CAMECO RESOURCES
CROW BUTTE OPERATION

86 Crow Butte Road
P.O. Box 169
Crawford, Nebraska 69339-0169

(308) 665-2215
(308) 665-2341 – FAX

December 12, 2013

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Michael Linder, Director
Nebraska Department of Environmental Quality
P.O. Box 98922
Lincoln, NE 68509-8922

Subject: Class III UIC Permit NE0122611
November 2013 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the November 2013 Monthly Restoration Reports for Mine Units 2, 3, 4, 5 and 6. The reverse osmosis (RO) units continue to inject permeate and reductant into Mine Units 4, and 5. IX treatment continued in Mine Unit 6 with groundwater sweep continuing in portions of Mine Units 4 and 5.

On November 14 and 15, 2013, split sampling with the department of discrete and composite samples of the baseline restoration wells were collected in Mine Units 2 and 3. The results of these samples are included with this report.

If you have any questions regarding this submittal, please feel free to contact me at (308) 665-2215, ext. 114.

Sincerely,
Cameco Resources
Crow Butte Operation

Larry Teahon

Larry Teahon
SHEQ Manager

Enclosures: As Stated

cc: NDEQ - Chadron Office
Ron Burrows - NRC
CBO - File
ec: CR - Cheyenne

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

NOVEMBER 2013

MINE UNIT 2

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment		X	
d. Wellfield Recirculation		X	
e. Other (explain):	X		The Mine Unit is in Stability Monitoring.

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

Mine Unit discrete and composite samples were collected from the following baseline restoration wells: CM1-6, I136P, I137P, I142P, I144P, I171P, I175P, I180P, I188P, P113, P94, P97, PR-15, and PR-8.

