yes
9/17/2003	1241.7	1242.4	-0.7	Yes
9/18/2003	1243.2	1244.6	-1.4	Yes
9/19/2003	1245.3	1246	-0.7	Yes
9/20/2003	1245.9	1246.6	-0.7	Yes
9/21/2003	1249.8	1250.5	-0.7	Yes
9/22/2003	1255.1	1255.8	-0.7	Yes
9/23/2003	1256.5	1257.2	-0.7	Yes
9/24/2003	1257.3	1258	-0.7	Yes
9/25/2003	1258.1	1258.8	-0.7	Yes
9/26/2003	1258.6	1259.3	-0.7	Yes
9/27/2003	1258.8	1259.5	-0.7	Yes
9/28/2003	1258.9	1259.6	-0.7	Yes
9/29/2003	1256.1	1256.8	-0.7	Yes
9/30/2003	1253.3	1254	-0.7	Yes

Figure 6 - Annular Resistivity in Kohms



ATTACHMENT 2

POC QUARTERLY COMPLIANCE MONITORING REPORT

201 East Washington Street
Suite 500
Phoenix, Arizona 85004

Tel: (602) 567-6000
Fax: (602) 567-6001

www.brownandcaldwell.com

October 23, 2003

**BROWN AND
CALDWELL**

Mr. Hugh Nowell
Corporate Counsel
Vanguard Properties, Inc.
975 Johnson Ferry Road, Suite 450
Atlanta, Georgia 30342

15-21622.007

Subject: Florence Project
Quarterly Compliance Monitoring Report

Dear Mr. Nowell:

Please find enclosed a final copy of the Florence Project Quarterly Compliance Monitoring Report for the Third Quarter 2003. 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) 567-3894.

Very truly yours,

BROWN AND CALDWELL



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

BAS:ld
Attachment

cc: Mr. Adrain Taylor, Vanguard Properties
Florence Copper File

**FLORENCE MINE PROJECT
QUARTERLY AND BIENNIAL COMPLIANCE MONITORING REPORT
THIRD QUARTER 2003**

Primary Sampling Activities

Quarterly and biennial compliance monitoring was conducted for the Florence Mine project on July 7 through July 9 and July 29, 2003 (Third Quarter 2003). Groundwater sampling and analysis was conducted in accordance with the requirements of Aquifer Protection Permit (APP) Permit Number 101704, Part II.E.2 d (Compliance Monitoring). Quarterly parameters, as listed in Part IV, Table III.B of the APP were analyzed from the designated Point of Compliance (POC) wells. The quarterly parameters are magnesium, sulfate, fluoride, and total dissolved solids (TDS). During this quarter, biennial parameters were also analyzed. The biennial parameters, as listed in Part IV, Table III.C, are shown in Table 1 of this report. Radium 226 and radium 228 were only analyzed if gross alpha exceeded 5.0 picocuries per liter (pCi/l). Total uranium was only analyzed if gross alpha exceeded 15.0 pCi/l.

During the Third Quarter 2003 sampling event, 29 POC wells were sampled and a total of 1,067 constituents were analyzed. Two POC wells, M32-UBF and M33-UBF, were dry and could not be sampled. Of the 1,067 constituents analyzed, none had reported concentrations exceeding the approved alert levels (ALs) or aquifer quality limits (AQLs).

Analyses of the samples were conducted by Precision Analytical Laboratories (PAL). Radiochemical analyses were provided by Radiation Safety Engineering. Analytical results for the POC wells for the indicator parameters are provided in Table 2 and field parameters measured during sampling are indicated in Table 3. Common ions are presented in Table 4, formation-related radiochemicals are presented in Table 5, process-related organics are presented in Table 6, and trace inorganics (metals) are presented in Table 7.

All of the results were similar to past results for Level II parameters. No trends or unusual changes were observed. Due to a miscommunication with the laboratory, the method detection limit used to analyze total diesel petroleum hydrocarbons (TPH-D) was above historical method detection limits. Because ALs and AQLs have been not established for TPH-D, no action limit was exceeded. However, TPH-D will be reanalyzed at the lower detection limit on samples collected during the next quarterly event in order to more accurately compare current conditions to concentrations reported during the last biennial event in 2001.

