

**CAMECO RESOURCES
CROW BUTTE OPERATION**



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

(308) 665-2215
(308) 665-2341 – FAX

February 6, 2009

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

Subject: Class III UIC Permit NE0122611
January 2009 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the January 2009 Monthly Restoration Reports for Mine Units 2, 3, 4, and 5. Wellfield recirculation continues in Mine Units 2 and 3 to create a hydrologic bleed in preparation for re-starting the RO circuit. Mine Units 4 and 5 are in ion exchange. The reverse osmosis (RO) units were turned on and tested for leaks during the month.

The bioremediation study continues in Mine Unit 4. An emulsified oil substrate (EOS) is being added to six production wells in Wellhouse 9.

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
JANUARY 2009
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	01/07/09	21.6								
P118	01/14/09	21.3	<1							3740
P118	01/21/09	21.0								
P118	01/28/09	21.4								3810
P119	01/07/09	17.5								
P119	01/14/09	17.8	<1							3980
P119	01/21/09	17.9								
P119	01/28/09	17.7								3950
P120	01/07/09	5.9								
P120	01/14/09	5.7	<1							3110
P120	01/21/09	5.9								
P120	01/28/09	6.7								3370

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JANUARY 2009
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, I315, 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	01/07/09	4.8								
P239	01/14/09	4.7	<1							3210
P239	01/21/09	4.5								
P239	01/28/09	5.0								3310
P251	01/07/09	10.5								
P251	01/14/09	10.1	<1							3690
P251	01/21/09	9.6								
P251	01/28/09	9.3								3660
P252	01/07/09	4.8								
P252	01/14/09	5.2	<1							3500
P252	01/21/09	5.0								
P252	01/28/09	5.2								3510
P255	01/07/09	6.0								
P255	01/14/09	6.6	<1							3630
P255	01/21/09	6.1								
P255	01/28/09	5.9								3600
P262	01/07/09	13.2								
P262	01/14/09	13.1	<1							3980
P262	01/21/09	12.4								
P262	01/28/09	12.6								4090

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JANUARY 2009
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		IX P395, P396, P405, P464, I555P
d. Wellfield Recirculation (Area recirculated to prepare it for bioremediation)		X	
e. Other (explain): Bioremediation test started on 12/17/08.	X		P380, P386, P421, P422, P423, and P424

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:

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	01/02/09	9.43		930	7.20	79	904	474	750	4290
P380	01/05/09	8.94	<1	930	7.30	80	917	480	727	4300
P380	01/07/09	10.09		1005	7.17	80	904	476	731	4300
P380	01/09/09	10.08		1005	7.22	81	910	479	730	4290
P380	01/12/09	10.24		983	7.12	82	906	470	703	4290
P380	01/14/09	10.43	<1	998	7.18	81	905	475	719	4270
P380	01/16/09	10.45		1005	7.04	82	915	478	693	4300
P380	01/19/09	10.17		1050	6.99	82	902	481	701	4280
P380	01/21/09	9.60		1065	7.27	82	917	473	709	4270
P380	01/23/09	10.10		1035	7.07	82	905	471	696	4280
P380	01/26/09	10.83		1050	7.14	82	909	473	714	4280
P380	01/28/09	10.18		1035	7.17	82	906	470	719	4340
P380	01/30/09	8.98		1020	7.23	81	911	474	691	4280
P386	01/02/09	6.20		1080	7.29	94	982	534	818	4740
P386	01/05/09	5.90	<1	1065	7.45	94	986	530	809	4720
P386	01/07/09	5.95		1042	7.27	93	973	533	780	4720
P386	01/09/09	6.00		1065	7.43	94	975	526	793	4700
P386	01/12/09	6.02		1095	7.30	94	976	518	798	4700
P386	01/14/09	5.86	<1	1073	7.34	92	970	520	751	4660
P386	01/16/09	5.67		1080	7.21	94	971	515	743	4690
P386	01/19/09	5.90		1080	7.19	93	973	511	745	4690
P386	01/21/09	5.80		1080	7.47	93	983	526	781	4710
P386	01/23/09	6.17		1080	7.29	93	980	520	785	4700
P386	01/26/09	6.03		1110	7.36	94	975	507	781	4670
P386	01/28/09	6.00		1065	7.23	94	988	531	769	4780
P386	01/30/09	5.35		1125	7.20	94	982	518	784	4690
P395	01/07/09	5.9								
P395	01/14/09	5.7	<1							4410
P395	01/21/09	5.4								
P395	01/28/09	5.6								4480
P396	01/07/09	3.1								
P396	01/14/09	3.2	<1							4130
P396	01/21/09	3.2								
P396	01/28/09	3.7								4180
P405	01/07/09	7.0								
P405	01/14/09	6.6	<1							3910
P405	01/21/09	6.5								
P405	01/28/09	6.9								3890
P421	01/02/09	7.94		900	7.41	74	894	473	733	4190
P421	01/05/09	7.35	<1	900	7.52	74	896	471	744	4210
P421	01/07/09	7.47		900	7.42	73	884	458	731	4200
P421	01/09/09	7.35		900	7.51	74	889	455	742	4190

