

**FLORENCE COPPER INC.
FLORENCE COPPER PROJECT
FOURTH QUARTER 2006 MONITORING REPORT
U.L.C. PERMIT AZ396000001
AND
A.P.F. PERMIT 101704**

January 26, 2007

MERRILL MINING, LLC
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HUGH NOWELL
CORPORATE COUNSEL

January 26, 2007

Ms. Nancy Rurrill
U.S. Environmental Protection Agency
Region 9, Ground Water Office, WTR-9
75 Hawthorne Street
San Francisco, California 94105-3901

**RE: MONITORING REPORT FOR UIC PERMIT NUMBER AZ396000001
FOURTH QUARTER 2006 REPORT**

Dear Ms. Rurrill,

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 October 1 through December 31, 2006. 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 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 – Fourth Quarter 2006* by Brown and Caldwell and sealed by Ms. Barbara Sylvester, Professional Engineer (Attachment 2), contains the POC monitoring records and results. Brown and Caldwell, along with Project personnel, conducted compliance sampling on October 2 through October 5, 2006.

Quarterly 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.

Ms. Nancy Runrill

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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 2. During the last quarter a historically high value was calculated for CH-1. This value returned to a normal range suggesting that the previous value was an outlier and not indicative of a physical condition of the well.

(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.

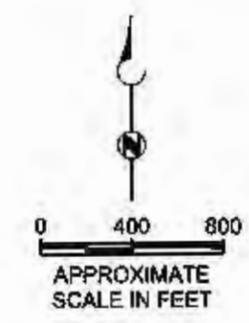
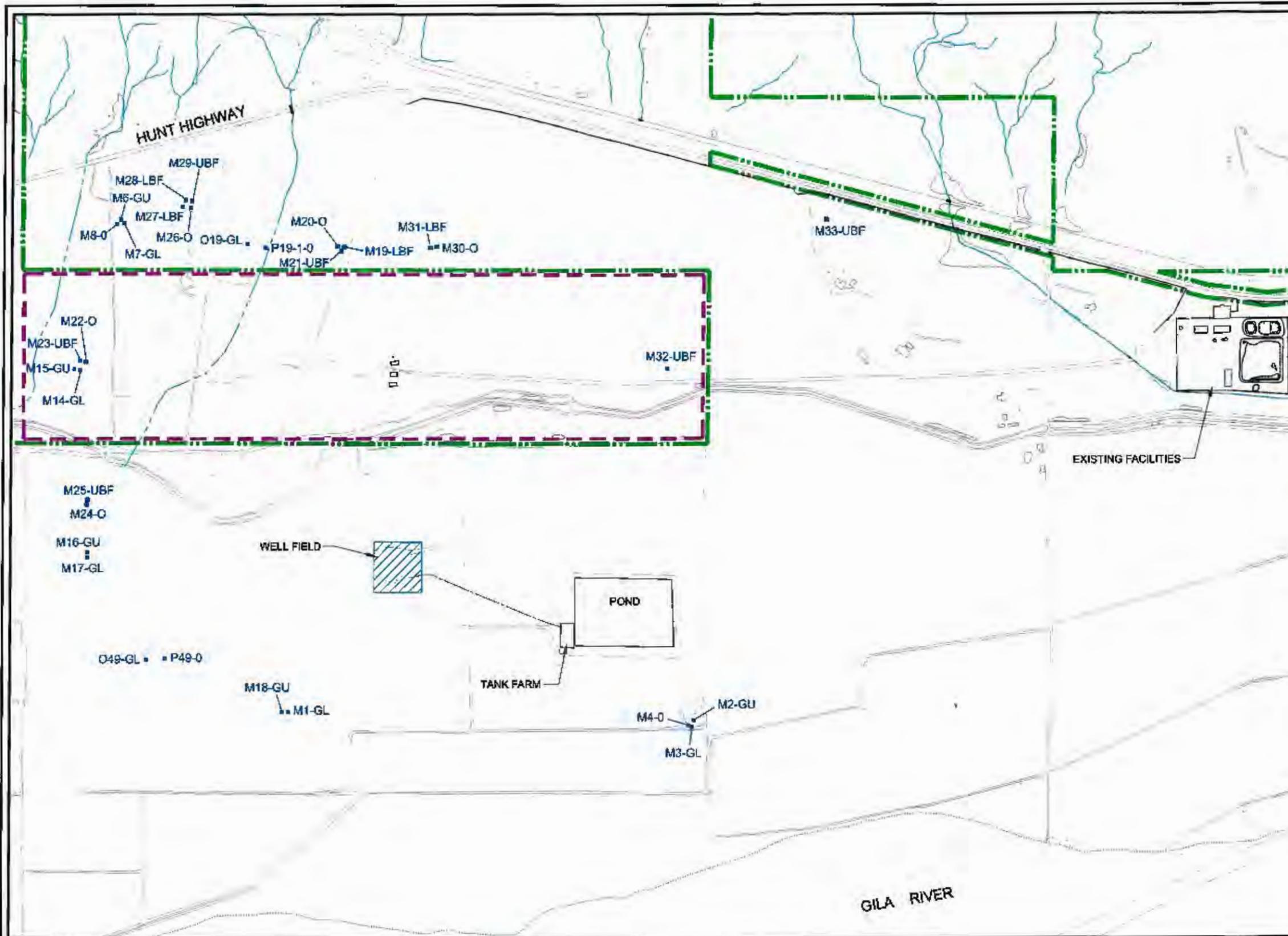
Sincerely,



