

**FLORENCE COPPER INC.
FLORENCE COPPER PROJECT
FIRST QUARTER 2005 MONITORING REPORT
U.L.C. PERMIT AZ396000001
AND
A.P.P. PERMIT 101704**

April 28, 2005

MERRILL MINING, LLC
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**HUGH NOWELL
CORPORATE COUNSEL**

April 28, 2005

Mr. Doug Liden
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
FIRST QUARTER 2005 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 January 1 through March 31, 2005. Copies of records required by Part II.G.1 are maintained at the Mine Site along with other information that is summarized below.

Florence Copper is subject to the requirements of Underground Injection Permit (UIC) Permit No. AZ396000001 issued by the United States Environmental Protection Agency (USEPA) on May 1, 1997, and APP No. 101704 issued by the Arizona Department of Environmental Quality (ADEQ) on June 9, 1997, and last amended on July 16, 2004.

As you are aware, Florence Copper discontinued hydraulic control on September 1, 2004, in order to conduct groundwater quality tests in accordance with Part II.H.2 of the APP and Part II.I.2 of the UIC Permit. A report of the results has been provided to the ADEQ and USEPA for review. The pumping wells remain off during the evaluation process. As a result, no extraction flows are reported under Section (b) below and the water level measurements that are reported in Section (b) reflect natural conditions, not hydraulic control.

(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.**

Hydraulic control was discontinued on September 1, 2004, for purposes of collecting groundwater samples following a 90-day period of no hydraulic control, and remains discontinued for evaluation of results. Accordingly there are no injection or extraction flows to report.

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

Although hydraulic control was not maintained during this reporting period, water level measurements were continued by manual measurements in the four observation wells and their nearest inward neighbors. Figure 1 of Attachment 1 and the supporting data show the groundwater elevations in the four well pairs.

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

The attached report *Florence Project Quarterly Compliance Monitoring Report – First Quarter 2005* 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 on January 13, 19, and 20, 2005.

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.

Mr. Martin Zeleznik
April 28, 2005
Page 3

(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 2. 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.

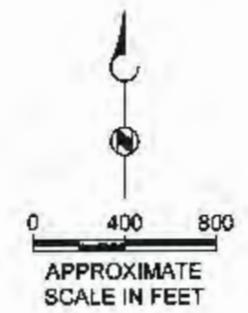
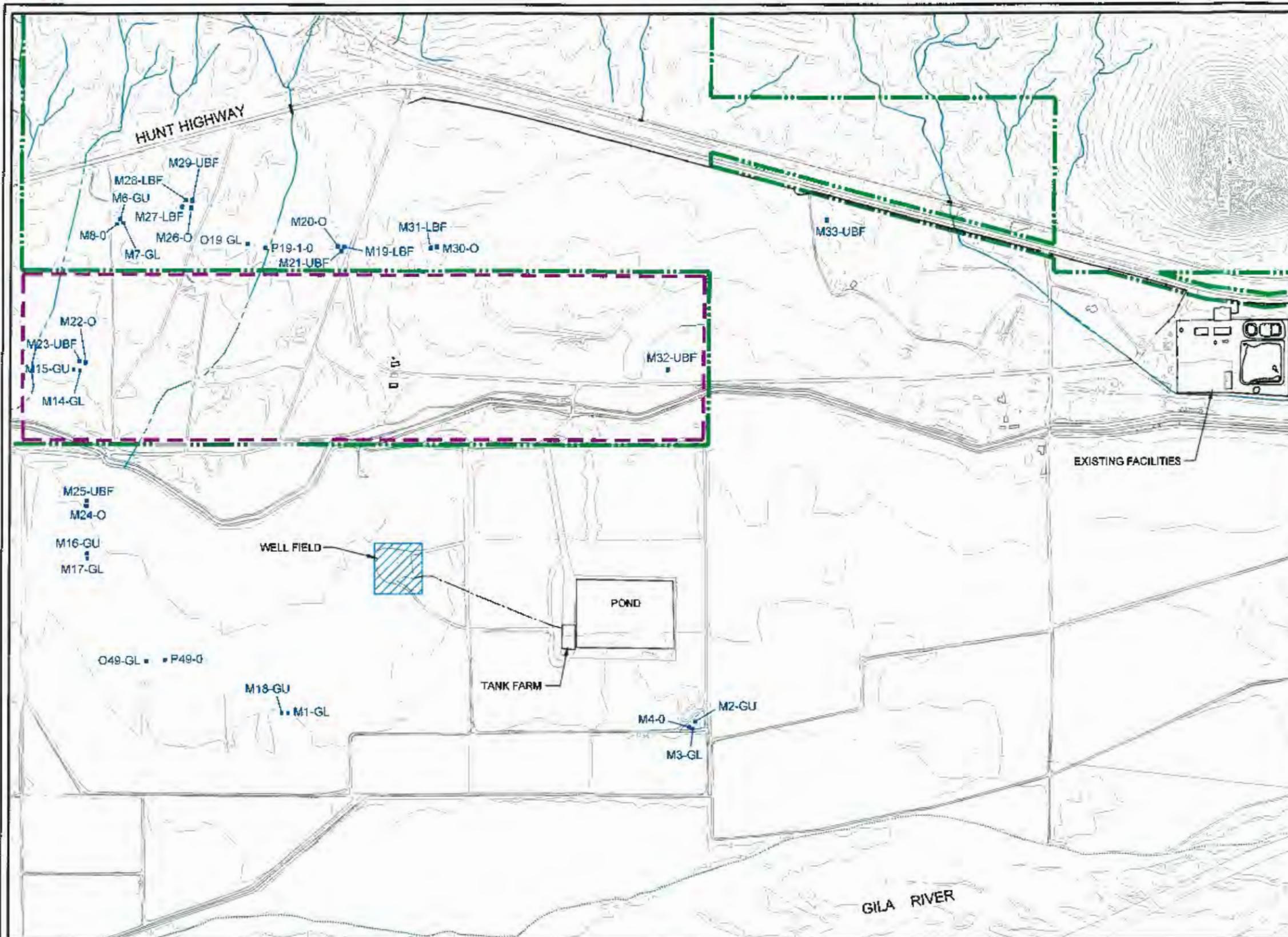
Sincerely,



