

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

30-045-28050  
Form approved.  
Budget Bureau No. 1004-0136  
Expires August 31, 1985

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 28	
4. LOCATION OF WELL (Report clearly and in accordance with any State requirements.) At surface 1045' FNL & 1489' FEL At proposed Prod. zone Approximately the same		9. WELL NO. 1	
13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 6 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 drig. line, if any) 1045'		11. SEC., T., M., OR BLK. AND SURVEY OR AREA Sec 28, T31N-R10W	
16. NO. OF ACRES IN LEASE 2394.72		12. COUNTY San Juan	
17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 642'		13. STATE NM	
18. PROPOSED DEPTH 2930'		17. NO. OF ACRES ASSIGNED TO THIS WELL 301.58 320 E/2	
19. ROTARY OR CABLE TOOLS Rotary		20. APPROX. DATE WORK WILL START Spud 7/90	
21. ELEVATIONS (Show whether GR or KB) 6082.0' GR		22. APPROX. DATE WORK WILL START Spud 7/90	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT, ft <sup>3</sup>
12-1/4"	8-5/8"	24#	300' 500'	325 cuft
7-7/8"	5-1/2"	15.5#	2930'	1200 cuft

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 Kenneth Gosnell 915 688-5672  
(This space for Federal or State Use) TITLE Regulatory Coordinator DATE 5-2-90

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

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

CONDITIONS OF APPROVAL, IF ANY \_\_\_\_\_

RECEIVED

JUL 31 1990

NMOCD

OIL CON. DIV.

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.

APPROVED  
AS AMENDED

JUL 24 1990

AREA MANAGER

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

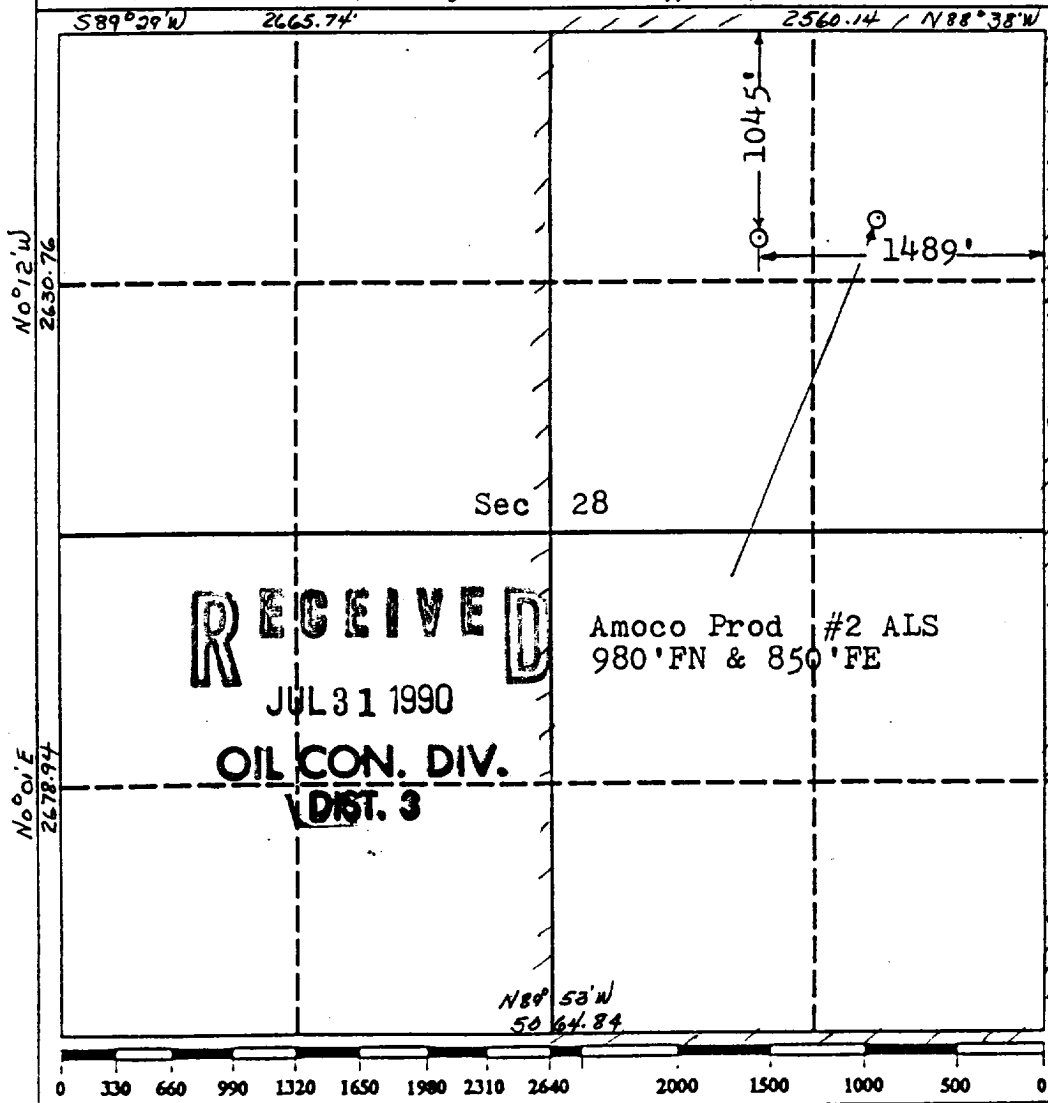
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Arco Oil & Gas Company			Lease Atlantic Fruitland 28		Well No. 1
Unit Letter B	Section 28	Township 31 N.	Range 10 W.	County San Juan	