Mine Unit 4 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P421	01/12/09	7.44		900	7.32	75	889	465	734	4200
P421	01/14/09	7.43	<1	945	7.29	78	887	470	715	4200
P421	01/16/09	7.29		930	7.28	74	888	463	705	4210
P421	01/19/09	7.32		930	7.22	74	884	459	707	4180
P421	01/21/09	7.40		945	7.6	74	896	464	743	4210
P421	01/23/09	7.46		945	7.35	74	896	458	731	4190
P421	01/26/09	7.41		945	7.22	74	896	462	739	4210
P421	01/28/09	7.83		960	7.35	76	896	463	704	4290
P421	01/30/09	5.95		975	7.32	76	894	462	703	4230
P422	01/02/09	6.02		863	7.43	79	847	461	702	4060
P422	01/05/09	5.71	<1	908	7.50	80	855	453	686	4090
P422	01/07/09	5.83		915	7.40	80	850	451	688	4090
P422	01/09/09	5.71		938	7.38	81	858	454	702	4100
P422	01/12/09	5.71		945	7.3	82	855	456	709	4100
P422	01/14/09	5.25	<1	930	7.22	82	858	457	700	4090
P422	01/16/09	5.14		930	7.17	84	860	456	669	4110
P422	01/19/09	5.16		945	7.19	84	853	449	680	4110
P422	01/21/09	5.10		945	7.29	84	868	460	680	4120
P422	01/23/09	5.32		968	7.27	84	870	456	694	4120
P422	01/26/09	5.36		945	7.26	84	857	456	714	4130
P422	01/28/09	5.65		945	7.32	85	866	455	715	4210
P422	01/30/09	4.45		945	7.39	84	872	454	707	4140
P423	01/02/09	5.30		922	7.28	82	892	473	725	4250
P423	01/05/09	4.56	<1	930	7.43	82	886	479	720	4250
P423	01/07/09	4.73		915	7.38	82	884	474	722	4250
P423	01/09/09	4.70		930	7.46	82	889	473	718	4240
P423	01/12/09	4.77		945	7.26	84	888	480	716	4270
P423	01/14/09	4.65	<1	945	7.39	83	888	472	683	4240
P423	01/16/09	4.76		945	7.21	84	893	468	700	4270
P423	01/19/09	4.51		930	7.17	84	889	466	703	4270
P423	01/21/09	4.60		930	7.36	85	897	480	726	4280
P423	01/23/09	4.91		960	7.26	84	898	474	706	4270
P423	01/26/09	4.57		945	7.27	85	890	464	716	4260
P423	01/28/09	4.38		960	7.24	86	894	477	706	4350
P423	01/30/09	3.97		1013	7.25	85	894	472	699	4260
P424	01/02/09	10.34		900	7.34	77	892	473	716	4260
P424	01/05/09	10.05	<1	900	7.45	78	902	477	729	4230
P424	01/07/09	10.60		930	7.34	76	887	467	692	4220
P424	01/09/09	11.08		945	7.43	78	894	466	710	4210
P424	01/12/09	11.30		938	7.23	83	883	472	711	4220
P424	01/14/09	10.67	<1	945	7.29	77	888	469	725	4200
P424	01/16/09	10.36		930	7.14	78	890	461	696	4210
P424	01/19/09	9.13		945	7.14	77	891	469	657	4210
P424	01/21/09	9.13		960	7.37	76	893	470	701	4190

Mine Unit 4 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P424	01/23/09	9.81		960	7.23	76	899	468	719	4200
P424	01/26/09	10.08		960	7.26	75	877	459	710	4180
P424	01/28/09	10.51		960	7.21	76	895	472	702	4250
P424	01/30/09	8.96		930	7.24	74	896	471	711	4190
P464	01/21/09	5.8								
P464	01/28/09	6.1								4250
I555P	01/07/09	5.4								
I555P	01/14/09	5.6	<1							4260
I555P	01/21/09	5.3								
I555P	01/28/09	6.6								4780

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JANUARY 2009
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		IX P690, P691, P767, P796, P837, P1138, P1139, P1144, P1156, P1181, P1193, and I1202P.
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:

P690, P691, P767, P796, P837, P1138, P1139, P1144, 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	01/07/09	11.7								
P690	01/14/09	12.1	<1							5100
P690	01/21/09	11.8								
P690	01/28/09	12.8								5280
P691	01/07/09	9.0								
P691	01/14/09	7.6	1.1							4500
P691	01/21/09	7.6								
P691	01/28/09	8.0								4650
P767	01/07/09	11.5								
P767	01/14/09	11.3	<1							4750
P767	01/21/09	11.0								
P767	01/28/09	11.8								4770
P796	01/07/09	6.3								
P796	01/14/09	5.9	<1							4270
P796	01/21/09	5.8								
P796	01/28/09	6.8								4280
P837	01/07/09	6.8								
P837	01/14/09	6.3	<1							4730
P837	01/21/09	5.8								
P837	01/28/09	6.0								4710
P1138	01/07/09	9.6								
P1138	01/14/09	9.3	<1							4590
P1138	01/21/09	9.2								
P1139	01/07/09	11.6								
P1139	01/21/09	10.6								
P1139	01/28/09	11.9								5040
P1144	01/07/09	8.4								
P1144	01/14/09	8.1	<1							4540
P1144	01/21/09	7.4								
P1144	01/28/09	7.6								4560
P1156	01/07/09	9.0								
P1156	01/14/09	8.7	<1							4580
P1156	01/21/09	8.7								
P1156	01/28/09	8.4								4530
P1181	01/07/09	8.0								
P1181	01/14/09	7.6	<1							4550
P1181	01/21/09	6.8								
P1181	01/28/09	6.8								4560

Mine Unit 5 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P1193	01/07/09	10.4								
P1193	01/14/09	10.4	<1							4610
P1193	01/21/09	10.0								
P1193	01/28/09	10.2								4640
I1202P	01/07/09	9.0								
I1202P	01/14/09	9.0	<1							4670
I1202P	01/21/09	8.8								
I1202P	01/28/09	9.6								4940