

**CAMECO RESOURCES
CROW BUTTE OPERATION**



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

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

June 13, 2012

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Attn: Document Control Desk, Deputy Director
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

Subject: Source Materials License SUA-1534
Docket No. 40-8943
Well P-4501 Repair

Dear Deputy Director:

On June 4, 2012, during routine MIT, well number P-4501 in Mine Unit 10, Wellhouse 50 failed the MIT criteria at Crow Butte Resources, Inc. (CBR), d/b/a Cameco Resources – Crow Butte Operation mine site. A copy of the letter submitted to the Nebraska Department of Environmental Quality (NDEQ) detailing the repair of this well is enclosed. The copy is submitted in compliance with License Condition 12.2 of Source Materials License SUA-1534.

If you have any questions or concerns on this matter, please do not hesitate to call me at 308-665-2215 ext. 114.

Sincerely,

Larry Teahon
Manager, Safety, Health, Environment, and Quality

Enclosures

cc: CBO - File
ec: CR - Cheyenne

FSME20

**Cameco Resources
Crow Butte Operation**

86 Crow Butte Road
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Crawford, Nebraska 69339-0169



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June 8, 2012

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

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

Dear Mr. Linder:

On June 4, 2012, during routine 5-year Mechanical Integrity Testing (MIT), well number P-4501 in Mine Unit 10, Wellhouse 50 failed the MIT criteria. Using isolation techniques, it was determined that the failure is the casing joint at the 320-foot level. Jenny Coughlin, Groundwater Geologist UIC/ME, at Nebraska Department of Environmental Quality (NDEQ), Lindsey Phillips of the NDEQ field office in Chadron, Nebraska, and Ron Burrows, NRC Project Manager were notified concerning this well on June 4, 2012 at 2:15 p.m. MDT.

The joint that failed is located near the base of the red clay marker bed, two feet above the top of the basal Chadron sands, and twenty five feet below the bottom of the appetite zone which places the leak within the exempted aquifer. This data was reviewed with Jenny Coughlin and she concurred that the likelihood for contamination was minimal.

The nearest Shallow Monitor (SM) well to P-4501 is SM10-5. I have enclosed the latest results from SM10-5 for your review.

On June 7, 2012, Crow Butte repaired P-4501 by installing a sleeve to cover the failed joint. The well was successfully re-MIT'd which ensured the repair was sufficient.

If you have any questions or concerns on this matter, please do not hesitate to call me.

Sincerely,

Jim Stokey
General Manager

**Cameco Resources
Crow Butte Operation**



Page Two

Enclosures

cc: Lindsey Phillips – NDEQ
Ron Burrows – NRC
CBO – File
ec: CR - Cheyenne



Nebraska Department of Environmental Quality

Casing Integrity Test Report

Company: Crow Butte

Permit No: NE0122611

Project: Crow Butte

Well No: 4501

Casing Type: Certa-Lok

Diameter: 4.5 in.

Hole Depth: 390 ft.

Casing Depth: 389 ft.

Screened Interval 1 Top: 363 ft.

Screened Interval 2 Top: ft.

Screened Interval 1 Bottom: 377 ft.

Screened Interval 2 Bottom: ft.

Screened Interval 3 Top: ft.

Screened Interval 4 Top: ft.

Screened Interval 3 Bottom: ft.

Screened Interval 4 Bottom: ft.

Depth to K-Packer: 354 ft.

Depth to Test Packer(s) Top: Ground Level ft.

Bottom: 343 ft.