MINE UNIT #2

WellID	SampleDate	Alkalinity	Carbonate	Bicarbonate	Calcium	Chloride	Fluoride	Magnesium	Nitrogen Ammonia	Nitrogen Nitrate+Nitrite	Potassium	Silica	Sodium	Sulfate	Conductivity	pH	TDS	Aluminum	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Uranium	Uranium Activity	Vanadium	Zinc	Radium 226	Radium 226 precision	Radium 226 MDC	AC Balance	Anions	Cations	TDS Calc	TDS Balance
Reporting Limit		1	1	1	1	1	0.1	1	0.05	0.1	1	0.2	1	1	1	0.01	10	0.1	0.001	0.1	0.1	0.01	0.05	0.01	0.03	0.001	0.01	0.001	0.1	0.05	0.01	0.0003	2.00E-10	0.1	0.01	0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Baseline	Jun-91	585			134	250	4	35	10	10.0	126		4108	369		6.5-8.5	1170	0.1	0.050	1.0		0.01	0.05	1.0	0.30	0.05	0.05	0.002	1.0	0.15	0.05	5.0		0.2	5.0	1058.0							
CM1-6	11/14/2013	283	8	329	10	80	0.7	2	<.05	<.1	9	11.2	258	150	1120	8.39	687	<.1	0.025	<.1	0.6	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.1	<.05	<.01	0.5180	3.51E-07	<.1	<.01	11	0.61	0.16	4.27	11.1	12.1	690	0.99
I136P	11/14/2013	119	<1	145	2	22	0.4	<1	<.05	<.1	3	9.6	84	39	383	7.85	226	<.1	0.004	<.1	0.6	<.01	<.05	<.01	0.04	<.001	<.01	<.001	<.1	<.05	<.01	0.0096	6.50E-09	<.1	<.01	62	1.6	0.18	-0.7	3.91	3.85	240	0.96
I137P	11/14/2013	122	<1	149	<1	30	0.7	<1	<.05	<.1	3	13.7	97	42	431	7.99	263	<.1	0.016	<.1	0.6	<.01	<.05	<.01	<.03	<.001	0.01	<.001	<.1	<.05	<.01	0.0340	2.30E-08	<.1	<.01	243	3	0.17	1.61	4.21	4.35	260	0.99
I142P	11/14/2013	149	<1	182	7	58	0.9	2	<.05	<.1	6	8.9	156	126	746	7.25	447	<.1	0.023	<.1	0.4	<.01	<.05	<.01	1.05	<.001	0.02	<.001	0.4	<.05	<.01	0.0398	2.70E-08	<.1	<.01	140	2.3	0.18	1.53	7.27	7.49	460	0.98
I144P	11/14/2013	272	3	326	15	121	0.4	3	<.05	<.1	12	16.0	313	241	1410	8.15	871	<.1	0.013	<.1	0.6	<.01	<.05	<.01	0.04	<.001	0.09	<.001	0.1	<.05	<.01	1.1900	8.08E-07	<.1	<.01	306	3.4	0.18	3.75	13.9	15	890	0.98
I171P	11/14/2013	148	6	169	1	19	0.5	<1	<.05	<.1	4	12.7	96	37	425	8.72	260	<.1	0.036	<.1	0.5	<.01	<.05	<.01	0.04	<.001	<.01	<.001	<.1	<.05	<.01	0.1670	1.13E-07	0.2	<.01	35	1.1	0.17	0.26	4.38	4.4	260	0.98
I175P	11/14/2013	177	<1	216	2	38	0.8	<1	<.05	<.1	4	11.1	136	81	614	8.03	368	<.1	0.065	<.1	0.5	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.1	<.05	<.01	0.2730	1.85E-07	0.2	<.01	151	2.4	0.17	-1.9	6.41	6.16	380	0.96
I180P	11/14/2013	248	1	300	9	100	0.8	2	0.11	<.1	8	12.1	271	192	1200	7.99	740	<.1	0.041	<.1	0.7	<.01	<.05	<.01	<.03	<.001	0.01	<.001	<.1	<.05	<.01	0.5190	3.51E-07	0.2	<.01	144	2.4	0.19	3.1	11.8	12.6	750	0.99
I188P	11/14/2013	161	4	189	2	22	0.9	<1	<.05	<.1	4	13.6	105	41	463	8.41	278	<.1	0.028	<.1	0.6	<.01	<.05	<.01	<.03	<.001	<.01	<.001	<.1	<.05	<.01	0.3890	2.64E-07	0.1	<.01	27	0.99	0.17	-0.5	4.87	4.82	290	0.96
P113	11/14/2013	224	5	263	7	62	0.7	2	<.05	<.1	8	11.0	193	118	872	8.29	530	<.1	0.032	<.1	0.6	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.1	<.05	<.01	0.7180	4.86E-07	0.2	<.01	43	1.3	0.17	2.04	8.7	9.06	540	0.99
P94	11/14/2013	187	<1	228	6	42	0.4	<1	<.05	<.1	5	17.6	150	84	666	7.96	415	<.1	0.021	<.1	0.5	<.01	<.05	<.01	0.06	<.001	0.01	<.001	<.1	<.05	<.01	0.1330	9.02E-08	<.1	<.01	22	0.9	0.17	2.09	6.69	6.98	420	0.98
P97	11/14/2013	166	<1	202	2	35	0.5	<1	0.06	<.1	4	10.7	130	66	576	7.92	347	<.1	0.032	<.1	0.6	<.01	<.05	<.01	<.03	0.002	<.01	<.001	0.1	<.05	<.01	0.2180	1.47E-07	<.1	<.01	33	1.1	0.17	1.8	5.72	5.92	350	0.99
PR-15	11/14/2013	212	9	241	3	28	1.1	<1	<.05	<.1	5	13.2	136	56	597	8.64	365	<.1	0.056	<.1	0.5	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.1	<.05	<.01	0.8760	5.93E-07	0.6	<.01	8.2	0.56	0.17	-0.2	6.26	6.23	370	0.98
PR-8	11/14/2013	182	12	198	2	27	0.9	<1	<.05	<.1	4	11.2	121	46	524	8.87	317	<.1	0.047	<.1	0.6	<.01	<.05	<.01	<.03	<.001	<.01	<.001	<.1	<.05	<.01	0.5400	3.65E-07	0.4	<.01	37	1.2	0.18	0.9	5.4	5.5	320	0.98
MU2 Comp	11/14/2013	188	2	225	5	47	0.7	1	<.05	<.1	6	12.1	159	90	716	8.14	433	<.1	0.031	<.1	0.6	<.01	<.05	<.01	0.10	<.001	0.01	<.001	0.1	<.05	<.01	0.4010	2.72E-07	0.1	<.01	90	1.8	0.17	2.87	6.98	7.4	440	0.99

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

NOVEMBER 2013

MINE UNIT 3

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment		X	
d. Wellfield Recirculation		X	
e. Other (explain):	X		The Mine Unit is in Stability Monitoring.

