Form 31:00-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR RUPEAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
Budget Bursau No. 1004-0135
Expires: March 31, 1993

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SUNDRY NOTICES Do not use this form for proposals to o	S AND REPORTS ON WELLS drill or to deepen or reentry to a different reservoir. OR PERMIT—" for such proposals	 E.,.
SUBMI	7. If Unit or CA. Agreement Designation	
1. Type of Well Oll Gas Well Well Other 2. Name of Operator Arco Oil and Gas Company, a division of Atlantic Richfield Company 3. Address and Telephone No. 1816 E. Mojave, Farmington, New Mexico 87401		8. Well Name and No. Hammond WN Federal #4 9. API Well No. 30-045-06272 10. Field and Pool or Exploratory Area Basin Fruitland Coal
CHECK APPROPRIATE BOX	((s) TO INDICATE NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
Notice of Intent Subsequent Report Final Abandonment Notice	Abandonment Recompletion Plugging Back Casing Repair Altering Casing Other	Change of P ans New Construction Non-Routine Fracturing Water Shut-()ff Conversion to Injection Dispose Water Note: Report result of multiple completion on Well Completion or Reconstiction Report and Log form.)

Attached is a plugging procedure for the subject well. Upon your approval, ARCO will plug and abandon this well.

JAN 71992 OIL CON. DIVJ DIST. 3

CEE ATTACHED FISH CONDITIONS OF APPROVA

14 I hereby certify that the foregoing is true and correct Signed Killand & Samuel	70 TH TO THE THE		
	Tide	Production Supervisor	APPROVED
(This space for Federal or State office use)			AS AMENDED
Approved by Conditions of approves, if any: Title 18 U.S.C. Section 1001, makes at a crime for any person kink	Tide		1992 1992
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*See instruction on Reverse Side

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Plugging Procedure - Hammond # 4 ARCO NW, Sec. 26, T27N, R8W

Note: All cement plug volumes include excesses of 150 % for inside casing plugs; and 200 % for external.

Mud, 9.0 ppg, will separate all cement plugs.

Procedure:

- 1. MO RU; Blow well down; ND wellhead; NU BOPs.
- Pull tubing and packer out of hole; inspect and tally tubing;
 LD packer and gas lift valves.
- 3. RIH open ended to 2090' and tag bridge plug.
- 4. Plug #1 from 2090' to 1810' with 48 sacks Class 3 neat dement; covers Fruitland perforations and formation top at 1860'.
- 5. POG cement, WOC, Tag cement.
- 6. Circulate hole and spot mud from 1810' to 415', 33 bb s.
- 7. Plug #2 from 465' to 365' with 17 sacks Class B cement.
- 8. POO cement to 365' and spot mud from 365' to 146', 5 bbis. Pull tubing up to 146'.
- 9. RU on bradenhead and if possible pump 25 sacks dement into 8- 5/8" \times 5-1/2" annulus; shut in. (Top of dement at 90' from CBL ran after squeeze, 1-12-90.)
- 10. Plug #3 from 146' to surface with sufficient cement to circulate. approximately 17 sacks.
- 11. Out off wellhead and install P&A marker; RD and move off.
- Need: 1) 10 jts. 2-7/8" tubing from Arco yard.
 - 2) Cement 117 sxs: Mud 40 bbls.

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA 1235 LA PLATA HIGHWAY FARMINGTON, NEW MEXICO 87401

Attachment to Notice of

Re: Permanent Abandonment

Intention to Abandon

Well: 4 Hammond WN Fed

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases."
- 2. Mark Kelly with the Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 326-6201.
- 3. Blowout prevention equipment is required.
- 4. The following modifications to your plugging program are to be made (when applicable):

Add a plug from 1460-1295 (Ojo Alumo 1345-1410)

Office Hours: 7:45 a.m. to 4:30 p.m.

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON RESOURCE AREA

- 1. Secure prior approval either on a Sundry Notice (Form 3160-5) or verbally from the Fluids Drilling & Production Section at this office before changing the approved plugging program.
- 2. Plugging equipment used shall have separate mixing and displacement pumps and a calibrated tank to assure proper displacement of plugs. The Operator is responsible for providing all measuring devices needed to assure proper measurement of materials being used.
- 3. A proper tank or pit will be used to contain all fluids pumped from the well during plugging operations. Unattended pits are to be fenced.
- 4. All cement plugs are to be placed through tubing (or drillpipe) and shall be a minimum of 100 feet in length with 50% excess inside casing or 100% excess when plug is set in open hole or squeezed into perforations. 15.6#/gal slurry weight is to be used when using class B neat cement or when CaCl2 is used. Use the recommended slurry weight of other type cements when they are used (Class C, Pozzolan etc.).
- 5. Any cement plugs placed when well is not full of fluid, or when well may be taking fluid, (i.e. across perfs-unless bridge plug or retainer is used, across bad csg., or fresh water formations) will be tagged (touched) after cement has set to verify proper location.
 - 5a. Testing The first plug below the surface plug shall generally be tested by either tagging the plug with the working pipe string, or pressuring to a minimum pump (surface) pressure of 1000 psig, with no more than a 10 percent drop during a 15-minute period (cased hole only). If the integrity of any other plug is questioned, it must be tested in the same manner. Also, any cement plug which is the only isolating medium for a fresh water interval or a zone containing a valuable mineral deposit should be tested by tagging with the drill string.
- 6. Mud must be placed between plugs. Plugging mud is to be made up with a minimum of 15 lbs/bbl of sodium bentonite, and a nonfermenting polymer.

 Minimum consistency of plugging mud must be 9 lbs/gal and with a minimum viscosity of 50 sec/qt. Fresh water is to be utilized for mixing mud.
- 7. Following the placement of a cement plug, the withdrawl rate for at least the length of the cement plug shall not exceed 30 ft/min, in order to minimize the contamination of the plug.

- 8. Within 30 days after plugging work is completed, file a Sundry Notice (Subsequent Report of Abandonment, Form 3160-5), in quintuplicate with Area Manager, Bureau of Land Management, 1235 La Plata Highway, Farmington, NM 87401. The report should give in detail the manner in which the plugging work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. Show date well was plugged.
- 9. All permanently abandoned wells are to be marked with a regulation marker (4" pipe extending 4' above the ground line) containing the information as specified in 43 CFR 3162.6(d). Unless otherwise approved.
- 10. After plugging work is completed the surface is to be rehabilitated in accord with instructions from the Fluids Surface Management Section of the Farmington Resource Area Office.

All above are minimum requirements. The period of liability under the bond of record will not be terminated until the lease is inspected and surface work approved.

Please advise this office when the well location is ready for final inspection.

Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1.

You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.