COLORADO OFFICE
10758 W. CENTENNIAL RD., STE. 200
LITTLETON, CO 80127
TEL: (866) 981-4588
FAX: (720) 981-5643

WYOMING OFFICE
5880 ENTERPRISE DR., STE. 200
CASPER, WY 82609
TEL: (307) 265-2373
FAX: (307) 265-2801

LOST CREEK ISR, LLC

September 1, 2015

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

RE: 7-day Notification of Reoccurrence of Excursion at MU-104
Lost Creek ISR Project SUA-1598

To Whom It May Concern,

In accordance with License Condition 11.5, this letter serves as written notification of the verification of the reoccurrence of a vertical excursion at the Lost Creek ISR Project for monitor well MU-104. This letter follows the e-mail notification submitted on August 28, 2015. The excursion was suspected based on the sample collected on August 20 and confirmed on August 28, 2015 by analysis of the verification sample collected on August 26, 2015. The location of the well is provided on the attached figure "HH1-10 Patterns and Wells". This notification provides the following information:

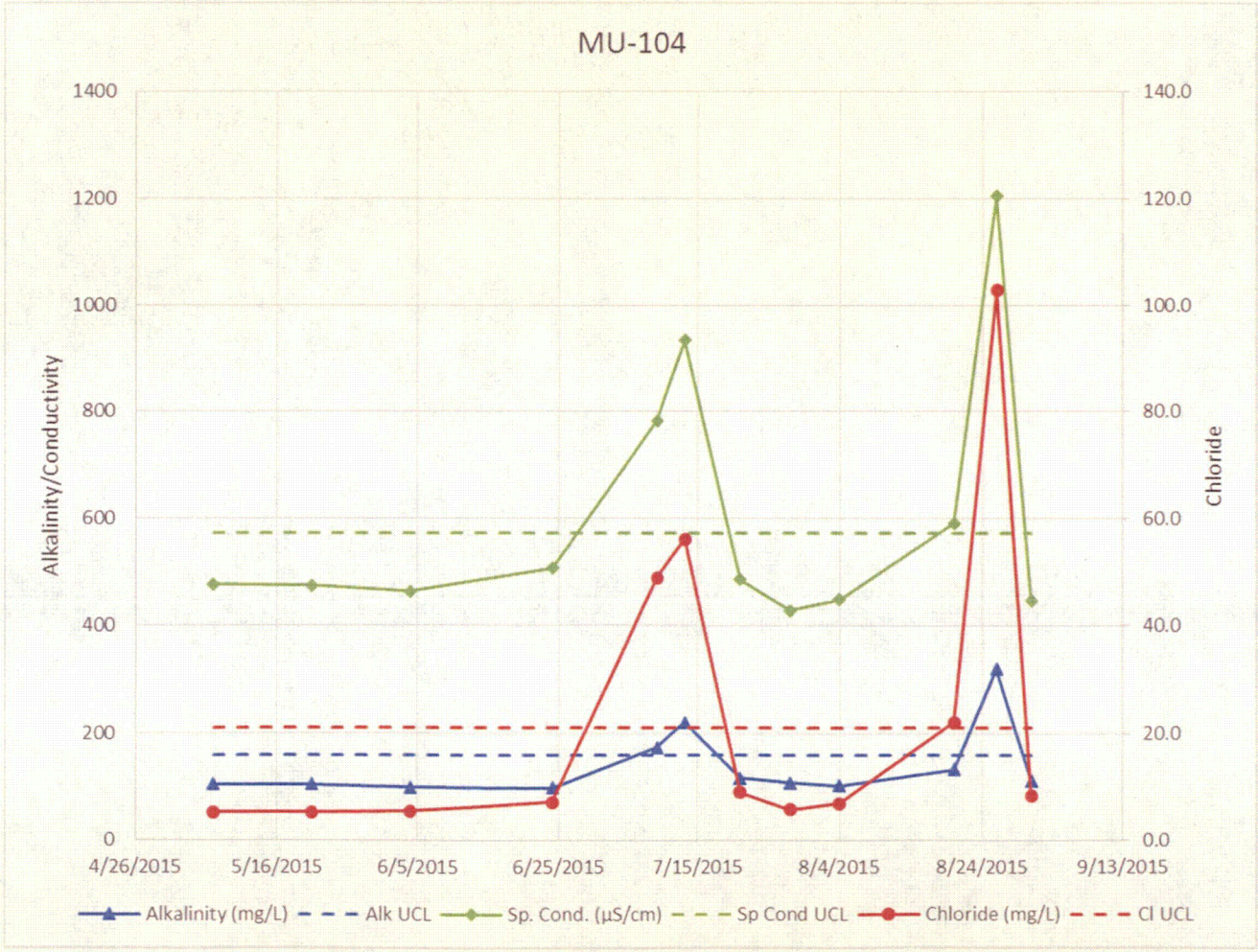
- *Analytical data and trends of the monitor well on excursion*