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

Mine Unit discrete and composite samples were collected from the following baseline restoration wells: CM1-1, CM1-10, CM1-11, I288P, I298P, I304P, I315P, I320P, I326P, I372P, IJ13P, P217, P224, and P246.

MINE UNIT #3

WellID	SampleDate	Alkalinity	Carbonate	Bicarbonate	Calcium	Chloride	Fluoride	Magnesium	Nitrogen Ammonia	Nitrogen Nitrate+Nitrite	Potassium	Silica	Sodium	Sulfate	Conductivity	pH	TDS	Aluminum	Arsenic	Barium	Boron	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Uranium	Uranium Activity	Vanadium	Zinc	Radium 226	Radium 226 precision	Radium 226 MDC	AC Balance	Anions	Cations	TDS Calc	TDS Balance
Reporting Limit		1	1	1	1	1	0.1	1	0.05	0.1	1	0.2	1	1	1	0.01	10	0.1	0.001	0.1	0.1	0.01	0.05	0.01	0.03	0.001	0.01	0.001	0.1	0.05	0.01	0.0003	2.00E-10	0.1	0.01	0.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Baseline	Jun-92	592			133	250	4.0	35	10	10	139		4280	404		6.5-8.5	1183		0.050	1.0		0.01		1.0	0.30	0.05	0.05	0.002	1.0	0.15	0.05	5.0		0.2	5.0	611.0							
CM1-1	11/15/2013	153	16	154	4	13	0.3	<1	<.05	<.1	4	12.6	72	20	369	9.18	226	<.1	0.015	<.1	0.5	<.01	<.05	<.01	<.03	<.001	<.01	<.001	<.1	<.05	<.01	0.1420	9.62E-08	0.4	<.01	2.4	0.29	0.15	-4.3	3.84	3.52	220	1.02
CM1-10	11/15/2013	323	5	383	17	94	0.3	3	<.05	<.1	9	14.9	279	158	1240	8.01	763	<.1	0.01	<.1	0.5	<.01	<.05	<.01	0.18	<.001	0.04	<.001	0.2	<.05	<.01	1.0100	6.84E-07	<.1	<.01	26	0.96	0.17	4.07	12.4	13.5	770	0.99
CM1-11	11/15/2013	281	4	334	14	56	0.7	3	0.11	<.1	7	11.4	202	107	909	7.93	557	<.1	0.021	<.1	0.6	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.1	<.05	<.01	0.0718	4.86E-08	0.1	<.01	37	1.1	0.15	2.07	9.47	9.87	570	0.97
I288P	11/15/2013	220	2	266	2	21	1.8	<1	<.05	<.1	4	12.3	143	50	589	7.81	361	<.1	0.064	<.1	0.5	<.01	<.05	<.01	0.05	<.001	<.01	<.001	0.1	<.05	<.01	1.2800	8.69E-07	0.3	<.01	34	1.1	0.16	2.67	6.14	6.47	370	0.97
I298P	11/15/2013	144	<1	175	3	28	0.4	<1	<.05	<.1	4	10.4	97	55	487	8.07	292	<.1	0.031	<.1	0.6	<.01	<.05	<.01	<.03	0.002	<.01	<.001	<.1	<.05	<.01	0.0348	2.36E-08	<.1	<.01	77	1.6	0.15	-3.3	4.84	4.53	290	1.02
