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Atlanta, Georgia 30342  
404-495-9577 Fax: 404-495-9578

HUGH NOWELL  
CORPORATE COUNSEL

July 28, 2004

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  
SECOND QUARTER 2004 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 April 1 through July 31, 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 1. Note that injection last occurred in early 1998 and that water has been continuously withdrawn since that time.

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**(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 – Second Quarter 2004* 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 April 5 through April 7, 2004.

Quarterly and biennial parameters were conducted for 29 of the 31 POC monitoring wells. POC monitoring 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.

**(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.

**(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.**

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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

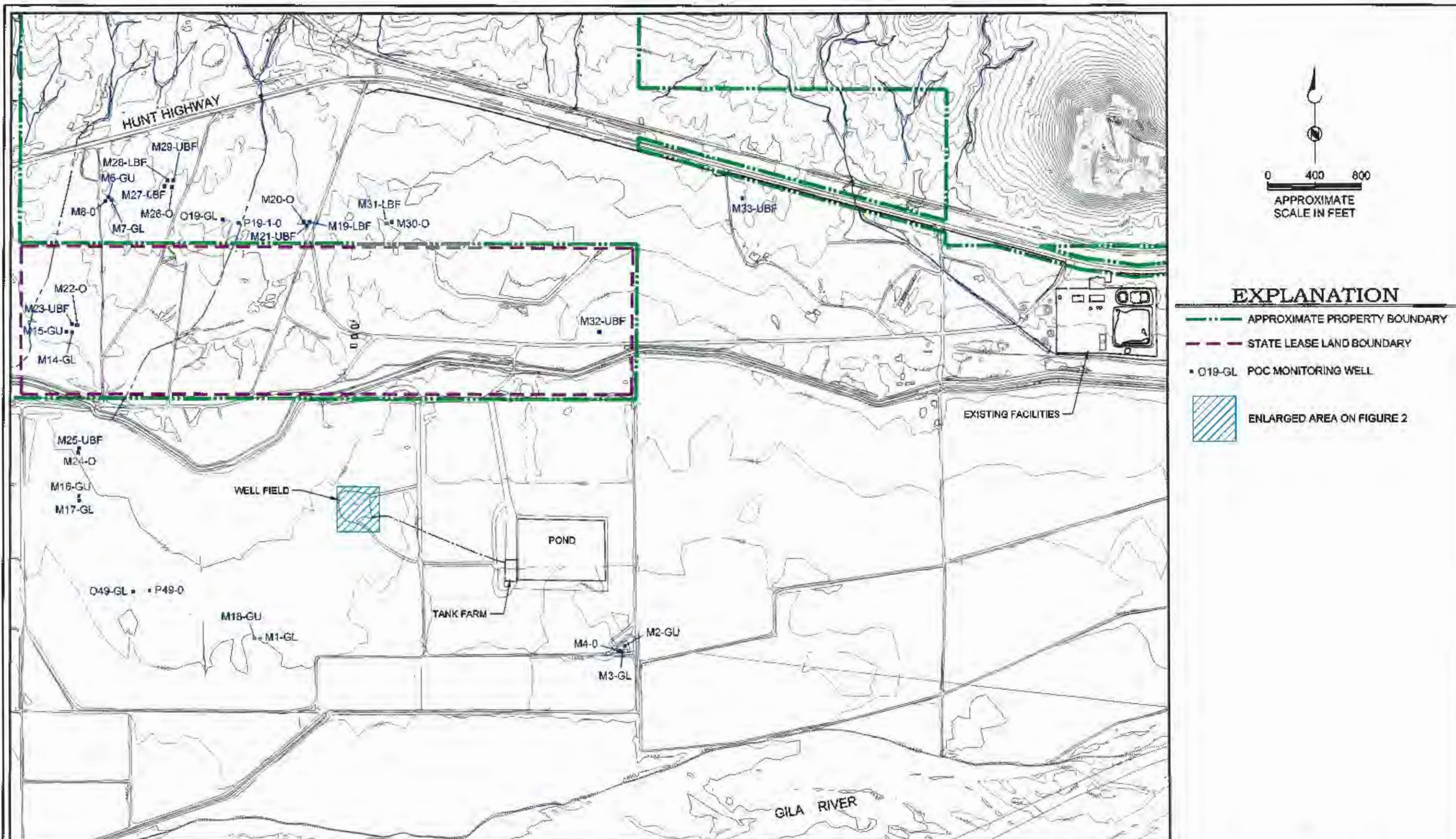
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Attachments

cc: Florence Copper File

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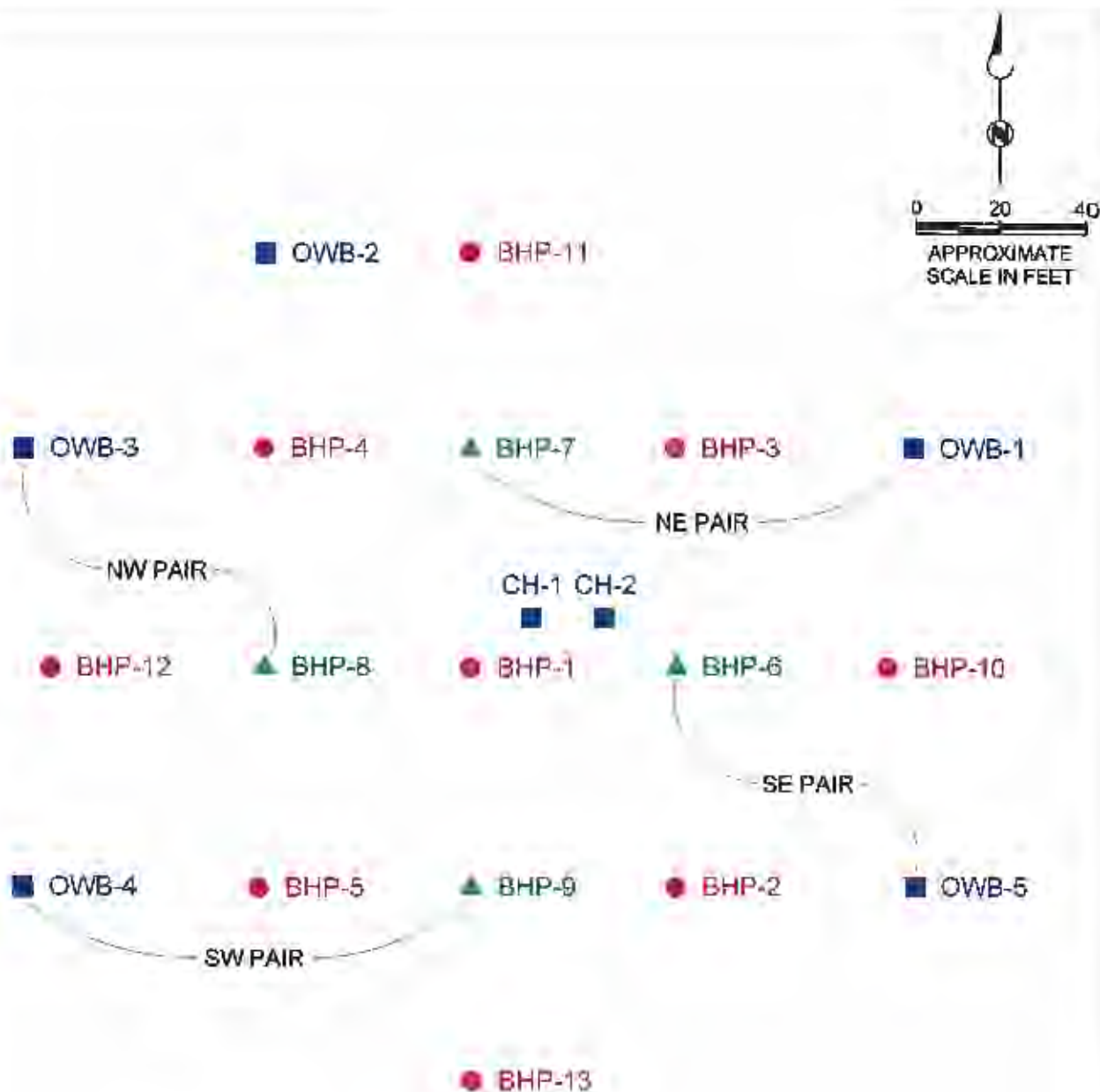




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Figure 1  
**MONITORING AREA**  
MERRILL MINING, L.L.C.  
FLORENCE, ARIZONA