Comments:

Five Year Retest

Time	Elapsed Time (Min)	Pressure (PSIG)
10:20	0	125
10:25	5	124
10:30	10	123
10:35	15	120
10:40	20	118

Well Tag ID Number: 4501

Test Performed By: Tennessee Dix

Date: 6-7-12

Calibration Performed By: Tennessee Dix

Date: 6-7-12

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. Further, I certify awareness that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

By Steven Boeslager

PRINTED NAME OF PERSON SIGNING

By Steven Boeslager

SIGNATURE

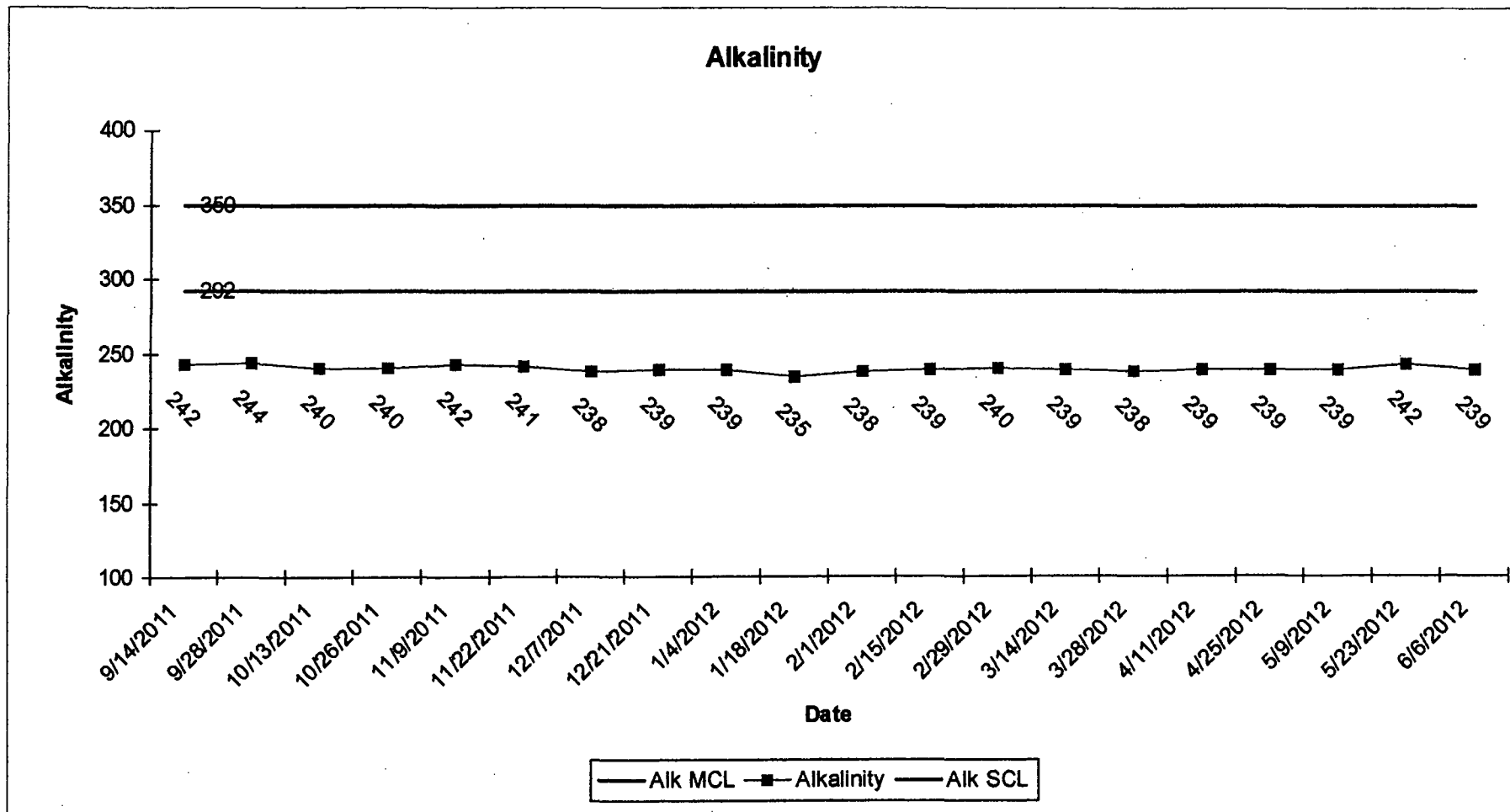
Restoration Supervisor

TITLE

6-11-12

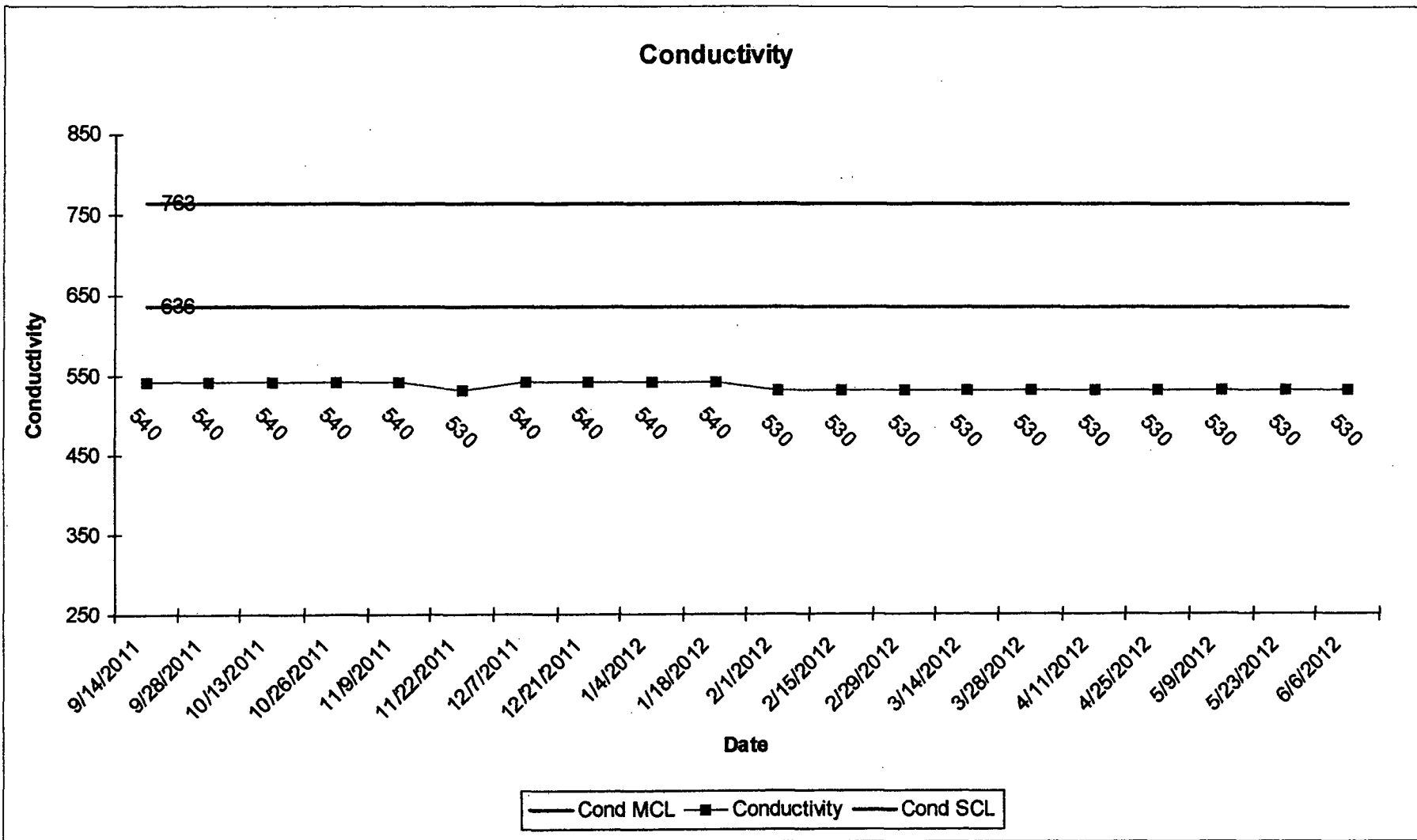
DATE

SM10-5



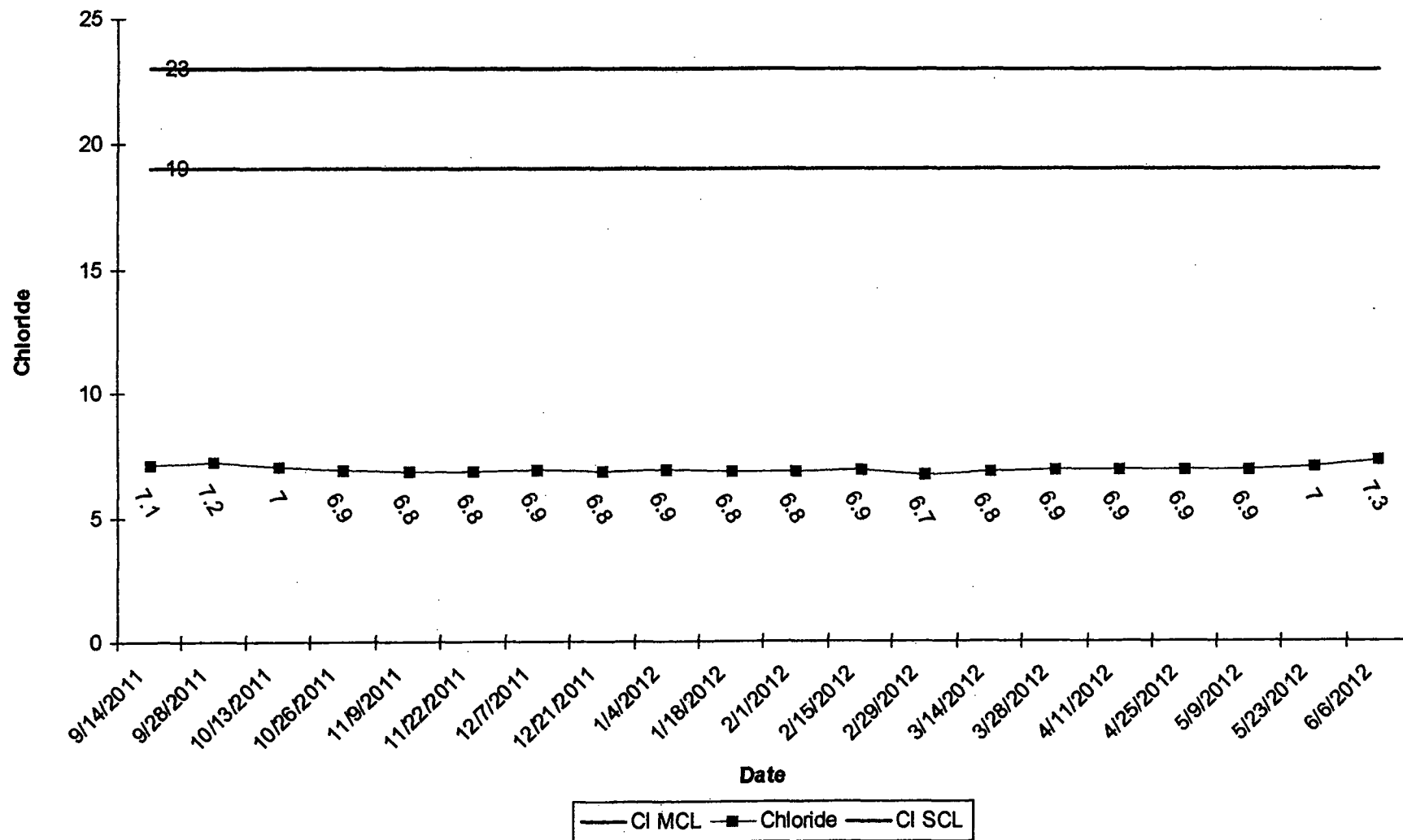
SM10-5

Conductivity



SM10-5

Chloride



SM10-5