AL Exceedances and Verification Sampling

Part II.F.4 of the permit (Contingencies for AL and AQL Exceedances) requires verification sampling for an AL or AQL exceedance. There were no AL or AQL exceedances during this quarterly sampling. No verification sampling was required.

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During the Second Quarter of 2003, well M29-UBF had a reported TDS concentration of 3,200 milligrams per liter (mg/l), which exceeded the alert level of 2,751 mg/l. Because the final results were obtained from the laboratory after the quarter had ended, verification sampling was not performed during the quarter. The Third Quarter sampling served as the verification sampling event for the TDS exceedance. The Third Quarter result of 1,500 mg/l was below the AL and therefore the exceedance was not verified. No further contingency sampling will be required.

Contingency Sampling Plan to be Implemented During Fourth Quarter 2003

There were no AL or AQL exceedances verified during this quarterly sampling. No contingency sampling plan is required during the Fourth Quarter of 2003.

Results of Contingency Sampling Plan Implemented from Second Quarter 2003

There were no AL or AQL exceedances verified during the Second Quarter 2003. Therefore, no contingency sampling plan was implemented.

Issues

There were no other issues to report during the Second Quarter 2003.

TABLE 1. SUMMARY OF BIENNIAL GROUNDWATER MONITORING PARAMETERS

ANALYSIS	METHOD	PRESERVATIVE
Quarterly Parameters		
Fluoride	EPA 300.0	None
Magnesium	EPA 200.7	HNO ₃
Sulfate	EPA 300.0	None
Total dissolved solids	SM 2540C	None
Common Ions		
pH	EPA 150.1	None
Bicarbonate alkalinity	SM 2320B	None
Carbonate alkalinity	SM 2320B	None
Calcium	EPA 200.7	HNO ₃
Chloride	EPA 300.0	None
Nitrate as N	EPA 300.0	None
Potassium	EPA 200.7	HNO ₃
Sodium	EPA 200.7	HNO ₃
Cation/anion balance	Calculation	
Formation-Related Radiochemicals		
Gross alpha	EPA 600/00-02	None
Radium 226 (if gross alpha >5.0)	EPA 903.1	None
Radium 228 (if gross alpha >5.0)	EPA 904	None
Total Uranium (if G. Alpha >15.0)	EPA 60-07	None
Process-Related Organics		
Extractable fuel hydrocarbons (diesel range organics)	8015AZR1	None
Benzene	EPA 8260B	HCl
Ethylbenzene	EPA 8260B	HCl
Toluene	EPA 8260B	HCl
Total xylene	EPA 8260B	HCl
Trace Inorganics (Metals)		
Aluminum	EPA 200.7	HNO ₃
Antimony	EPA 200.8	HNO ₃
Arsenic	EPA 200.8	HNO ₃
Barium	EPA 200.8	HNO ₃
Beryllium	EPA 200.7	HNO ₃
Cadmium	EPA 200.7	HNO ₃
Chromium total	EPA 200.8	HNO ₃
Cobalt	EPA 200.8	HNO ₃
Copper	EPA 200.7	HNO ₃
Iron	EPA 200.7	HNO ₃
Lead	EPA 200.8	HNO ₃
Manganese	EPA 200.7	HNO ₃
Mercury	EPA 245.1	HNO ₃
Nickel	EPA 200.7	HNO ₃
Selenium	EPA 200.8	HNO ₃
Thallium	EPA 200.8	HNO ₃
Zinc	EPA 200.7	HNO ₃