Actual Footage Location of Well: 1045' feet from the North line and 1489' feet from the East line					
Ground level Elev. 6082	Producing Formation Fruitland		Pool Basin-Fruitland Coal Gas Pool	Dedicated Acreage: E/2 32.0 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 communization, 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 communization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Joel Talley*  
Printed Name: JOEL Talley  
Position: Drilling Engineer  
Company: ARCO OIL & GAS  
Date: 3-12-90

SURVEYOR CERTIFICATION

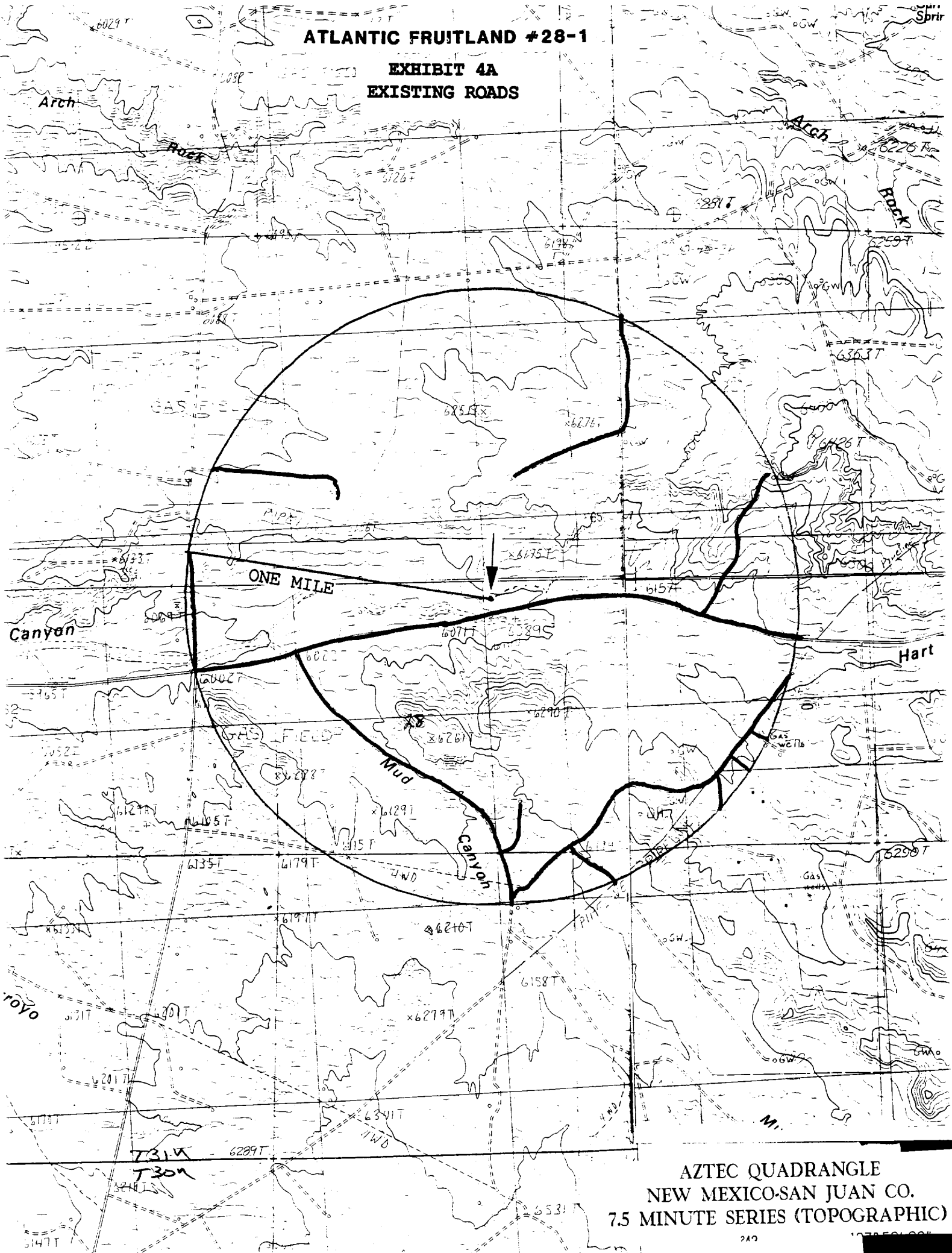
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: 3-12-90

Signature & Seal of Professional Surveyor: *ROY A. RUSH*  
Certificate No.: 8894  
Professional Land Surveyor

ATLANTIC FRUITLAND #28-1

EXHIBIT 4A  
EXISTING ROADS



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