

**CAMECO RESOURCES
CROW BUTTE OPERATION**



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

**(308) 665-2215
(308) 665-2341 – FAX**

July 6, 2012

**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
June 2012 Monthly Restoration Report

Dear Mr. Linder:

Please find enclosed the June 2012 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.

Split samples between the NDEQ and CBO were collected from the baseline restoration wells in Mine Units 2 and 3. The samples were submitted to two different third party laboratories for analyses of the baseline restoration parameters.

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
SHEQ Manager

Enclosures: As Stated

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

CROW BUTTE MINE
MONTHLY RESTORATION REPORT

JUNE 2012

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 CM2-4, 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 ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P97	06/06/12	0.90								484
P97	06/13/12	1.04								
P97	06/20/12	1.61								560
P97	06/27/12	1.40								
P113	06/06/12	0.94								954
P113	06/13/12	1.17								
P113	06/20/12	1.38								962
P113	06/27/12	1.06								
I180P	06/06/12	0.78								1492
I180P	06/13/12	1.04								
I180P	06/20/12	1.04								1469
I180P	06/27/12	0.77								
I188P	06/06/12	1.11								810
I188P	06/13/12	1.17								
I188P	06/20/12	1.42								792
I188P	06/27/12	1.04								
P209	06/06/12	1.55								1349
P209	06/13/12	1.64								
P209	06/20/12	2.06								1421
P209	06/27/12	1.72								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JUNE 2012
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 CM1-11, IJ13P, I298P, RES1E, and RES3E.
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:

CM1-11, I298P, and RES3E.

Mine Unit 3 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
CM1-11	06/06/12	0.00								2204
CM1-11	06/13/12	0.35								
CM1-11	06/20/12	0.64								2263
CM1-11	06/27/12	0.08								
I298P	06/06/12	0.00								404
I298P	06/13/12	0.08								
I298P	06/20/12	0.36								422
I298P	06/27/12	0.31								
RES3E	06/06/12	1.29								1020
RES3E	06/13/12	1.41								
RES3E	06/20/12	1.58								1028
RES3E	06/27/12	1.33								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JUNE 2012
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 P371, P372, P383, P430, P434, and P437.
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:

4. LIST WELLS SAMPLED DURING MONTH AND ASSAY RESULTS:

CM2-4, P371, P430, P434, and P437.

Mine Unit 4 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
CM2-4	06/06/12	4.20								4000
CM2-4	06/13/12	3.17								
P371	06/06/12	3.05								2005
P371	06/13/12	4.32								
P371	06/20/12	4.84								2171
P371	06/27/12	4.82								
P430	06/06/12	1.05								599
P430	06/13/12	1.24								
P430	06/20/12	1.46								670
P430	06/27/12	1.33								
P434	06/13/12	2.47								
P434	06/20/12	2.71								2503
P434	06/27/12	2.66								
P437	06/06/12	6.23								2815
P437	06/13/12	6.54								
P437	06/20/12	6.85								2952
P437	06/27/12	6.84								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JUNE 2012
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 BL-5, I676P, P707, P709, P773, P790, P800, and I854P.
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:

I676P, P707, P709, P773, P790, P800, and I854P.

Mine Unit 5 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
I676P	06/06/12	5.74								2100
I676P	06/13/12	5.56								
I676P	06/20/12	4.38								1960
P707	06/06/12	3.58								884
P707	06/13/12	3.80								
P707	06/20/12	4.01								863
P707	06/27/12	3.60								
P709	06/06/12	4.74								1805
P709	06/13/12	4.63								
P709	06/20/12	4.44								1676
P773	06/06/12	2.97								2700
P773	06/13/12	2.75								
P773	06/20/12	3.01								2668
P773	06/27/12	2.87								
P790	06/06/12	1.85								1004
P790	06/13/12	2.18								
P790	06/20/12	1.89								1008
P800	06/06/12	2.59								2931
P800	06/13/12	2.39								
P800	06/20/12	2.40								2838
P800	06/27/12	2.54								
I854P	06/06/12	1.86								3300
I854P	06/13/12	2.08								
I854P	06/20/12	2.11								3280
I854P	06/27/12	2.06								

CROW BUTTE MINE
MONTHLY RESTORATION REPORT
JUNE 2012
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, P1370, P1497, P1531, P1588, P1596, P1612, P1633, P1658, P1703, P1704, P1710, P1715, P1733, P1751, P1756, P1778, P1800, P1857, and P1862.
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, P1314, P1370, P1497, P1531, P1588, P1596, P1612, P1633, P1658, P1703, P1704, P1710, P1715, P1733, P1751, P1756, P1778, P1800, P1857, and P1862.

Mine Unit 6 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P1268	06/06/12	16.72								5110
P1268	06/13/12	15.38								
P1268	06/20/12	15.84								5070
P1268	06/27/12	14.97								
P1283	06/06/12	33.25	1.8							5750
P1283	06/13/12	33.10								
P1283	06/20/12	35.35								5770
P1283	06/27/12	35.56								
P1312	06/06/12	18.67	1							5230
P1312	06/13/12	18.86								
P1312	06/27/12	18.48								
P1314	06/06/12	14.48								5350
P1314	06/13/12	14.73								
P1314	06/20/12	15.15								5390
P1314	06/27/12	15.34								
P1370	06/06/12	20.86	<1							5400
P1370	06/13/12	20.28								
P1370	06/20/12	22.40								5420
P1370	06/27/12	19.82								
P1497	06/06/12	58.87	<1							5090
P1497	06/13/12	56.00								
P1497	06/20/12	58.63								5110
P1497	06/27/12	60.06								
P1531	06/06/12	8.20	<1							5470
P1531	06/13/12	8.06								
P1531	06/20/12	8.40								5420
P1531	06/27/12	8.11								
P1588	06/06/12	7.89								5470
P1588	06/13/12	7.81								
P1588	06/20/12	8.02								5490
P1588	06/27/12	7.85								
P1596	06/06/132	72.25								5710
P1596	06/13/12	63.90								
P1596	06/20/12	67.41								5680
P1596	06/27/12	64.70								