Hugh Nowell
Corporate Counsel

BAS:lld
Attachments

cc: Florence Copper File

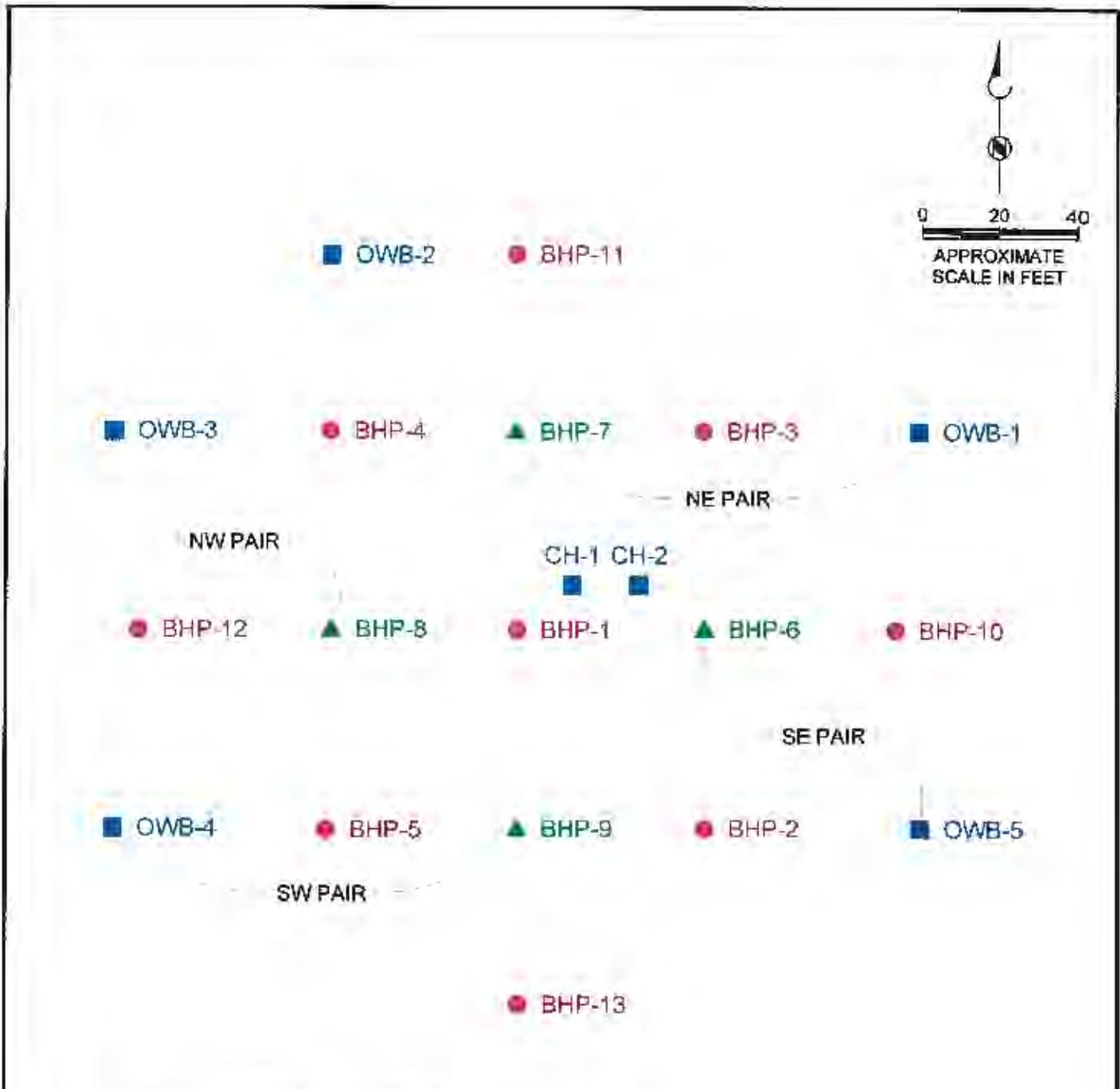


EXPLANATION

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

**BROWN AND
CALDWELL**

