

40-8903



Homestake Mining Company of California

Jesse R. Toepfer
Closure Manager

28 August 2014

Mr. David Mayerson
New Mexico Environment Department
Ground Water Pollution Prevention Section
P.O. Box 26110
Santa Fe, NM 87502

RE: Q2 2014 Quarterly Report In Accordance With Requirements of Discharge Plan DP-725

Mr. Mayerson:

This report for the 2nd quarter 2014 is hereby submitted to the New Mexico Environment Department (NMED) as per the requirements of Homestake Mining Company of California's (HMC) Discharge Plan DP-725 at the Grants Reclamation Project.

Water quality data results, as attached, pertain to the lined lagoons (East Collection Pond, West Collection Pond, Evaporation Ponds 1,2, and 3, as well as monitoring wells X, DD, and DD2 which are utilized at the site for the ongoing groundwater remediation program. Tabular data is also included with respect to the leak detection recovery systems (LDRS) for the aforementioned Evaporation Ponds.

HMC placed 43.08 acre-feet of collected water and reverse osmosis (RO) plant brine water into the lined evaporation ponds during the period covered by this report.

The leak detection sumps in Evaporation Pond 2 (EP-2) leak detection / recovery system (LDRS) cells were operational during the quarter and within permit limits. The numbers reflected on the enclosed Leak Detection Recovery System (LDRS) spreadsheet for EP-2 reflect the meter readings for each of the five LDRS cells in the pond. The LDRS sumps were routinely pumped until no discharge flow is observed as specified by permit condition. At the present time, observed seepage rates are below the permit limit requirements that would require an investigation.

Also enclosed is spreadsheet monitoring data for Evaporation Pond 3 (EP-3) that includes monitoring data for the LDRS system. Cell A of EP-3 is LDRS monitored with ports A-1 through A-5 and Cell B is LDRS monitored with Ports B-1 through B-5; this information is reported on the attached spreadsheet. The LDRS sumps were routinely pumped until no discharge flow is observed. At the current time, observed seepage rates are below the permit limits that would require an investigation.

No significant repairs or modifications were made to the existing piping / plumbing system related to the waste water management systems during the quarter. During the quarter, no reportable spills occurred in relation to the waste water management system. Freeboard limits for all the evaporation ponds were maintained during the 2nd quarter 2014.

FSMEZO



Grants Project

Homestake Mining Company of California

Q2 2014 Quarterly Report IAW Req. DP-725

28 August 2014

Thank you very kindly for your time and attention. If you have any questions regarding the foregoing information, I can be reached at 505-287-4456 extension 34 or directly via cell phone at 505.290.3067.

Respectfully,

Jesse R. Toepfer
Closure Manager
HOMESTAKE MINING COMPANY OF CALIFORNIA

Copy To:

- Document Control Desk, NRC, Washington, DC (w/encl.)
- J. Parrott, NRC, Rockville, Maryland (w/encl.)
- B. Spitzberg, NRC, Arlington, Texas (w/encl.)
- K. Vollbrecht, NMED, Santa Fe, New Mexico (w/encl.)
- D. Shafer, DOE, Westminster, Colorado (w/encl.)
- S. Appaji, Region VI EPA, Dallas, Texas (w/encl.)
- P. Malone, Barrick, Salt Lake City, Utah (electronic copy)
- B. Ferdinand, Barrick, Salt Lake City, Utah (electronic copy)
- G. Hoffman, Hydro-Engineering, Casper, Wyoming (electronic copy)

Discharge Plan (DP-725)
Water Quality Data
1st 2nd Quarters, 2014

Sample Point Name	Date	WL (feet)	Temp (deg.C)	pH (f) (std. units)	Cond (calc.) (micromhos/cm)	CO3 (mg/l)	Ca (mg/l)	Cl (mg/l)	HCO3 (mg/l)	Mg (mg/l)	K (mg/l)	Na (mg/l)	SO4 (mg/l)	TDS (mg/l)	NO3 (mg/l)	Mn(t) (mg/l)
Parameter Code		13	12	109	51	6	1	7	5	2	3	4	8	10	39	134
Site Standard Gal aquifer**								250					1500	2734	12	
DD	2/11/14	48.65	10.40	7.17	3537			67					1790	3020		
	5/14/14	48.50	14.30	7.26	34.61	<5	424	71	358	101	6.7	356	1840	3060	5.5	
DD2	2/18/14	47.23	13.40	7.06	2868											
	5/14/14	47.30	15.70	7.20	2808	<5	308	65	362	78.4	5.6	296	1430	2400	<.1	
E Coll Pond	2/10/14		7.70	9.47	6402			326					2410	4750		0.008
	4/8/14		16.40	9.55	6940			378					2730	5130		0.007
	5/5/14		18.60	9.52	10020			545					4500	7900		0.009
Evap Pond 1	2/10/14		7.20	9.54	41310			3620					16700	39800		0.018
	4/8/14		16.30	9.54	52130			5560					23400	52500		0.012
	5/5/14		16.20	9.45	55940			6040					25000	61500		<0.02
Evap Pond 2	2/10/14		4.70	9.37	20630			1070					8850	18300		0.015
	4/8/14		17.10	9.34	20230			1200					9470	17800		0.013
	5/5/14		14.30	9.59	20450			1330					9820	18000		0.018
Evap Pond 3-A	2/10/14		8.80	9.39	90970			21800					19800	105000		0.02
	4/8/14		16.00	9.31	110900			30100					35000	153000		0.017
	5/5/14		16.10	9.41	114500			35600					25900	159000		<0.02
Evap Pond 3-B	2/10/14		7.90	9.51	59470			8200					22100	62000		0.018
	4/8/14		15.30	9.43	77520			10600					39900	89200		0.014
	5/5/14		16.20	9.48	86030			12400					34000	108000		<0.02
W Coll Pond	2/10/14		8.00	9.67	6121			288					2220	4470		0.004
	4/8/14		15.70	9.71	6768			386					2770	4740		0.009
	5/5/14		15.80	9.53	10230			542					4490	7910		0.003
X	2/11/14		16.00	7.33	1412			96					298	920		
	4/21/14	24.10	18.80	6.93	1352			105					295	910		