Mine Unit 6 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P1612	06/06/12	10.17								5410
P1612	06/13/12	11.68								
P1612	06/20/12	11.59								5380
P1612	06/27/12	11.14								
P1633	06/06/12	18.86								4560
P1633	06/13/12	19.46								
P1633	06/20/12	19.39								4610
P1633	06/27/12	20.37								
P1658	06/06/12	5.50								4910
P1658	06/13/12	5.53								
P1658	06/20/12	5.40								4960
P1658	06/27/12	4.96								
P1703	06/06/12	10.04	1.4							5410
P1703	06/13/12	9.92								
P1703	06/20/12	9.65								5380
P1703	06/27/12	9.93								
P1704	06/06/12	7.98	<1							5310
P1704	06/13/12	8.08								
P1704	06/20/12	6.66								5340
P1704	06/27/12	7.30								
P1710	06/06/12	3.55	<1							5450
P1710	06/13/12	3.33								
P1710	06/20/12	3.58								5460
P1710	06/27/12	3.24								
P1715	06/06/12	20.73								5560
P1715	06/13/12	20.48								
P1715	06/20/12	24.04								5690
P1715	06/27/12	26.04								
P1733	06/06/12	8.83								5450
P1733	06/13/12	8.87								
P1733	06/20/12	8.72								5420
P1733	06/27/12	8.04								
P1751	06/06/12	16.61								5640
P1751	06/13/12	15.62								
P1751	06/20/12	15.22								5610
P1751	06/27/12	15.57								

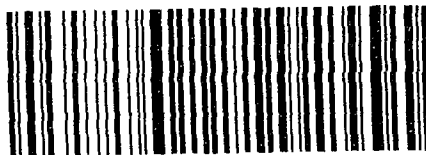
Mine Unit 6 Restoration Data

Well	Date	U ₃ O ₈	V	Total CO ₃	pH	Ca	Na	Cl	SO ₄	Cond
P1756	06/06/12	23.75								4940
P1756	06/13/12	22.08								
P1756	06/20/12	21.71								4980
P1756	06/27/12	20.60								
P1778	06/06/12	10.89								5460
P1778	06/13/12	11.16								
P1778	06/20/12	10.99								5420
P1778	06/27/12	10.83								
P1800	06/06/12	12.18								5270
P1800	06/27/12	11.76								
P1857	06/06/12	18.22								5480
P1857	06/13/12	17.50								
P1857	06/20/12	16.72								5500
P1857	06/27/12	16.27								
P1862	06/06/12	8.88								
P1862	06/13/12	8.96								
P1862	06/20/12	8.79								5700
P1862	06/27/12	8.36								

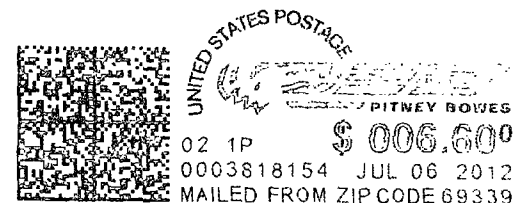
NRC FORM 253 (9-96)		U.S. NUCLEAR REGULATORY COMMISSION		DATE OF REQUEST		CONTROL NUMBER	
MESSENGER/COURIER RECEIPT				7-13-12			
TO: Mr. Ron Burrows				OFFICE FSME		BUILDING TWFN	
FROM: Cameco Resources				OFFICE ADM		BUILDING OWFN	
ROOM NUMBER 8F5				ROOM NUMBER PI-C10			
DESCRIPTION USPS Certified envelope 7010.0780.00001422-1250				MESSENGER/COURIER SIGNATURE			
				MESSENGER/COURIER		DATE RECEIVED	
				MEC		7-13	
						TIME RECEIVED	
						1:45 PM	
MESSENGER/COURIER		DATE RECEIVED					
		TIME RECEIVED					
				RECIPIENT'S SIGNATURE			
RECIPIENT		DATE RECEIVED					
(Signature)		7/16/12					
		TIME RECEIVED					
		8:45					
SENDER:				MESSENGER/COURIER:		RECIPIENT:	
1. Complete "DATE OF REQUEST," "TO:," "FROM:," and unclassified "DESCRIPTION" blocks.				1. Deliver package to recipient or next messenger/courier enroute to addressee.		1. Provide signature, date received, and time received in the appropriate blocks.	
2. Obtain MESSENGER/COURIER signature, date received, and time received in first blocks provided.				2. Obtain MESSENGER/COURIER or RECIPIENT signature, date received, and time received in the appropriate blocks provided.		2. Retain RECIPIENT'S COPY.	
3. Retain "SENDER'S SUSPENSE COPY."						3. Return original to messenger/courier immediately, who will return it to the sender.	

NRC FORM 253 (9-96)

RECIPIENT'S COPY



7010 0780 0000 1422 1250



GPO U.S. GOVERNMENT PRINTING OFFICE: 2011-368-983



CAMECO RESOURCES
Crow Butte Operation
86 Crow Butte Road
P.O. Box 169
Crawford, NE
69339 USA

Mr. Ron Burrows, Project Manager
Decommissioning and Uranium Recovery Licensing
Directorate
Division of Waste Management and Environmental
Protection
Office of Federal and State Materials and
Environmental Management Programs
Mailstop T8-F5
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001