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



EXPLANATION

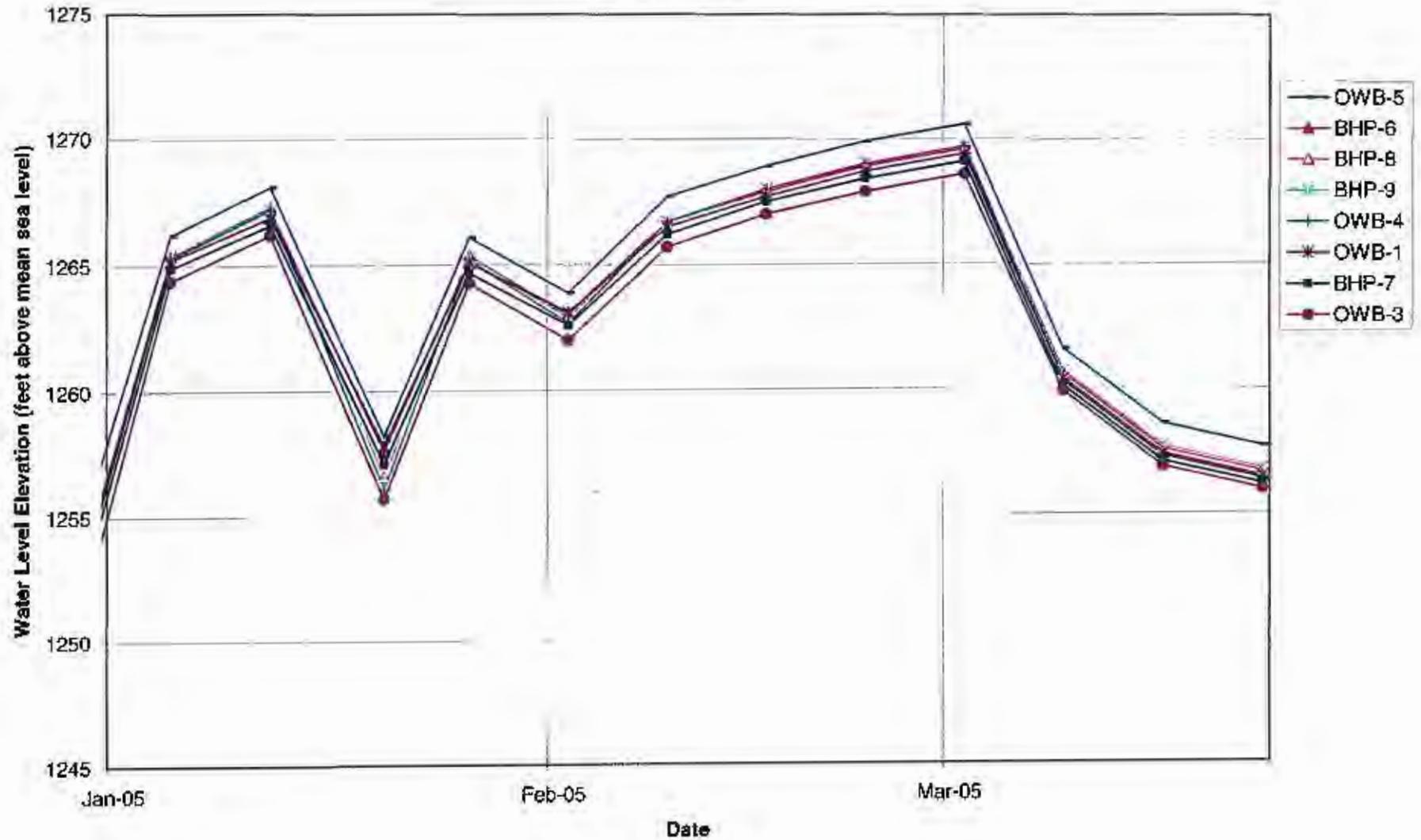
- BHP-10 PUMPING WELL (CURRENTLY INACTIVE)
- OWB-2 OBSERVATION WELL
- ▲ BHP-8 INJECTION / RECOVERY WELL (RECOVERY MODE SINCE 1998)



