SIGNED Per	the foregoing is true and correct ai or State office use)	TITLE Production Supervisor	SEP2 3 1988 OIL CON. DIV. \ DIST. 3
i hereby certify that SIGNED	the foregoing is true and correct		SEP2 3 1988 OIL CON. DIV.
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Once plugging	is complete, reseedi	ng will be completed per BLM	app1 0 7 4 1 3
The subject w	ell will be plugged u	pon ARCO receiving co-owner attached for your review and a	approval. approval.
proposed work. If nent to this work.)	well is directionally drilled, give so	ubsurface locations and measured and true vertle	cal depths for all markers and sones per
(Other)		(Nors: Report result	a of multiple completion on Well pletion Report and Log form.)
SHOOT OR ACIDIZA	ABANDON®	(Other)	TRINDORMENTO
TEST WATER SHUT-OF	PCUL OR ALTER CASIN	WATER SHUT-OFF FRACTURE TREATMENT	ALTERINO CARING
1	OTICE OF INTENTION TO:	• • •	DENT REPORT OF:
		(GR) Indicate Nature of Notice, Report, or (
PERMIT NO.	18. ELEVATIONS (SI	how whether DF, RT, GR, etc.)	12. COURTY OF PARISE 18. STATE San Juan NM
	1860 FNI	, 1840 FEL	Sec. 2, T30N,R16W
At surface			Horseshoe Gallup
1816 E. Mojaye. Farmington. NM 87401 LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)		241 10. FIBLD AND POOL, OR WILDCAT	
ARCO OIL & GA		of Atlantic Richfield	Horseshoe Gallup 9. Wall No.
			Horseshoe Gallup Unit
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			7. UNIT AGREEMENT NAME
OIL X GAR			Navajo
(Do not use this	orm for proposals to drill or to de Use "APPLICATION FOR PERMIT OTHER	epen or plug back to a different reservoir. —" for such proposals.)	
(Do not use this		PORTS ON WELLS	14-20-603-4908 6. IF INDIAN, ALLOTTES OR TRIBE NAME

*See Instructions on Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

HORSESHOE GALLUP UNIT # 241 CURRENT WELLBORE CONFIGURATION

S PUDDED: 02,03/59	UNIT: G	SECTION: 2	TOWNSHIP: 30N RANGE: 16W
COMPLETED: (I RILLING) 02/13/59	LOCATION:	1860 FNL &	1840 FEL
GL: 5613' RKB: 5621'			
TUBING: DATE LAST PULLED: 12/22/65 1 Mud Anchor 2-3/8" EUE 8RD 4.7# 1 Seating Nilple 2-3/8"	15.50' 1.10' 1587.60' 4.00' 1608.20' 8.00' 1616.20'		SURFACE CASING: 8-5/8" 8RD J-55 28# set at 100' cemented with 103 sacks, circulated to surface.
RODS: DATE LAST PULLED: 07/31/70 (RODS AND PIMP REMOVED, RETURNED FOR STOCK.)	TO YARD		PRODUCTION CASING: 5-1/2 15.5# set at 1580' and cemented with 100 sack cement.
			SLOTTED LINER SET FROM 1568'-1639' TOP OF LINER @ 1575'
PED: 1630'			LINER NOT CEMENTED. 4-1/2" 14# slotted liner.

HORSESHOE GALLUP UNIT PRODUCING WELLS PLUGGING AND ABANDONMENT PROCEDURE

- 1) Make pumping unit off location.
- 2) MIRU. Pull rods and downhole pumping equipment.
- 3) RIH below the bottom perforation w/tbg. open ended. Pump sufficient cement inside casing to cover top perforation by 50'.
- 4) PCH w/tbg. GIH w/wireline and perforate casing as specified by New Mexico Oil Commission. Number of shots should be sufficient to allow cement squeeze. POH w/wireline. GIH w/tbg. open ended. Squeeze cement to provide plug inside and outside of casing to surface. fe, fa 153
- 5) PCH w/tbg. Cut casing one foot below ground level. Weld a blind flange to casing, and weld a dry hole marker on blind flange. Fill hole and move off.
- 6) Rehabilitate location and access road using stipulations supplied by the Bureau of Land Management.

BUREAU OF LAND MANAGEMENT 1235 La Plata Highway Farmington, New Mexico 87401 Phone (505) 327-5344

Attachment to Notice of

Re: Permanent Abandonment

Intention to Abandon

Well: 241 Horsechoe Gally

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases."
- 2. Blackard with the Farmington Office is to be notified at least 24 lours before the plugging operations commence (505) 327-5344.
- 3. Blowout prevention equipment is required.
- 4. The following modifications to your plugging program are to be made (when applicable):

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

and and the Marketta Cartes and the

- 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 minitum 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 bac 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-m nute 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 dril 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.