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**LOST CREEK ISR, LLC**

40-9068

October 4, 2016

ATTN: Document Control Desk  
Nuclear Regulatory Commission  
Washington, D.C. 20555-001

\*\*\*and\*\*\*

Brian Wood  
State of Wyoming  
Department of Environmental Quality - Land Quality Division  
510 Meadowview Drive  
Lander, WY 82520

**RE: Notification of Excursion at MO-108  
Lost Creek ISR Project SUA-1598 / PT788**

Mr. Saxton/Mr. Wood,

This is the written notification to NRC of the verification of an upper vertical excursion at the Lost Creek ISR Project in follow up to notification submitted via e-mail on September 30, 2016. The excursion detected at MO-108 was confirmed on September 29, 2016 by analysis of the verification sample collected that same day. The location of the well is provided on the attached figure "HH1-6 Patterns and Wells". The excursion was detected in the overlying FG horizon directly above the HJ mining horizon.

The excursion is based on the Upper Control Limits (UCL) calculated on a per well basis as approved by NRC. However, the event is not an excursion according to the LQD-approved method of determining UCLs on a per well basis.

In accordance with Operations Plan Section 3.6.4.3, this notification provides the following information:

- *Recent chemical trends of the monitor well on excursion*

The following table and charts provide data from 2016 to reveal the trends of the Upper Control Limit (UCL) parameters:

*Lost Creek ISR, LLC is a wholly-owned subsidiary of Ur-Energy Inc.*

TSX: URE

[www.ur-energy.com](http://www.ur-energy.com)

NM5501



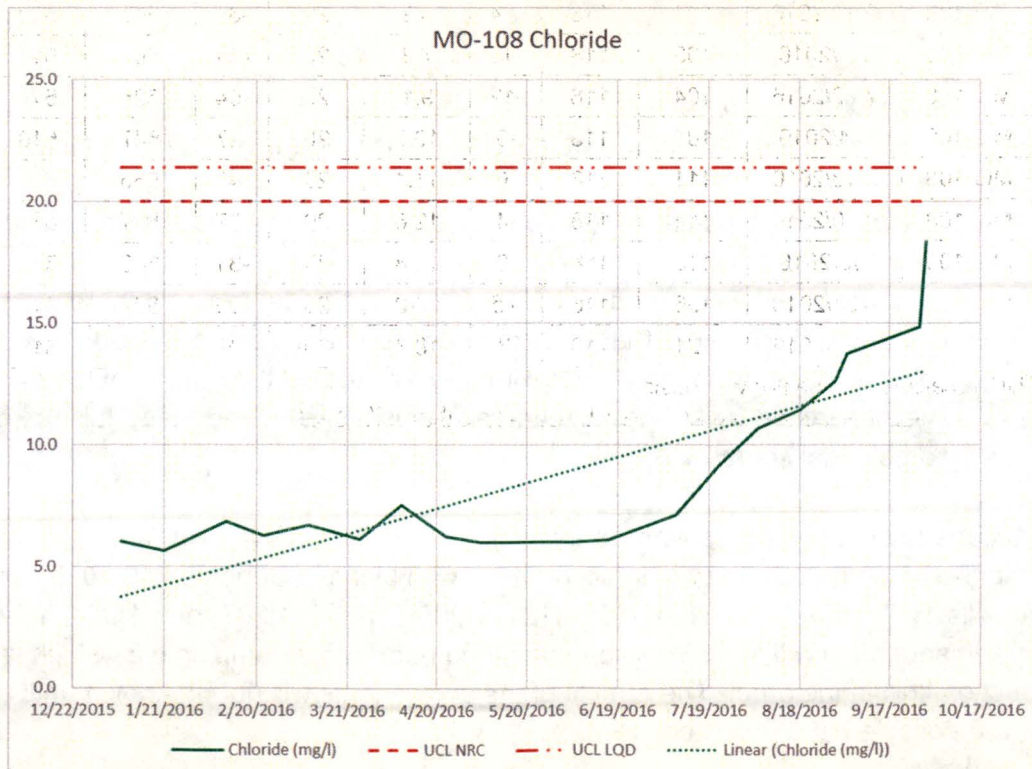
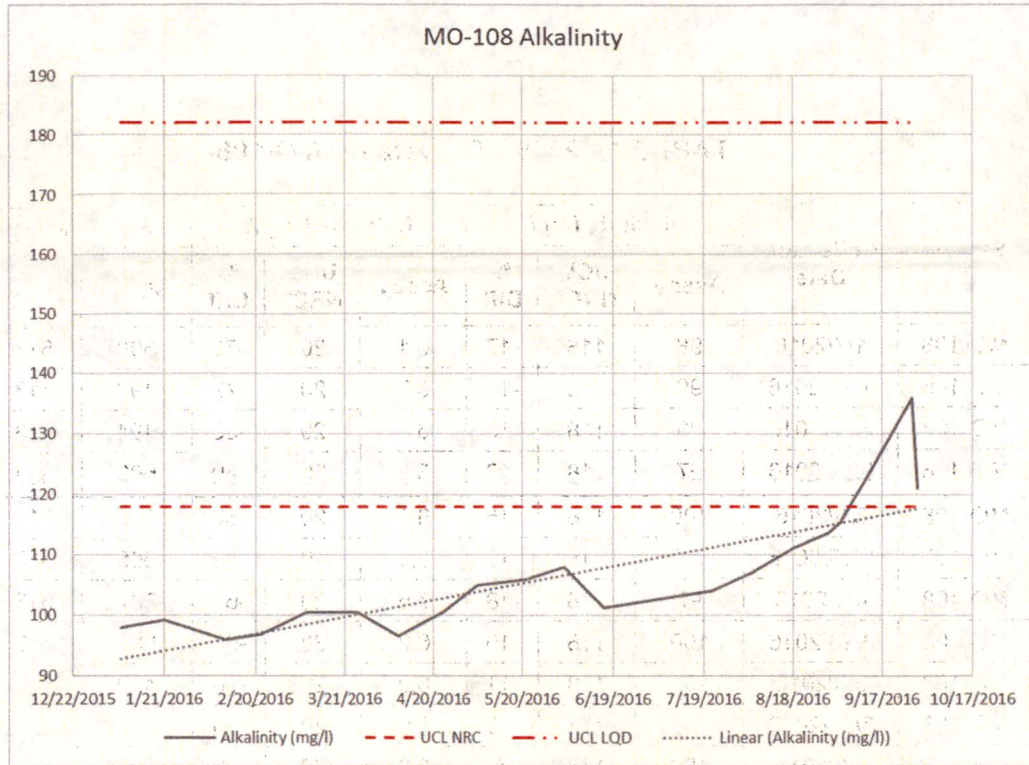
TABLE 1: 2016 UCL Data for MO-108