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

ATTACHMENT 1
MINE OPERATIONS MONITORING

Figure 1 - Well Field Water Elevations
First Quarter 2005



**Well Field Water Elevations
First Quarter 2005**

Date	BHP-6	BHP-7	BHP-8	BHP-9	OWB-1	OWB-3	OWB-4	OWB-5
12/29/2004	1251.7	1250.8	1251.7	1251.8	1251.3	1249.7	1251.7	1253.3
1/5/2005	1265.4	1264.9	1265.4	1265.4	1265.2	1264.4	1265.3	1266.2
1/12/2005	1267.2	1266.6	1267.3	1267.2	1266.9	1266.2	1267.2	1268.1
1/20/2005	1257.6	1257.1	1256.6	1256.6	1257.8	1255.7	1256.1	1258.2
1/26/2005	1265.2	1264.7	1265.4	1265.3	1265.1	1264.3	1265.2	1266.1
2/2/2005	1263.1	1262.6	1263.0	1262.9	1263.1	1262.0	1262.7	1263.9
2/9/2005	1266.7	1266.2	1266.7	1266.7	1266.5	1265.7	1266.7	1267.7
2/16/2005	1267.9	1267.5	1268.0	1268.0	1267.7	1267.0	1268.0	1268.9
2/23/2005	1268.9	1268.4	1269.0	1269.0	1268.7	1267.9	1269.0	1269.9
3/2/2005	1269.6	1269.1	1269.7	1269.7	1269.4	1268.6	1269.7	1270.6
3/9/2005	1260.6	1260.1	1260.6	1260.7	1260.4	1259.9	1260.3	1261.6
3/16/2005	1257.6	1257.1	1257.6	1257.7	1257.4	1256.9	1257.3	1258.6
3/23/2005	1256.7	1256.2	1256.7	1256.8	1256.5	1256.0	1256.4	1257.7
3/30/2005	1245.6	1245.1	1245.6	1245.7	1245.4	1244.3	1245.3	1246.6
Water Level Elevations (feet AMSL)								

