

December 16, 2013

Sent via Overnight Mail

Attn: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Mr. Drew Persinko, Deputy Director  
Decommissioning & Uranium Recovery Licensing Directorate  
Division of Waste Management & Environmental Protection  
Office of Federal and State Materials &  
Environmental Management Programs  
11545 Rockville Pike  
Rockville, MD 20852-2738

**Subject: License SUA-1341, Docket No. 40-8502  
Willow Creek Project  
November 26, 2013  
10-716 Injection Well Release  
Christensen Ranch Mine Unit 10**

Dear Mr. Persinko:

In accordance with License Conditions 12.2 and 9.2 of the referenced license, this correspondence serves as the written notification for a release of ISR injection fluid at the Mine Unit 10 wellfield area at Willow Creek (Christensen Ranch) located in Johnson County. The spill occurred on November 26, 2013. This area is entirely within the fenced MU-10 Controlled Area. The release was reported via email to the NRC Project Manager, Region IV personnel and WDEQ on November 27, 2013.

The details of the release are included on the attached Spill Report Summary along with a map of the location. Note that there were no significant impacts to the public, environment, wildlife or livestock.

Please contact me should you have any questions regarding this report.

Sincerely,



Tim McCullough  
Manager Site SHE

cc: Jon Winter  
Larry Arbogast  
Barry Koch  
Rick Kukura  
NRC File; Spill Reports



**Uranium One USA, Inc. - Willow Creek Project**  
**Spill Report Summary**  
**Mine Unit 10 ISR Injection Fluid Release**

**Date and Estimated Time (beginning & end)**

From: November 26, 2013 (09:00 am)

To: November 26, 2013 (15:25 pm)

**Location**

Christensen Ranch Mine Unit 10

Injection Well 10-716

Module 10-5

Section 35, Township 45N, Range 77W

Johnson County, Wyoming

(See attached map for detailed location)

**Spill Type**

ISR injection fluid

**Estimated Volume Released**

Spilled: Approximately 1,060 gallons of ISR injection fluid was released from Injection Well 10-716 when a pop-off valve opened up to relieve pressure and a small piece of poly shaving stuck between the plunger and the seat and did not allow the plunger to close. The injection well is located on a bench above a cut bank at the head of a small dry ephemeral draw that is a tributary to ephemeral Willow Creek in the 10-5 Wellfield. The associated leak detect with the injection well failed to alarm.

**Estimated Volume Recovered**

Approximately 600 gallons of the fluid was contained in two check dams that had been previously installed for erosion control in the area and the collected fluid was able to be recovered.

**Spill Analysis Results**

A small volume of the released fluid was obtained on November 26, 2013 and submitted to the Willow Creek on site lab for analysis. The results were as follows:

Uranium        0.32 ppm

**Impacts**

The release followed site drainage for approximately 50 feet and migrated down the adjacent ephemeral draw approximately 350 feet (see map). It is estimated that 1,465 square feet (0.03 acre) of soil was impacted. No wildlife or livestock were affected. No significant erosion resulted from the spill.

### **Soil Surveys & Analysis Results**

Due to the limited extent of the release no soil samples were obtained for analysis.

### **Remediation Actions**

Due to the limited extent of the release, no remediation is anticipated at this time.

### **Explanation of the Root Cause**

A 125 psi pop-off valve opened up to relieve pressure at the well head and a small piece of poly shaving became lodged between the plunger and the seat and did not allow the plunger to close. Additionally the associated leak detect device did not go into an audible alarm.

### **Corrective Actions**

The well was immediately shut off and repairs were made associated with the pop-off and the leak detect device.