Sample ID	Collection Date	Alkalinity (mg/l)			Chloride (mg/l)			Sp. Cond. (µS/cm)		
		Assay	UCL NRC*	% Diff	Assay	UCL NRC*	% Diff	Assay	UCL NRC*	% Diff
MO-108	1/7/2016	98	118	-17	6.1	20	-70	500	513	-3
MO-108	1/21/2016	99	118	-16	5.7	20	-72	496	513	-3
MO-108	2/10/2016	96	118	-19	6.9	20	-66	494	513	-4
MO-108	2/22/2016	97	118	-18	6.3	20	-69	500	513	-3
MO-108	3/8/2016	100	118	-15	6.7	20	-67	502	513	-2
MO-108	3/25/2016	100	118	-15	6.1	20	-69	505	513	-2
MO-108	4/8/2016	97	118	-18	7.6	20	-62	504	513	-2
MO-108	4/23/2016	100	118	-15	6.2	20	-69	507	513	-1
MO-108	5/5/2016	105	118	-11	6.0	20	-70	489	513	-5
MO-108	5/21/2016	106	118	-10	6.0	20	-70	486	513	-5
MO-108	6/3/2016	108	118	-8	6.0	20	-70	489	513	-5
MO-108	6/16/2016	101	118	-14	6.2	20	-69	506	513	-1
MO-108	7/8/2016	103	118	-13	7.2	20	-64	506	513	-1
MO-108	7/22/2016	104	118	-12	9.1	20	-54	525	513	2
MO-108	8/4/2016	107	118	-9	10.7	20	-47	547	513	7
MO-108	8/18/2016	111	118	-6	11.4	20	-43	556	513	8
MO-108	8/30/2016	114	118	-4	12.6	20	-37	551	513	7
MO-108	9/3/2016	115	118	-2	13.8	20	-31	548	513	7
MO-108	9/27/2016	136	118	15	14.9	20	-26	589	513	15
MO-108	9/29/2016	121	118	3	18.3	20	-8	583	513	14