TABLE 2. SUMMARY OF ANALYTICAL RESULTS, QUARTERLY PARAMETERS

Well ID	Sample Date	Magnesium		Sulfate		Fluoride		Total Dissolved Solids	
		Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level
M1-GL	Jul 09 2003	22.0	31	97	109	0.8	1.3	650	1028
M1-GL (Dup)	Jul 09 2003	22.0	31	99	109	0.82	1.3	640	1028
M2-GU	Jul 29 2003	19.0	39	140	275	0.85	1.4	730	1496
M3-GL	Jul 07 2003	20.0	36	130	187	0.75	1.3	690	1157
M4-O	Jul 07 2003	4.5	15	57	405	2.5	5.1	420	1072
M6-GU	Jul 08 2003	3.1	5.1	53	86	0.77	1.3	370	620
M7-GL	Jul 08 2003	<0.25	1	37	82	0.94	1.7	280	464
M8-O	Jul 08 2003	<0.25	1	76	122	2.0	3.6	350	609
M14-GL	Jul 08 2003	3.1	23	59	144	0.73	1.4	410	874
M15-GU	Jul 08 2003	25.0	44	73	126	0.59	1.2	740	1359
M15-GU (Dup)	Jul 08 2003	24.0	44	73	126	0.6	1.2	740	1359
M16-GU	Jul 29 2003	28.0	52	170	248	0.58	1.1	990	1635
M17-GL	Jul 09 2003	5.7	9.3	120	209	0.87	1.6	480	831
M18-GU	Jul 09 2003	18.0	36	160	288	1.0	1.6	670	1323
M19-LBF	Jul 07 2003	12.0	21	56	89	0.53	1	470	794
M19-LBF (Dup)	Jul 07 2003	12.0	21	56	89	0.53	1	450	794
M20-O	Jul 07 2003	8.9	14	70	112	0.87	1.7	470	809
M21-UBF	Jul 07 2003	33.0	87	240	487	0.73	1.1	1100	2867
M22-O	Jul 08 2003	6.2	8.6	52	86	0.77	1.3	400	1094
M23-UBF	Jul 08 2003	43.0	69	250	411	0.79	1.3	1500	2392
M24-O	Jul 09 2003	12.0	19	760	1364	1.1	2.5	1300	2363
M25-UBF	Jul 09 2003	37.0	76	230	387	0.72	1.6	1200	2083
M26-O	Jul 07 2003	<0.25	1	65	105	1.6	3.4	340	556
M27-LBF	Jul 07 2003	32.0	51	130	179	0.44	1	1000	1745
M28-LBF	Jul 07 2003	1.6	2.6	49	81	0.82	1.6	370	610
M29-UBF	Jul 07 2003	47.0	84	280	465	0.66	1.1	1500	2751
M30-O	Jul 09 2003	11.0	18	61	102	0.78	1.6	470	824
M31-LBF	Jul 09 2003	29.0	46	220	330	0.75	1.3	950	1665
O19-GL	Jul 08 2003	10.0	17	58	99	0.7	1.4	450	770
O49-GL	Jul 07 2003	9.8	18	75	159	0.61	1	530	849
P19-I-O	Jul 08 2003	6.5	12	67	107	1.6	2.8	440	767
P49-O	Jul 07 2003	4.0	6.2	110	131	1.0	2	470	801
Laboratory Detection Limit		0.25		2		0.4		10	
Arizona Aquifer Water Quality Standard		-		-		4		-	
All results in milligrams per liter (mg/l) < = less than the laboratory practical quantitation limit									

TABLE 3. SUMMARY OF QUARTERLY FIELD PARAMETERS

Well ID	Sample Date	Temperature (°C)	Temperature (°F)	pH	Conductivity (µmhos/cm)
M1-GL	Jul 09 2003	22.3	72.1	7.48	1027
M2-GU	Jul 28 2003	19.8	67.6	7.36	1030
M3-GL	Jul 07 2003	22.1	71.8	7.49	1069
M4-O	Jul 07 2003	24.0	75.2	7.41	638
M6-GU	Jul 08 2003	23.4	73.7	8.52	692
M7-GL	Jul 08 2003	24.6	76.3	9.39	499
M8-O	Jul 08 2003	29.5	85.1	8.77	673
M14-GL	Jul 08 2003	27.3	81.1	8.52	805
M15-GU	Jul 08 2003	25.2	77.4	7.52	1269
M16-GU	Jul 28 2003	24.2	75.6	7.42	1483
M17-GL	Jul 09 2003	23.3	82.9	8.35	849
M18-GU	Jul 09 2003	19.6	67.3	7.50	972
M19-LBF	Jul 07 2003	23.5	74.3	7.71	769
M20-O	Jul 07 2003	24.0	75.2	7.53	759
M21-UBF	Jul 07 2003	22.7	72.9	7.28	1610
M22-O	Jul 08 2003	28.1	82.6	8.09	767
M23-UBF	Jul 08 2003	22.5	72.5	7.14	2177
M24-O	Jul 09 2003	30.9	87.6	7.79	1996
M25-UBF	Jul 09 2003	21.3	70.3	7.19	1734
M26-O	Jul 07 2003	29.2	84.6	8.48	592
M27-LBF	Jul 07 2003	23.7	74.7	7.51	1571
M28-LBF	Jul 07 2003	26.4	79.5	8.33	672
M29-UBF	Jul 07 2003	22.8	73.0	7.09	2159
M30-O	Jul 09 2003	24.4	75.9	7.53	786
M31-LBF	Jul 09 2003	22.6	72.7	7.27	1414
O19-GL	Jul 08 2003	24.1	75.4	7.84	758
O49-GL	Jul 07 2003	26.2	79.2	7.69	901
P19-L-O	Jul 08 2003	24.8	76.6	7.64	733
P49-O	Jul 07 2003	28.2	82.8	7.68	807

