

**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 3, 2008

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

Subject: Class III UIC Permit NE0122611
November 2008 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the November 2008 Monthly Restoration Reports for Mine Units 2, 3, 4, and 5. The reverse osmosis (RO) restoration circuit continues to be shut down while changes are being made. Wellfield recirculation continues in Mine Unit 2 to create a hydrologic bleed in preparation for re-starting the RO circuit. Mine Unit 3 is in recirculation to maintain a hydrologic bleed while the RO circuit is shut down and Mine Units 4 and 5 are in groundwater sweep. Recirculation continues through six production wells in Mine Unit 4 to prepare the patterns for bioremediation. 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
Mgr. Health, Safety and Environmental Affairs

Enclosures: As Stated

cc: Mr. Dave Carlson
NDEQ Chadron Office

Mr. Steve Collings
CBO, Denver, Colorado

Mr. Stephen Cohen
NRC, Washington, DC

CBO File

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
NOVEMBER 2008
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 (Used to maintain wellfield bleed)	X		P118, P119, P120, I185, I186, and I187
e. Other (explain):		X	

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

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

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4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P118, P119, and P120.

Mine Unit 2 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P118	11/05/08	19.92	<1							3300
P118	11/12/08	20.56								
P118	11/19/08	18.36	<1							3230
P118	11/25/08	19.29								
P119	11/05/08	19.51	<1							3700
P119	11/25/08	13.75								
P120	11/05/08	4.82	<1							2690
P120	11/12/08	6.35								
P120	11/19/08	5.57	<1							2740
P120	11/25/08	5.20								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
NOVEMBER 2008
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 (Used to maintain a wellfield bleed)	X		P239, P251, P252, P255, P262, I312, I323, I351, I352, I357, I358, I366, I367, and I368
e. Other (explain):		X	

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

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

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4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P239, P251, P252, P255, and P262.

Mine Unit 3 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P239	11/25/08	9.52								
P251	11/25/08	15.22								
P252	11/25/08	4.40								
P255	11/25/08	8.05								
P262	11/25/08	21.63								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
NOVEMBER 2008
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	
d. Wellfield Recirculation (Area recirculated to prepare it for bioremediation)	X		P380, P386, P421,P422, P423, P424, I523, I524, I525, I527, I546, I605, I606, I608, and I609
e. Other (explain):		X	

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

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

P395, P396, P405, I509, I545, I555P, I595, I601, and I602

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P380, P386, P395, P396, P405, P421, P422, P423, P424, P464, and I555P.

Mine Unit 4 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P380	11/03/08	8.80	<1	1065	7.29	96	1008	547	759	4830
P380	11/05/08	7.77	<1	1035	7.39	95	996	540	777	4760
P380	11/10/08	9.51	<1	1035	7.41	88	931	519	754	4610
P380	11/12/08	8.66	<1	1020	7.23	85	951	497	770	4560
P380	11/14/08	8.46	<1	990	7.35	87	953	504	770	4520
P380	11/17/08	8.39	<1	945	7.27	84	944	493	773	4420
P380	11/19/08	8.66	<1	975	7.21	86	959	493	779	4480
P380	11/21/08	8.80	<1	975	7.28	85	944	496	787	4450
P380	11/24/08	9.08	<1	975	7.2	84	942	491	786	4400
P380	11/26/08	10.48	<1	960	7.48	84	922	483	767	4370
P386	11/03/08	6.10	<1	1185	7.26	106	1074	584	906	5180
P386	11/05/08	4.44	<1	1200	7.39	106	1077	590	866	5190
P386	11/10/08	6.60	<1	1200	7.39	105	1038	586	870	5200
P386	11/12/08	6.18	<1	1185	7.2	108	1077	576	899	5180
P386	11/14/08	7.86	<1	1200	7.36	108	1080	586	889	5200
P386	11/17/08	6.31	<1	1170	7.11	108	1086	574	886	5160
P386	11/19/08	6.17	<1	1200	7.18	107	1104	604	878	5180
P386	11/21/08	6.29	<1	1200	7.27	106	1086	575	911	5160
P386	11/24/08	6.19	<1	1170	7.12	106	1122	575	885	5110
P386	11/26/08	6.24	<1	1170	7.48	106	1062	567	879	5050
P395	11/05/08	5.36	<1							4450
P395	11/12/08	7.91								
P395	11/19/08	5.78	<1							4450
P395	11/25/08	5.94								
P396	11/05/08	1.79	<1							4060
P396	11/12/08	4.66								
P396	11/25/08	3.31								
P405	11/05/08	5.23	<1							4010
P405	11/12/08	7.40								
P405	11/19/08	7.10	<1							3980
P405	11/25/08	7.41								
P421	11/03/08	5.20	<1	900	7.49	70	882	450	736	4150
P421	11/05/08	4.47	<1	900	7.61	70	870	455	724	4210
P421	11/10/08	5.75	<1	915	7.64	70	844	448	728	4160
P421	11/12/08	6.36	<1	900	7.42	68	858	441	701	4150
P421	11/14/08	7.14	<1	900	7.51	71	878	449	681	4140
P421	11/17/08	6.61	<1	870	7.42	70	892	452	715	4140
P421	11/19/08	6.61	<1	885	7.4	71	880	439	687	4150
P421	11/21/08	6.89	<1	885	7.52	71	885	451	737	4160
P421	11/24/08	6.75	<1	885	7.34	72	910	454	724	4140
P421	11/26/08	6.77	<1	878	7.71	72	881	467	672	4130