Hugh Nowell
Corporate Counsel

BAS:lld
Attachments

cc: Florence Copper File

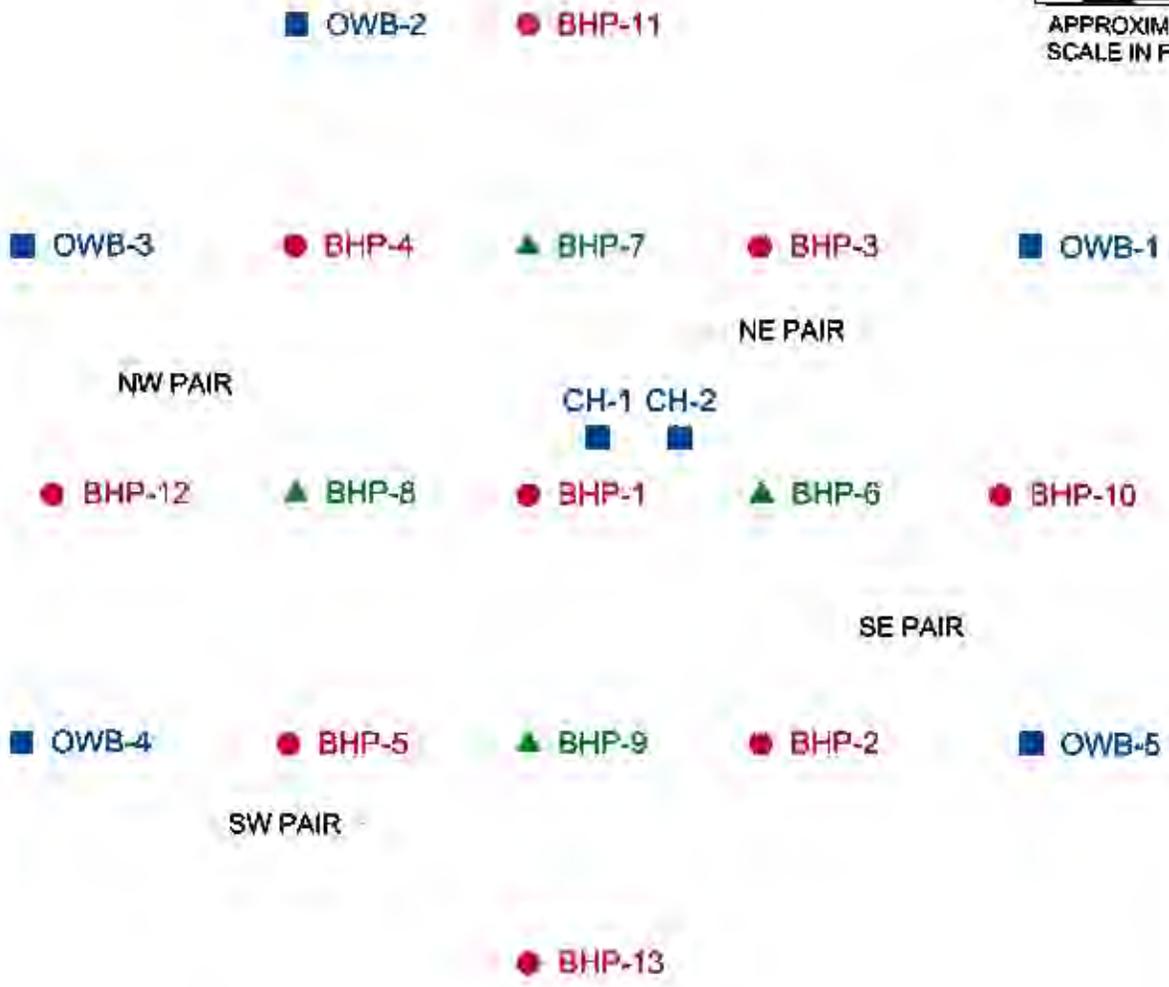
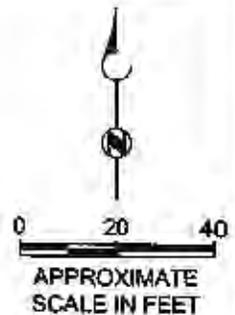


