

DNMS

October 17, 2014

U.S. Nuclear Regulatory Commission – Region IV  
612 East Lamar Blvd., Suite 400  
Arlington, TX 76011-4125

Attn: Division Director - DNMS

Re: **Notification of Well Logging Sealed Source Abandonment  
Halliburton Energy Services, Inc.  
USNRC License No. 42-01068-07**

This letter comprises the 30-day written notification of source abandonment as required by 10 CFR 39.77(d). This is a follow-up to the communications between Mr. Steven Woods, (Senior RSO, Halliburton) and Mr. James Thompson (NRC Region IV) on October 9, 2014, in which permission to proceed with the abandonment was granted. The abandonment procedure was completed on October 11, 2014.

Date of Occurrence: 11 October 2014

Company Name: Hilcorp Alaska, LLC  
3800 Centerpoint Dr.; Suite 1400  
Anchorage, AK 99503

Well Name & Registration No.: Paxton #7  
50-133-20643-00-00

Well Location: Ninilchick  
Kenai Borough  
Kenai, AK

Sources Abandoned: One 2.0 Curie Cs-137 doubly-encapsulated radioactive sealed source, solid, special form.  
QSA Global, Inc. Model CDC.CY13.  
Source Serial Number 39381B.

One 15.0 Curie Am-241/Be doubly-encapsulated radioactive sealed source, solid, special form.  
QSA Global, Inc. Model AMN.CY19.  
Source Serial Number 84492B.

Logging sources held within the source ports contained within the sidewalls of heavy pipe wall Logging While Drilling (LWD) logging tools. Sources threaded into the source ports and torqued down.

PUBLIC

Environmental Release

NON-PUBLIC

A.3 Sensitivity Related

A.7 Sensitivity

Other: \_\_\_\_\_

Reviewer: \_\_\_\_\_

Date: \_\_\_\_\_

Two Energy Compensation Sources (ECS) were contained within the detector assembly installed in the density logging tool:

One 95.63 nanoCurie Cs-137 ECS source, Eckert & Ziegler Model IND1402. Source serial number H3-626.

One 109 nanoCurie Cs-137 ECS source, Eckert & Ziegler Model IND1402. Source serial number H2-698.

Immobilization method:

An 1136 foot cement plug was used to immobilize the logging tool's bottom hole assembly (BHA) containing the sources in place. The BHA was completely entombed within the cement plug. The plug serves as the deflection device.

Results of Efforts to Immobilize and set sources in place:

Abandonment procedure successfully completed on 11 October 2014.

Depth of Well:

4695 ft. MD / 2193 ft TVD

Depth of Bottom of Fish:

3916 ft. MD / 1962 ft TVD

Depth of Sources:

Cs-137 sources located at 3839 ft MD / 1939 ft TVD

Am-241/Be source located at 3826 ft MD / 1935 ft TVD

Depth of Top of Fish:

3562 ft MD / 1855 ft. TVD

Depth of Bottom of Cement Plug:

4695 ft. MD / 2193 ft TVD

Depth of Top of Cement Plug:

3559 ft MD / 1855 ft TVD

Summary of Event and Recovery Attempts:

*October 5, 2014:* While drilling the production hole on Paxton #7 at 4695' MD, mud returns were lost and the Bottom Hole Assembly (BHA) subsequently became stuck while attempting to pull out of the hole with the directional LWD assembly.

*October 7 - 9, 2014:* Fishing operations commenced. Started POOH after backing out of hole with drill pipe and pick up fishing jars. After several unsuccessful fishing attempts, customer decided to cease fishing operations and proceed with abandonment plans.

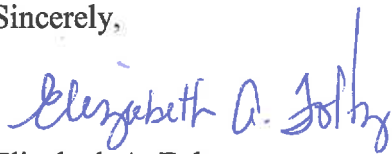
*October 9, 2014:* Halliburton RSO contacts NRC Region IV and permission was granted to proceed with the abandonment.

*October 11, 2014:* Cement pumped into hole and abandonment procedure successfully completed.

Warning Plaque:

A permanent identification warning plaque will be fabricated and provided to Hilcorp Alaska, LLC, for mounting at the wellhead, as practicable. Attachment 1 includes a representation of the warning plaque.

Sincerely,



Elizabeth A. Foltz  
Global Radiation Safety Officer  
Halliburton Energy Services, Inc.  
Email: [Elizabeth.Foltz@Halliburton.com](mailto:Elizabeth.Foltz@Halliburton.com)

Attachment: (1) Representation of Warning Plaque

ATTACHMENT 1



*Representation of Permanent Warning Plaque*