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January 22, 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
December 23, 2012
8AL198-2 Injection Well Release
Christensen Ranch Mine Unit 8

December 22, 2012
Deep Disposal Well #1 pump building
RO Brine Fluid Release

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 8 wellfield area at Willow Creek (Christensen Ranch) located in Johnson County. The spill occurred on December 23, 2012. This area is entirely within the fenced MU-8 Controlled Area.

Additionally, a release of RO Brine Fluid occurred at the Deep Disposal #1 pump building at Willow Creek (Christensen Ranch) located in Johnson County. The spill occurred on December 22, 2012. The affected area is entirely within the fenced DDW #1 Controlled Area.

The releases were reported via email to the NRC Project Manager, Region IV personnel and WDEQ on December 26, 2012.

The details of these releases are included on the attached Spill Report Summaries along with maps of the locations. Note that there were no significant impacts to the public, environment, wildlife or livestock.

Uranium One USA, Inc.
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Casper, Wyoming 82601
www.uranium1.com

FSME 21

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

Sincerely,

Tim McCullough
Manager Site SHE

cc: Bill Kearney
Larry Arbogast
Barry Koch
Rick Kukura
NRC File; Spill Reports

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Uranium One USA, Inc. - Willow Creek Project
Spill Report Summary
Mine Unit 8 ISR Injection Fluid Release

Date and Estimated Time (beginning & end)
From: December 23, 2012 at approximately (04:00 pm)
To: December 23, 2012 (08:30 pm)

Location
Christensen Ranch Mine Unit 8
Injection Well 8AL198-2
Module 8-2
Section 25, Township 45N, Range 77W
Johnson County, Wyoming
(see attached map for detailed location)

Spill Type
ISR injection fluid

Estimated Volume Released
Approximately 800 gallons of ISR injection fluid was released from Injection Well 8AL198-2 when a 125 psi "pop-off" valve opened to relieve some excess pressure. The well was located on a side hill in Heldt Draw which is a dry ephemeral swale. The released fluid flowed approximately 250 feet down the small hill and approximately 200 feet into the bottom of the draw. The affected area is located entirely within the fenced Controlled Area.

Estimated Volume Recovered
No fluid was recovered due to the fluid being frozen.

Spill Analysis Results
A small volume of the released fluid was obtained on December 23, 2012 and submitted to the Willow Creek on site lab for analysis. The results were as follows:

Uranium	<0.4 ppm

Impacts
The release was within the fenced MU-8 Controlled Area. It is estimated that 2144 square feet (0.05 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 and that it occurred inside the fenced wellfield area, 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 designed to release pressure in the event of a pressure build up opened up when the pressure at the injection well exceeded 125 psi. The leak detect device installed to alert plant operator of the release failed to operate properly due to the wires for the device lying across the float mechanism.

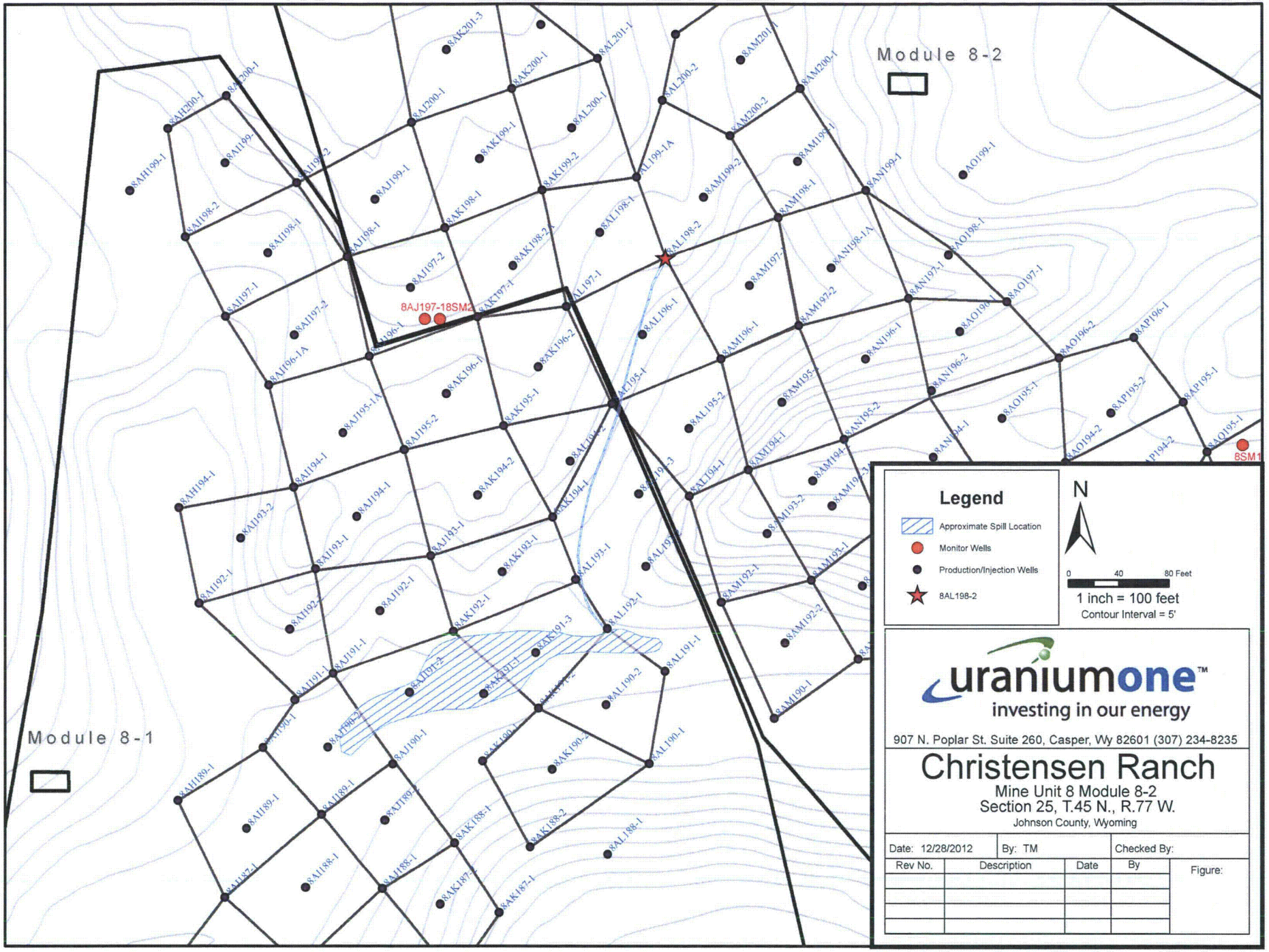
Corrective Actions
The well was immediately shut off and the "pop-off" was inspected. The manifold pressure at the Module Building was lowered. The leak detect device was made operable and an inspection of the leak detect mechanisms in the wellfield was performed to ensure that all would properly function.

