Kennecott Utah Copper Corporation
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William J. Adams , Ph.D.
Director, Environmental Affairs

Kennecott

February 28, 2002

Mr. Wayne Hedberg, Permit Supervisor
Minerals Reclamation Program
Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801

Subject: Annual Reports for 2001, Kennecott Utah Copper Corporation M/045/004, Pine Canyon Reclamation Project.

Dear Mr. Hedberg:

Enclosed are the water level and water quality data for the Carr Fork shaft that were referenced in the annual report submitted to your office January 31, 2002. The data are complete through August 7, 2001.

The pump was shut down in late July 2001 and the pump and water level monitoring removed in August. From August through December the old pump was replaced with a larger 2000 horsepower submersible pump. This was required to maintain a pumping target rate of 3200 to 3500 gallons per minute. Pumping was not continued with the new pump until late December. No water level or quality data were recorded for the shutdown or startup period. Water level records and quality data will be collected for 2002.

If you have any questions about this annual report data, please contact Jim Kandolin at 569-6208.

Sincerely,

Lydia S. Salmon
for William J. Adams, Ph.D.
Director, Environmental Affairs

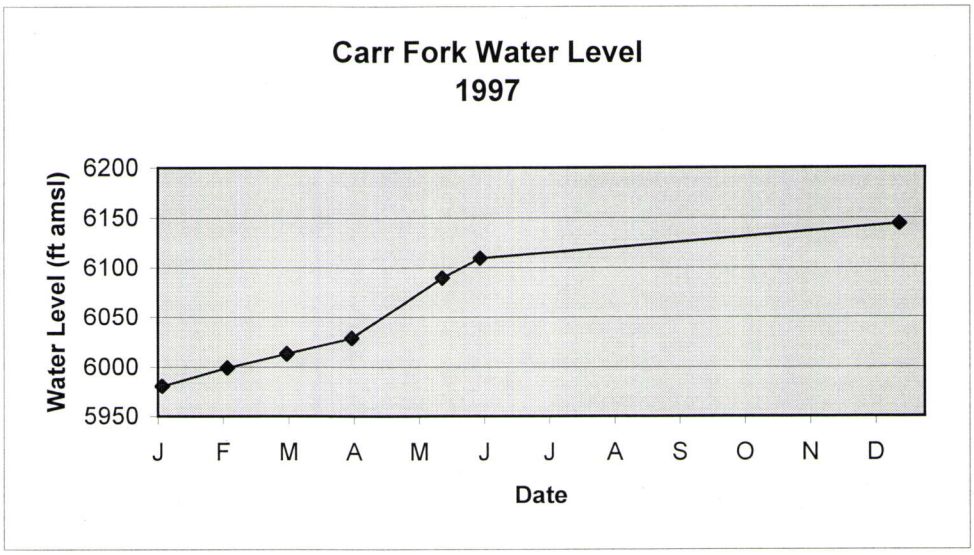
Enclosures

RECEIVED
FEB 28 2002
DIVISION OF
OIL, GAS AND MINING

1997 Carr Fork Exhaust Shaft
Water Level Soundings

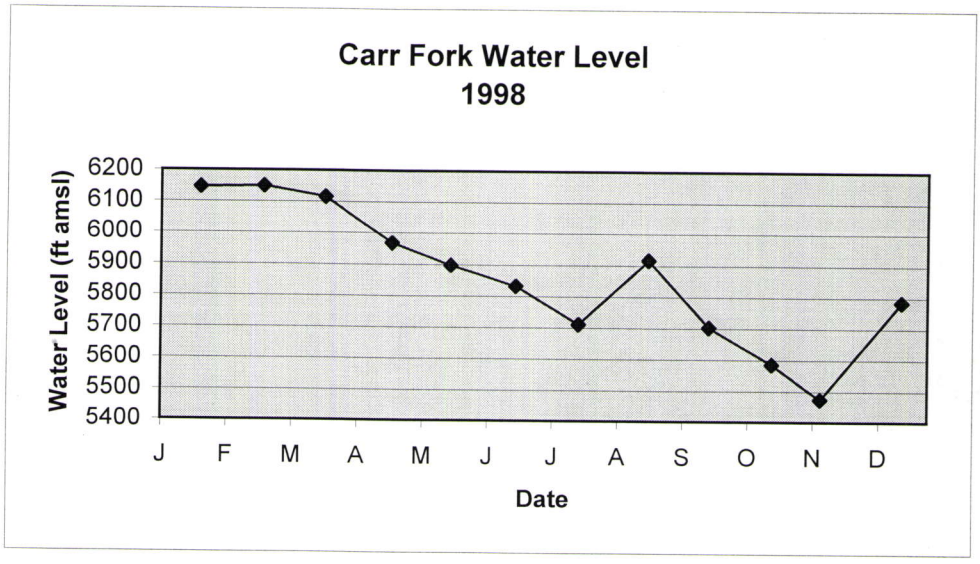
Date	Water Elev. (ft amsl)
03-Jan-97	5980.77
03-Feb-97	5999.33
03-Mar-97	6013.36
03-Apr-97	6028.88
16-May-97	6089.75
03-Jun-97	6109.69
19-Dec-97	6144.20

NOTE: Carr Fork Exhaust Shaft was plugged beginning Jun-97; upper 200 ft of shaft was excavated Jun- to Dec-97, hence no water level soundings. Collar of the Exhaust Shaft (@ 6240 ft) is now the lowest of the four Carr Fork Shafts.



1998 Carr Fork Exhaust Shaft
Water Level Soundings

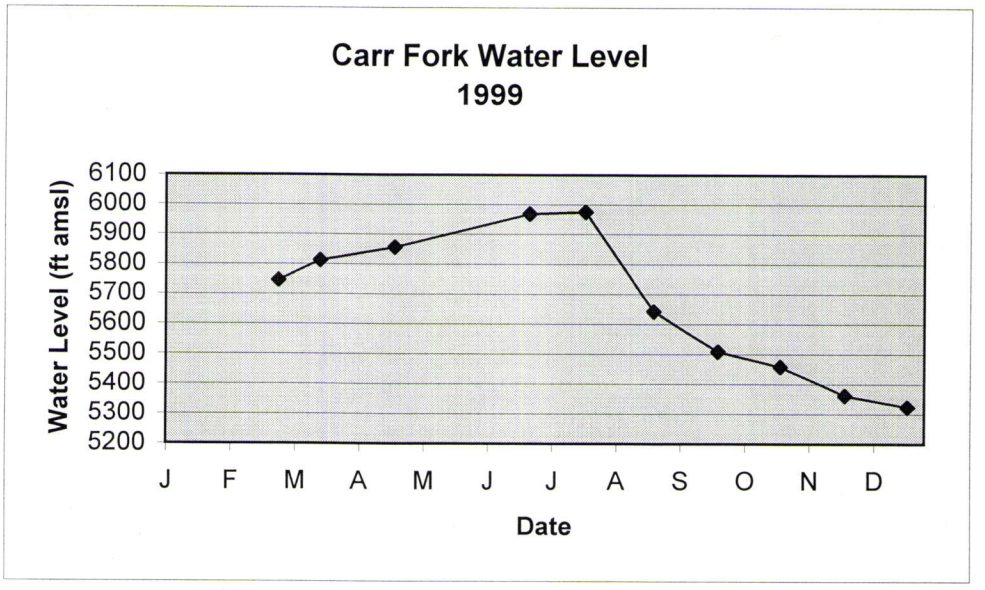
Date	Water Elev. (ft amsl)
19-Jan-98	6146.9
18-Feb-98	6149.9
19-Mar-98	6115.2
20-Apr-98	5966.9
18-May-98	5898.0
18-Jun-98	5832.2
18-Jul-98	5710.6
20-Aug-98	5917.2
18-Sep-98	5702.2
18-Oct-98	5585.5
10-Nov-98	5474.2
18-Dec-98	5783.6