EXPLANATION

- 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**



EXPLANATION

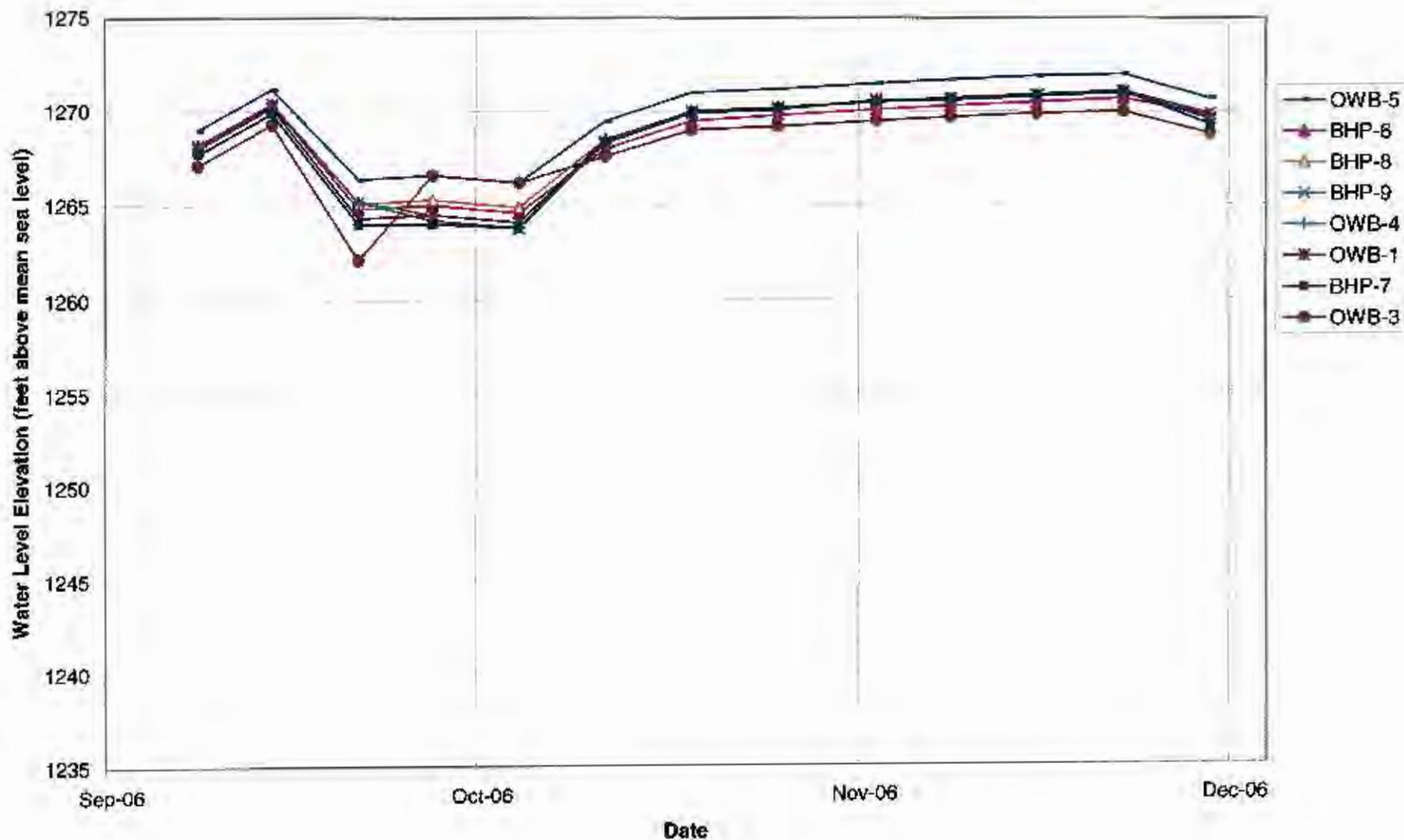
- BHP-10 PUMPING WELL (CURRENTLY INACTIVE)
- OWB-2 OBSERVATION WELL
- ▲ BHP-8 (INJECTION / RECOVERY WELL (RECOVERY MODE SINCE 1998))