The following table and chart provides recent data from 2015 to reveal the trends of the Upper Control Limit (UCL) parameters. The excursion determination is based on the NRC-approved method of calculation of the UCLs on a per-well basis. The data shows the initial excursion in July, the nominalization, and the reoccurrence.

NMSS01

Well ID	Collection Date	Alkalinity (mg/L)			Chloride (mg/L)			Sp. Cond. (µS/cm)		
		Assay	NRC-UCL	% Diff	Assay	NRC-UCL	% Diff	Assay	NRC-UCL	% Diff
MU-104	5/7/2015	105	159	-34	5.3	21	-75	477	572	-17
MU-104	5/21/2015	105	159	-34	5.3	21	-75	474	572	-17
MU-104	6/4/2015	100	159	-37	5.5	21	-74	464	572	-19
MU-104	6/24/2015	99	159	-38	7.1	21	-66	507	572	-11
MU-104	7/9/2015	174	159	*9*	48.9	21	***133***	783	572	***37***
MU-104	7/13/2015	221	159	***39***	56.2	21	***168***	934	572	***63***
MU-104	7/21/2015	116	159	-27	9.0	21	-57	486	572	-15
MU-104	7/28/2015	108	159	-32	5.8	21	-72	428	572	-25
MU-104	8/4/2015	103	159	-35	7.0	21	-67	448	572	-22
MU-104	8/20/2015	133	159	-16	22.1	21	*5*	592	572	*3*
MU-104	8/26/2015	320	159	***101***	102.8	21	***389***	1204	572	***110***
MU-104	8/31/2015	112	159	-30	8.4	21	-60	447	572	-22

Italics indicates the % difference is between 0 and 20%.
***Bold italics** indicates the % difference is greater than the 20% threshold.*



- *The reason for the excursion*

Injectors 1P347I, 1I404, and 1I406B were restarted in the area on August 17 after the excursion had been corrected. The sudden restart of injection in the area as opposed to the gradual return of injection likely caused the excursion to reoccur. It is still not known what the nature of the conduit is allowing fluid to migrate to the monitor well.

- *Actions to be taken to recover the excursion*

Injection in the area was stopped by shutting off injection wells 1I404, 1I406B, 1I408, 1P347I and reducing the injection rate in wells 1I642, 1I643 and 1I412 (see attached map). Immediate effects are apparent revealed by the quality of the groundwater returning to a nominal state in a very short amount of time. Sampling will continue weekly until the excursion is corrected.