## EXPLANATION

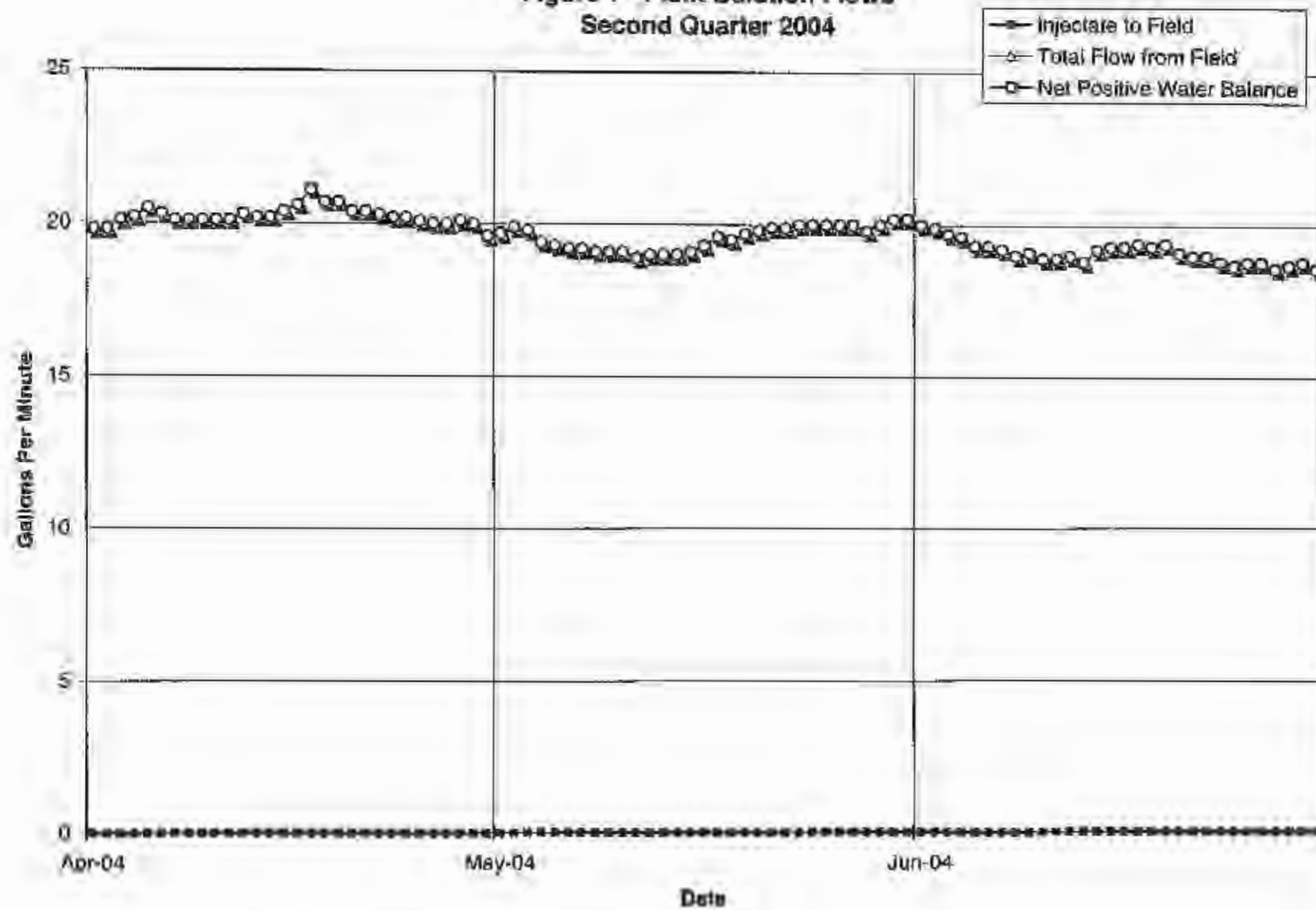
- BHP-10 PUMPING WELL (CURRENTLY INACTIVE)
- OWB-2 OBSERVATION WELL
- ▲ BHP-8 INJECTION / RECOVERY WELL (RECOVERY MODE SINCE 1998)

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Figure 2  
**WELLFIELD LAYOUT**  
MERRILL MINING, L.L.C.  
FLORENCE, ARIZONA

**ATTACHMENT 1**  
**MINE OPERATIONS MONITORING**

Figure 1 - Plant Solution Flows  
Second Quarter 2004



**Plant Solution Flows - Daily Averages  
Second Quarter 2004**

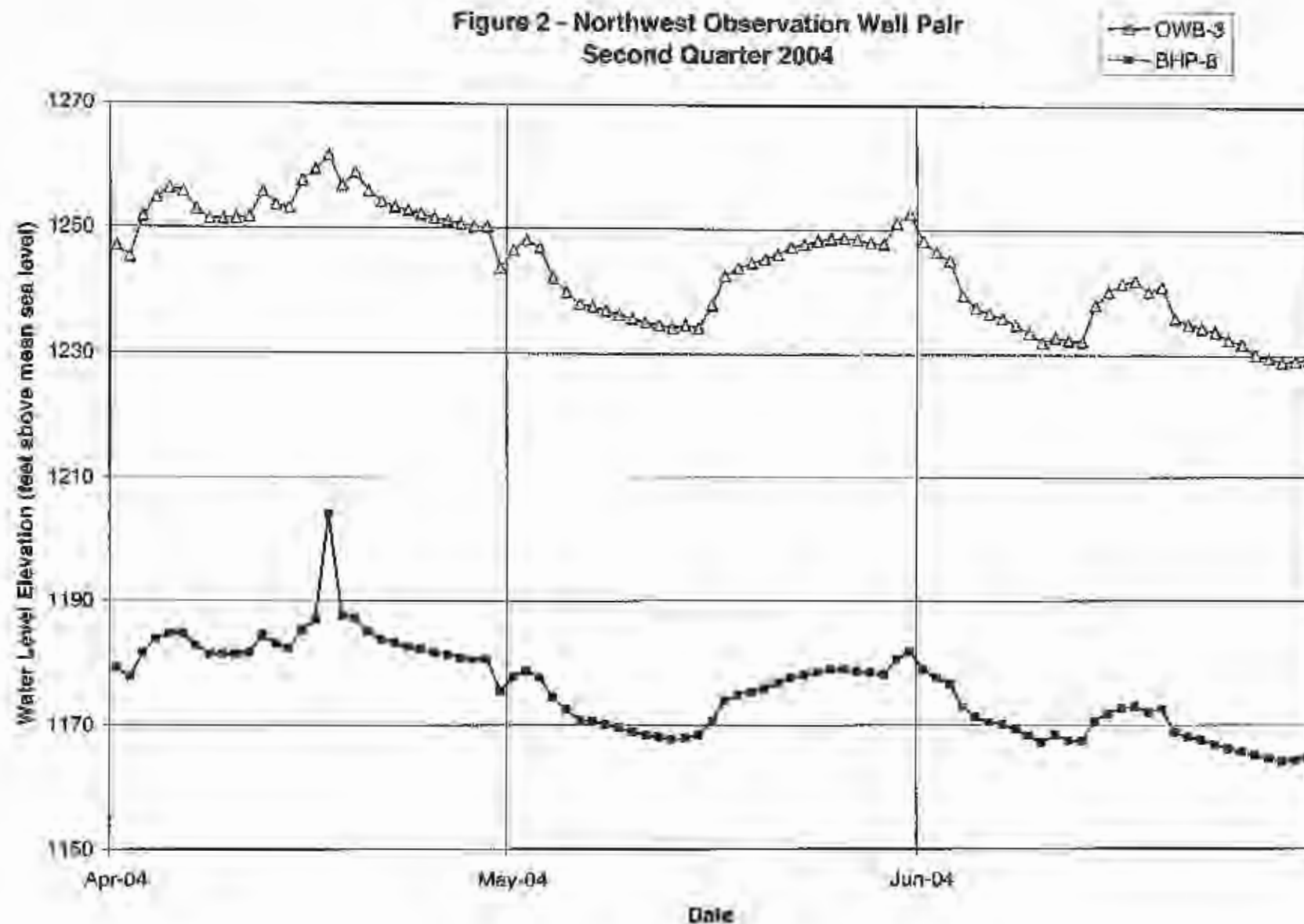
Date	Injectate to Field (gpm)	BHP-6 (gpm)	BHP-7 (gpm)	BHP-8 (gpm)	BHP-9 (gpm)	Total Flow from Field (gpm)	Net Positive Water Balance (gpm)	Maintained Hydrologic Control (Yes/No)
4/1/2004	0	0.0	0.0	7.4	12.4	19.8	19.8	Yes
4/2/2004	0	0.0	0.0	7.4	12.4	19.8	19.8	Yes
4/3/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/4/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
4/5/2004	0	0.0	0.0	7.7	12.8	20.5	20.5	Yes
4/6/2004	0	0.0	0.0	7.6	12.7	20.3	20.3	Yes
4/7/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/8/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/9/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/10/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/11/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/12/2004	0	0.0	0.0	7.6	12.7	20.3	20.3	Yes
4/13/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
4/14/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
4/15/2004	0	0.0	0.0	7.6	12.8	20.4	20.4	Yes
4/16/2004	0	0.0	0.0	7.7	12.9	20.6	20.6	Yes
4/17/2004	0	0.0	0.0	8.2	12.9	21.1	21.1	Yes
4/18/2004	0	0.0	0.0	7.8	12.9	20.7	20.7	Yes
4/19/2004	0	0.0	0.0	7.8	12.9	20.7	20.7	Yes
4/20/2004	0	0.0	0.0	7.6	12.8	20.4	20.4	Yes
4/21/2004	0	0.0	0.0	7.7	12.7	20.4	20.4	Yes
4/22/2004	0	0.0	0.0	7.6	12.7	20.3	20.3	Yes
4/23/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
4/24/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
4/25/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/26/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
4/27/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
4/28/2004	0	0.0	0.0	7.5	12.6	20.1	20.1	Yes
4/29/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
4/30/2004	0	0.0	0.0	7.3	12.3	19.6	19.6	Yes
5/1/2004	0	0.0	0.0	7.4	12.3	19.7	19.7	Yes
5/2/2004	0	0.0	0.0	7.5	12.4	19.9	19.9	Yes
5/3/2004	0	0.0	0.0	7.4	12.4	19.8	19.8	Yes
5/4/2004	0	0.0	0.0	7.2	12.2	19.4	19.4	Yes
5/5/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
5/6/2004	0	0.0	0.0	7.2	12.0	19.2	19.2	Yes
5/7/2004	0	0.0	0.0	7.2	12.0	19.2	19.2	Yes
5/8/2004	0	0.0	0.0	7.1	12.0	19.1	19.1	Yes
5/9/2004	0	0.0	0.0	7.1	12.0	19.1	19.1	Yes
5/10/2004	0	0.0	0.0	7.1	12.0	19.1	19.1	Yes
5/11/2004	0	0.0	0.0	7.0	11.9	18.9	18.9	Yes
5/12/2004	0	0.0	0.0	7.1	11.9	19.0	19.0	Yes
5/13/2004	0	0.0	0.0	7.1	11.9	19.0	19.0	Yes
5/14/2004	0	0.0	0.0	7.1	11.9	19.0	19.0	Yes
5/15/2004	0	0.0	0.0	7.1	12.0	19.1	19.1	Yes
5/16/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
5/17/2004	0	0.0	0.0	7.3	12.3	19.6	19.6	Yes
5/18/2004	0	0.0	0.0	7.3	12.2	19.5	19.5	Yes



**Plant Solution Flows - Daily Averages  
Second Quarter 2004**

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)
5/19/2004	0	0.0	0.0	7.3	12.4	19.7	19.7	Yes
5/20/2004	0	0.0	0.0	7.4	12.4	19.8	19.8	Yes
5/21/2004	0	0.0	0.0	7.5	12.4	19.9	19.9	Yes
5/22/2004	0	0.0	0.0	7.5	12.4	19.9	19.9	Yes
5/23/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
5/24/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
5/25/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
5/26/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
5/27/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
5/28/2004	0	0.0	0.0	7.4	12.4	19.8	19.8	Yes
5/29/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
5/30/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
5/31/2004	0	0.0	0.0	7.6	12.6	20.2	20.2	Yes
6/1/2004	0	0.0	0.0	7.5	12.5	20.0	20.0	Yes
6/2/2004	0	0.0	0.0	7.5	12.4	19.9	19.9	Yes
6/3/2004	0	0.0	0.0	7.4	12.3	19.7	19.7	Yes
6/4/2004	0	0.0	0.0	7.3	12.3	19.6	19.6	Yes
6/5/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
6/6/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
6/7/2004	0	0.0	0.0	7.2	12.0	19.2	19.2	Yes
6/8/2004	0	0.0	0.0	7.1	11.9	19.0	19.0	Yes
6/9/2004	0	0.0	0.0	7.1	12.0	19.1	19.1	Yes
6/10/2004	0	0.0	0.0	7.0	11.9	18.9	18.9	Yes
6/11/2004	0	0.0	0.0	7.1	11.8	18.9	18.9	Yes
6/12/2004	0	0.0	0.0	7.1	11.9	19.0	19.0	Yes
6/13/2004	0	0.0	0.0	7.0	11.8	18.8	18.8	Yes
6/14/2004	0	0.0	0.0	7.2	12.0	19.2	19.2	Yes
6/15/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
6/16/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
6/17/2004	0	0.0	0.0	7.2	12.2	19.4	19.4	Yes
6/18/2004	0	0.0	0.0	7.2	12.1	19.3	19.3	Yes
6/19/2004	0	0.0	0.0	7.2	12.2	19.4	19.4	Yes
6/20/2004	0	0.0	0.0	7.1	12.0	19.1	19.1	Yes
6/21/2004	0	0.0	0.0	7.1	11.9	19.0	19.0	Yes
6/22/2004	0	0.0	0.0	7.0	12.0	19.0	19.0	Yes
6/23/2004	0	0.0	0.0	7.0	11.8	18.8	18.8	Yes
6/24/2004	0	0.0	0.0	6.9	11.8	18.7	18.7	Yes
6/25/2004	0	0.0	0.0	7.0	11.8	18.8	18.8	Yes
6/26/2004	0	0.0	0.0	7.0	11.8	18.8	18.8	Yes
6/27/2004	0	0.0	0.0	6.9	11.7	18.6	18.6	Yes
6/28/2004	0	0.0	0.0	7.0	11.7	18.7	18.7	Yes
6/29/2004	0	0.0	0.0	7.0	11.8	18.8	18.8	Yes
6/30/2004	0	0.0	0.0	6.9	11.7	18.6	18.6	Yes

Figure 2 - Northwest Observation Well Pair  
Second Quarter 2004



**Northwest Observation Well Pair  
Second Quarter 2004**

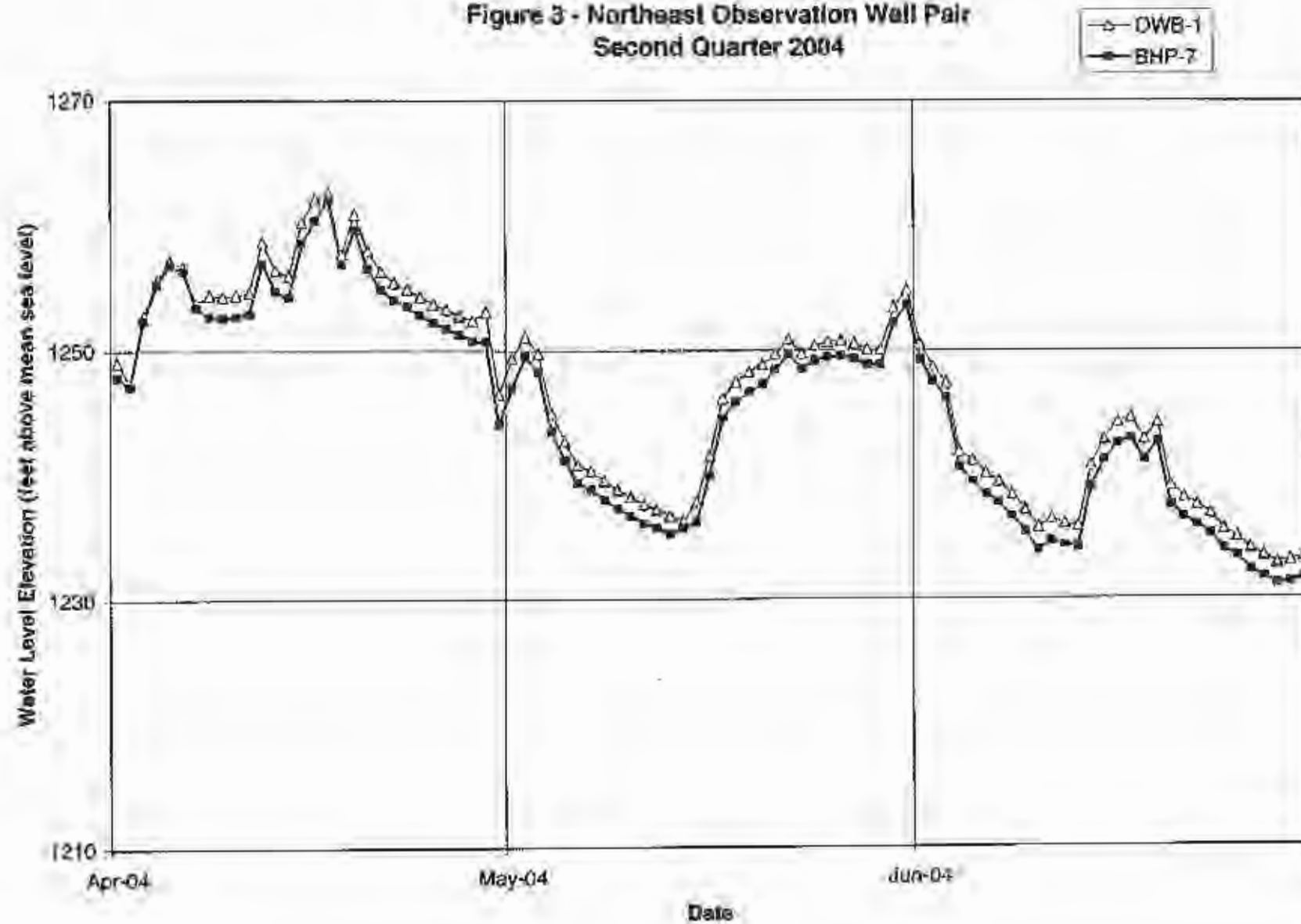
Date	BHP-8	OWB-3	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
4/1/2004	1179.3	1247.1	-67.8	Yes
4/2/2004	1177.8	1245.3	-67.5	Yes
4/3/2004	1181.7	1251.8	-70.1	Yes
4/4/2004	1184	1254.7	-70.7	Yes
4/5/2004	1184.9	1256.3	-71.4	Yes
4/6/2004	1184.8	1255.8	-71	Yes
4/7/2004	1182.9	1252.9	-70	Yes
4/8/2004	1181.6	1251.5	-69.9	Yes
4/9/2004	1181.5	1251.4	-69.9	Yes
4/10/2004	1181.6	1251.5	-69.9	Yes
4/11/2004	1181.8	1251.7	-69.9	Yes
4/12/2004	1184.5	1255.7	-71.2	Yes
4/13/2004	1183.1	1253.6	-70.5	Yes
4/14/2004	1182.5	1253.2	-70.7	Yes
4/15/2004	1185.4	1257.5	-72.1	Yes
4/16/2004	1186.9	1259.3	-72.4	Yes
4/17/2004	1204	1261.6	-57.6	Yes
4/18/2004	1187.8	1256.7	-68.9	Yes
4/19/2004	1187.2	1258.8	-71.6	Yes
4/20/2004	1185	1255.8	-70.8	Yes
4/21/2004	1183.8	1254.2	-70.4	Yes
4/22/2004	1183.3	1253.3	-70	Yes
4/23/2004	1182.7	1252.8	-70.1	Yes
4/24/2004	1182.3	1252.2	-69.9	Yes
4/25/2004	1181.8	1251.6	-69.8	Yes
4/26/2004	1181.5	1251.2	-69.7	Yes
4/27/2004	1180.9	1250.7	-69.8	Yes
4/28/2004	1180.6	1250.3	-69.7	Yes
4/29/2004	1180.8	1250.3	-69.5	Yes
4/30/2004	1175.6	1243.7	-68.1	Yes
5/1/2004	1177.9	1246.6	-68.7	Yes
5/2/2004	1178.8	1248.2	-69.4	Yes
5/3/2004	1177.7	1246.9	-69.2	Yes
5/4/2004	1174.6	1242.1	-67.5	Yes
5/5/2004	1172.6	1239.8	-67.2	Yes
5/6/2004	1170.9	1237.9	-67	Yes
5/7/2004	1170.7	1237.5	-66.8	Yes
5/8/2004	1170.1	1236.9	-66.8	Yes
5/9/2004	1169.6	1236.2	-66.6	Yes
5/10/2004	1169	1235.6	-66.6	Yes
5/11/2004	1168.4	1235	-66.6	Yes
5/12/2004	1168.2	1234.6	-66.4	Yes
5/13/2004	1167.6	1234.1	-66.5	Yes
5/14/2004	1168	1234.6	-66.6	Yes
5/15/2004	1168.3	1234.1	-65.8	Yes
5/16/2004	1170.7	1237.8	-67.1	Yes



**Northwest Observation Well Pair  
Second Quarter 2004**

Date	BHP-8	OWB-3	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
5/17/2004	1174	1242.5	-68.5	Yes
5/18/2004	1175	1243.8	-68.8	Yes
5/19/2004	1175.5	1244.6	-69.1	Yes
5/20/2004	1175.9	1245.2	-69.3	Yes
5/21/2004	1176.9	1246	-69.1	Yes
5/22/2004	1177.7	1247.2	-69.5	Yes
5/23/2004	1178.2	1247.6	-69.4	Yes
5/24/2004	1178.7	1248.2	-69.5	Yes
5/25/2004	1179	1248.5	-69.5	Yes
5/26/2004	1179.1	1248.6	-69.5	Yes
5/27/2004	1178.8	1248.4	-69.6	Yes
5/28/2004	1178.5	1247.9	-69.4	Yes
5/29/2004	1178.3	1247.8	-69.5	Yes
5/30/2004	1180.8	1251.1	-70.3	Yes
5/31/2004	1182	1252.5	-70.5	Yes
6/1/2004	1179	1248.2	-69.2	Yes
6/2/2004	1177.7	1246.4	-68.7	Yes
6/3/2004	1176.9	1245.1	-68.2	Yes
6/4/2004	1173	1239.5	-66.5	Yes
6/5/2004	1171.3	1237.5	-66.2	Yes
6/6/2004	1170.5	1236.5	-66	Yes
6/7/2004	1170.1	1235.8	-65.7	Yes
6/8/2004	1169.3	1234.7	-65.4	Yes
6/9/2004	1168.3	1233.4	-65.1	Yes
6/10/2004	1167.2	1232	-64.8	Yes
6/11/2004	1168.4	1232.7	-64.3	Yes
6/12/2004	1167.5	1232.3	-64.8	Yes
6/13/2004	1167.4	1232.1	-64.7	Yes
6/14/2004	1170.6	1238	-67.4	Yes
6/15/2004	1171.9	1240.1	-68.2	Yes
6/16/2004	1172.8	1241.5	-68.7	Yes
6/17/2004	1173	1241.9	-68.9	Yes
6/18/2004	1172.1	1240.1	-68	Yes
6/19/2004	1172.6	1241	-68.4	Yes
6/20/2004	1168.8	1235.9	-67.1	Yes
6/21/2004	1168	1234.9	-66.9	Yes
6/22/2004	1167.6	1234.3	-66.7	Yes
6/23/2004	1166.9	1233.7	-66.8	Yes
6/24/2004	1166.2	1232.4	-66.2	Yes
6/25/2004	1165.7	1231.8	-66.1	Yes
6/26/2004	1165.1	1230.1	-65	Yes
6/27/2004	1164.7	1229.5	-64.8	Yes
6/28/2004	1164.2	1228.9	-64.7	Yes
6/29/2004	1164.4	1229.1	-64.7	Yes
6/30/2004	1164.7	1229.4	-64.7	Yes

Figure 3 - Northeast Observation Well Pair  
Second Quarter 2004



**Northeast Observation Well Pair  
Second Quarter 2004**

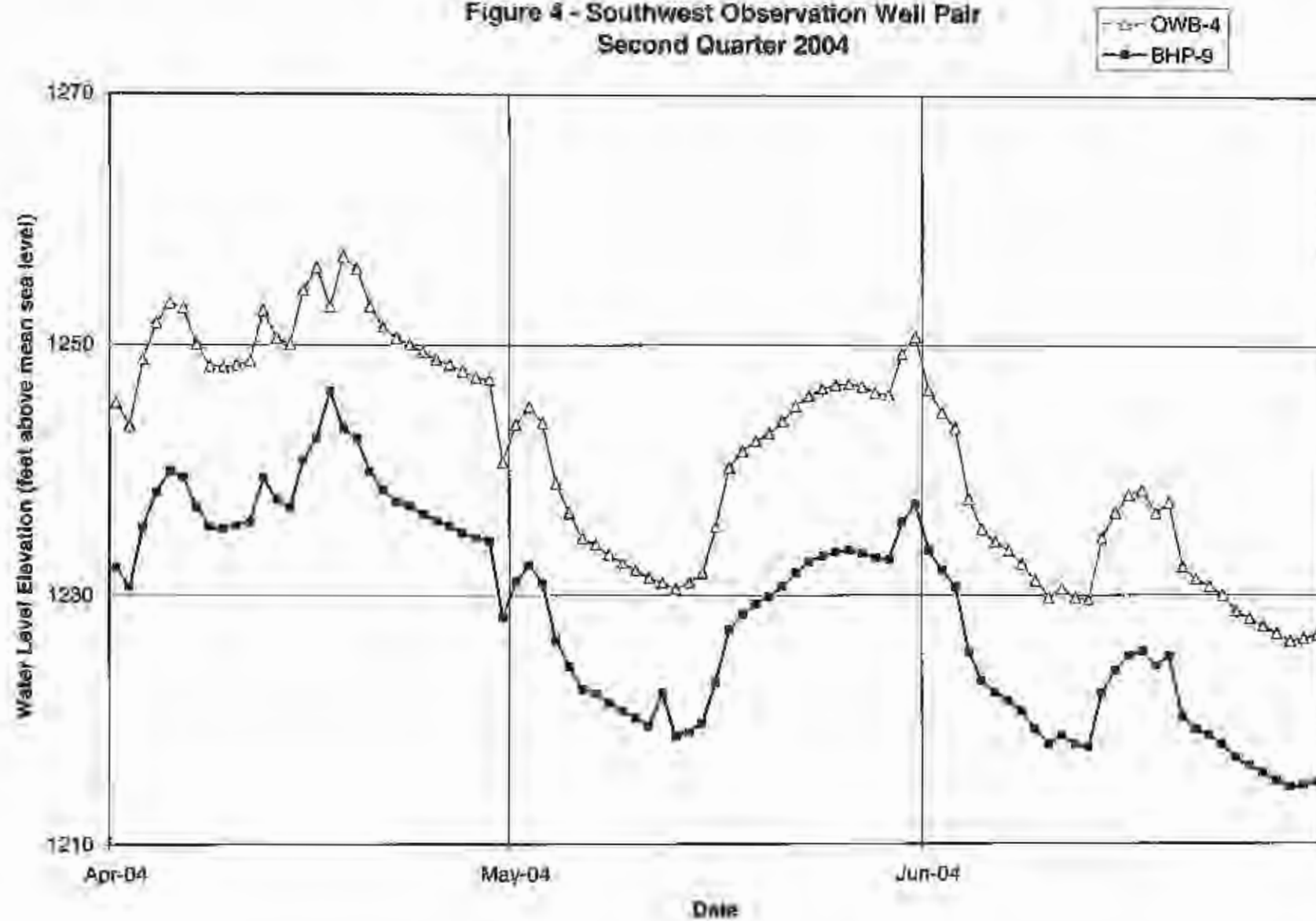
Date	BHP-7	OWB-1	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
4/1/2004	1247.9	1249.1	-1.2	Yes
4/2/2004	1247.2	1247.4	-0.2	Yes
4/3/2004	1252.4	1253.7	-0.3	Yes
4/4/2004	1255.2	1255.5	-0.3	Yes
4/5/2004	1256.8	1257.1	-0.3	Yes
4/6/2004	1256.3	1256.6	-0.3	Yes
4/7/2004	1253.4	1253.7	-0.3	Yes
4/8/2004	1252.7	1254.4	-1.7	Yes
4/9/2004	1252.6	1254.3	-1.7	Yes
4/10/2004	1252.7	1254.4	-1.7	Yes
4/11/2004	1252.9	1254.6	-1.7	Yes
4/12/2004	1256.9	1258.6	-1.7	Yes
4/13/2004	1254.7	1256.4	-1.7	Yes
4/14/2004	1254.2	1255.9	-1.7	Yes
4/15/2004	1258.5	1260.2	-1.7	Yes
4/16/2004	1260.3	1262	-1.7	Yes
4/17/2004	1262	1262.5	-0.5	Yes
4/18/2004	1256.9	1257.6	-0.7	Yes
4/19/2004	1259.6	1260.8	-1.2	Yes
4/20/2004	1256.5	1257.9	-1.4	Yes
4/21/2004	1254.9	1256.3	-1.4	Yes
4/22/2004	1254	1255.4	-1.4	Yes
4/23/2004	1253.5	1254.9	-1.4	Yes
4/24/2004	1252.8	1254.3	-1.5	Yes
4/25/2004	1252.2	1253.7	-1.5	Yes
4/26/2004	1251.8	1253.3	-1.5	Yes
4/27/2004	1251.3	1252.8	-1.5	Yes
4/28/2004	1250.8	1252.4	-1.6	Yes
4/29/2004	1250.7	1253.1	-2.4	Yes
4/30/2004	1244.1	1246.5	-2.4	Yes
5/1/2004	1247	1249.4	-2.4	Yes
5/2/2004	1249.6	1251.1	-1.5	Yes
5/3/2004	1248.3	1249.8	-1.5	Yes
5/4/2004	1243.5	1245	-1.5	Yes
5/5/2004	1241.2	1242.7	-1.5	Yes
5/6/2004	1239.3	1240.8	-1.5	Yes
5/7/2004	1238.8	1240.3	-1.5	Yes
5/8/2004	1238	1239.5	-1.5	Yes
5/9/2004	1237.3	1238.8	-1.5	Yes
5/10/2004	1236.7	1238.2	-1.5	Yes
5/11/2004	1236.1	1237.6	-1.5	Yes
5/12/2004	1235.7	1237.2	-1.5	Yes
5/13/2004	1235.2	1236.7	-1.5	Yes
5/14/2004	1235.7	1236.2	-0.5	Yes
5/15/2004	1236.2	1237.8	-1.6	Yes
5/16/2004	1239.9	1241.5	-1.6	Yes



**Northeast Observation Well Pair  
Second Quarter 2004**

Date	BHP-7	OWB-1	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
5/17/2004	1244.6	1246.2	-1.6	Yes
5/18/2004	1245.9	1247.5	-1.6	Yes
5/19/2004	1246.7	1248.3	-1.6	Yes
5/20/2004	1247.3	1248.9	-1.6	Yes
5/21/2004	1248.5	1249.7	-1.2	Yes
5/22/2004	1249.7	1250.9	-1.2	Yes
5/23/2004	1248.6	1249.8	-1.2	Yes
5/24/2004	1249.2	1250.4	-1.2	Yes
5/25/2004	1249.5	1250.7	-1.2	Yes
5/26/2004	1249.6	1250.8	-1.2	Yes
5/27/2004	1249.4	1250.6	-1.2	Yes
5/28/2004	1248.9	1250.1	-1.2	Yes
5/29/2004	1248.9	1250.1	-1.2	Yes
5/30/2004	1252.2	1253.4	-1.2	Yes
5/31/2004	1253.6	1254.8	-1.2	Yes
6/1/2004	1249.3	1250.5	-1.2	Yes
6/2/2004	1247.5	1248.7	-1.2	Yes
6/3/2004	1246.2	1247.4	-1.2	Yes
6/4/2004	1240.6	1241.8	-1.2	Yes
6/5/2004	1239.4	1241.1	-1.7	Yes
6/6/2004	1238.4	1240.1	-1.7	Yes
6/7/2004	1237.7	1239.4	-1.7	Yes
6/8/2004	1236.6	1238.3	-1.7	Yes
6/9/2004	1235.3	1237.1	-1.8	Yes
6/10/2004	1233.9	1235.7	-1.8	Yes
6/11/2004	1234.6	1236.4	-1.8	Yes
6/12/2004	1234.3	1236	-1.7	Yes
6/13/2004	1234.1	1235.8	-1.7	Yes
6/14/2004	1239	1240.7	-1.7	Yes
6/15/2004	1241.1	1242.8	-1.7	Yes
6/16/2004	1242.5	1244.2	-1.7	Yes
6/17/2004	1242.9	1244.6	-1.7	Yes
6/18/2004	1241.1	1242.8	-1.7	Yes
6/19/2004	1242.6	1244.2	-1.6	Yes
6/20/2004	1237.5	1239.1	-1.6	Yes
6/21/2004	1236.5	1238.1	-1.6	Yes
6/22/2004	1235.9	1237.5	-1.6	Yes
6/23/2004	1235.2	1236.8	-1.6	Yes
6/24/2004	1233.9	1235.5	-1.6	Yes
6/25/2004	1233.3	1234.9	-1.6	Yes
6/26/2004	1232.3	1234	-1.7	Yes
6/27/2004	1231.7	1233.4	-1.7	Yes
6/28/2004	1231.1	1232.8	-1.7	Yes
6/29/2004	1231.3	1233	-1.7	Yes
6/30/2004	1231.6	1233.3	-1.7	Yes