I304P	11/15/2013	376	3	452	8	80	0.9	2	<.05	<.1	9	13.2	317	156	1290	7.92	797	<.1	0.115	<.1	0.6	<.01	<.05	<.01	0.14	<.001	0.05	<.001	0.3	<.05	<.01	2.1900	1.48E-06	0.2	<.01	172	2.4	0.16	5.21	13.1	14.5	810	0.98
I315P	11/15/2013	347	8	406	12	85	0.9	2	<.05	<.1	8	11.2	239	153	1240	8.16	760	<.1	0.011	<.1	0.6	<.01	<.05	<.01	<.03	<.001	0.02	<.001	0.1	<.05	<.01	0.7800	5.28E-07	<.1	<.01	70	1.6	0.16	-4.7	12.5	11.4	720	1.05
I320P	11/15/2013	173	17	177	2	17	0.5	<1	<.05	<.1	4	12.6	104	33	451	9.14	270	<.1	0.027	<.1	0.5	<.01	<.05	<.01	<.03	<.001	<.01	<.001	<.1	<.05	<.01	0.3440	2.33E-07	0.2	<.01	5.4	0.44	0.16	1.02	4.66	4.76	280	0.96
I326P	11/15/2013	292	7	342	5	38	1.0	<1	<.05	<.1	7	15.1	172	86	843	8.22	525	<.1	0.06	<.1	0.5	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.2	<.05	<.01	1.1200	7.57E-07	0.9	<.01	28	0.99	0.16	-4.7	8.76	7.97	500	1.04
I372P	11/15/2013	62	<1	75	<1	10	0.2	<1	<.05	<.1	1	5.4	40	16	185	7.59	108	<.1	0.002	<.1	0.6	<.01	<.05	<.01	0.05	0.004	<.01	<.001	<.1	<.05	<.01	0.0046	3.10E-09	<.1	<.01	73	1.7	0.19	-1.9	1.85	1.78	110	0.97
IJ13P	11/15/2013	218	<1	266	6	56	0.8	1	0.11	<.1	5	12.2	161	103	824	7.91	502	<.1	0.058	<.1	0.6	<.01	<.05	0.01	0.1	0.006	<.01	<.001	0.2	<.05	<.01	0.5840	3.95E-07	<.1	<.01	226	2.7	0.15	-3.7	8.11	7.53	480	1.05
P217	11/15/2013	86	<1	105	2	10	0.8	<1	<.05	<.1	1	15.2	50	25	258	8.21	161	<.1	0.054	<.1	0.5	<.01	<.05	0.02	0.06	0.008	0.02	<.001	<.1	<.05	<.01	0.0341	2.31E-08	0.1	<.01	987	5.8	0.16	-5.4	2.56	2.3	160	1.01
P224	11/15/2013	193	4	227	2	31	1.2	<1	<.05	<.1	5	14.3	123	65	611	8.13	367	<.1	0.069	<.1	0.6	<.01	<.05	<.01	<.03	<.001	<.01	<.001	0.2	<.05	<.01	0.4250	2.88E-07	0.1	<.01	26	0.95	0.16	-4.7	6.15	5.6	360	1.02
P246	11/15/2013	90	5	101	2	17	0.4	<1	<.05	<.1	2	13.7	55	25	286	8.86	168	<.1	0.026	<.1	0.6	<.01	<.05	<.01	0.04	0.001	<.01	<.001	<.1	<.05	<.01	0.0633	4.28E-08	<.1	<.01	19	0.8	0.16	-4.8	2.82	2.57	170	0.97
MU3 Comp	11/15/2013	211	5	247	5	40	0.7	1	0.34	<.1	5	11.8	153	78	691	8.23	416	<.1	0.035	<.1	0.5	<.01	<.05	<.01	0.06	0.002	0.01	<.001	0.1	<.05	<.01	0.567	3.84E-07	0.2	<.01	142	2.2	0.16	0.48	7.08	7.14	420	0.98