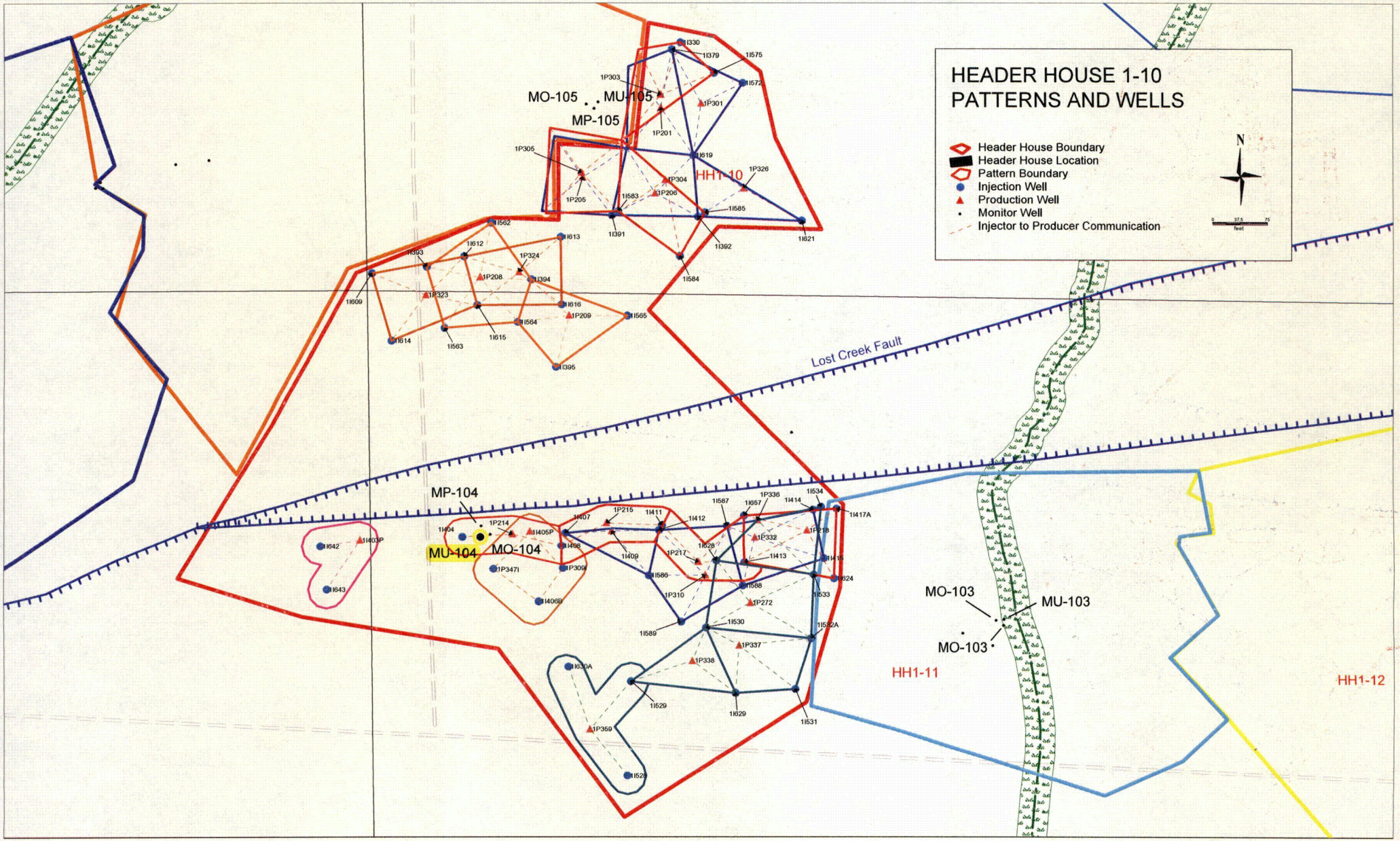
Please contact me at the Casper office if you have any questions regarding this submittal.

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
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
U.S. Nuclear Regulatory Commission
Mail Stop T-8F5
11545 Rockville Pike, Two White Flint North
Rockville, MD 20852-2738
John Saxton, NRC Project Manager (via email)
Theresa Horne, Ur-Energy Littleton Office (via email)


HEADER HOUSE 1-10
PATTERNS AND WELLS
Header House Boundary
Header House Location
Pattern Boundary
Injection Well
Production Well
Monitor Well
Injector to Producer Communication
N
0 37.5 75
feet
MO-105
MU-105
MP-105
HH1-10
MP-104
MU-104
MO-104
Lost Creek Fault
MO-103
MU-103
MO-103
HH1-11
HH1-12