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 14, 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
January 2013 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the January 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 2, 3, 4, and 5. IX treatment continued in Mine Unit 6 with groundwater sweep being initiated in one wellhouse. Groundwater sweep was continued in portions of Mine Units 4 and 5.

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: Shar Sapp, NDEQ Chadron Office
Ron Burrows, NRC
CBO File
ec: CR - Cheyenne

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

JANUARY 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		RO and Reductant PR15, P97, P113, I180P, I188P, and P209.
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:

P97, P113, I180P, I188P, and P209.

Mine Unit 2 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P97	01/09/13	0.93								
P97	01/16/13	0.27								342
P97	01/23/13	0.34								
P97	01/30/13	0.51								305
P113	01/09/13	1.64								
P113	01/16/13	1.06								948
P113	01/23/13	0.99								
P113	01/30/13	1.14								913
I180P	01/09/13	0.57								
I180P	01/16/13	0.35								1099
I180P	01/23/13	0.37								
I180P	01/30/13	0.47								1083
I188P	01/09/13	0.88								
I188P	01/16/13	0.5								617
I188P	01/23/13	0.55								
I188P	01/30/13	0.67								572
P209	01/09/13	1.15								
P209	01/16/13	0.92								1244
P209	01/23/13	0.92								
P209	01/30/13	0.97								1187

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

JANUARY 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		RO and Reductant CM1-1, CM1-11, IJ13P, I298P, and RES2E.
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:

CM1-1, CM1-11, I298P, and RES2E.

Mine Unit 3 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
CM1-1	01/09/13	0.78								
CM1-1	01/16/13	0.41								401
CM1-1	01/23/13	0.38								
CM1-1	01/30/13	0.47								361
CM1-11	01/09/13	0.38								
CM1-11	01/16/13	0.03								2058
CM1-11	01/23/13	0.21								
CM1-11	01/30/13	0.25								2029
I298P	01/09/13	0.08								
I298P	01/16/13	0.00								386
I298P	01/23/13	0.10								
I298P	01/30/13	0.16								373
RES2E	01/09/13	1.89								
RES2E	01/16/13	1.43								946
RES2E	01/23/13	1.53								
RES2E	01/30/13	1.60								922

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

JANUARY 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 P380, P387, P393, P394, P421, P422, P456, P461, I548P, 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, P371, P372, P396, P397, P426, P430, P434, P437, P508, and P537.

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

CM2-4, P371, P372, P380, P387, P393, P394, P421, P422, P426, P430, P434, P437, P456, P461, I508P, I537P, I548P, and I551P.

Mine Unit 4 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
CM2-4	01/09/13	2.62								
CM2-4	01/16/13	2.46								3620
CM2-4	01/23/13	2.47								
CM2-4	01/30/13	2.78								3500
P371	01/09/13	5.09								
P371	01/16/13	4.37								2381
P371	01/23/13	4.49								
P371	01/30/13	4.47								2263
P372	01/16/13	6.05								1673
P372	01/23/13	5.29								
P372	01/30/13	4.76								1523
P380	01/09/13	8.48								
P380	01/23/13	8.51								
P380	01/30/13	8.21								4440
P387	01/09/13	4.65								
P387	01/16/13	3.99								1863
P387	01/23/13	3.61								
P387	01/30/13	3.60								1550
P393	01/09/13	2.58								
P393	01/16/13	2.26								1587
P393	01/23/13	2.02								
P394	01/09/13	4.41								
P394	01/16/13	3.38								2001
P394	01/23/13	3.16								
P394	01/30/13	3.11								1795
P421	01/09/13	1.93								
P421	01/16/13	2.46								3760
P421	01/23/13	2.59								
P421	01/30/13	2.70								3540
P422	01/09/13	1.90								
P422	01/16/13	1.70								1253
P426	01/09/13	10.85								
P426	01/16/13	10.15								4160
P426	01/23/13	10.17								
P426	01/30/13	10.23								4290