1999 Carr Fork
Water Level Soundings

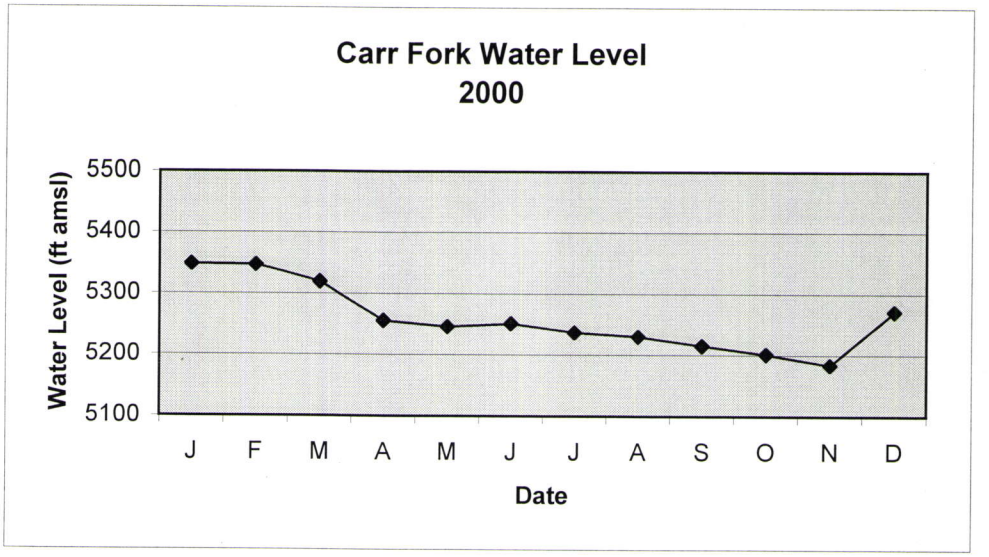
Date	Water Elev. (ft amsl)	
24-Feb-99	5746.4	(1)
16-Mar-99	5812.2	(1)
21-Apr-99	5856.5	(1)
25-Jun-99	5968.4	(2)
22-Jul-99	5975.2	(2)
24-Aug-99	5641.1	(2)
24-Sep-99	5509.0	(2)
24-Oct-99	5458.8	(2)
24-Nov-99	5362.0	(2)
24-Dec-99	5324.3	(2)

Note: (1) water level measured in Carr Fork Exhaust Shaft, Bingham Canyon
(2) water level measured in Carr Fork Service Shaft, Pine Canyon



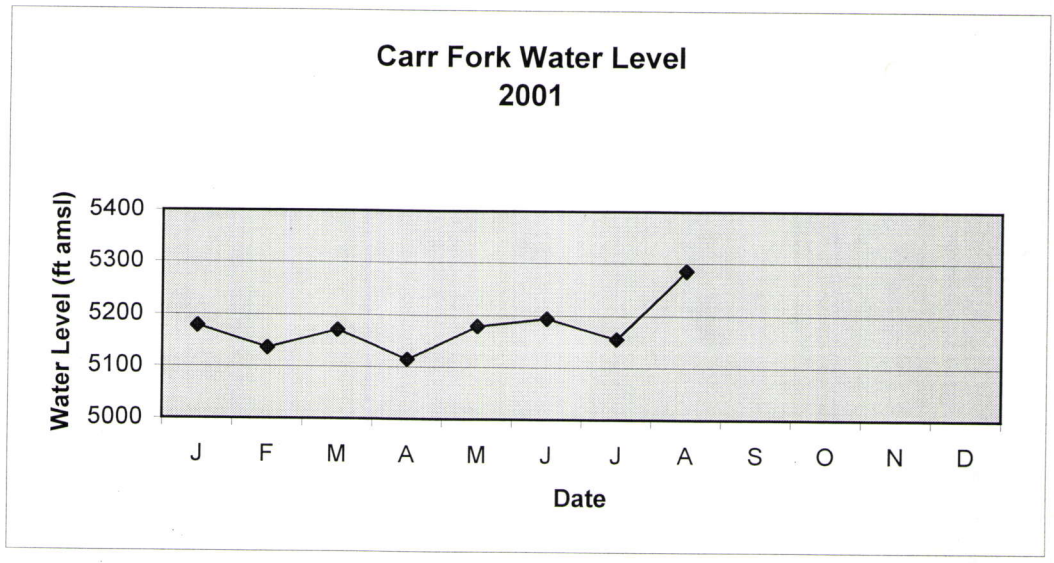
2000 Carr Fork Service Shaft
Water Level Soundings

Date	Water Elev. (ft amsl)
04-Jan-00	5348.1
04-Feb-00	5346.7
04-Mar-00	5319.0
04-Apr-00	5256.2
04-May-00	5246.2
04-Jun-00	5251.3
06-Jul-00	5237.0
04-Aug-00	5230.0
04-Sep-00	5215.0
04-Oct-00	5201.2
04-Nov-00	5183.4
04-Dec-00	5271.2