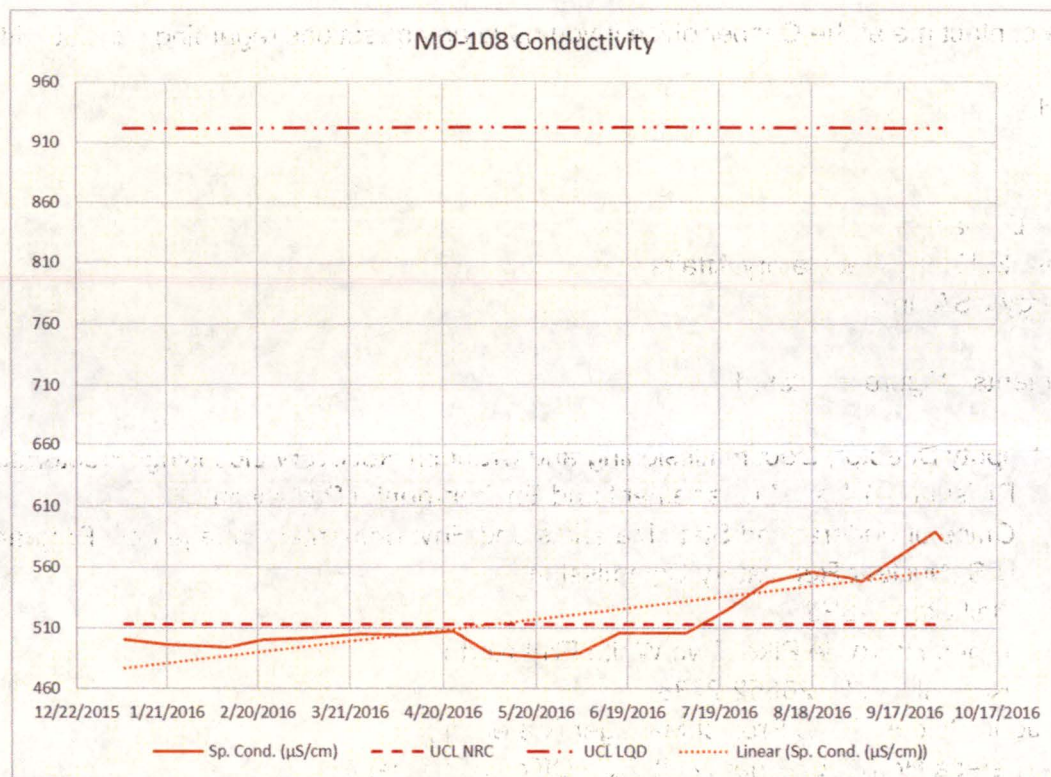
\*UCLs calculated on a per-well basis

*Italics* indicates % difference exceeds UCL but by less than 20% over









- *The reason for the excursion*

The reason for the excursion is unknown at this time but is under investigation. Current investigation elements include:

- Injection and production well flow rates are being reviewed to determine if an effect was the result of flow scheme;
- Historic borehole records have been reviewed to determine if there were any historic boreholes in the area that had not been found and re-abandoned. Records show one historic borehole located approximately 170 feet to the south-southeast of MO-108 was searched for but never found and thus not re-abandoned. It is unknown if this is a potential source.

- *Actions to be taken to recover the excursion*

Injection in the area was terminated, in accordance with License Condition 10.10, by shutting off injection wells 11171, 11527, 11161, 11162, 11181, 11305A, 11306, 11307, and 11284, if they had not already been shut off. Well 1P153I will be converted back into a pumping well which will supplement the production flow in the area. The effects of the adjustments will not be known until successive samples are collected and analyzed.



Please contact me at the Casper office if you have any questions regarding this submittal.

Regards,



Michael D. Gaither  
Manager EHS and Regulatory Affairs  
Ur-Energy USA, Inc.

Attachments: Figure as stated

Cc: Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate  
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