Mine Unit 4 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P430	01/09/13	2.01								
P430	01/16/13	1.82								1336
P430	01/23/13	1.78								
P430	01/30/13	1.78								1317
P434	01/09/13	1.44								
P434	01/16/13	1.26								1339
P434	01/23/13	0.95								
P434	01/30/13	1.34								1317
P437	01/09/13	7.08								
P437	01/16/13	6.87								2870
P437	01/23/13	6.92								
P437	01/30/13	7.09								2863
P456	01/09/13	2.42								
P456	01/16/13	2.18								1800
P456	01/23/13	2.20								
P456	01/30/13	2.15								1642
P461	01/09/13	15.21								
P461	01/16/13	15.32								4760
P461	01/23/13	14.22								
P461	01/30/13	14.03								4470
I508P	01/09/13	8.18								
I508P	01/16/13	7.95								4240
I508P	01/23/13	7.84								
I508P	01/30/13	7.95								4340
I537P	01/16/13	4.28								4320
I548P	01/09/13	5.52								
I548P	01/16/13	5.05								4950
I548P	01/23/13	5.28								
I548P	01/30/13	5.28								4960
I551P	01/09/13	12.39								
I551P	01/16/13	12.08								3830
I551P	01/23/13	12.40								
I551P	01/30/13	12.38								3760

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

JANUARY 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 I676P, P773, P790, P800, P962, P1075, P1099, P1117, P1155, and P1232.
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:
BL5-5, P690, I854P, P891, P897, P837, and P1209.

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

I676P, P690, P773, P790, P800, P837, I854P, P891, P897, P962, P1075, P1117, P1155, P1209, and P1232.

Mine Unit 5 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
I676P	01/09/13	3.89								
I676P	01/16/13	3.73								1581
I676P	01/23/13	3.90								
I690P	01/09/13	16.97	<1							
I690P	01/16/13	14.47								4460
I690P	01/23/13	15.23								
I690P	01/30/13	16.95								4920
P773	01/09/13	2.38								
P773	01/16/13	2.10								2199
P773	01/23/13	2.16								
P773	01/30/13	2.26								2126
P790	01/09/13	1.31								
P790	01/16/13	1.23								663
P790	01/23/13	1.26								
P800	01/09/13	2.14								
P800	01/16/13	2.06								2555
P800	01/23/13	2.15								
P800	01/30/13	2.36								2510
P837	01/09/13	3.96	<1							
P837	01/16/13	3.96								3780
P837	01/23/13	4.10								
P837	01/30/13	4.76								4170
I854P	01/09/13	2.19								
I854P	01/16/13	1.69								3150
I854P	01/23/13	1.80								
I854P	01/30/13	1.97								3140
P891	01/09/13	3.07								
P891	01/16/13	2.83								2039
P891	01/23/13	2.97								
P891	01/30/13	3.22								2022
P897	01/09/13	4.08								
P897	01/16/13	4.23								2314
P897	01/23/13	4.35								
P897	01/30/13	4.64								2354
P962	01/09/13	8.39	<1							
P962	01/16/13	8.50								2916
P962	01/23/13	8.65								
P962	01/30/13	9.01								2993

Mine Unit 5 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P1075	01/09/13	2.98								
P1075	01/16/13	2.64								1303
P1075	01/23/13	2.48								
P1075	01/30/13	2.49								1212
P1117	01/09/13	3.38								
P1117	01/16/13	2.33								1300
P1117	01/23/13	2.16								
P1117	01/30/13	2.15								1700
P1155	01/09/13	7.52	<1							
P1155	01/16/13	7.54								3180
P1155	01/23/13	7.58								
P1155	01/30/13	7.72								3080
P1209	01/09/13	12.75	<1							
P1209	01/16/13	12.00								3350
P1209	01/23/13	12.06								
P1209	01/30/13	12.57								3500
P1232	01/09/13	6.27								
P1232	01/16/13	5.86								1396
P1232	01/23/13	5.53								
P1232	01/30/13	5.42								1320

CROW BUTTE MINE

MONTHLY RESTORATION REPORT

JANUARY 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, P1314, P1322, P1370, P1474, P1494, P1497, P1531, P1588, P1596, P1612, P1630, P1633, P1703, P1715, P1751, P1756, 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:
P1348.

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

P1268, P1283, P1312, P1314, P1322, P1348, P1370, P1474, P1494, P1497, P1531, P1588, P1596, P1612, P1630, P1633, P1703, P1715, P1751, P1756, P1778, P1794, P1800, P1857, and P1865.

