lovember 1983) Cormerly 9–331) DE	PARTMENT OF TI	/	R (Other Instructions on verse side)	Expires August 31, 1985  5. LEASE DESIGNATION AND SERIAL NO I-149-Indian 7652
	NOTICES AND For proposals to drull or to happelication for perm	REPORTS ON		6. IF INDIAN, ALLOTTER OR TRIBE HAT
V N	APPLICATION FOR PERA	(		Navajo 7. Unit Adresient Hame
WELL GAS WELL MANE OF OPERATOR	orman Injection	Well		Horseshoe Gallup Unit
ARCO OIL & GAS COL	Horseshoe Gallup			
1816 E. Mojave, Fa				67
LOCATION OF WELL (Report See also space 17 below.) At surface	location clearly and in accor	rdance with any Sta	te requirements.*	Horseshoe Gallup  11. SPC. T. B. M. OR BLE. AND STRUCT OF ARIA
				Sec. 15,T31N,R17W
. PERMIT NO. 660	FNL 660 FEL	(Show whether as, 27	, <b>ce</b> , etc.)	12. COUNTY OR PARISE 18. STATE
	5251'	(GR)		San Juan NM
	heck Appropriate Box	To Indicate Nati	ure of Notice, Report, o	r Other Data
TEST WATER SHUT-OFF	PCLL OR ALTER CAL	HING	WATER SHUT-OFF	BEPAIRING WELL
PRACTURE TREAT	NULTIPLE COMPLET		PRACTURE TREATMENT	ALTERING CASING
SHOOT OR ACIDIES	ABANDON®	X-	SHOOTING OR ACIDIZING	THE WOODINGS
REPAIR WELL	CHANGE PLANS		(Other)	nits of multiple completion on Well
The subject work A proposed pl	is directionally drilled, give ell will be plugg ugging procedure	ed upon ARC is attached	Completion or Reco	mpletion Report and Log form.)  tea, including estimated date of starting strical depths for all markers and sones pe  ner approval.  and approval.
The subject we A proposed plugging	is directionally drilled, give ell will be plugg ugging procedure	ed upon ARC is attached	Completion or Reco	mpletion Report and Log form.)  tea, including estimated date of starting strical depths for all markers and sones pe  ner approval.  and approval.
The subject we A proposed plugging	ell will be plugg ugging procedure is complete, res	ged upon ARC is attached eeding will	Completion or Reco	ner approval. and approval. BLM standards.
The subject we A proposed plugging	ell will be plugg ugging procedure is complete, res	ged upon ARC is attached eeding will	Completion or Reco	ner approval. and approval. BLM standards.  RECEIVE  SEP2 3 1988  OIL CON. DIV.
The subject we A proposed plugging  Once plugging	ell will be pluggugging procedure is complete, res	ged upon ARC is attached eeding will	Completion or Reco	ner approval. and approval. BLM standards.  RECEIVE  SEP2 3 1988  OIL CON. DIV.

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 #67

#### CURRENT WELLBORE CONFIGURATION

S PUDDED: 12/04/57	UNIT: A SEC: 15 TWSP: 31N RG: 17W
COMPLETED: 02/07/58	LOCATION: 660 FNL & 660 FEL
GL: 5251 KB: 5262	
( STARTED INJECTING WATER THRU TUBING INTO THE LOWER GALLUP on 03/20/63.)	SURFACE CASING:
TUBING:	4 JTS: 8-5/8" 26# (117.30')
DATE LAST PULLED: 03/20/63	set @ 126' W/100 sx REGULAR CEMENT, CIRCULATED TO SURFACE.
28 JTS: 2-3/8" EUE 8R J-55 849.53'	HELD 500# FOR 30 MINITES.
1 PACKER: BAKER "A" MODEL TENSION PKR SET @858.53' W/2000# TENSION.	
	PRODUCTION CASING
	23 JTS: 5-1/2" 15.5# J-55 (941' SET @ 948' W/50 sx REG CMT AND 50 SX POZMIX. HELD 1000# FOR 30 MINUTES. TOP OF CEMENT BY TEMPERATURE SURVEY AT 350'.
	PERFORATIONS:
1. (1. (1. (1. (1. (1. (1. (1. (1. (1. (	876'-890' W/34 SHOTS
PBD: 901'	

TD: 948'

## HORSESHOE GALLUP UNIT PRODUCING WELLS PLUGGING AND ABANDONMENT PROCEDURE

- 1) MIRU. POH w/Tbg and Packer.
- 2) RIH below the bottom perforation w/tbg. open ended. Pump sufficient cement inside casing to cover top perforation by 50'.
- POH 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.  $\rho_{\rm c} \neq 0.176$
- 4) POH 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.
- 5) Rehabilitate location and access road using stipulations supplied by the Bureau of Land Management.

#### BURFAU 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: 67 Horseshoe Gallup

### CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases."
- 2. Bill Blackerd with the Farmington Office is to be notified at least 24 hours 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):

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.

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- 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 CaCl<sub>2</sub> 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.