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

NOVEMBER 2013

MINE UNIT 4

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep	X		(if yes, complete part 3)
c. Groundwater Treatment	X		RO and Reductant BL-18, BL-19, CM3-10, P380, P426, P427, P431, P437, P442, P445, P460, P463, 534P, I548P, I549P, I550P, and I551P.
d. Wellfield Recirculation		X	
e. Other (explain):			

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

CM2-4, RES-2i, P371, P396, P430, and I508P.

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

BL-18, BL-19, CM2-4, CM3-10, RES 2i, P371, P380, P396, P426, P427, P430, P431, P437, P442, P445, P460, P463, I508P, I534P, and I548P.

Mine Unit 4 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
BL18	11/5/2013				3.23	
	11/12/2013				3.78	
	11/19/2013	427.5	0.6	26.5		2153
BL19	11/5/2013				6.83	
	11/12/2013				7.26	
	11/19/2013	303.0	0.5	11.1		1661
CM2-4	11/5/2013				2.21	
	11/12/2013				2.36	
	11/19/2013	496.5	0.0	32.9		2686
CM3-10	11/5/2013				1.74	
	11/12/2013				2.04	
	11/19/2013	483.2	0.2	34.9		2676
I508P	11/12/2013				5.33	
	11/19/2013	652.5	0.1	50.9		3647
I534P	11/12/2013				11.14	
	11/19/2013	775.5	0.4	67.4		4332
I548P	11/12/2013				3.59	
	11/19/2013	620.2	0.2	36.1		3023
P371	11/5/2013				3.92	
	11/12/2013				4.02	
	11/19/2013	381.9	0.3	26.3		2041
P380	11/5/2013				2.66	
	11/12/2013				2.81	
	11/19/2013	365.5	0.3	19.7		1865
P396	11/12/2013				6.01	
	11/19/2013	710.4	0.2	53.8		3798

Mine Unit 4 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
P426	11/5/2013				1.64	
	11/12/2013				1.59	
	11/19/2013	319.9	0.2	15.3		1627
P427	11/5/2013				2.44	
	11/12/2013				2.48	
	11/19/2013	215.6	0.2	8.2		1098
P430	11/5/2013				1.56	
	11/12/2013				1.36	
	11/19/2013	269.4	0.1	19.7		1473
P431	11/5/2013				3.31	
	11/12/2013				3.17	
	11/19/2013	307.9	0.1	8.2		1457
P437	11/12/2013				2.19	
	11/19/2013	348.9	0.6	24.4		1970
P442	11/5/2013				4.87	
	11/12/2013				5.09	
	11/19/2013	354.0	0.4	13.9		1713
P445	11/5/2013				3.76	
	11/12/2013				4.35	
	11/19/2013	654.3	0.2	47.7		3311
P460	11/5/2013				5.25	
	11/12/2013				5.43	
	11/19/2013	502.8	0.3	37.3		2575
P463	11/5/2013				6.58	
	11/12/2013				7.51	
	11/19/2013	509.8	0.5	39.3		2715

Mine Unit 4 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
RES2i	11/12/2013				0.14	
	11/19/2013	128.4	0.0	7.5		710

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

NOVEMBER 2013

MINE UNIT 5

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep	X		(if yes, complete part 3)
c. Groundwater Treatment	X		RO and Reductant P679, I692P, P751, I792, P793, P962, P1016, P1050, P1055, P1060, P1064, P1073, and P1155.
d. Wellfield Recirculation		X	
e. Other (explain):		X	

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:
BL5-1, BL5-2, BL5-4, BL5-5, CM3-2, P690, I698, P837, I854P, P1002, and P1209.

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

BL5-1, BL5-2, CM3-2, P679, I690P, I692P, P698, P751, I792, I793, I854P, P962, P1016, P1050, P1055, P1060, P1064, P1073, P1155, and P1209.

Mine Unit 5 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
BL5-1	11/5/2013				0.62	
	11/12/2013				0.73	
	11/19/2013	528.6	0.0	33.8		3125
BL5-2	11/5/2013				1.68	
	11/12/2013				1.59	
	11/19/2013	641.4	0.0	46.4		2853
CM3-2	11/5/2013				0.53	
	11/12/2013				0.58	
	11/19/2013	337.1	0.0	14.9		1770
I690P	11/5/2013				12.63	
	11/12/2013				14.14	
	11/19/2013	928.2	0.3	64.4		5060
I692P	11/5/2013				5.08	
	11/12/2013				5.24	
	11/19/2013	300.6	1.4	12.7		1570
I698P	11/5/2013				4.02	
	11/12/2013				4.10	
	11/19/2013	665.9	1.0	34.9		3035
I792P	11/5/2013				1.17	
	11/12/2013				1.00	
	11/19/2013	121.2	1.1	3.3		666
I793P	11/5/2013				1.54	
	11/12/2013				1.50	
	11/19/2013	169.0	2.1	3.9		
I854P	11/12/2013				1.68	
	11/19/2013	522.6	0.0	27.5		
P1016	11/19/2013	249.9	1.2	8.9		1347
P1050	11/5/2013				1.30	
	11/12/2013				1.08	
	11/19/2013	87.3	1.1	1.8		480
P1055	11/5/2013				1.26	
	11/12/2013				1.28	
	11/19/2013	284.8	1.1	10.3		1515