Mine Unit 6 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P1268	01/09/13	11.03								
P1268	01/16/13	10.04								5100
P1268	01/23/13	9.95								
P1268	01/30/13	9.48								5130
P1283	01/09/13	30.18	1.5							
P1283	01/16/13	29.78								5510
P1283	01/23/13	30.20								
P1283	01/30/13	31.63								5540
P1312	01/09/13	19.49	1.1							
P1312	01/16/13	20.43								5400
P1312	01/23/13	20.17								
P1312	01/30/13	21.15								5270
P1314	01/09/13	11.38								
P1314	01/16/13	10.33								5190
P1314	01/23/13	10.31								
P1314	01/30/13	10.86								5180
P1322	01/30/13	7.20								5090
P1348	01/09/13	10.68								
P1348	01/16/13	10.15								5370
P1348	01/23/13	10.28								
P1348	01/30/13	9.03								5330
P1370	01/09/13	12.82	<1							
P1370	01/16/13	12.95								5340
P1370	01/23/13	13.28								
P1370	01/30/13	13.97								5260
P1474	01/30/13	8.82								5640
P1494	01/16/13	5.33								4910
P1497	01/09/13	76.81								
P1497	01/16/13	75.81								5080
P1497	01/23/13	76.57								
P1497	01/30/13	73.24								5080
P1531	01/09/13	7.54								
P1531	01/16/13	7.42								5340
P1588	01/09/13	6.93								
P1588	01/16/13	6.75								5240
P1588	01/23/13	7.06								

Mine Unit 6 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P1596	01/09/13	40.49								
P1596	01/16/13	41.07								5340
P1596	01/23/13	39.14								
P1596	01/30/13	38.05								5410
P1612	01/09/13	9.65								
P1612	01/16/13	9.03								5250
P1612	01/23/13	9.48								
P1630	01/30/13	9.81								5620
P1633	01/09/13	15.67								
P1633	01/16/13	14.22								4170
P1633	01/23/13	15.01								
P1633	01/30/13	14.54								4160
P1703	01/09/13	8.20	1.5							
P1703	01/16/13	7.95								5250
P1715	01/09/13	23.26								
P1715	01/16/13	25.65								5640
P1715	01/23/13	25.10								
P1715	01/30/13	25.55								5620
P1751	01/09/13	10.55								
P1751	01/16/13	10.32								5300
P1751	01/23/13	10.31								
P1751	01/30/13	10.64								5330
P1756	01/09/13	14.06								
P1756	01/16/13	12.36								5180
P1756	01/23/13	14.01								
P1756	01/30/13	12.12								5210
P1778	01/09/13	11.21								
P1778	01/16/13	11.10								5270
P1778	01/23/13	11.14								
P1778	01/30/13	11.55								5300
P1794	01/30/13	8.45								2894
P1800	01/09/13	12.39								
P1800	01/16/13	12.00								5140
P1800	01/23/13	12.00								
P1800	01/30/13	12.37								5200

Mine Unit 6 Restoration Data

Well	Date	U_3O_8	V	Total CO_3	pH	Ca	Na	Cl	SO_4	Cond
P1857	01/09/13	11.86								
P1857	01/16/13	11.26								5130
P1857	01/23/13	11.10								
P1857	01/30/13	11.49								5140
P1865	01/30/13	86.93								5390

NRC FORM 253 (9-96)

U.S. NUCLEAR REGULATORY COMMISSION

MESSENGER/COURIER RECEIPT

DATE OF REQUEST: 2-26-13			CONTROL NUMBER:
TO: Ron Burrows	OFFICE: FSME	BUILDING: TWFN	ROOM NUMBER: 8F5
FROM: Cameco Resources	OFFICE: ADM	BUILDING: OWFN	ROOM NUMBER: P1-C10

DESCRIPTION
USPS Certified envelope
7010 0780 0000 1422 4336

MESSENGER/COURIER SIGNATURE

MESSENGER/COURIER: MEC	DATE RECEIVED: 2-26
	TIME RECEIVED: 8 am
MESSENGER/COURIER:	DATE RECEIVED:
	TIME RECEIVED:

RECIPIENT'S SIGNATURE

RECIPIENT: Champa Raj [illegible]	DATE RECEIVED: 2/26
	TIME RECEIVED: 43

SENDER:
1. Complete "DATE OF REQUEST," "TO:," "FROM:," and unclassified "DESCRIPTION" blocks.
2. Obtain MESSENGER/COURIER signature, date received, and time received in first blocks provided.
3. Retain "SENDER'S SUSPENSE COPY."

MESSENGER/COURIER:
1. Deliver package to recipient or next messenger/courier enroute to addressee.
2. Obtain MESSENGER/COURIER or RECIPIENT signature, date received, and time received in the appropriate blocks provided.

RECIPIENT:
1. Provide signature, date received, and time received in the appropriate blocks.
2. Retain RECIPIENT'S COPY.
3. Return original to mesenger/courier immediately, who will return it to the sender.

NRC FORM 253 (9-96)

RECIPIENT'S COPY