Mine Unit 4 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P422	11/03/08	5.10	<1	750	7.62	64	761	401	601	3630
P422	11/05/08	3.92	<1	750	7.66	66	766	415	592	3730
P422	11/10/08	5.44	<1	735	8.25	61	749	416	603	3690
P422	11/12/08	5.45	<1	795	7.5	68	763	412	618	3760
P422	11/14/08	5.08	<1	795	7.58	71	796	422	656	3800
P422	11/17/08	5.43	<1	780	7.47	72	814	426	648	3840
P422	11/19/08	5.36	<1	825	7.42	72	806	418	648	3890
P422	11/21/08	5.77	<1	825	7.53	74	820	431	683	3880
P422	11/24/08	5.51	<1	825	7.38	74	838	435	695	3900
P422	11/26/08	5.51	<1	810	7.74	75	816	433	647	3910
P423	11/03/08	3.80	<1	945	7.33	88	936	502	803	4490
P423	11/05/08	2.31	<1	960	7.47	89	908	507	738	4530
P423	11/10/08	4.07	<1	945	7.48	86	884	504	711	4470
P423	11/12/08	3.67	<1	945	7.31	88	885	493	726	4440
P423	11/14/08	3.22	<1	945	7.38	89	921	501	743	4400
P423	11/17/08	3.44	<1	945	7.32	88	906	489	740	4350
P423	11/19/08	3.13	<1	930	7.26	87	904	490	726	4390
P423	11/21/08	3.45	<1	930	7.36	87	910	487	774	4350
P423	11/24/08	3.39	<1	930	7.24	86	918	487	741	4320
P423	11/26/08	4.98	<1	915	7.64	86	891	480	730	4290
P424	11/03/08	8.70	<1	840	7.51	62	830	419	651	3860
P424	11/05/08	8.24	<1	840	7.56	63	828	428	673	3950
P424	11/10/08	9.61	<1	855	7.54	64	810	437	627	3950
P424	11/12/08	10.61	<1	870	7.4	65	818	433	662	3990
P424	11/14/08	10.02	<1	870	7.49	70	860	443	647	4030
P424	11/17/08	10.36	<1	870	7.45	70	869	442	661	4070
P424	11/19/08	10.60	<1	870	7.34	70	872	443	664	4080
P424	11/21/08	10.39	<1	885	7.45	72	874	450	700	4090
P424	11/24/08	10.28	<1	885	7.32	72	888	454	686	4080
P424	11/26/08	10.56	<1	885	7.7	73	870	452	659	4110
P464	11/05/08	4.71	<1							4150
P464	11/12/08	5.83								
I555P	11/05/08	4.61	<1							4160
I555P	11/12/08	5.41								
I555P	11/19/08	5.38	<1							4140
I555P	11/25/08	5.61								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
NOVEMBER 2008
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	
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:

BL5-4, P690, P691, P767, P796, P837, P1002, P1138, P1139, P1144, P1149, P1156, P1181, P1193, P1207, I678, I719, I726, I775, I776, I815, I834, I1113, I1124, I1126, I1145, I1147, I1158, I1164, I1168, I1173, I1175, I1176, I1220, I1226, I1146, I1202P, P814I, P816I, and I1895.

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P690, P691, P767, P796, P837, P1138, P1139, P1144, P1149, P1156, P1181, P1193, and I1202P.

Mine Unit 5 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P690	11/05/08	8.86	<1							4760
P690	11/12/08	10.69								
P690	11/19/08	10.08	<1							4780
P690	11/25/08	10.24								
P691	11/05/08	7.30	1.5							4570
P691	11/12/08	9.11								
P691	11/19/08	8.13	1.3							4600
P691	11/25/08	8.32								
P767	11/05/08	11.08	<1							4750
P767	11/12/08	12.84								
P767	11/19/08	11.71	<1							4720
P767	11/25/08	12.64								
P796	11/05/08	5.03	<1							4490
P796	11/12/08	6.25								
P796	11/19/08	5.47	<1							4370
P796	11/25/08	5.61								
P837	11/12/08	7.91								
P837	11/19/08	7.26	<1							4670
P837	11/25/08	6.94								
P1138	11/05/08	9.13	<1							4630
P1138	11/12/08	10.59								
P1138	11/19/08	9.89	<1							4610
P1138	11/25/08	10.36								
P1139	11/05/08	12.84	<1							4760
P1139	11/12/08	13.56								
P1139	11/19/08	12.59	<1							4660
P1139	11/25/08	12.89								
P1144	11/12/08	10.25								
P1144	11/19/08	9.58	<1							4550
P1144	11/25/08	9.40								
P1149	11/05/08	8.01	<1							4620
P1149	11/12/08	9.61								
P1149	11/19/08	9.15	<1							4600
P1149	11/25/08	9.36								
P1156	11/05/08	8.59	<1							4560
P1156	11/12/08	10.01								
P1156	11/19/08	9.65	<1							4580
P1156	11/25/08	10.13								

Mine Unit 5 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P1181	11/05/08	6.95	<1							4540
P1181	11/12/08	8.20								
P1181	11/25/08	8.11								
P1193	11/05/08	8.95	<1							4600
P1193	11/12/08	10.23								
P1193	11/19/08	10.22	<1							4600
I1202P	11/05/08	8.28	<1							4690
I1202P	11/12/08	9.44								
I1202P	11/19/08	9.22	<1							4670
I1202P	11/25/08	9.05								