Figure 4 - Southwest Observation Well Pair  
Second Quarter 2004



**Southwest Observation Well Pair  
Second Quarter 2004**

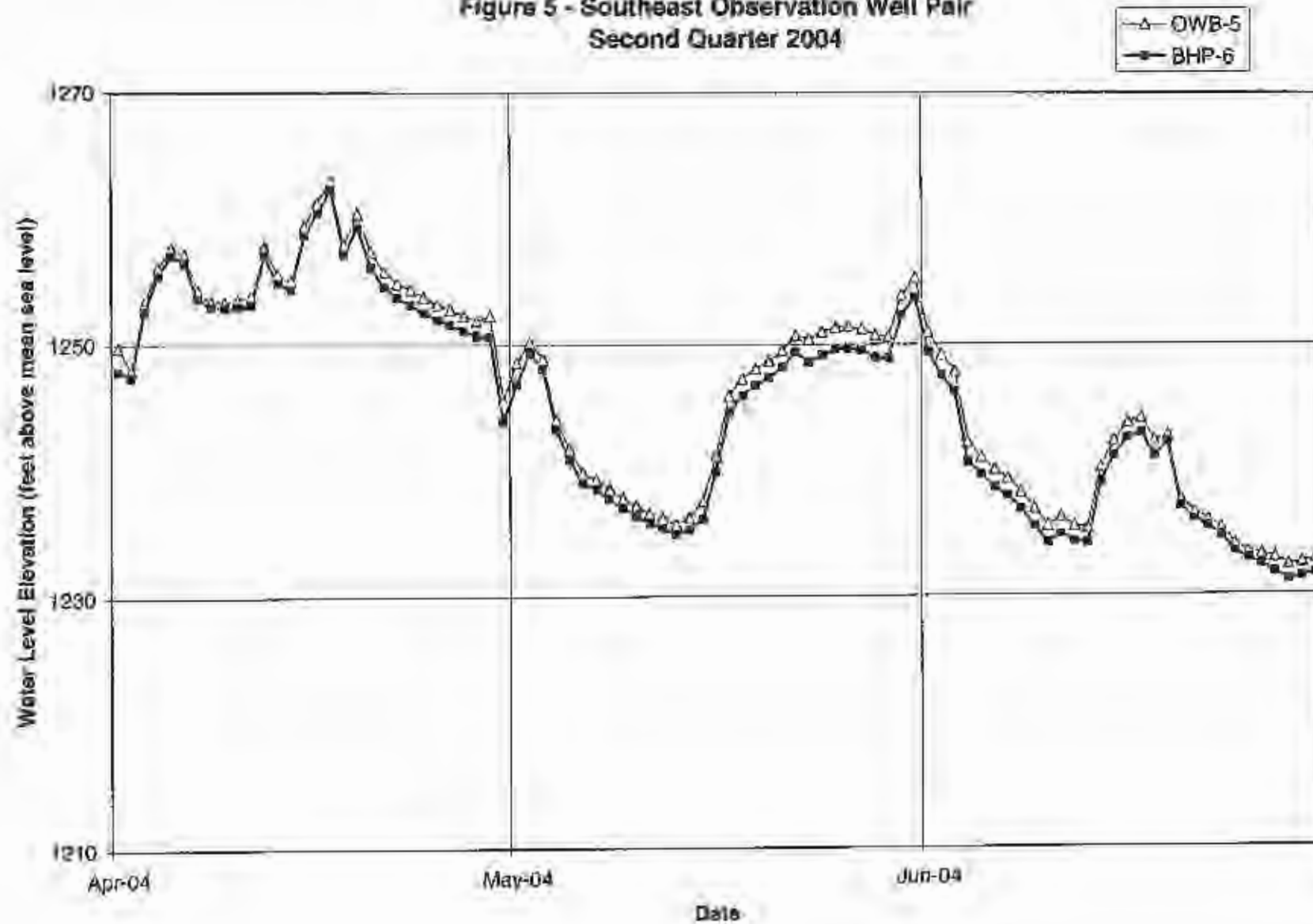
Date	BHP-9	OWB-4	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
4/1/2004	1232.3	1245.3	-13	Yes
4/2/2004	1230.7	1243.5	-12.8	Yes
4/3/2004	1235.5	1248.8	-13.3	Yes
4/4/2004	1238.3	1251.7	-13.4	Yes
4/5/2004	1239.9	1253.3	-13.4	Yes
4/6/2004	1239.5	1252.9	-13.4	Yes
4/7/2004	1237.1	1250	-12.9	Yes
4/8/2004	1235.5	1248.3	-12.8	Yes
4/9/2004	1235.4	1248.2	-12.8	Yes
4/10/2004	1235.6	1248.4	-12.8	Yes
4/11/2004	1235.9	1248.7	-12.8	Yes
4/12/2004	1239.4	1252.7	-13.3	Yes
4/13/2004	1237.6	1250.5	-12.9	Yes
4/14/2004	1237.1	1250	-12.9	Yes
4/15/2004	1240.8	1254.3	-13.5	Yes
4/16/2004	1242.5	1256.1	-13.6	Yes
4/17/2004	1246.3	1253	-6.7	Yes
4/18/2004	1243.3	1257	-13.7	Yes
4/19/2004	1242.5	1256	-13.5	Yes
4/20/2004	1239.9	1253	-13.1	Yes
4/21/2004	1238.4	1251.4	-13	Yes
4/22/2004	1237.5	1250.5	-13	Yes
4/23/2004	1237.1	1250	-12.9	Yes
4/24/2004	1236.5	1249.4	-12.9	Yes
4/25/2004	1236	1248.8	-12.8	Yes
4/26/2004	1235.6	1248.4	-12.8	Yes
4/27/2004	1235	1247.9	-12.9	Yes
4/28/2004	1234.6	1247.4	-12.8	Yes
4/29/2004	1234.4	1247.2	-12.8	Yes
4/30/2004	1228.2	1240.6	-12.4	Yes
5/1/2004	1231.1	1243.6	-12.5	Yes
5/2/2004	1232.4	1245	-12.6	Yes
5/3/2004	1231	1243.7	-12.7	Yes
5/4/2004	1226.4	1238.9	-12.5	Yes
5/5/2004	1224.3	1236.6	-12.3	Yes
5/6/2004	1222.4	1234.6	-12.2	Yes
5/7/2004	1222.1	1234.1	-12	Yes
5/8/2004	1221.3	1233.3	-12	Yes
5/9/2004	1220.7	1232.6	-11.9	Yes
5/10/2004	1220.1	1232	-11.9	Yes
5/11/2004	1219.5	1231.4	-11.9	Yes
5/12/2004	1222.1	1231	-8.9	Yes
5/13/2004	1218.6	1230.5	-11.9	Yes
5/14/2004	1219	1231	-12	Yes
5/15/2004	1219.7	1231.8	-12.1	Yes
5/16/2004	1223	1235.5	-12.5	Yes



**Southwest Observation Well Pair  
Second Quarter 2004**

Date	BHP-9	OWB-4	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
5/17/2004	1227.2	1240.2	-13	Yes
5/18/2004	1228.5	1241.5	-13	Yes
5/19/2004	1229.3	1242.3	-13	Yes
5/20/2004	1229.9	1242.9	-13	Yes
5/21/2004	1230.7	1243.9	-13.2	Yes
5/22/2004	1231.8	1245.1	-13.3	Yes
5/23/2004	1232.7	1245.9	-13.2	Yes
5/24/2004	1233.2	1246.5	-13.3	Yes
5/25/2004	1233.5	1246.8	-13.3	Yes
5/26/2004	1233.6	1246.9	-13.3	Yes
5/27/2004	1233.4	1246.7	-13.3	Yes
5/28/2004	1233	1246.2	-13.2	Yes
5/29/2004	1232.9	1246	-13.1	Yes
5/30/2004	1235.9	1249.3	-13.4	Yes
5/31/2004	1237.3	1250.7	-13.4	Yes
6/1/2004	1233.6	1246.4	-12.8	Yes
6/2/2004	1232	1244.6	-12.6	Yes
6/3/2004	1230.7	1243.3	-12.6	Yes
6/4/2004	1225.4	1237.7	-12.3	Yes
6/5/2004	1223.1	1235.3	-12.2	Yes
6/6/2004	1222.1	1234.3	-12.2	Yes
6/7/2004	1221.5	1233.6	-12.1	Yes
6/8/2004	1220.6	1232.5	-11.9	Yes
6/9/2004	1219.2	1231.2	-12	Yes
6/10/2004	1218	1229.8	-11.8	Yes
6/11/2004	1218.7	1230.5	-11.8	Yes
6/12/2004	1217.9	1229.8	-11.9	Yes
6/13/2004	1217.7	1229.6	-11.9	Yes
6/14/2004	1222.1	1234.6	-12.5	Yes
6/15/2004	1223.9	1236.6	-12.7	Yes
6/16/2004	1225.1	1238	-12.9	Yes
6/17/2004	1225.5	1238.4	-12.9	Yes
6/18/2004	1224.3	1236.6	-12.3	Yes
6/19/2004	1225.1	1237.4	-12.3	Yes
6/20/2004	1220.2	1232.3	-12.1	Yes
6/21/2004	1219.2	1231.3	-12.1	Yes
6/22/2004	1218.7	1230.7	-12	Yes
6/23/2004	1218	1230	-12	Yes
6/24/2004	1216.9	1228.7	-11.8	Yes
6/25/2004	1216.3	1228.1	-11.8	Yes
6/26/2004	1215.7	1227.5	-11.8	Yes
6/27/2004	1215.1	1226.9	-11.8	Yes
6/28/2004	1214.6	1226.3	-11.7	Yes
6/29/2004	1214.7	1226.5	-11.8	Yes
6/30/2004	1215	1226.8	-11.8	Yes