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

ATTACHMENT 1
MINE OPERATIONS MONITORING

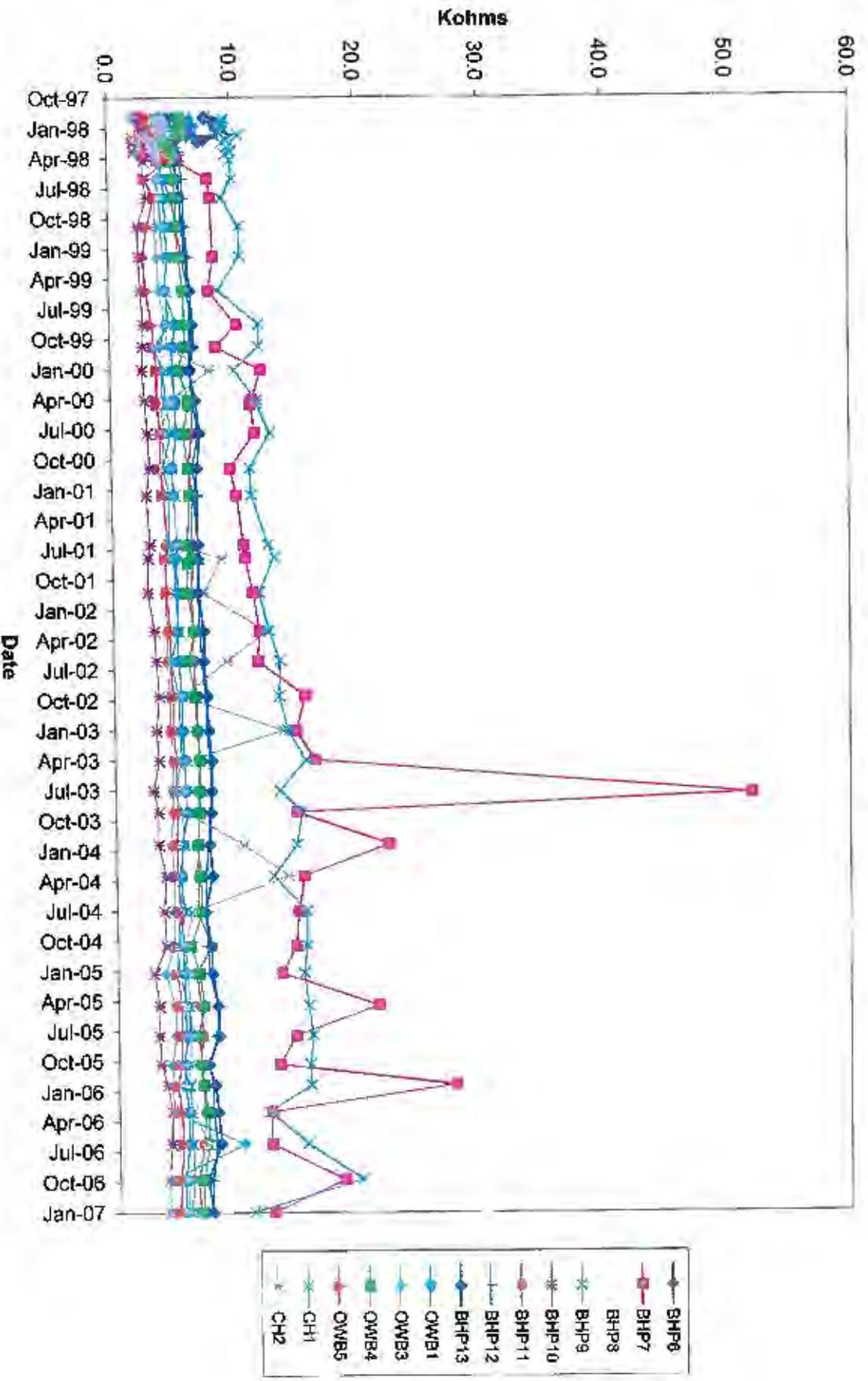
**Figure 1 - Well Field Water Elevations
Fourth Quarter 2006**



