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## **LOST CREEK ISR, LLC**

August 16, 2018

40-9068

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

**RE: 60-day Excursion Report for MO104  
Lost Creek ISR Project PT788**

To Whom It May Concern,

In accordance with License Condition 11.5, this letter serves as the 60-day report for the excursion at the Lost Creek ISR Project for monitor well MO104. The excursion has not yet been resolved as of this report date.

### **Description of the Excursion Event**

A vertical excursion is being monitored at MO104 associated with the HH1-10 area shown on the attached figure. The well, located just to the south-southwest of HH1-10, allows monitoring of the FG horizon which overlies the HJ mining horizon. The analysis of a sample collected from MO104 on June 8, 2018 revealed elevated alkalinity and conductivity that exceeded the UCL (NRC criteria) values indicating a potential excursion. A confirmation sample was collected on June 21, 2018 and the resulting data confirmed the excursion which was declared via notification letter to NRC dated June 21, 2018. The excursion confirmation was the result of two parameters exceeding the associated UCL albeit not by more than the 20% threshold.

The cause or source of the excursion is not yet known but several courses of action were taken to recover the water quality in the area of MO104.

### **Corrective Actions**

As described in the initial notification, injection in the area was halted in accordance with License Condition 10.10 by shutting off the following injection wells in the vicinity of MO104: 1I642, 1I643, 1I404, 1P347I, 1I406B, 1P309I, 1I407, 1I408, 1I411, 1I412, 1I586, 1I589, 1I588, 1I413, 1I628, 1I587, 1I657, 1I414, 1I534, 1I417A, 1I415, 1I533, 1I532A, 1I530, 1I531, 1I629, 1I624, 1I529, 1I528, and 1I630A. Two production wells 1I403P and 1P215 remained in operation in the vicinity to provide drawdown. Flows at some of the wells well outside of the 200



foot radius around MO104 have been or will be adjusted during the corrective action period as necessary to improve water quality. The injection in the area will remain off until the excursion is corrected. It is likely not necessary to increase surety since the termination of injection option has been enabled.

Sampling of MO104 was increased to weekly for the duration of the excursion.

### Corrective Action Results

Following the flow adjustments, the water quality of MO104 is trending (**Table 1**) as follows:

**TABLE 1: MO104 UCL Data**

Sample ID	Collection Date	Alkalinity (mg/L)			Chloride (mg/L)			Sp. Cond. (µS/cm)		
		Assay	UCL	% Diff	Assay	UCL	% Diff	Assay	UCL	% Diff
MO104	4/6/2018	137	160	-14	15.8	24	-34	665	714	-7
MO104	4/20/2018	146	160	-9	17.0	24	-29	683	714	-4
MO104	5/1/2018	149	160	-7	15.5	24	-35	686	714	-4
MO104	5/22/2018	156	160	-3	18.7	24	-22	724	714	<b>1</b>
MO104	6/8/2018	167	160	<b>4</b>	18.2	24	-24	746	714	<b>4</b>
MO104	6/21/2018	168	160	<b>5</b>	18.4	24	-23	749	714	<b>5</b>
MO104	6/26/2018	174	160	<b>9</b>	18.8	24	-22	757	714	<b>6</b>
MO104	7/6/2018	168	160	<b>5</b>	19.1	24	-20	755	714	<b>6</b>
MO104	7/12/2018	166	160	<b>4</b>	18.3	24	-24	744	714	<b>4</b>
MO104	7/18/2018	164	160	<b>3</b>	17.5	24	-27	739	714	<b>4</b>
MO104	7/26/2018	159	160	-1	15.9	24	-34	737	714	<b>3</b>
MO104	8/2/2018	164	160	<b>3</b>	16.9	24	-30	736	714	<b>3</b>
MO104	8/8/2018	164	160	<b>3</b>	17.5	24	-27	744	714	<b>4</b>
MO104	8/15/2018	172	160	<b>8</b>	19.3	24	-20	742	714	<b>4</b>

*Italics (yellow highlight): Percent difference is between 0% and 20%*

***Bold Italics (red highlight): Percent difference is greater than 20%***

Water quality was improving but had rebounded slightly with respect to alkalinity and chloride. The current corrective action will continue and the data will be evaluated to determine if any additional course of action is necessary.

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

Sincerely,

**Lost Creek ISR, LLC**

**By its Member/Manager, Ur-Energy USA Inc.**

By:



Michael Gaither

Manager EHS and Regulatory Affairs

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

TSX: URE

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

Attachments: Figure as stated

Cc: Deputy Director, Division of Decommissioning, Uranium Recovery and Waste Programs  
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