Figure 5 - Southeast Observation Well Pair  
Second Quarter 2004



**Southeast Observation Well Pair  
Second Quarter 2004**

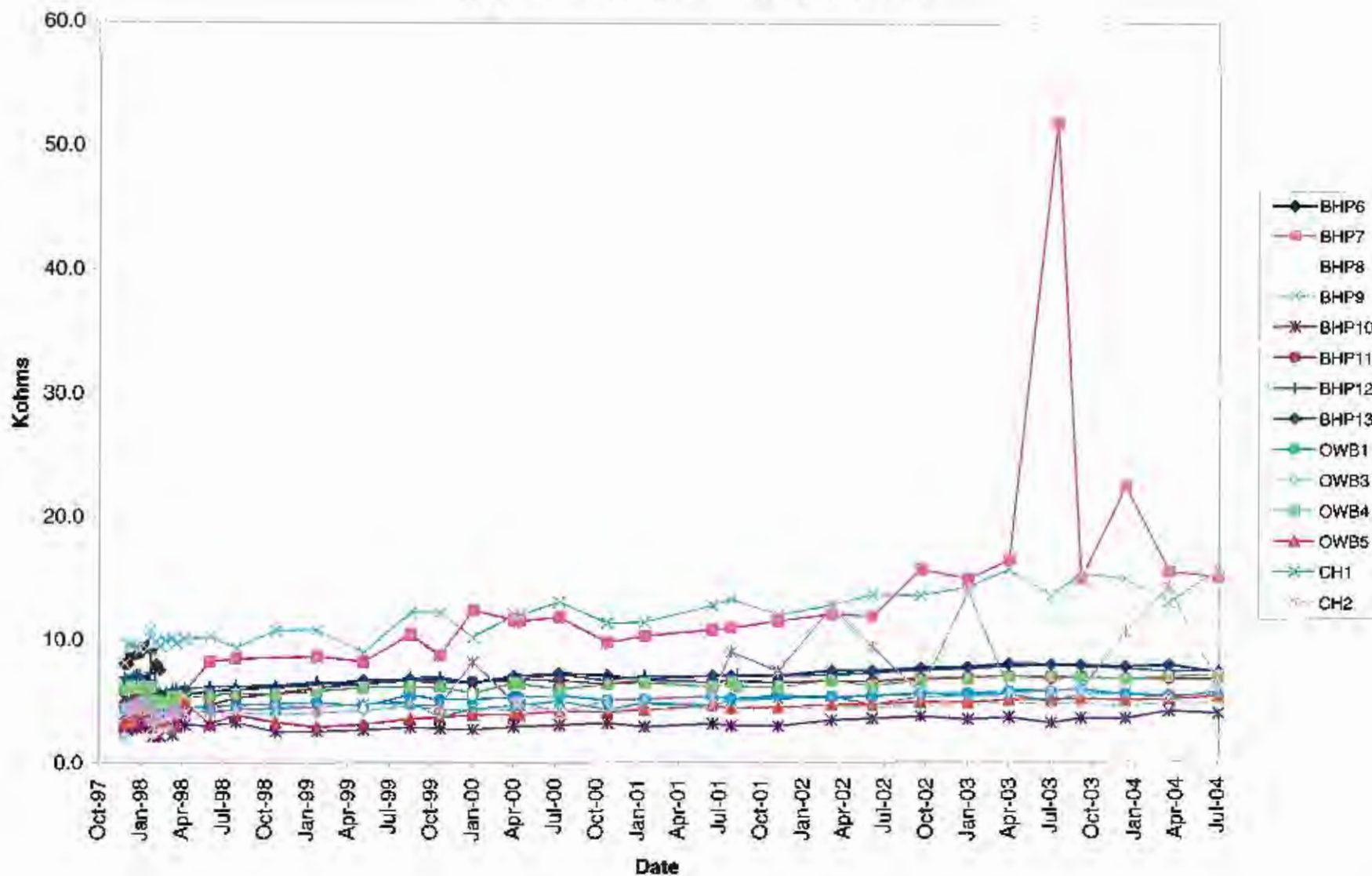
Date	BHP-6	OWB-5	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
4/1/2004	1248	1249.8	-1.8	Yes
4/2/2004	1247.5	1248	-0.5	Yes
4/3/2004	1252.7	1253.3	-0.6	Yes
4/4/2004	1255.5	1256.1	-0.6	Yes
4/5/2004	1257.1	1257.7	-0.6	Yes
4/6/2004	1256.6	1257.2	-0.6	Yes
4/7/2004	1253.7	1254.3	-0.6	Yes
4/8/2004	1253	1253.4	-0.4	Yes
4/9/2004	1252.9	1253.4	-0.5	Yes
4/10/2004	1253	1253.6	-0.6	Yes
4/11/2004	1253.1	1253.8	-0.7	Yes
4/12/2004	1257.1	1257.8	-0.7	Yes
4/13/2004	1254.9	1255.6	-0.7	Yes
4/14/2004	1254.4	1255.1	-0.7	Yes
4/15/2004	1258.7	1259.4	-0.7	Yes
4/16/2004	1260.5	1261.2	-0.7	Yes
4/17/2004	1262.2	1262.9	-0.7	Yes
4/18/2004	1257.2	1258	-0.8	Yes
4/19/2004	1259.3	1260.4	-1.1	Yes
4/20/2004	1256.2	1257.4	-1.2	Yes
4/21/2004	1254.6	1255.8	-1.2	Yes
4/22/2004	1253.7	1254.9	-1.2	Yes
4/23/2004	1253.2	1254.4	-1.2	Yes
4/24/2004	1252.6	1253.8	-1.2	Yes
4/25/2004	1252	1253.2	-1.2	Yes
4/26/2004	1251.6	1252.8	-1.2	Yes
4/27/2004	1251.1	1252.3	-1.2	Yes
4/28/2004	1250.7	1251.9	-1.2	Yes
4/29/2004	1250.6	1252.3	-1.7	Yes
4/30/2004	1244	1245.7	-1.7	Yes
5/1/2004	1246.9	1248.6	-1.7	Yes
5/2/2004	1249.4	1250.2	-0.8	Yes
5/3/2004	1248.1	1248.9	-0.8	Yes
5/4/2004	1243.3	1244.1	-0.8	Yes
5/5/2004	1241	1241.8	-0.8	Yes
5/6/2004	1239.1	1239.9	-0.8	Yes
5/7/2004	1238.6	1239.4	-0.8	Yes
5/8/2004	1237.8	1238.6	-0.8	Yes
5/9/2004	1237.1	1237.9	-0.8	Yes
5/10/2004	1236.5	1237.3	-0.8	Yes
5/11/2004	1235.9	1236.7	-0.8	Yes
5/12/2004	1235.5	1236.3	-0.8	Yes
5/13/2004	1235	1235.8	-0.8	Yes
5/14/2004	1235.4	1236.3	-0.9	Yes
5/15/2004	1236.2	1237.6	-1.4	Yes
5/16/2004	1240	1241.3	-1.3	Yes