Concentrations greater than site standards are in bold.

f = field measurement

t = analyte, total

** = applies to Wells DD, DD2, and X

Discharge Plan (DP-725)
Water Quality Data
1st 2nd Quarters, 2014

Sample Point Name	Date	Se (mg/l)	Se (t) (mg/l)	Mo (mg/l)	Mo (t) (mg/l)	Unat (mg/l)	Unat (t) (mg/l)	Ra226 (pCi/l)	Ra228 (pCi/l)	Ra226+Ra228 (pCi/l)	Th230 (pCi/l)	V (mg/l)
Parameter Code		40	140	36	136	15	115	45	57	372	48	42
Site Standard Qal aquifer**		0.32		0.1		0.16				5	0.3	0.02
DD	2/11/14	0.038		<0.03		0.142						
	5/14/14	0.053		<0.03		0.157		0.08	0.9	0.98	0.03	<0.01
DD2	2/18/14	<0.005		<0.03		0.226						
	5/14/14	<0.005		<0.03		0.228		0.65	1	1.65	0.02	<0.01
E Coll Pond	2/10/14	0.388	0.421	13.2	15.2	8.46	8.9					
	4/8/14	0.333	0.344	14	14.6	9.98	10.9					
	5/5/14	0.655	0.657	21.5	21.7	16	16.4					
Evap Pond 1	2/10/14	0.7	0.7	95	182	103	112					
	4/8/14	0.46	0.44	152	180	129	129					
	5/5/14	0.52	0.68	204	260	151	166					
Evap Pond 2	2/10/14	0.686	0.733	51.1	56.5	28.7	28.8					
	4/8/14	0.629	0.67	46.9	50.4	26	28.6					
	5/5/14	0.646	6.94	45	49.7	22.7	24.7					
Evap Pond 3-A	2/10/14	0.67	0.62	448	920	561	616					
	4/8/14	0.55	0.59	638	1200	707	914					
	5/5/14	0.38	0.57	1310	1250	809	825					
Evap Pond 3-B	2/10/14	0.62	0.65	258	398	218	272					
	4/8/14	0.55	0.59	301	373	239	269					
	5/5/14	0.722	0.91	450	514	295	324					
W Coll Pond	2/10/14	0.423	0.432	14.1	15.4	9.4	9.33					
	4/8/14	0.401	0.41	13.7	14.3	12.5	13.6					
	5/5/14	0.593	0.648	19.7	21.3	15.3	16					
X	2/11/14	0.013		0.07		0.0496						
	4/21/14	0.009		0.07		0.042						

Concentrations greater than site standards are in bold.

Evaporation Pond #2
LDRS Sump Collection Volumes**

2nd Quarter, 2014

Date	No. 1		No. 2		No. 3		No. 4		No. 5	
	Reading	Gallons	Reading	Gallons	Reading	Gallons	Reading	Gallons	Reading	Gallons
Previous Reading	76200		17410		241920		937450		321320	
4/7	76200	0	22570	5160	241920	0	947030	9580	323320	2000
4/14	76200	0	24420	1850	241920	0	947040	10	323320	0
4/21	77250	1050	41350	16930	241920	0	947040	0	324910	1590
4/28	77250	0	44840	3490	241920	0	947040	0	324910	0
5/5	77250	0	99040	54200	241920	0	949360	2320	326580	1670
5/12	77250	0	138980	39940	241920	0	950570	1210	326580	0
5/19	77250	0	185690	46710	241920	0	950570	0	326580	0
5/26	77250	0	213500	27810	241920	0	950570	0	326580	0
6/2	77250	0	215040	1540	241920	0	950570	0	326580	0
6/9	78810	1560	254210	39170	241920	0	952330	1760	327940	1360
6/16	78810	0	258100	3890	241920	0	952420	90	328100	160
6/23	78860	50	260400	2300	241920	0	952620	200	328240	140
6/30	78860	0	260400	0	241920	0	952620	0	328240	0