**TABLE 4. SUMMARY OF COMMON INORGANIC ANALYTICAL RESULTS,
BIENNIAL PARAMETERS**

Well ID	Sample Date	Bicarbonate Alkalinity	Carbonate Alkalinity	Calcium	Chloride	Nitrate as N	Potassium	Sodium	pH	Ion Balance
M1-GL	Jul 09 2003	130	<2	90.	210	4.3	6.8	120	7.45	1.07
M1-GL (Dup)	Jul 09 2003	130	<2	90.	200	4.3	6.7	120	7.5	1.09
M2-GU	Jul 29 2003	170	<2	80.	160	4.8	5.4	150	7.38	1.09
M3-GL	Jul 07 2003	140	<2	84.	200	4.	6.6	140	7.44	1.13
M4-O	Jul 07 2003	84	<2	20.	120	0.7	4.8	140	7.53	0.96
M6-GU	Jul 08 2003	48	<2	17.	130	0.76	4.6	140	7.68	1.24
M7-GL	Jul 08 2003	74	16.	3.	78	<0.2	2.	110	9.04	0.98
M8-O	Jul 08 2003	150	<2	2.4	47	1.1	<2	170	8.47	1.27
M14-GL	Jul 08 2003	58	<2	17.	140	1.1	4.	160	8.11	1.23
M15-GU	Jul 08 2003	96	<2	91.	260	4.4	7.8	160	7.56	1.22
M15-GU (Dup)	Jul 08 2003	120	<2	88.	260	4.3	7.6	150	7.65	1.12
M16-GU	Jul 29 2003	120	<2	110.	330	8.7	8.6	170	7.47	0.98
M17-GL	Jul 09 2003	84	<2	28.	110	0.63	6.8	140	7.92	1.05
M18-GU	Jul 09 2003	190	<2	82.	140	4.1	5.7	150	7.45	1.07
M19-LBF	Jul 07 2003	120	<2	52.	150	0.98	5.1	100	7.69	0.99
M19-LBF (Du)	Jul 07 2003	120	<2	54.	140	0.98	5.4	100	7.68	1.03
M20-O	Jul 07 2003	100	<2	42.	130	0.54	7.4	110	7.6	1.39
M21-UBF	Jul 07 2003	220	<2	140.	230	10.	7.6	210	7.31	1.17
M22-O	Jul 08 2003	82	<2	33.	120	0.78	5.3	120	7.82	1.13
M23-UBF	Jul 08 2003	190	<2	200.	460	13.	11.	290	7.28	1.17
M24-O	Jul 09 2003	74	<2	140.	63	0.77	8.7	330	7.56	1.15
M25-UBF	Jul 09 2003	210	<2	170.	340	10.	9.5	240	7.16	1.17
M26-O	Jul 07 2003	140	<2	2.9	43	1.3	<2	140	8.09	1.14
M27-LBF	Jul 07 2003	96	<2	140.	350	9.6	8.8	170	7.33	1.14
M28-LBF	Jul 07 2003	80	<2	210.	130	0.7	11.	300	7.92	3.91
M29-UBF	Jul 07 2003	220	<2	210.	430	16.	11.	290	7.32	1.19
M30-O	Jul 09 2003	110	<2	51.	130	0.74	6.7	90	7.56	0.98
M31-LBF	Jul 09 2003	220	<2	130.	180	7.3	8.3	200	7.34	1.23
O19-GL	Jul 08 2003	110	<2	47.	130	0.73	5.6	100	7.81	1.01
O49-GL	Jul 07 2003	130	<2	51.	150	1.8	6.3	140	7.43	1.06
P19-1-O	Jul 08 2003	110	<2	32.	110	0.65	5.5	140	7.88	1.08
P49-Q	Jul 07 2003	96	<2	34.	98	0.63	5.4	160	7.49	1.18
Laboratory Detection Limit		2	2	2	2	2	2	2	-	-
AWQS		-	-	-	-	10	-	-	-	-

All results in milligrams per liter (mg/L), except pH in pH units, and Ion Balance, a calculation

< = less than detection limit

AWQS = Arizona Aquifer Water Quality Standard

TABLE 5. SUMMARY OF RADIOCHEMICAL ANALYTICAL RESULTS, BIENNIAL PARAMETERS

Well ID	Sample Date	Gross Alpha	Radium 226	Radium 228	Total Radium
M1-GL	Jul 09 2003	4.0 ± 0.9	-	-	-
M1-GL (Dup)	Jul 09 2003	5.3 ± 1.0	<0.4	<0.4	<0.4
M2-GU	Jul 29 2003	4.0 ± 0.9	-	-	-
M3-GL	Jul 07 2003	4.4 ± 0.9	-	-	-
M4-O	Jul 07 2003	2.8 ± 0.7	-	-	-
M6-GU	Jul 08 2003	1.3 ± 0.5	-	-	-
M7-GL	Jul 08 2003	1.7 ± 0.6	-	-	-
M8-O	Jul 08 2003	12.0 ± 1.6	<0.2	<0.3	<0.3
M14-GL	Jul 08 2003	1.5 ± 0.6	-	-	-
M15-GU	Jul 08 2003	4.5 ± 1.0	-	-	-
M15-GU (Dup)	Jul 08 2003	5.8 ± 1.1	<0.2	<0.3	<0.3
M16-GU	Jul 29 2003	7.6 ± 1.3	<0.3	<0.4	<0.4
M17-GL	Jul 09 2003	2.1 ± 0.7	-	-	-
M18-GU	Jul 09 2003	4.5 ± 1.0	-	-	-
M19-LBF	Jul 07 2003	4.4 ± 0.9	-	-	-
M19-LBF (Dup)	Jul 07 2003	5.1 ± 1.0	<0.4	<0.3	<0.4
M20-O	Jul 07 2003	2.2 ± 0.7	-	-	-
M21-UBF	Jul 07 2003	6.6 ± 1.2	<0.2	<0.3	<0.3
M22-O	Jul 08 2003	3.1 ± 0.8	-	-	-
M23-UBF	Jul 08 2003	9.0 ± 1.4	<0.3	<0.4	<0.4
M24-O	Jul 09 2003	7.4 ± 1.3	0.9 ± 0.1	0.6 ± 0.4	1.5 ± 0.4
M25-UBF	Jul 09 2003	7.6 ± 1.3	<0.3	<0.3	<0.3
M26-O	Jul 07 2003	8.9 ± 1.4	0.3 ± 0.1	<0.3	0.3 ± 0.1
M27-LBF	Jul 07 2003	6.3 ± 1.2	<0.3	<0.3	<0.3
M28-LBF	Jul 07 2003	2.6 ± 0.7	-	-	-
M29-UBF	Jul 07 2003	9.9 ± 1.5	<0.4	<0.4	<0.4
M30-O	Jul 09 2003	8.5 ± 1.4	<0.5	<0.8	<0.8
M31-LBF	Jul 09 2003	7.3 ± 1.3	<0.3	<0.3	<0.3
O19-GL	Jul 08 2003	5.6 ± 1.1	<0.2	<0.3	<0.3
O49-GL	Jul 07 2003	4.5 ± 1.0	-	-	-
P19-I-O	Jul 08 2003	4.0 ± 0.9	-	-	-
P49-O	Jul 07 2003	3.5 ± 0.8	-	-	-
Alert Level		15	-	-	4
Laboratory Detection Limit		0.04	0.02	0.04	0.06
Arizona Aquifer Water Quality Standard		-	-	-	5

