

**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
 Mechanical Integrity Testing (MIT) Failure at Well SM6-5

Dear Deputy Director:

On May 25, 2012, during routine MIT, well number SM6-5 in Mine Unit 6, Wellhouse 21 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: As stated.

cc: CBO - File
ec: CR - Cheyenne

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

Dear Mr. Linder:

On May 25, 2012, during routine 15-year Mechanical Integrity Testing (MIT), well number SM6-5 in Mine Unit 6, Wellhouse 21 failed the MIT criteria. Using isolation techniques, it was been determined that the failure was at the top of the 70 foot sleeve. Jenny Coughlin, Groundwater Geologist UIC/ME, at Nebraska Department of Environmental Quality (NDEQ), Lindsey Phillips, of the NDEQ field office in Chadron, and Ron Burrows, NRC Project Manager were notified concerning this well on May 25, 2015 at 11:55 a.m. MDT.

This well is a shallow monitor well which is sampled bi-weekly. The failed joint is approximately 5 feet above the static water level for the Brule Formation. Based on the location of the failure the likelihood for contamination is minimal.

Following isolation of the problem, a 70 foot sleeve was set using a drilling rig. The top of the 70 foot long patch is located at 34 feet and extends to 104 feet.

The well was then re-integrity tested on June 7, 2012 to check the entire well interval from 105' to surface. A copy of the successful MIT is enclosed.

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

Sincerely,

Jim Stokey
General Manager

Enclosures

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



Nebraska Department of Environmental Quality

Casing Integrity Test Report

Phil Dunn

Company: Crow Butte

Permit No: NE0122611

Project: Crow Butte

Well No: SM6-5

Casing Type: Certa-Lok

Diameter: 4.5 in.

Hole Depth: 220 ft.

Casing Depth: 109 ft.

Screened Interval 1 Top: 115 ft.

Screened Interval 2 Top: ft.

Screened Interval 1 Bottom: 150 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: 105 ft.

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

Bottom: 98 ft.

Comments:

5 YR Retest

Tested in Sleeve with bottom packer inflated to 300#

Time	Elapsed Time (Min)	Pressure (PSIG)
0935	0	125
0940	5	124
0945	10	123
0950	15	123
0955	20	122

Well Tag ID Number: SM 6-5

Test Performed By: *Old Elk*

Date: 6-7-12

Calibration Performed By: *DE*

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 Boeselager*
PRINTED NAME OF PERSON SIGNING

By *Steven Boeselager*
SIGNATURE

Restoration Supervisor
TITLE

6-11-12
DATE