Mine Unit 5 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
P1060	11/5/2013				1.28	
	11/12/2013				1.28	
	11/19/2013	224.9	2.1	6.7		1107
P1064	11/5/2013				0.83	
	11/12/2013				0.50	
	11/19/2013	87.1	1.6	2.3		448
P1073	11/5/2013				2.52	
	11/12/2013				2.44	
	11/19/2013	257.5	2.4	6.5		1301
P1155	11/5/2013				5.62	
	11/12/2013				6.25	
	11/19/2013	456.7	0.6	26.4		2535
P1209	11/5/2013				9.09	
	11/12/2013				9.77	
	11/19/2013	582.5	0.4	31.7		3270
P679	11/5/2013				3.13	
	11/12/2013				2.82	
	11/19/2013	177.6	1.1	6.1		977
P751	11/5/2013				10.99	
	11/19/2013	316.7	0.6	17.6		1718
P962	11/5/2013				4.54	
	11/12/2013				4.83	
	11/19/2013	400.5	0.5	22.9		2126

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

NOVEMBER 2013

MINE UNIT 6

1. RESTORATION ACTIVITY DURING MONTH:

	YES	NO	
a. Groundwater Transfer		X	(if yes, complete part 2)
b. Groundwater Sweep		X	(if yes, complete part 3)
c. Groundwater Treatment	X		IX P1268, P1283, P1312, P1370, P1497, P1596, P1630, P1633, P1715, P1751, P1778, P1794, P1800, P1857, and P1865.
d. Wellfield Recirculation		X	
e. Other (explain):		X	

2. LIST WELLS USED IN GROUNDWATER TRANSFER DURING THE MONTH:

3. LIST WELLS USED IN GROUNDWATER SWEEP DURING THE MONTH:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P1268, P1283, P1312, P1370, P1497, P1596, P1630, P1633, P1715, P1751, P1756, P1778, P1794, P1857, and P1865.

Mine Unit 6 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
P1268	11/5/2013				8.44	
	11/12/2013				7.32	
	11/19/2013	954.5	1.9	59.4		5270
P1283	11/5/2013				22.94	
	11/12/2013				24.54	
	11/19/2013	920.9	1.2	48.8		5120
P1312	11/5/2013				16.29	
	11/12/2013				16.32	
	11/19/2013	856.5	0.9	60.4		4880
P1370	11/5/2013				10.00	
	11/12/2013				10.83	
	11/19/2013	878.6	0.7	54.4		4960
P1497	11/5/2013				42.05	
	11/12/2013				44.35	
	11/19/2013	823.2	0.1	70.7		4670
P1596	11/5/2013				15.89	
	11/12/2013				17.13	
	11/19/2013	910.7	1.2	51.7		4950
P1630	11/5/2013				10.34	
	11/12/2013				10.58	
	11/19/2013	867.1	1.3	41.2		4910
P1633	11/5/2013				14.37	
	11/12/2013				16.34	
	11/19/2013	813.8	0.9	40.8		4430
P1715	11/5/2013				22.96	
	11/12/2013				21.27	
	11/19/2013	1090.0	1.2	52.2		5950
P1751	11/5/2013				7.57	

Mine.Unit 6 Restoration Data

Well Name	Date	Na (ppm)	V (ppm)	Ca (ppm)	U (ppm)	Cond (umohs/l)
P1751	11/12/2013				8.83	
	11/19/2013	940.2	0.8	50.6		5120
P1756	11/19/2013	1066.0	0.7	70.8		5690
P1778	11/5/2013				9.50	
	11/12/2013				10.48	
	11/19/2013	941.6	0.8	56.7		5180
P1794	11/5/2013				9.34	
	11/12/2013				9.96	
	11/19/2013	800.9	1.1	47.0		4570
P1857	11/5/2013				7.98	
	11/12/2013				9.02	
	11/19/2013	874.0	0.8	49.9		4940
P1865	11/5/2013				14.94	
	11/12/2013				15.88	
	11/19/2013	776.5	1.4	42.0		4330