Agency Reporting

WDEQ:	Mike Ploughe - Permit Coordinator; December 26, 2012 (e-mail)
	Joe Hunter – Spill Coordinator; December 26, 2012 (e-mail)
NRC:	Blair Spitzberg - Region IV Branch Chief; December 26, 2012 (e-mail)
	Ron Linton - Project Manager; December 26, 2012 (e-mail)
	Linda Gersey – Health Physicist, Region IV; December 26, 2012 (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.


Module 8-2
Module 8-1
8AJ197-18SM2
8SM1
Legend
Approximate Spill Location
Monitor Wells
Production/Injection Wells
8AL198-2
N
0 40 80 Feet
1 inch = 100 feet
Contour Interval = 5'
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907 N. Poplar St. Suite 260, Casper, Wy 82601 (307) 234-8235
Christensen Ranch
Mine Unit 8 Module 8-2
Section 25, T.45 N., R.77 W.
Johnson County, Wyoming
Date: 12/28/2012
By: TM
Checked By:
Rev No.
Description
Date
By
Figure:

Uranium One USA, Inc. - Willow Creek Project
Spill Report Summary
Deep Disposal Well #1 RO Brine Fluid Release

Date and Estimated Time (beginning & end)
From: December 22, 2012 (12:00 pm)
To: December 22, 2012 (3:20 pm)

Location
Deep Disposal Well #1 Pump Building
Section 7, Township 44N, Range 76W
Christensen Ranch
Johnson County, Wyoming
(see attached map for detailed location)

Spill Type
RO Brine fluid

Estimated Volume Released
Approximately 950 gallons of RO Brine fluid was released when a 3/4" steel plug that is located on the bottom of the fluid end of the charge pump located inside of the pump house building failed.

Estimated Volume Recovered
Approximately 800 gallons of the release was able to be recovered utilizing a sump pump to transfer released fluid back into the storage tank located inside of the building.

Spill Analysis Results
A sample of the released fluid was obtained on December 22, 2012 and submitted to the Willow Creek on site lab for analysis. The results were as follows:

Uranium	2.1 mg/L

Impacts
The release pooled on the graveled pad, access road and associated barrow pit around the building. It is estimated that 1,500 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 frozen ground conditions, the limited extent of the release, the fact that the majority of the release was located on the compacted gravel road surface and the majority of the release volume was recovered, no soil samples were obtained for analysis. Soil samples from the barrow pit area will be obtained and sent in for analysis when the ground thaws.

Remediation Actions

Due to the limited extent of the release, the volume of released fluid recovered and that most of the area was a graveled road and pad surface, no remediation is anticipated at this time.

Explanation of the Root Cause

A steel ¾" plug had corroded and failed due to years of service.

Corrective Actions

The pump was immediately shut off when the release was discovered. The failed steel plug was replaced with a new stainless steel plug as well as an additional plug on the pump was changed out with a stainless steel plug. A general inspection of the DDW #1 piping system was conducted.

Agency Reporting

WDEQ: Mike Ploughe - Permit Coordinator; December 26, 2012 (e-mail)
Joe Hunter – Spill Coordinator; December 26, 2012 (e-mail)

NRC: Blair Spitzberg- Region IV Branch Chief; December 26, 2012 (e-mail)
Ron Linton - Project Manager; December 26, 2012 (e-mail)
Linda Gersey – Health Physicist, Region IV; December 26, 2012 (e-mail)

Map of Spill Location and Impacted Area

Attached


Pond 2
Tank House
Pump Bldg
Well Bldg
Old Pit
bing™
Legend
Source
Approximate Spill Location
Site Facilities
N
0
25
50 Feet
1 inch = 50 feet
Contour Interval = 5'
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907 N. Poplar St. Suite 260, Casper, Wy 82601 (307) 234-8235
Christensen Ranch
DDW No. 1 Spill Location
Section 7, T.44 N., R.76 W.
Johnson County, Wyoming
Date: 12/28/2012
By: TM
Checked By:
Rev No.
Description
Date
By
Figure: