

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IS TRIPLICATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

30-045-27953

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>				5. LEASE DESIGNATION AND SERIAL NO. NM - 0606	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>				6. IF INDIAN, ALLOTTEE OR TRIBE NAME NONE	
2. NAME OF OPERATOR ARCO Oil and Gas Company				7. UNIT AGREEMENT NAME -----	
3. ADDRESS OF OPERATOR P.O. Box 1610, Midland, Texas 79702				8. FARM OR LEASE NAME Atlantic Fruitland 27	
4. LOCATION OF WELL (Report clearly and in accordance with any State requirements.) At surface 1480' FNL & 1403' FEL At proposed Prod. zone Approximately the same				9. WELL NO. 1	
13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 7 miles NE of Aztec, New Mexico				10. FIELD AND POOL, OR WILDCAT Basin-Fruitland Coal Gas Pool	
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. line, if any) 1480'		16. NO. OF ACRES IN LEASE 2394.72		11. SEC., T., M., OR BLK. AND SURVEY OR AREA G Sec 27, T31N-R10W	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 252'		19. PROPOSED DEPTH 3065'		12. COUNTY San Juan	
21. ELEVATIONS (Show whether GR or KB) 6229.0' GR		22. APPROX. DATE WORK WILL START Spud 6/90		13. STATE NM	
23. PROPOSED CASING AND CEMENTING PROGRAM				17. NO. OF ACRES ASSIGNED TO THIS WELL 314.25-820 E12	
SIZE OF HOLE		SIZE OF CASING		20. ROTARY OR CABLE TOOLS Rotary	
12-1/4"		8-5/8"		21. NO. OF ACRES ASSIGNED TO THIS WELL 314.25-820 E12	
7-7/8"		5-1/2"		22. APPROX. DATE WORK WILL START Spud 6/90	
		15.5#		23. PROPOSED CASING AND CEMENTING PROGRAM	
		3065'		24. ELEVATIONS (Show whether GR or KB) 6229.0' GR	
				25. APPROX. DATE WORK WILL START Spud 6/90	

It is proposed to drill a 12-1/4" hole to 300' using fresh water spud mud. After setting surface casing, the shoe will be drilled out with a 7-7/8" bit, continuing to TD. A low solids, fresh water gel/polymer mud system will be utilized. A water loss of less than 20cc will be maintained and a mud weight of 9.5 ppg will be used to balance the 1600 psi Fruitland pore pressure. At TD, open-hole logs consisting of GR/CAL/FDC will be run and 5-1/2" production casing will be set and cemented to surface.

Pursuant to the "Onshore Oil and Gas Order #1" attachments are as follows:

1. Certified Location Plat
2. Drilling Plan with attachments
3. Surface Use Plan with attachments

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Ken Townsend TITLE Regulatory Coordinator DATE 5-2-90  
(This space for Federal or State Use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

NMOCD

APPROVED  
AS AMENDED

JUN 26 1990

Ken Townsend

FOR AREA MANAGER

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly 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.

# OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

## DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

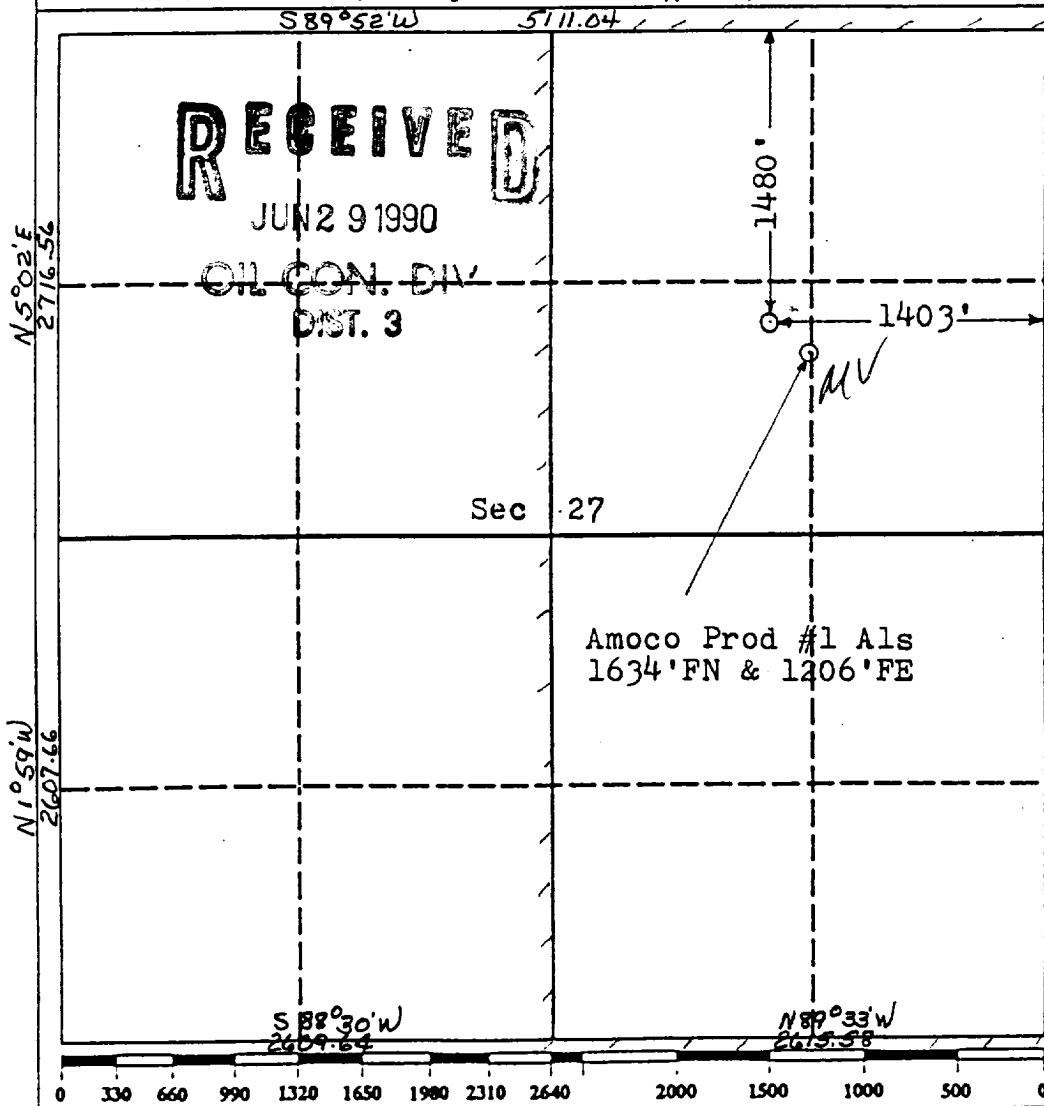
## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator <b>Arco Oil &amp; Gas Company</b>			Lease <b>Atlantic Fruitland 27</b>		Well No. <b>1</b>
Unit Letter <b>G</b>	Section <b>27</b>	Township <b>31 N.</b>	Range <b>10 W.</b>	County <b>San Juan</b>	

Actual Footage Location of Well: <b>1480'</b> feet from the <b>North</b> line and <b>1403'</b> feet from the <b>East</b> line					
Ground level Elev. <b>6229'</b>	Producing Formation <b>Fruitland</b>		Pool <b>Basin-Fruitland Coal Gas Pool</b>	Dedicated Acreage: <b>E/2 320 Acres</b>	