Figure 2 - Annular Resistivity in Kohms

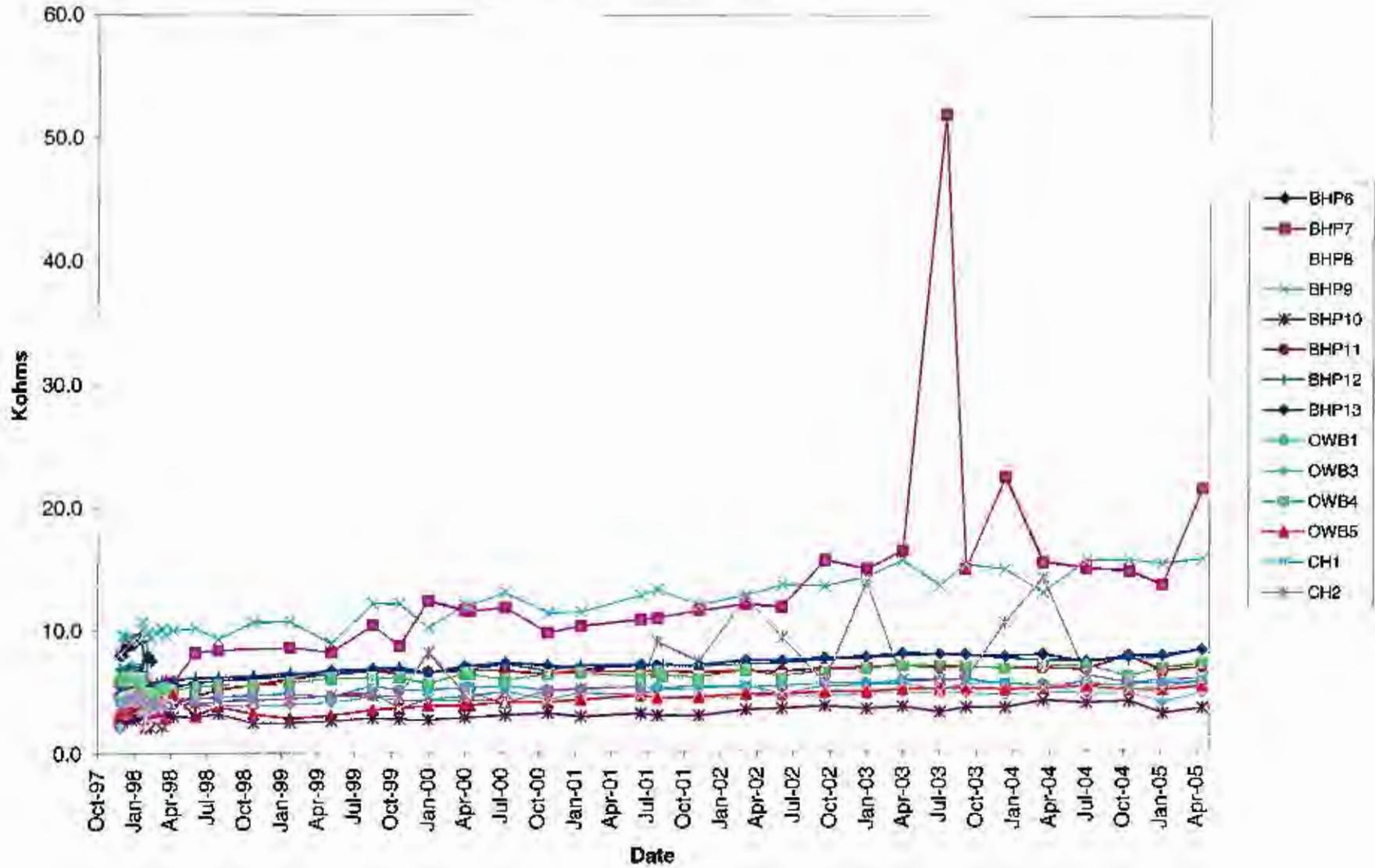


TABLE 1. SUMMARY OF ANALYTICAL RESULTS, QUARTERLY PARAMETERS

Well ID	Sample Date	Magnesium		Sulfate		Fluoride		Total Dissolved Solids	
		Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level	Concentration	Alert Level
M1-GL	Jan 13 2005	20.0	31	100	109	0.78	1.3	640	1028
M2-GU	Jan 13 2005	22.0	39	120	275	0.9	1.4	800	1496
M3-GL	Jan 13 2005	18.0	36	110	187	0.76	1.3	630	1157
M4-O	Jan 13 2005	4.1	15	55	405	2.5	5.1	430	1072
M6-GU	Jan 20 2005	2.9	5.1	50	86	0.74	1.3	370	620
M6-GU (Dup)	Jan 20 2005	2.9	5.1	50	86	0.7	1.3	370	620
M7-GL	Jan 20 2005	<0.25	1	35	82	0.94	1.7	280	464
M8-O	Jan 20 2005	<0.25	1	73	122	2.2	3.6	420	609
M14-GL	Jan 20 2005	2.0	23	56	144	0.68	1.4	420	874
M15-GU	Jan 20 2005	25.0	44	77	126	0.57	1.2	850	1359
M16-GU	Jan 13 2005	29.0	52	170	248	0.64	1.1	980	1635
M17-GL	Jan 13 2005	5.5	9.3	100	209	0.8	1.6	470	831
M18-GU	Jan 13 2005	17.8	36	150	288	1.0	1.6	700	1323
M19-LBF	Jan 19 2005	12.0	21	54	89	0.56	1	440	794
M20-O	Jan 19 2005	8.6	14	67	112	0.88	1.7	470	809
M21-UBF	Jan 19 2005	26.0	87	210	487	0.8	1.1	920	2867
M22-O	Jan 20 2005	5.8	8.6	51	86	0.77	1.3	390	1094
M23-UBF	Jan 20 2005	40.0	69	260	411	0.76	1.3	1400	2392
M24-O	Jan 13 2005	9.8	19	750	1364	1.1	2.5	1300	2363
M24-O (Dup)	Jan 13 2005	10.0	19	790	1364	1.2	2.5	1300	2363
M25-UBF	Jan 13 2005	21.0	76	180	387	0.9	1.6	840	2683
M26-O	Jan 19 2005	<0.25	1	62	105	1.7	3.4	350	556
M27-LBF	Jan 19 2005	32.0	51	120	179	0.45	1	1100	1745
M28-LBF	Jan 19 2005	1.6	2.6	47	81	0.82	1.6	350	610
M29-UBF	Jan 19 2005	43.0	84	290	465	0.7	1.1	1300	2751