**Well Field Water Elevations
Fourth Quarter 2006**

Date	BHP-6	BHP-7	BHP-8	BHP-9	OWB-1	OWB-3	OWB-4	OWB-5
10/7/2006	1268.2	1267.7	1268.2	1268.2	1268.0	1267.1	1268.1	1269.0
10/13/2006	1270.4	1269.9	1270.4	1270.4	1270.2	1269.3	1270.3	1271.2
10/20/2006	1264.8	1264.0	1265.1	1265.2	1264.3	1262.1	1265.2	1266.4
10/26/2006	1265.0	1264.0	1265.3	1264.2	1264.5	1266.6	1264.5	1266.6
11/2/2006	1264.6	1263.8	1264.9	1263.8	1264.1	1266.2	1264.1	1266.2
11/9/2006	1268.0	1268.4	1268.5	1268.4	1268.3	1267.6	1268.5	1269.5
11/16/2006	1269.5	1270.0	1270.0	1270.0	1269.9	1269.0	1270.0	1271.0
11/23/2006	1269.8	1270.2	1270.2	1270.2	1270.1	1269.2	1270.2	1271.2
12/1/2006	1270.1	1270.5	1270.5	1270.5	1270.6	1269.5	1270.5	1271.5
12/7/2006	1270.3	1270.7	1270.7	1270.7	1270.6	1269.7	1270.7	1271.7
12/14/2006	1270.5	1270.9	1270.9	1270.9	1270.8	1269.9	1270.9	1271.9
12/21/2006	1270.7	1271.1	1271.1	1271.1	1271.0	1270.0	1271.1	1272.0
12/28/2006	1269.8	1269.3	1269.8	1269.9	1269.6	1268.8	1269.8	1270.7
Water Level Elevations (feet AMSL)								

Figure 2 - Annular Resistivity in Kohms



ATTACHMENT 2

POC QUARTERLY COMPLIANCE MONITORING REPORT

**FLORENCE COPPER PROJECT
QUARTERLY COMPLIANCE MONITORING REPORT
FOURTH QUARTER 2006**

Primary Sampling Activities

Quarterly compliance monitoring was conducted for the Florence Copper project on October 2 through 5, 2006 (Fourth Quarter 2006). Groundwater sampling and analysis was conducted in accordance with the requirements of Aquifer Protection Permit (APP) Permit Number 101704, Part II.E.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 Fourth Quarter 2006 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 First Quarter 2007

There were no AL exceedances verified during this quarterly sampling. No contingency sampling plan is required during the First Quarter of 2007.

Results of Contingency Sampling Plan Implemented from Third Quarter 2006

There were no AL exceedances during the Third Quarter 2006. Therefore, no contingency sampling plan was implemented.

Issues

There were no other issues to report during the Fourth Quarter 2006.