2001 Carr Fork Service Shaft
Water Level Soundings

Date	Water Elev. (ft amsl)
04-Jan-01	5178.510
04-Feb-01	5136.220
04-Mar-01	5171.110
04-Apr-01	5114.270
04-May-01	5178.740
04-Jun-01	5194.450
04-Jul-01	5154.940
07-Aug-01	5285.700
04-Sep-01	Not Available
04-Oct-01	Not Available
04-Nov-01	Not Available
04-Dec-01	Not Available



CARR FORK WATER QUALITY
2001

			March 13, 2001		June 12, 2001		AVERAGE	
ANALYTE	UNITS	DET. LIMIT	ID #	RESULT	ID #	RESULT	RESULT	UNITS
Total Suspended Solids	mg/L	3	BMS1356 T	21	BMS1356 T	19	20	mg/L
Total Dissolved Solids	mg/L	20	BMS1356 T	1890	BMS1356 T	2020	1955	mg/L
Sulfate	mg/L	5	BMS1356 T	1290	BMS1356 T	1170	1230	mg/L
Chloride	mg/L	5	BMS1356 T	17	BMS1356 T	17	17	mg/L
Calcium	mg/L	1	BMS1356 T	385	BMS1356 T	397	391	mg/L
Magnesium	mg/L	1	BMS1356 T	118	BMS1356 T	140	129	mg/L
Potassium	mg/L	0.5	BMS1356 T	3.9	BMS1356 T	5	4.45	mg/L
Sodium	mg/L	1	BMS1356 T	15	BMS1356 T	15.8	15.4	mg/L
Alkalinity	mg/L as $CaCO_3$	5	BMS1356 T	242	BMS1356 T	225	233.5	mg/L as CaCO3
Nitrite	mg/L	0.05	BMS1356 T	Below CRDL	BMS1356 T	Below CRDL	Below CRDL	mg/L
Nitrate	mg/L	0.2	BMS1356 T	Below CRDL	BMS1356 T	Below CRDL	Below CRDL	mg/L
SiO2	mg/L	2	BMS1356 T	24	BMS1356 T	25	24.5	mg/L
Mercury	mg/L	0.2	BMS1356 T	Below CRDL	BMS1356 T	Below CRDL	Below CRDL	mg/L
pH	-0-	-0-	BMS1356 T	7.9	BMS1356 T	8.02	7.96	-0-
Lab Conductivity	micro mho/cm	1	BMS1356 T	2190	BMS1356 T	2250	2220	micro mho/cm
* pH (Field)	-0-	-0-	no field taken		BMS1356 T	7.02	7.02	-0-
* Conductivity (Field)	micro mho/cm	1	no field taken		BMS1356 T	2330	2330	micro mho/cm
* Temperature (Field)	^{O}C	-0-	no field taken		BMS1356 T	18	18	Degree C
Arsenic	ug/L	5	BMS1356 D	34	BMS1356 D	19	26.5	ug/L
Cadmium	ug/L	1	BMS1356 D	Below CRDL	BMS1356 D	2	Below CRDL	ug/L
Copper	ug/L	20	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Lead	ug/L	5	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Zinc	ug/L	10	BMS1356 D	413	BMS1356 D	1290	851.5	ug/L
Selenium (hydride)	ug/L	2	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Barium	ug/L	10	BMS1356 D	17	BMS1356 D	16	16.5	ug/L
Chromium	ug/L	10	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Silver	ug/L	1	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Manganese	ug/L	10	BMS1356 D	1770	BMS1356 D	1730	1750	ug/L
Nickel	ug/L	40	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Molybdenum	ug/L	40	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Iron	ug/L	300	BMS1356 D	3880	BMS1356 D	700	2290	ug/L
Aluminum	ug/L	15	BMS1356 D	Below CRDL	BMS1356 D	7	3.5	ug/L
Beryllium	ug/L	2	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Boron	ug/L	10	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Antimony	ug/L	5	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Thallium	ug/L	2	BMS1356 D	Below CRDL	BMS1356 D	Below CRDL	Below CRDL	ug/L
Titanium	ug/L	10	BMS1356 D	550	BMS1356 D	461	505.5	ug/L