M29-UBF (Dup)	Jan 19 2005	44.0	84	270	465	1.1	1.1	1300	2751
M30-O	Jan 19 2005	11.0	18	58	102	0.82	1.6	460	824
M31-LBF	Jan 19 2005	24.0	46	210	330	0.82	1.3	830	1665
O19-GL	Jan 20 2005	10.0	17	56	99	0.68	1.4	450	770
O49-GL	Jan 19 2005	11.0	18	77	159	0.65	1	570	849
P19-1-O	Jan 20 2005	6.1	12	64	107	1.6	2.8	440	767
P49-O	Jan 19 2005	3.6	6.2	96	181	1.0	2	480	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 2. SUMMARY OF QUARTERLY FIELD PARAMETERS

Well ID	Sample Date	Temperature (°C)	Temperature (°F)	pH	Conductivity (µmhos/cm)
M1-GL	Jan 13 2005	21.6	70.9	7.74	1035
M2-GU	Jan 13 2005	19.6	67.3	7.60	1185
M3-GL	Jan 13 2005	21.7	71.1	7.77	999
M4-O	Jan 13 2005	23.3	73.9	7.60	631
M6-GU	Jan 20 2005	24.5	76.1	8.54	674
M7-GL	Jan 20 2005	24.2	75.6	9.51	490
M8-O	Jan 20 2005	26.7	80.1	8.88	660
M14-GL	Jan 20 2005	26.7	80.1	8.60	788
M15-GU	Jan 20 2005	24.3	75.7	7.34	1287
M16-GU	Jan 13 2005	23.5	74.3	7.65	1530
M17-GL	Jan 13 2005	28.0	82.4	8.58	829
M18-GU	Jan 13 2005	19.7	67.5	7.76	1047
M19-LBF	Jan 19 2005	22.8	73.0	7.84	763
M20-O	Jan 19 2005	23.6	74.5	7.71	738
M21-UBF	Jan 19 2005	22.0	71.6	7.48	1332
M22-O	Jan 20 2005	28.0	82.4	8.08	765
M23-UBF	Jan 20 2005	21.4	70.5	6.92	2061
M24-O	Jan 13 2005	29.6	85.3	8.07	1924
M25-UBF	Jan 13 2005	20.6	69.1	7.52	1201
M26-O	Jan 19 2005	28.6	83.5	8.73	584
M27-LBF	Jan 19 2005	22.9	73.2	7.72	1543
M28-LBF	Jan 19 2005	25.8	78.4	8.51	664
M29-UBF	Jan 19 2005	21.9	71.4	7.34	2026
M30-O	Jan 19 2005	24.1	75.4	7.64	769
M31-LBF	Jan 19 2005	22.4	72.3	7.52	1263
O19-GL	Jan 20 2005	23.3	73.9	7.65	744
O49-GL	Jan 19 2005	25.4	77.7	7.85	938
P19-1-O	Jan 20 2005	24.1	75.4	7.59	722
P49-O	Jan 19 2005	27.5	81.5	7.91	776