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## LOST CREEK ISR, LLC

January 16, 2015

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

**Re: Spill Report 11256P**  
**Lost Creek ISR Project SUA-1598**

Dear John Saxton,

Pursuant to License Condition 11.6, Lost Creek ISR, LLC ("LCI") hereby provides a written report detailing a release of production fluid that was reportable to the Wyoming Department of Environmental Quality (WDEQ). Notification of the release was submitted to WDEQ via webpage (Incident ID 1411217-1008) and e-mail (Brian Wood) and to the NRC via email (John Saxton and Linda Gersey) on December 17, 2014. Volume released was originally estimated to be approximately 480 gallons determined by estimated flow rate (4 gpm) and duration of leakage (2 hrs). However, calculated estimates based on the spill area with no infiltration (0.25 inch sheer thickness due to frozen ground) result in a volume roughly 900 gallons. The fluid did not enter any drainage and the area of effect is shown on **Figure 1**. The location of the release was southwest of Header House 1-4 (HH1-4) in the NW quarter of the NE quarter of R92W and T25N.

The release of production fluid was discovered by a wellfield operator at approximately 1600hrs on December 16, 2014. The operator observed water flowing out from production well 11256P and immediately notified the Wellfield Superintendent who advised that all wells in the HH1-4 area be shut off. The wells were shut off but water continued to flow out of the top of the well casing. The Superintendent performed an onsite assessment, determined that the pump had failed in the production well, and surmised that residual injection pressure in the production horizon was causing continued discharge of groundwater from the well. With consideration that the well is just south of the Lost Creek Fault (Figure 1), pressure rebound against the fault may have been a contributing factor in the persistence of residual pressure in the area. Immediate efforts were taken to replace the pump concurrent with and in the midst of the continued outflow. After replacement and startup of the new pump, the water was immediately drawn back into the well. Subsequently, flows were then normalized following the restart of the injection and production of HH1-4. The production fluid had been sampled and analyzed by the on-site lab for natural uranium resulting in a concentration of 146 ppm.

Further study of the hydrogeology of the area near the fault will be conducted to determine if any programmatic corrective action should be implemented to prevent groundwater releases from production wells in the event of pump failure.

<sup>1</sup>  
FE72  
KIMSS

If you have any questions regarding this letter or require additional information please feel free to contact me at the Casper Office.

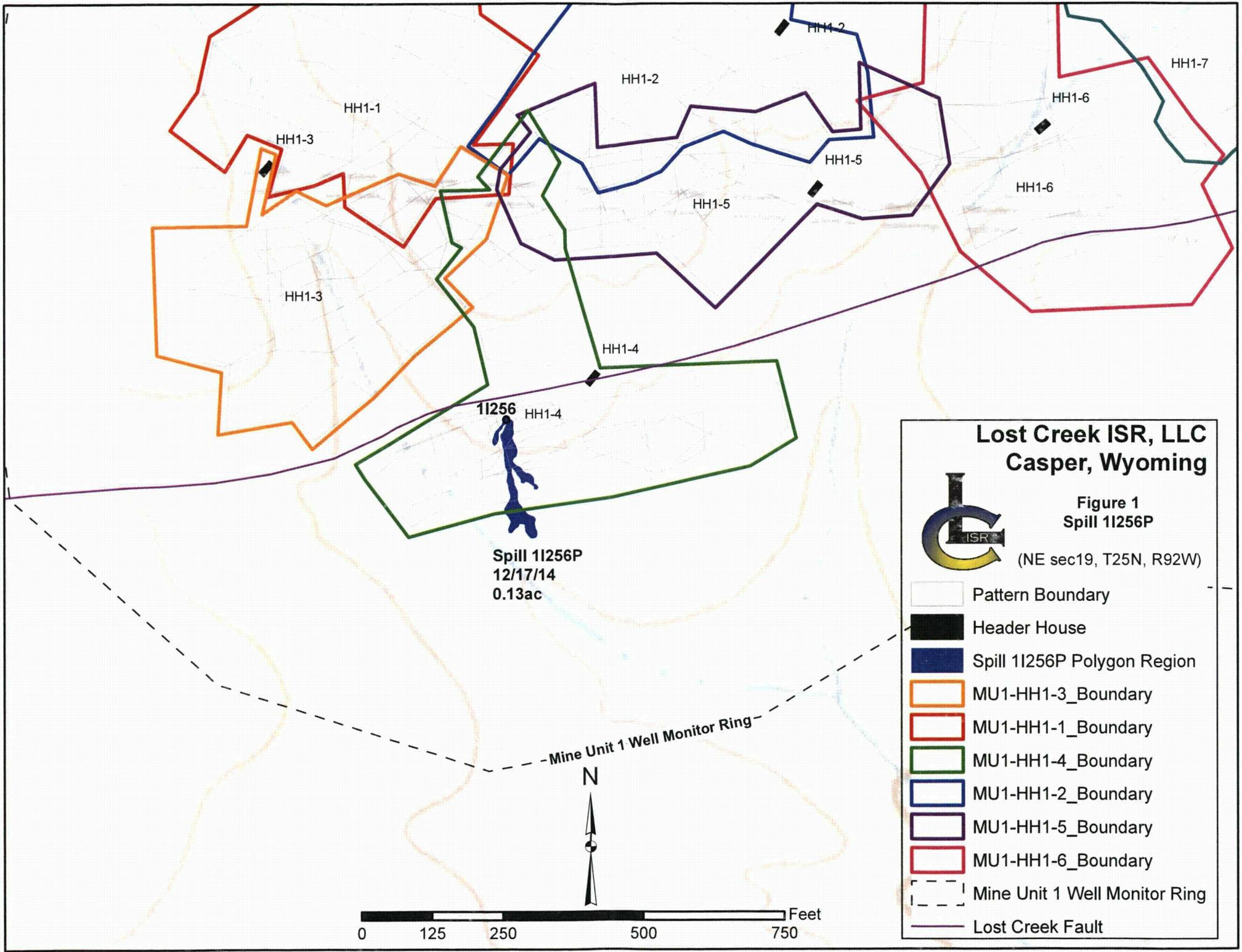
Sincerely,



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

Attachments: **Figure 1: 11256P**

Cc: John Saxton, NRC Project Manager  
U.S. Nuclear Regulatory Commission  
Mail Stop T-8F5  
11545 Rockville Pike  
Rockville, MD 20852  
Linda Gersey, NRC Inspector (via e-mail)  
Brian Wood, WDEQ-LQD (via e-mail)  
Theresa Horne, Ur-Energy, Littleton (via e-mail)



**Lost Creek ISR, LLC  
Casper, Wyoming**



**Figure 1  
Spill 11256P**

(NE sec19, T25N, R92W)

-  Pattern Boundary
-  Header House
-  Spill 11256P Polygon Region
-  MU1-HH1-3\_Boundary
-  MU1-HH1-1\_Boundary
-  MU1-HH1-4\_Boundary
-  MU1-HH1-2\_Boundary
-  MU1-HH1-5\_Boundary
-  MU1-HH1-6\_Boundary
-  Mine Unit 1 Well Monitor Ring
-  Lost Creek Fault

**Spill 11256P**  
12/17/14  
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Mine Unit 1 Well Monitor Ring