HALLIBURTON

3000 N. Sam Houston Parkway, East • Building M, Room M1F21
Houston, Texas 77032-3219
Direct: 281-871-5745 • Fax: 281-871-7119

October 6, 2009

RECEIVED
OCT 7 – 2009
DNMS

U.S. Nuclear Regulatory Commission - Region IV
Texas Health Resources Tower
612 E. Lamar Blvd., Suite 400
Arlington, TX 76011-4125

Attn: Division Director - DNMS

Re: **Notification of Source Abandonment**
Halliburton Energy Services, Inc.
USNRC License # 42-01068-07

This letter comprises the required 30-day written notification of source abandonment as per 10 CFR 39.77(d). This is a follow-up to the telephone conversation between Elizabeth Foltz (Halliburton) and Mr. Charles Cain (NRC Region IV) on September 11, 2009 in which permission to proceed with the abandonment was granted.

Date of Occurrence:	September 11, 2009
Company Name:	Pioneer Natural Resources Co. 5205 N. O'Conner Blvd., Suite 200 Irving, TX 75039
Well Name & Registration No:	ODSN-34i 50-703-20563-00
Well Location:	Oooguruk Island Field North Slope Borough Alaska USA
Source(s) Abandoned:	One 8.0 Curie Am-241/Be doubly-encapsulated special form radioactive source. QSA Global, Inc. Model AMN.CY17. Source Serial Number 7332NK/8638NK. One 2.0 Curie Cs-137 doubly-encapsulated special form radioactive source. QSA Global, Inc. Model CDC.CY13. Source Serial Number 31782B. Logging sources held within source ports contained in the sidewalls of heavy pipe wall Measurement While Drilling (MWD) logging tools. Sources threaded into place and torqued down.

	Two energy compensation sources contained within detector assembly installed in density tool collar serial number 10859715. One 230 nanocurie Cs-137 sealed source, IPL Model A3888, serial number A8-461. One 135 nanocurie Cs-137 sealed source, IPL Model A3888, serial number C3-298.
Depth of Well:	16,007 ft. MD (6352 ft. TVD)
Depth of Bottom of Fish:	16,007 ft. MD (6352 ft. TVD)
Depth of 2.0 Ci Cs-137 source:	15,933 ft. MD (6358 ft. TVD)
Depth of 8.0 Ci Am-241/Be source:	15,919 ft. MD (6359 ft. TVD)
Depth of Top of Fish: *(Top of Abandoned Drillstring)*	9040 ft. MD (6412 ft. TVD)
Length of Abandoned Drillstring located above sources:	6879 feet of 4" drill pipe above abandoned sources
Depth of Bottom of Cement Plug:	8985 ft. MD (6410 ft. TVD)
Depth of Top of Cement Plug:	8413 ft. MD (6334 ft. TVD) *(572 ft. cement plug. G-type cement with additives.)*
Sequence of Events:	09/08/2009 09:50 Loss of SPP, loss of pulses from down hole.
	09/08/2009 10:00 Confirmed that BHA twisted off. Nuke log and contact of slope supervisor initiated. Radiation surveys to be conducted while pumping. (Circulating and conditioned mud to kill well.)
	09/08/2009 12:51 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.
	09/08/2009 13:55 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/08/2009 16:30 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/09/2009 00:30 No more pumping has occurred from downhole. Fishing company (Baker) made up overshot assembly.

09/09/2009 01:15 Begin run in hole with overshot assembly.

09/09/2009 07:00 Still tripping in with overshot assembly.

09/09/2009 09:35 On top of fish but can't latch on with overshot.

09/09/2009 10:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/09/2009 11:00 Keep sliding past fish with no luck grabbing.

09/09/2009 12:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/09/2009 14:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/09/2009 17:00 POOH to pick up bent sub and hook arm assembly for another fishing attempt.

09/09/2009 21:00 Change out fishing BHA

09/10/2009 00:00 Trip in hole with new assembly.

09/10/2009 05:40 Washing down to top of fish.

09/10/2009 06:30 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/10/2009 09:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above

bkgd.

09/10/2009 10:00 Continued tries to grapple over fish.

09/10/2009 11:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/10/2009 14:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/10/2009 14:20 Hooked side of fish with cut lip shoe and set off jars.

09/10/2009 16:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/10/2009 16:25 POOH for new fishing BHA configuration.

09/10/2009 18:00 Trip in hole with new assembly.

09/10/2009 22:30 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/11/2009 02:30 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/11/2009 05:00 Made up BHA #8 consisting of 6-1/8" oversized cut lip shoe. Also increased bend on the bent joint. TIH to continue fishing.

09/11/2009 06:00 Continue to run into hole to top of fish.

09/11/2009 08:30 Attempt to make contact with top of fish.

09/11/2009 08:40 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/11/2009 15:00 Try to trough a ditch in front of fish to enable "line up".

09/11/2009 16:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/11/2009 18:30 Failed to latch fish. POOH.

09/11/2009 18:30 (CST) Halliburton Global Radiation Safety Officer contact Mr. Charles Cain (NRC Region IV) and received approval to plug and abandon sources.

09/11/2009 19:00 Radiation survey at shakers, mud pits, flow lines, and cellar. No readings above bkgd.

09/12/2009 02:00 Finish laying down fishing assembly.

09/12/2009 06:00 Run in hole with cement stinger.

Results of Efforts to Immobilize and Seal the Source in Place:

On September 12, 2009 the BHA with radioactive sources and the drill string above the BHA were immobilized by placement of a cement plug.

Warning Statement:

A warning plaque will be made and provided to Pioneer Natural Resources Co. for mounting on the wellhead. See attachment for template of warning plaque.

Regards,

Elizabeth A. Foltz

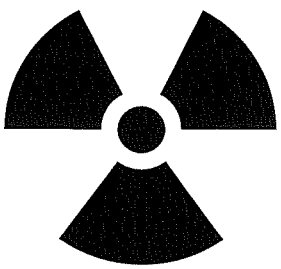
Elizabeth A. Foltz
Radiation Safety Officer
Halliburton Energy Services

Attachments: Warning Statement

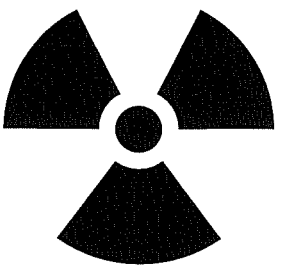
cc: Alaska Oil & Gas
Conservation Commission
333 W. 7th Ave., Ste 100
Anchorage, AK 99501

ABANDONMENT PLAQUE

PIONEER NATURAL RESOURCES CO.
ODSN-34i
50-703-20563-00



CAUTION



ONE 8.0 CURIE Am-241Be RADIOACTIVE SOURCE, AND ONE 2.0 CURIE Cs-137 RADIOACTIVE SOURCE ABANDONED 12 SEPTEMBER 2009 AT 15,919 FT. MD (6359 FT. TVD), AND AT 15,933 FT MD (6358 FT. TVD). PLUG BACK DEPTH 8413 FT. MD (6334 FT. TVD) AVOID BORE BELOW PLUG BACK, AND DO NOT RE-ENTER THIS WELL BELOW PLUG BACK BEFORE CONTACTING
U.S. NUCLEAR REGULATORY COMMISSION