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	Oct 05 2006	23.0	31	99	109	0.82	1.3	640	1028
M2-GU	Oct 05 2006	28.0	39	140	275	0.91	1.4	850	1496
M3-GL	Oct 05 2006	20.0	36	120	187	0.81	1.3	640	1157
M4-O	Oct 05 2006	5.6	15	61	405	2.4	5.1	540	1072
M6-GU	Oct 04 2006	3.1	5.1	48	86	0.76	1.3	350	620
M7-GL	Oct 04 2006	<0.25	1	34	82	0.95	1.7	260	464
M7-GL (Dup)	Oct 04 2006	<0.25	1	34	82	0.96	1.7	260	464
M8-O	Oct 04 2006	<0.25	1	70	122	2.0	3.6	360	609
M14-GL	Oct 04 2006	2.4	23	54	144	0.71	1.4	260	874
M15-GU	Oct 04 2006	26.0	44	74	126	0.61	1.2	720	1359
M16-GU	Oct 05 2006	34.0	52	170	248	0.68	1.1	940	1635
M17-GL	Oct 05 2006	6.2	9.3	110	209	0.85	1.6	450	831
M18-GU	Oct 05 2006	21.0	36	160	288	1.0	1.6	790	1323
M19-LBF	Oct 03 2006	13.0	21	52	89	0.63	1	430	794
M19-LBF (Dup)	Oct 03 2006	12.0	21	52	89	0.62	1	440	794
M20-O	Oct 03 2006	8.9	14	64	112	0.91	1.7	460	809
M21-UBF	Oct 03 2006	20.0	87	160	487	0.93	1.1	680	2867
M22-O	Oct 04 2006	6.4	8.6	49	86	0.79	1.3	380	1094
M23-UBF	Oct 04 2006	41.0	69	260	411	0.81	1.3	1300	2392
M24-O	Oct 05 2006	11.0	19	710	1364	1.2	2.5	1300	2363
M24-O (Dup)	Oct 05 2006	12.0	19	700	1364	1.2	2.5	1300	2363
M25-UBF	Oct 05 2006	25.0	76	170	387	0.94	1.6	840	2683
M26-O	Oct 03 2006	<0.25	1	60	105	1.6	3.4	310	556
M27-LBF	Oct 03 2006	34.0	51	140	179	0.53	1	1100	1745
M28-LBF	Oct 03 2006	1.7	2.6	46	81	0.86	1.6	340	610
M29-UBF	Oct 03 2006	40.0	84	260	465	0.77	1.1	1200	2751
M30-O	Oct 03 2006	12.0	18	56	102	0.87	1.6	460	824
M31-LBF	Oct 03 2006	17.0	46	160	330	0.98	1.3	640	1665
O19-GL	Oct 04 2006	11.0	17	54	99	0.68	1.4	440	770
O49-GL	Oct 03 2006	10.0	18	68	159	0.69	1	510	849
P19-1-O	Oct 04 2006	6.5	12	61	107	1.5	2.8	440	767
P49-O	Oct 03 2006	3.8	6.2	100	181	1.0	2	450	801
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	Oct 05 2006	22.6	72.7	7.59	1073
M2-GU	Oct 05 2006	20.5	68.9	7.39	1338
M3-GL	Oct 05 2006	22.4	72.3	7.62	1007
M4-O	Oct 05 2006	24.0	75.2	7.49	697
M6-GU	Oct 04 2006	24.8	76.6	8.54	679
M7-GL	Oct 04 2006	24.7	76.5	9.41	490
M8-O	Oct 04 2006	29.2	84.6	8.89	665
M14-GL	Oct 04 2006	27.5	81.5	8.55	808
M15-GU	Oct 04 2006	25.2	77.4	7.50	1294
M16-GU	Oct 05 2006	24.0	75.2	7.50	1562
M17-GL	Oct 05 2006	28.4	83.1	8.39	835
M18-GU	Oct 05 2006	20.8	69.4	7.53	1181
M19-LBF	Oct 03 2006	23.2	73.8	7.75	770
M20-O	Oct 03 2006	23.9	75.0	7.57	751
M21-UBF	Oct 03 2006	22.4	72.3	7.45	1074
M22-O	Oct 04 2006	28.8	83.8	8.04	783
M23-UBF	Oct 04 2006	22.4	72.3	7.19	1979
M24-O	Oct 05 2006	30.9	87.6	7.85	1949
M25-UBF	Oct 05 2006	21.6	70.9	7.43	1282
M26-O	Oct 03 2006	29.1	84.4	8.62	590
M27-LBF	Oct 03 2006	23.4	74.1	7.50	1585
M28-LBF	Oct 03 2006	26.4	79.5	8.39	673
M29-UBF	Oct 03 2006	22.5	72.5	7.19	1811
M30-O	Oct 03 2006	24.4	75.9	7.49	780
M31-LBF	Oct 03 2006	22.8	73.0	7.49	1609
O19-GL	Oct 04 2006	23.9	75.0	7.77	755
O49-GL	Oct 02 2006	25.9	78.6	7.56	893
P19-I-O	Oct 04 2006	24.6	76.3	7.64	737
P49-O	Oct 02 2006	28.3	82.8	7.53	796