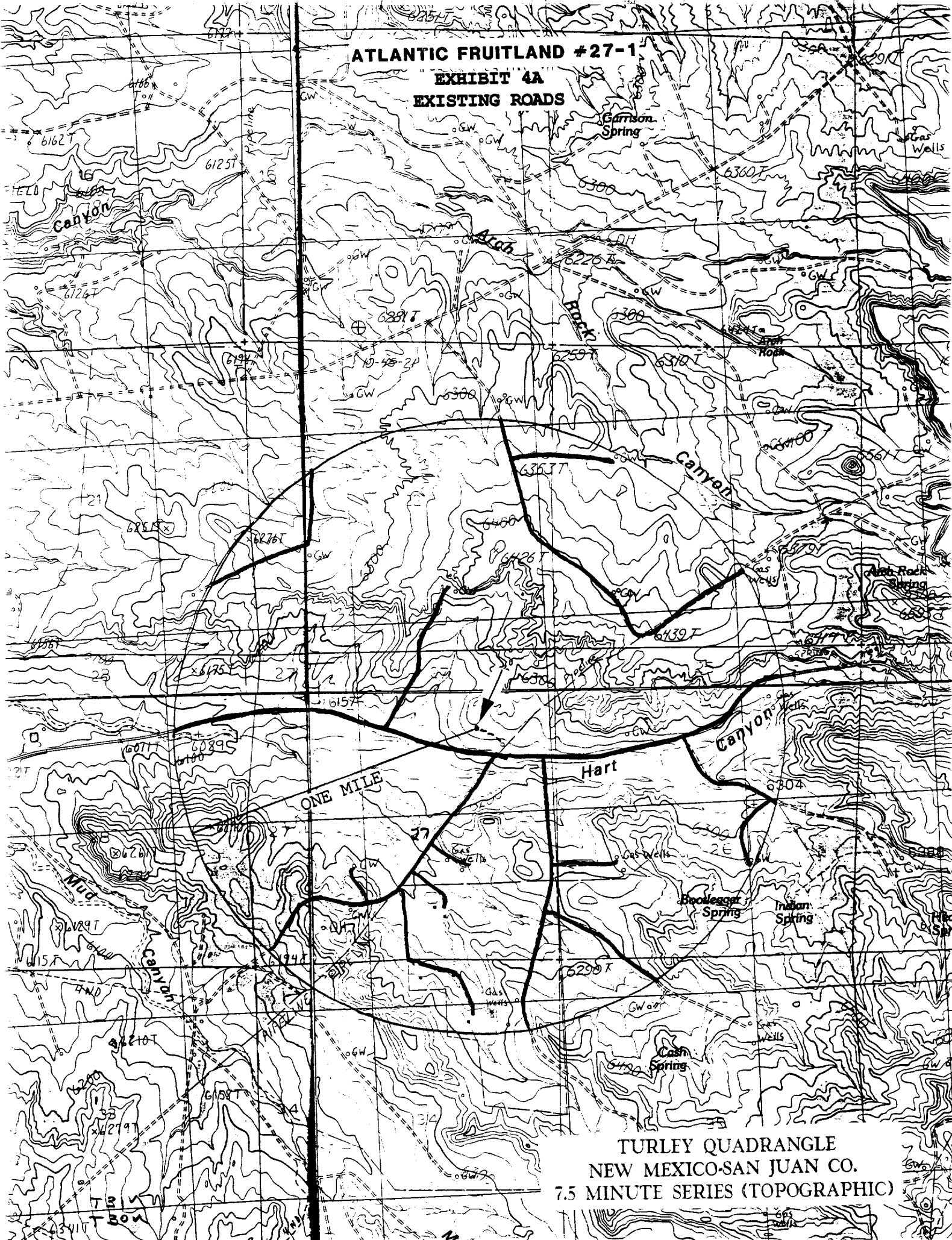
1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary). \_\_\_\_\_  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
Signature <i>Joel Talley</i>	Printed Name <b>Joel Talley</b>
Position <b>Drilling Engineer</b>	
Company <b>Arco Oil &amp; Gas</b>	
Date <b>3-14-90</b>	
<b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.	
Date Surveyed <b>3-14-90</b>	
Signature & Seal of Professional Surveyor <i>ROT A RUSH</i> <b>8894</b>	
Certificate No. <b>8894</b>	

ATLANTIC FRUITLAND #27-1

EXHIBIT 4A  
EXISTING ROADS



TURLEY QUADRANGLE  
NEW MEXICO-SAN JUAN CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)