### **Agency Reporting**

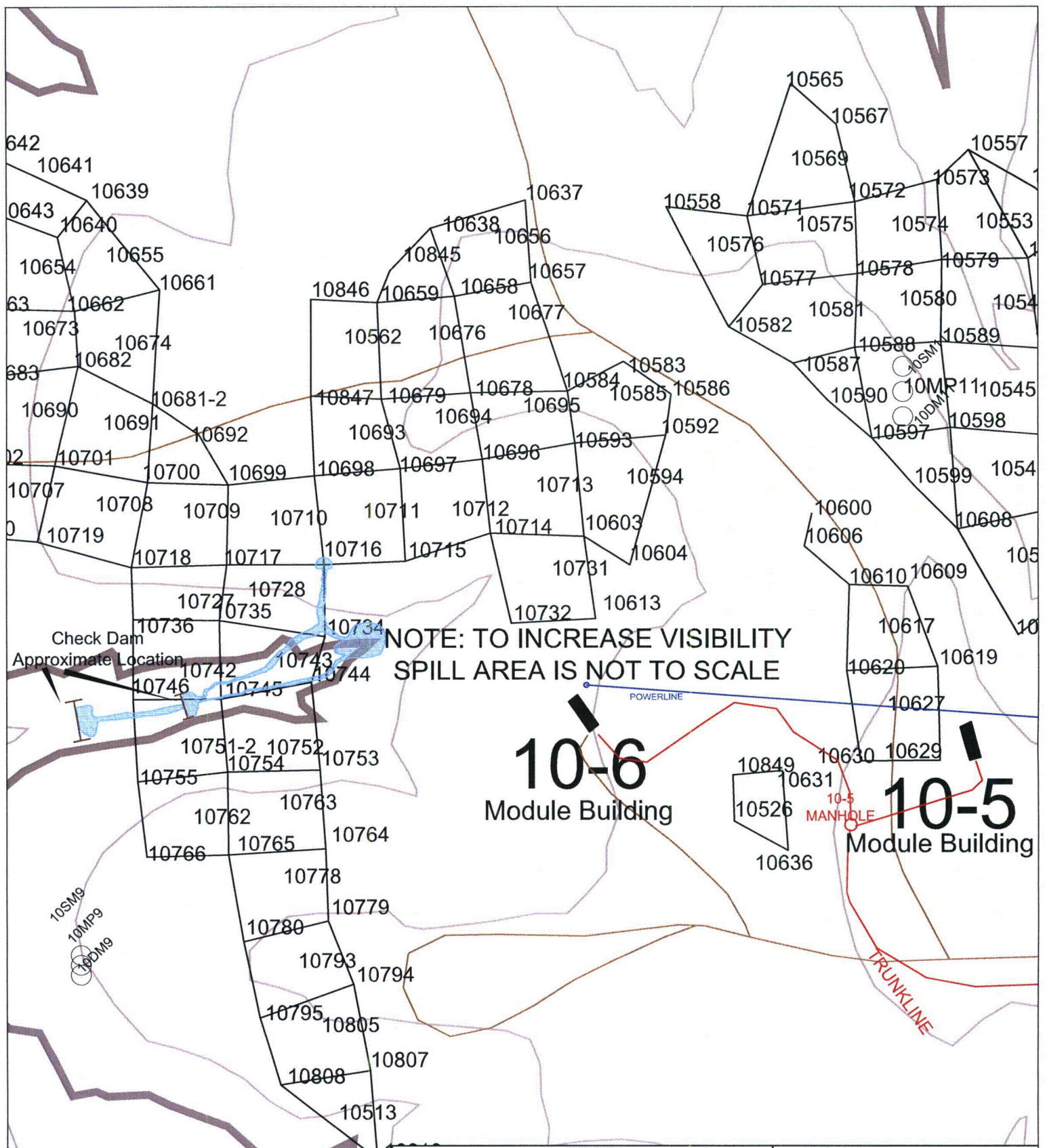
WDEQ: Luke McMahan - Permit Coordinator; November 27, 2013 (e-mail)  
Joe Hunter – Spill Coordinator; November 27, 2013 (e-mail)

NRC: Blair Spitzberg- Region IV Branch Chief; November 27, 2013 (e-mail)  
Ron Linton - Project Manager; November 27, 2013 (e-mail)  
Linda Gersey – Health Physicist, Region IV; November 27, 2013 (e-mail)

### **Map of Spill Location and Impacted Area**

Attached

The location and extent of the spill is recorded in the on-site historical spill file.



NOTE: TO INCREASE VISIBILITY  
SPILL AREA IS NOT TO SCALE

**10-6**  
Module Building

**10-5**  
Module Building



VERIFY SCALE  
1" : 100'



Christensen Ranch Satellite Project  
Module 10-6 Map

Date: 10/25/10	By: CM	Checked:	Approved:
Rev. No.	Description	Date	By
0	Initial Draft	01/12/11	CM
1	Injection Well 10-716 Spill	12/3/2013	CEO
Project Name: WILLOW CREEK		Figure #	REV 0