** LDRS sumps are pumped / purged until no flow observed

Leak Detection Sumps
Evaporation Pond #3

2nd Quarter, 2014

Cell A Sumps	A-1		A-2		A-3		A-4		A-5	
	Reading	Gallons	Reading	Gallons	Reading	Gallons	Reading	Gallons	Reading	Gallons
Previous Reading	106420		126500		126840		21700		275860	
4/7	106420	0	126820	320	126840	0	21700	0	276110	250
4/14	106420	0	126820	0	126840	0	21700	0	276110	0
4/21	106420	0	126820	0	126840	0	21700	0	276110	0
4/28	106420	0	126820	0	126840	0	21700	0	276110	0
5/5	106420	0	126820	0	126840	0	21700	0	276110	0
5/12	106420	0	126820	0	126840	0	21700	0	276110	0
5/19	106440	20	126820	0	126840	0	21700	0	276110	0
5/26	106450	10	127750	930	126840	0	21700	0	276130	20
6/2	106450	0	127750	0	126840	0	21700	0	276130	0
6/9	106450	0	127750	0	126840	0	21700	0	276130	0
6/16	106450	0	127750	0	126840	0	21700	0	276130	0
6/23	106450	0	127750	0	126840	0	21700	0	276130	0
6/30	106450	0	127750	0	126840	0	21700	0	276130	0

Cell B Sumps	B-1		B-2		B-3		B-4		B-5	
	Reading	Gallons	Reading	Gallons	Reading	Gallons	Reading	Gallons	Reading	Gallons
Previous Reading	135870		187150		419290		166000		129380	
4/7	135870	0	187150	0	426180	6890	166000	0	129380	0
4/14	135870	0	187150	0	429630	3450	166000	0	129380	0
4/21	135870	0	187150	0	440590	10960	166000	0	129380	0
4/28	135870	0	187150	0	446460	5870	166000	0	129380	0
5/5	135870	0	187150	0	446460	0	166000	0	129380	0
5/12	135870	0	187150	0	448090	1630	166000	0	129380	0
5/19	135870	0	187150	0	456540	8450	166000	0	129380	0
5/26	135870	0	187150	0	456630	90	166000	0	129380	0
6/2	135870	0	187150	0	461890	5260	166000	0	129380	0
6/9	135870	0	187150	0	461890	0	166000	0	129380	0
6/16	135870	0	187150	0	461890	0	166000	0	129380	0
6/23	135870	0	187150	0	461890	0	166000	0	129380	0
6/30	154670	18800	187150	0	462960	1070	183380	17380	130260	880

Evaporation Pond Inflow Data

2nd Quarter, 2014

April	Average GPM	Interval Gallons	Acre Feet
R.O. Flow to Evaporation Ponds	0.16	7,056	
Tailings Sumps	14.88	642,990	
Tailings Pile	31.89	1,377,700	
Total Gallons to Evaporation Ponds	47	2,027,746	6.22

May	Average GPM	Interval Gallons	Acre Feet
R.O. Flow to Evaporation Ponds	54.18	2,340,576	
Tailings Sumps	15.75	680,370	
Tailings Pile	65.95	2,848,900	
Total Gallons to Evaporation Ponds	136	5,869,846	18.02

June	Average GPM	Interval Gallons	Acre Feet
R.O. Flow to Evaporation Ponds	53.18	2,297,232	
Tailings Sumps	18.31	791,130	
Tailings Pile	70.60	3,049,900	
Total Gallons to Evaporation Ponds	142	6,138,262	18.84

2nd Quarter Totals	Average GPM	Interval Gallons	Acre Feet
R.O. Flow to Evaporation Ponds	35.84	4,644,864	
Tailings Sumps	16.32	2,114,490	
Tailings Pile	56.15	7,276,500	
Total Gallons to Evaporation Ponds	108	14,035,854	43.08

Evaporation Pond Storage Transfers

2nd Quarter, 2014

April
Transfer EP-2 to EP-1
Transfer EP-1 to EP-3

Interval Gallons	Acre Feet
0	0.00
1,000	0.00

May
Transfer EP-2 to EP-1
Transfer EP-1 to EP-3

Interval Gallons	Acre Feet
5,689,000	17.46
0	0.00

June
Transfer EP-2 to EP-1
Transfer EP-1 to EP-3

Interval Gallons	Acre Feet
6,138,000	18.84
0	0.00

2nd Quarter Totals
Transfer EP-2 to EP-1
Transfer EP-1 to EP-3

Interval Gallons	Acre Feet
11,827,000	36.30
1,000	0.00

Water Level Elevation
(MSL)

Well	Date	Baseline Water Level Elevation	Depth to Water	Current Water Level Elevation
DD	5/14/2014	6592.59	48.50	6544.09
DD2	5/14/2014	6593.28	47.30	6545.98
X	4/21/2014	6571.61	24.30	6547.31