**Southeast Observation Well Pair  
Second Quarter 2004**

Date	BHP-6	OWB-5	Difference in Gradient	Maintained Hydrologic Control
	Water Level Elevation (feet AMSL)	Water Level Elevation (feet AMSL)	(feet)	(Yes/No)
5/17/2004	1244.7	1246	-1.3	Yes
5/18/2004	1246	1247.3	-1.3	Yes
5/19/2004	1246.8	1248.1	-1.3	Yes
5/20/2004	1247.4	1248.7	-1.3	Yes
5/21/2004	1248.2	1249.5	-1.3	Yes
5/22/2004	1249.4	1250.7	-1.3	Yes
5/23/2004	1248.6	1250.4	-1.8	Yes
5/24/2004	1249.2	1251	-1.8	Yes
5/25/2004	1249.6	1251.3	-1.7	Yes
5/26/2004	1249.7	1251.4	-1.7	Yes
5/27/2004	1249.5	1251.2	-1.7	Yes
5/28/2004	1249	1250.7	-1.7	Yes
5/29/2004	1248.9	1250.6	-1.7	Yes
5/30/2004	1252.3	1253.9	-1.6	Yes
5/31/2004	1253.7	1255.3	-1.6	Yes
6/1/2004	1249.4	1251	-1.6	Yes
6/2/2004	1247.6	1249.2	-1.6	Yes
6/3/2004	1246.3	1247.9	-1.6	Yes
6/4/2004	1240.7	1242.3	-1.6	Yes
6/5/2004	1239.7	1241.1	-1.4	Yes
6/6/2004	1238.7	1240.1	-1.4	Yes
6/7/2004	1238	1239.4	-1.4	Yes
6/8/2004	1236.9	1238.3	-1.4	Yes
6/9/2004	1235.6	1237	-1.4	Yes
6/10/2004	1234.2	1235.6	-1.4	Yes
6/11/2004	1234.9	1236.3	-1.4	Yes
6/12/2004	1234.4	1235.6	-1.2	Yes
6/13/2004	1234.2	1235.4	-1.2	Yes
6/14/2004	1239.1	1240.3	-1.2	Yes
6/15/2004	1241.2	1242.4	-1.2	Yes
6/16/2004	1242.6	1243.8	-1.2	Yes
6/17/2004	1243	1244.2	-1.2	Yes
6/18/2004	1241.2	1242.4	-1.2	Yes
6/19/2004	1242.2	1242.8	-0.6	Yes
6/20/2004	1237.1	1237.7	-0.6	Yes
6/21/2004	1236.1	1236.7	-0.6	Yes
6/22/2004	1235.5	1236.1	-0.6	Yes
6/23/2004	1234.8	1235.4	-0.6	Yes
6/24/2004	1233.5	1234.1	-0.6	Yes
6/25/2004	1232.9	1233.5	-0.6	Yes
6/26/2004	1232.4	1233.3	-0.9	Yes
6/27/2004	1231.8	1233	-1.2	Yes
6/28/2004	1231.2	1232.4	-1.2	Yes
6/29/2004	1231.4	1232.6	-1.2	Yes
6/30/2004	1231.7	1232.9	-1.2	Yes

Figure 6 - Annular Resistivity in Kohms



**ATTACHMENT 2**

**POC QUARTERLY COMPLIANCE MONITORING REPORT**

**FLORENCE COPPER PROJECT  
QUARTERLY COMPLIANCE MONITORING REPORT  
SECOND QUARTER 2004**

***Primary Sampling Activities***

Quarterly compliance monitoring was conducted for the Florence Copper project on April 5 through April 7 and April 19, 2004 (Second Quarter 2004). 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). 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 the Second Quarter 2004 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, none had reported concentrations exceeding the approved alert levels (ALs).

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

***AL Exceedances and Verification Sampling***

Part II.F.4 of the APP (AL, Aquifer Quality Limit [AQL], and Discharge Limit [DL] Contingencies) requires verification sampling for an AL exceedance. There were no AL exceedances during this quarterly sampling. No verification sampling was required.

***Contingency Sampling Plan to be Implemented During Third Quarter 2004***

There were no AL exceedances verified during this quarterly sampling. No contingency sampling plan is required during the Third Quarter of 2004.

***Results of Contingency Sampling Plan Implemented from First Quarter 2004***

There were no AL exceedances during the First Quarter 2004. Therefore, no contingency sampling plan was implemented.

***Issues***

There were no other issues to report during the Second Quarter 2004.





TABLE 1. 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	Apr 07 2004	20.0	31	97	109	0.74	1.3	640	1028
M2-GU	Apr 06 2004	22.0	39	140	275	0.91	1.4	700	1496
M3-GL	Apr 06 2004	20.0	36	130	187	0.79	1.3	630	1157
M4-O	Apr 06 2004	4.3	15	55	405	2.4	5.1	390	1072
M6-GU	Apr 06 2004	3.0	5.1	50	86	0.76	1.3	320	620
M7-GL	Apr 06 2004	<0.25	1	35	82	0.93	1.7	280	464
M8-O	Apr 06 2004	<0.25	1	73	122	2.0	3.6	350	609
M14-GL	Apr 06 2004	2.2	23	56	144	0.65	1.4	380	874
M15-GU	Apr 06 2004	26.0	44	76	126	0.56	1.2	680	1359
M16-GU	Apr 07 2004	30.0	52	180	248	0.66	1.1	850	1635
M17-GL	Apr 19 2004	5.6	9.3	110	209	0.84	1.6	450	831
M18-GU	Apr 07 2004	18.0	36	160	288	1.3	1.6	680	1323
M19-LBF	Apr 05 2004	12.0	21	53	89	0.49	1	480	794
M20-O	Apr 05 2004	9.0	14	65	112	0.79	1.7	490	809
M21-LBF	Apr 05 2004	30.0	87	240	487	0.79	1.1	940	2867
M22-O	Apr 06 2004	6.1	8.6	51	86	0.8	1.3	400	1094
M23-LBF	Apr 06 2004	42.0	89	270	411	0.74	1.3	1300	2392
M23-LBF (Dup)	Apr 06 2004	41.0	69	270	411	0.74	1.3	1300	2392
M24-O	Apr 07 2004	11.0	19	730	1364	1.2	2.5	1300	2363
M24-O (Dup)	Apr 07 2004	10.0	19	740	1364	1.1	2.5	1300	2363
M25-LBF	Apr 07 2004	32.0	76	230	387	0.76	1.6	1100	2683
M26-O	Apr 05 2004	<0.25	1	60	105	1.7	3.4	330	556
M26-O (Dup)	Apr 05 2004	<0.25	1	60	105	1.6	3.4	350	556
M27-LBF	Apr 05 2004	32.0	51	130	179	0.4	1	1100	1745
M28-LBF	Apr 05 2004	1.6	2.6	46	81	0.8	1.6	360	610
M29-LBF	Apr 05 2004	45.0	84	300	465	0.66	1.1	1300	2751
M30-O	Apr 05 2004	11.0	18	58	102	0.76	1.6	450	824
M31-LBF	Apr 05 2004	26.0	46	220	330	0.83	1.3	880	1665
O19-GL	Apr 07 2004	11.0	17	62	99	0.65	1.4	460	770
O49-GL	Apr 05 2004	10.0	18	74	159	0.59	1	520	849
P19-L-O	Apr 07 2004	6.3	12	63	107	1.5	2.8	470	767
P49-O	Apr 05 2004	3.6	6.2	110	181	1.0	2	440	801
Laboratory Detection Limit		0.25		2		0.4		10	
Arizona Aquifer Water Quality Standard		-		-		4		-	

All results in milligrams per liter (mg/l)

&lt; = less than the laboratory practical quantitation limit

TABLE 2. SUMMARY OF QUARTERLY FIELD PARAMETERS

Well ID	Sample Date	Temperature (°C)	Temperature (°F)	pH	Conductivity (µmhos/cm)
M1-GL	Apr 07 2004	21.8	71.2	7.55	1051
M2-GU	Apr 05 2004	19.6	67.3	7.50	1115
M3-GL	Apr 05 2004	21.6	70.9	7.53	1030
M4-O	Apr 05 2004	23.4	74.1	7.51	638
M6-GU	Apr 05 2004	25.0	77.0	8.45	678
M7-GL	Apr 05 2004	24.3	75.7	9.30	490
M8-O	Apr 05 2004	29.3	84.7	8.78	666
M14-GL	Apr 06 2004	27.0	80.6	8.45	795
M15-GU	Apr 06 2004	24.6	76.3	7.54	1281
M16-GU	Apr 07 2004	24.0	75.2	7.37	1530
M17-GL	Apr 19 2004	28.5	83.3	8.11	832
M18-GU	Apr 07 2004	19.5	67.1	7.51	1004
M19-LBF	Apr 05 2004	22.7	72.9	7.60	762
M20-O	Apr 05 2004	23.6	74.5	7.53	741
M21-UBF	Apr 05 2004	22.2	72.0	7.24	1437
M22-O	Apr 06 2004	27.4	81.3	8.02	756
M23-UBF	Apr 06 2004	22.0	71.6	7.16	2095
M24-O	Apr 07 2004	30.4	86.7	7.72	1956
M25-UBF	Apr 07 2004	20.9	69.6	7.22	1609
M26-O	Apr 05 2004	29.0	84.2	8.53	584
M27-LBF	Apr 05 2004	23.2	73.8	7.54	1556
M28-LBF	Apr 05 2004	26.0	78.8	8.29	663
M29-UBF	Apr 05 2004	22.6	72.7	7.21	2118
M30-O	Apr 05 2004	24.1	75.4	7.48	779
M31-LBF	Apr 05 2004	22.4	72.3	7.30	1340
O19-GL	Apr 07 2004	23.6	74.5	7.73	782
O49-GL	Apr 05 2004	25.7	78.3	7.63	936
P19-I-O	Apr 07 2004	24.3	75.7	7.69	723
P49-O	Apr 05 2004	27.6	81.7	7.65	790