Form 3160-5 (November 1983)

UNITED STATES

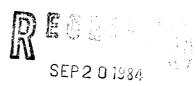
rorm gooroved. Budget Bureau No. 1004-0135 Expires August 31, 1985

Atlantic Richfield Company Navajo Allotted "A	
ARCO Oil and Gas Company, Div. of Atlantic Rickfield Company Navajo Allotted "A ADDRESS OF OPERATOR 707-17th Street ARCO Oil and Gas Company, Div. of Navajo Allotted "A RELL NO.	ted "A"

ARCO Oil and Gas Company, Operator, proposes to plug and abandon the subject well.

Well #1 was completed in February, 1966 as a Dakota formation producing well for 400 MCFPD. Production has declined from a high of 280 MCFPD in October, 1966 to its final rate of 15 MCFPD when it last produced in April, 1982. The Dakota zone production appears to be depleted. All other zones that appear on the logs are either too tight or too wet. well has been determined to be incapable of commercial production.

Therefore, in compliance with the BLM request to P&A this well (copies of letters attached), we request permission to plug and abandon well as per the attached P&A Procedure.



OH COAR SAIL

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SIGNED S. C. ROSE	TITLE Dist Prod. Sup't.	PROVED		
(This space for Federal or State office use)		SEP 1.8.1004		
APPROVED BY COMDITIONS OF APPROVAL, IF ANY:	TITLE	- DATE Starland Henra		
	NMOCC	M. MILLENBACH AREA MANAGER		

*See Instructions on Reverse Side

PLUG AND ABANDON PROCEDURES Navajo Allotted "A" Com #1 San Juan County, New Mexico

I. Location

2460'FSL, 1800'FWL, Sec. 24-T25N-R10W Basin - Dakota San Juan County, New Mexico

II. Well History

- . Spudded 1-18-66, Ran 4-1/2" Csg, completed in Dakota on 2-16-66.
- . IP : 400 MCFPD
- Production has declined from a high of 280 MCFPD in Oct. 1966 to its final rate of 15 MCFPD in its last year of production
- Cumulative production 155 MMCF
- Last produced April 1982. Well is not capable of commercial production

III. Existing Well Status

- . This particular zone of production in the Dakota appears to be depleted. All other zones that appear on the logs are either too tight or too wet. Zones considered include Mancos, Pictured Cliffs and the Gallup.
- . Lease has expired and ARCO still has obligation to P&A this well

TD: 6540'

PBTD: 6423' (CIBP @ 6460 w/35' fish on top)

TOC: 4125' (CBL & Temp Survey)

Production Csg: 4-1/2", 10.5#, J-55, STC @ 6535' w/550 sx

in 7-7/8" hole

Surf Csg: 8-5/8", 24# @ 343' w/220 sx in 12-1/4" hole

Tbg: 2-7/8" OD, 6.5#, J-55, Seal-Lok Tbg in Pkr

@ 63481

Perfs: 6390' - 6413' w/4 SPF

IV. Geology

Formation	Top
Ojo-Alamo	9961
Pictured Cliffs	1830'
Lewis Shale	20001
Mesaverde	2723'
Mancos	4517 '
Gallup	5360'
Greenhorn	6233 '
Graneros	6288'
Dakota	6390 '

V. P&A PROCEDURE

- Abbreviated procedure to P&A well without recovering 4-1/2" casing -
- M.I. R.U. 1.
- 2. Kill well
- 3. N.D. Christmas Tree and N.U. BOPE
- Cut off tbg as close as possible to permanent pkr @ 6348' if unable to release from pkr.

NOTE: WILL SET

EZSV-CMT. RET. F/ SRCEZING PERFS.

ROL

- 5. Load well w/ 9.2 ppg gel mud
- 6. Place Plug #1. FZSV-CMT. RET.

 - R.I.H. w/ ssz phr and set @ 6300'
 Sting into sqz phr and sqz Dakota perfs
 - (6390'-6413') w/ approx. 50 sx cement

 Sting out of the first and place a 10 sx cement plug on top of 6300'
 - . Pressure test casing to 1500 psi and hold for 15 min.
- 7. Place Plug #2.
 - . 10 sx cement plug set thru tbg inside 4-1/2" csg from 5360' to approx. 5260' (100' plug to isolate Gallup and Mesaverde)
- 8. Place Plug #3.
 - . Perforate 4-1/2" csg @ 1930'
 - Place a 100' cmt plug (100' inside 4-1/2" csg and 100' in annulus) by braden head squeezing thru perfs.
 - Plug location = 1930' to 1830'
 - Isolates Mesaverde and Pictured Cliffs
 - . Approx. 30 sx cement.
- 9. Place Plug #4.
 - Perforate 4-1/2" casing @ 1175'
 - Place a 200' cement plug (200' inside 4-1/2" csg and 200' in annulus) by braden head squeezing thru perfs
 - Plug location = 1175' to 975'
 - . Isolates Ojo-Alamo formation
 - . Approx. 60 sx cement.
- Place Plug #5. 10.
 - . Perforate 4-1/2" csg @ 400' (approx. 50' below surf esq shoe)
 - Place a 100' cement plug, 50' above and 50' below shoe (100' inside casing and 100' in annulus) by braden head squeezing thru perfs
 - Plug location = 400' to 300'
 - . Approx. 40 sx cement.
- 11. Place Plug #6.
 - . 10 sx cememt surface plug.
 - CUT-OFF & SALVAGE CASING HEAD AND ACCESSORIES
 - RDL INSTALL DRY HOLE MARKER
 - R.D. M.O.

MODEL "K" CMT. RETAINER @ 6460'

TD: 6540'

41/2", 10.5 # J-55 , STC CSG @ 6535' 4/550 Sx



United States Department of the Interior No. 14-20-603-1371

BUREAU OF LAND MANAGEMENT FARMINGTON RESOURCE AREA

Caller Service 4104 Farmington, New Mexico 87499

13 JUL 1984

Arco Oil and Gas Company Attn: Mr. B. R. Still P. O. Box 5540 Denver, CO 80217

Dear Mr. Still:

Enclosed please find a copy of our letter inadvertently sent to your Dallas office, regarding the status of your well No. 1-A Navajo Com, NELSW section 24, T. 25 N., R. 10 W., San Juan County, New Mexico, lease No. 14-20-603-1377. The letter and CFR reference are self explanatory. Your prompt attention is appreciated.

Sincerely yours,

Enclosure

Caller Service 4194 Farmington, New Powice 57499

CERTIFIED P 706 537 151

Arco 011 and Gas Company P. O. Box 2819 Dallas, Texas 75221

1 4 11-2 1984

Gentlemen:

Reference is made to your well No. 1-A Mayajo A-Com, AbbSW4 sec. 24, T. 25 N., R. 10 W., San June County, lew Mexico, lease No. 14-26-503-1377. This well ceased protection in aprel, 1982. Your attention is directed to 43 CFR 3162.3-4 entitled Well Abandonment.

Accordingly you are required to submit within 30 days of the date of this letter a Sundry Notice of intent to plug and abandon this well.

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

Sincerely yours,

(SGD.) MATHEW NUMBERS ACH

Area Nanager

BUREAU OF LAND MANAGEMENT Caller Service 4104 Farmington, New Mexico 87499

Attachment to Notice of

Re: Permanent Abandonment

Intention to Abandon

Well: LA Navajo Allolled Com A

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal Leases."
- 2. The Farmington office (telephone (505) 325-4572) is to be notified in sufficient time for a representative to witness all plugging operations.
- 3. Blowout prevention equipment is required.
- 4. In addition to normal filling of pits and cleanup of location, additional surface restoration work may be required, i.e. ripping of pad and/or access road, reseeding, etc. We have asked the Surface Management Agency for the surface restoration requirements for this well and we should be able to furnish you these requirements within 30 days. After plugging the well and before making final clean-up, you should contact this office unless you have already been advised as to what additional surface restoration work is required.
- 5. The following modifications to your plugging program are to be made (when applicable):

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

Office Hours: 7:45 A.M. to 4:30 P.M.

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

- 1. Secure prior approval 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.
- 3. A proper tank or pit will be used to contain all fluids pumped from the well during plugging operations.
- 4. All cement plugs are to be placed through tubing (or drillpipe) and shall be a minimum of 15 sacks or 100 feet in length, whichever is greater.
- 5. Any cement plug placed when well is not full of fluid, or when well may be taking fluid, will be touched after cement has set to verify proper location.
- 6. Mud must be placed between plugs. Minimum consistency of plugging mud must be 9.2 lbs/gal. Brine is to be utilized for mixing mud where possible.
- 7. Within 30 days after plugging work is completed, file Subsequent Report of Abandonment, Form 3160-5 (formerly 9-331), in quintuplicate with Area Manager, Bureau of Land Management, Caller Service 4104, Farmington, New Mexico 87499. 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.
- 8. All permanently abandoned wells are to be marked with a permanent monument, on which has been stenciled or beaded the well name, well number, and well location by quarter-quarter, section, township and range. The monument is to be of steel pipe, not less than four inches in diameter, cemented permanently in the ground, and extending four feet above general ground level. The top should be closed with a screw cap, welding, or a cement plug.
- 9. After plugging work is completed:
 - a. Fill all pits, rat hole and cellar.
 - b. Clean well location of all equipment, concrete bases, pipe, junk and
 - c. Cut or remove tie downs.
- d. If last well on lease, and no additional drilling is contemplated, fill tank battery pits, remove battery equipment, and clean and level battery location.
- e. Accomplish surface restoration as specified by the surface management agency or land owner.

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

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

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

Form 3100-5 (November 1983) Formerly 9-331	DEPARTMEN BUREAU OF	TED STATES T OF THE INTERIFICAND MANAGEMENT	<u>' </u>	Form approved. Budger Bureau No. 100- Expires August 31 198 5 LEASE DESIGNATION AND SEE 14-20-603-13	S LAL NO.
Do not use thi	NDRY NOTICES form for proposals to Use "APPLICATION	AND REPORTS C	a different reservoir.	Navajo Allottee	
OIL GAS WELL TELL	Mores and Gas Comp Richfield Co	any	JAN 1 0 1985	S. FAUN OR LEASE NAME Navajo Allotted	 "A" Coi
P.O. BOX	707-17th S 5540, Denver	←	Die Dr.	9. WELL NO. 1 10 FIELD AND POOL, DE WILDCA	
		1800' FWL, Sec		Basin Dakota 11. SBC. T. B. M. OR MLE. AND STRYNY OR ABA Sec. 24-T25N-R10)W
14. PERMIT 40. (A)		ELEVATIONS (Show whether for		12. COUNTY OR PARISE 13. ST.	
16.	• • •		ature of Notice, Report, or		
TEST WATER SEUT- PRACTURE TREAT SHOUT OR ACIDIZE REPAIR FELL (Other)	MULTI	OR ALTER CASING	WATER SHUT-OFF FRACTURE TREATMENT SHOOTING OR ACIDIZING (Other) Change of	ABPAIRING WELL ALTERING CASING ABANDONMENT* Plans-#1 Plug Its of multiple completion on Well appletion Report and Log form.	
was approve During the P & A Proce Being u cement plugs w S/N dat	d by the BLM plugging of dure for plu nable to pur plug (264') ere set as ped 9/7/84.	this well #1, ag # 1 as follo the Dak from 6108-5844 per the origina	ota perfs, we spo ' inside 4-1/2" o 1 P & A Procedure	to change the	
f ((SFF C	or the plug MPLETE PLUG Notice dat	#1, 12/12/84 () GING PROCEDURE ed December 13,	ATTACHED, as req	E. Taylor). uested by BLM on APPROVI	ED
SIGNED S.	CI ROSE derai or State office to		st. Prod. Sup't.	JAN 0 8 19	
APPROVED BY	APPROVAL IF ANY: ugging of the	well bore.		JAN U O 130 Ya/ A Stan Makes IA. MILLENB AREA IMANA	ACH

Instructions on Reverse Side

surface restoration is completed.

County or Parish	New Mexico	
San Juan		
Lease or Unit Navajo Allotted "A" Com.	Well no 1	
Title Plug and Abandon		

12/11/84

MI & RU Pulling Unit. Pump 60 bbls water down csg., to kill well. Nipple up BOP. Rig up HOMCO Wireline Truck and freepoint Tool. Ran FP Tool in 2 7/8" tbg to 5976'. Worked down to 6028'. Could not get deep*r. Tbg free @ 6028'. Made up jet tbg cutting Tool. Picked up 10 pts over tbg weight prep to cut. Tbg came free. Pull jet cutter. Pull 2 jts tbg. Secure Well. SDON.

12/12/84

12/13/84

Trip out with 2 7/8 tbg. Lay down 17 joints of bad tbg. Pick up 45 Casing scraper & bit. Trip in hole to 6008'. Trip out of hole with 2 7/8" tbg.

Prep to squeeze Dakota & set bottom plug. SDON.

Ran Baker full-bore packer on 2 7/8" tbg. w/300' tbg Tailpipe. Bottom tailpipe 6108' GLM. Set pkr. Could not pump into Dakota. Two tries at 3500 psig.

Released pkr. spotted 20 xs Class "B" cement plug (6108'-5844'), 264'. Circulated hole $w/9.2 \, \mu$ mud. Spotted 20 sx. Class "B" cement plug (5361'-5097'), 264.

Perf. 3 holes in 4½"csg. Squeezed 28½ sx through perfs. Annulus plug 1930'-1805' (125'). Left 12½ sx plug inside 4½" csg. (125").

Perf. 3 holes in $4\frac{1}{2}$ " csg. at 1175'. Mixed 70 sx Class "B" cement. Squeezed 50.5 sxs through perfs into annulus (1175-955') 220'. Left 19.5 sx plug inside $4\frac{1}{2}$ " csg. (1175-955') 220'. Perf 3 holes in $4\frac{1}{2}$ " 0 400'. Closed Blind rams and dis-

Perf 3 holes in 4½ @ 400'. Closed Blind rams and displaced 31 sx into annulus behind 4½ csg. (400'-300'), 100'. Left 9 sx plug inside 4½ csg. (400'-300'), 100'.

Nipple down BOP. Set 10 sx. Class "B" Cement plug in 4½" csg. (118'-0'). Nipple down casing head. Set 4" dry hole marker.

12/13/84

12/14/84

FINAL REPORT - WELL P&A'd, 12-14-84.