All results in pico-curies per liter +/- a standard deviation of two (pCi/L +/- 2 σ)
 < = less than detection limit
 Radium 226 and Radium 228 are analyzed when Gross Alpha exceeds 5.0
 Total Radium = Radium 226 + Radium 228

TABLE 6. SUMMARY OF ORGANIC ANALYTICAL RESULTS, BIENNIAL PARAMETERS

Well ID	Sample Date	Benzene	Ethylbenzene	Toluene	Total Xylene	Total Petroleum Hydrocarbons-Diesel
M1-GL	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M1-GL (Dup)	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M2-GU	Jul 29 2003	<0.0005	<0.0005	<0.0005	<0.001	3.
M3-GL	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M4-O	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M6-GU	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M7-GL	Jul 08 2003	<0.001	<0.001	0.017	<0.003	3.
M8-O	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M14-GL	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M15-GU	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M15-GU (Dup)	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M16-GU	Jul 29 2003	<0.0005	<0.0005	0.0097	<0.001	3.
M17-GL	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M18-GU	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M19-LBF	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M19-LBF (Dup)	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M20-O	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M21-UBF	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M22-O	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M23-UBF	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
M24-O	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M25-UBF	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M26-O	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M27-LBF	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M28-LBF	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M29-UBF	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
M30-O	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
M31-LBF	Jul 09 2003	<0.001	<0.001	<0.001	<0.003	3.
O19-GL	Jul 08 2003	<0.001	<0.001	<0.001	<0.003	3.
O49-GL	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
P19-J-O	Jul 05 2003	<0.001	<0.001	<0.001	<0.003	3.
P49-O	Jul 07 2003	<0.001	<0.001	<0.001	<0.003	3.
Alert Level		0.0025	0.35	0.5	5	R
Laboratory Detection Limit		0.002	0.002	0.002	0.002	0.5
AWQS		0.005	0.7	1	10	-
All results are in milligrams per liter (mg/L) < = less than detection limit AWQS = Arizona Aquifer Water Quality Standard R = Reserved						

Well ID	Sample Date	Aluminum	Antimony	Nickel	Selenium	Thallium	Zinc
M1-GL	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M1-GL (Dup)	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M2-GU	Jul 29 2003	<0.1	<0.001	<0.01	0.0011	<0.001	<0.05
M3-GL	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M4-O	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M6-GU	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M7-GL	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M8-O	Jul 08 2003	<0.1	<0.001	<0.01	0.003	<0.001	<0.05
M14-GL	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M15-GU	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M15-GU (Dup)	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M16-GU	Jul 29 2003	<0.1	<0.001	<0.01	0.0023	<0.001	<0.05
M17-GL	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M18-GU	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M19-LBF	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M19-LBF (Dup)	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M20-O	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M21-UBF	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M22-O	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M23-UBF	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M24-O	Jul 09 2003	<0.1	<0.001	<0.01	0.0077	<0.001	<0.05
M25-UBF	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M26-O	Jul 07 2003	<0.1	<0.001	<0.01	0.0022	<0.001	<0.05
M27-LBF	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M28-LBF	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M29-UBF	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M30-O	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
M31-LBF	Jul 09 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
O19-GL	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
O49-GL	Jul 07 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
P19-I-O	Jul 08 2003	<0.1	<0.001	<0.01	<0.001	<0.001	<0.05
P49-O	Jul 07 2003	<0.1	<0.001	<0.01	0.0011	<0.001	<0.05
Lowest Action Level		0.71	0.005	0.08	0.027	0.002	2.5
Laboratory Detection Limit		0.1	0.001	0.01	0.001	0.001	0.05
Arizona Aquifer Water Quality Standard		-	0.006	0.1	0.05	0.002	-

All results in milligrams per liter (mg/L)

< = less than detection limit

AQL = Aquifer quality limit

Lowest Action Level = Lowest alert level or AQL; a higher val

R = Reserved