

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IS TRIPLICATE*
(Other instructions on
reverse side)

30-045-27927
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. SF - 080917	
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 4	
4. LOCATION OF WELL (Report clearly and in accordance with any State requirements.) At surface 1086' FNL & 1371' FEL At proposed Prod. zone Approximately the same		9. WELL NO. 1	
13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 4 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) 2691'		11. SEC., T., M., OR BLK. AND SURVEY OR AREA Sec 4, T30N-R10W	
16. NO. OF ACRES IN LEASE 2538.18		12. COUNTY San Juan	
17. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 473'		13. STATE NM	
18. PROPOSED DEPTH 3042'		17. NO. OF ACRES ASSIGNED TO THIS WELL 320 N/2	
20. ROTARY OR CABLE TOOLS Rotary		22. APPROX. DATE WORK WILL START Spud 6/90	
21. ELEVATIONS (Show whether GR or KB) 6317.0' GR		23. PROPOSED CASING AND CEMENTING PROGRAM	

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24#	300' 500	250 cuft 384
7-7/8"	5-1/2"	15.5#	3042'	1200 cuft 13/6

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

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

RECEIVED

JUN 27 1990

*See Instructions On Reverse Side

It is 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

JUN 25 1990

Ken Townsend
FOR AREA MANAGER

1 8 7 0 8 4 9 2

1 8 7 0 8 4 9 2

1 8 7 0 8 4 9 2

0 3 4 1 3 3 3 0

0 3 4 1 3 3 3 0

0 3 4 1 3 3 3 0

0 3 4 1 3 3 3 0

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

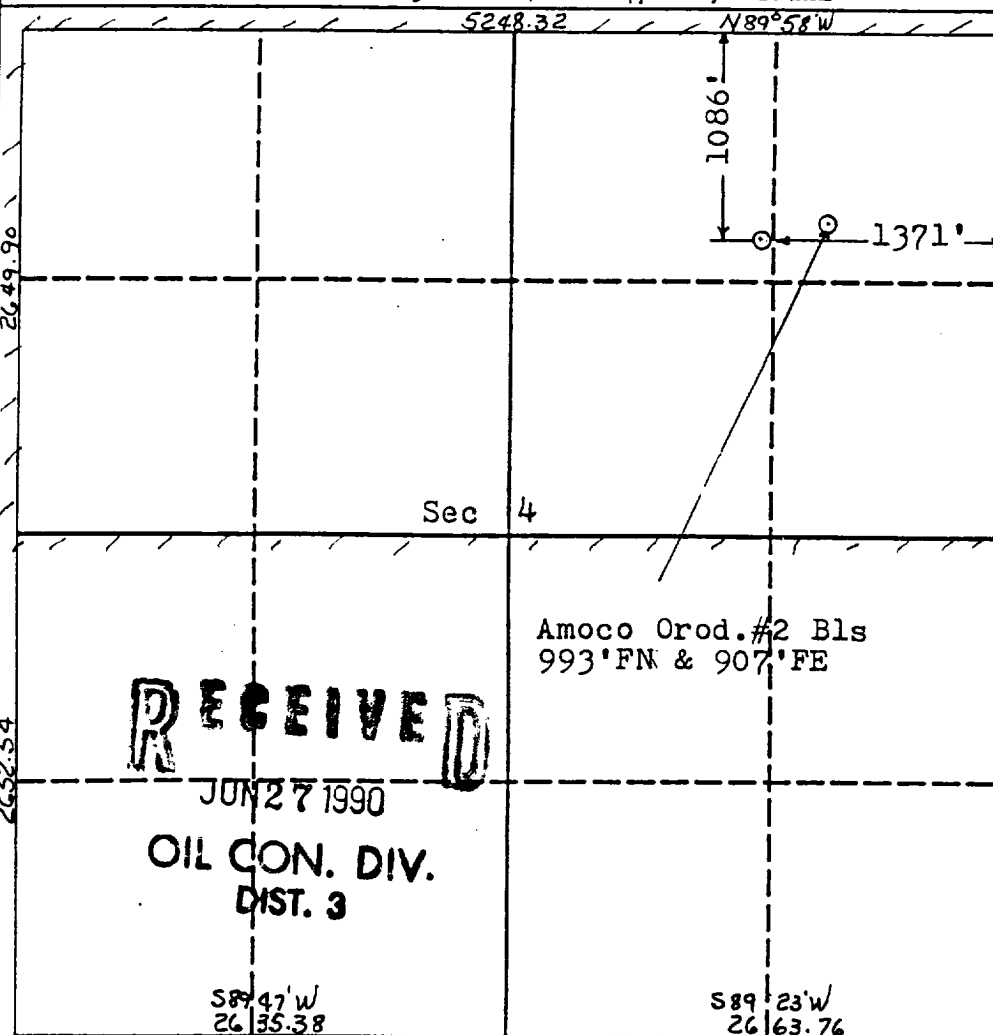
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Arco Oil & Gas Company			Lease Atlantic Fruitland 4		Well No. 1
Unit Letter B	Section 4	Township 30 N.	Range 10 W.	County San Juan	
Actual Footage Location of Well: 1086' feet from the North line and 1371' feet from the East line					
Ground level Elev. 6317'	Producing Formation Fruitland		Pool Basin-Fruitland Coal Gas Pool		Dedicated Acreage: N/2 320 Acres

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.



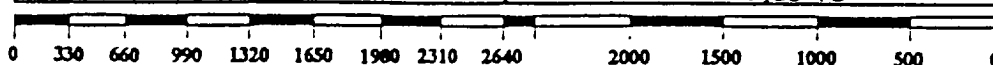
OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Joel Tally*
Printed Name: **Joel Tally**
Position: **Drilling Engineer**
Company: **ARCO Oil & Gas**
Date: **3-10-90**

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.

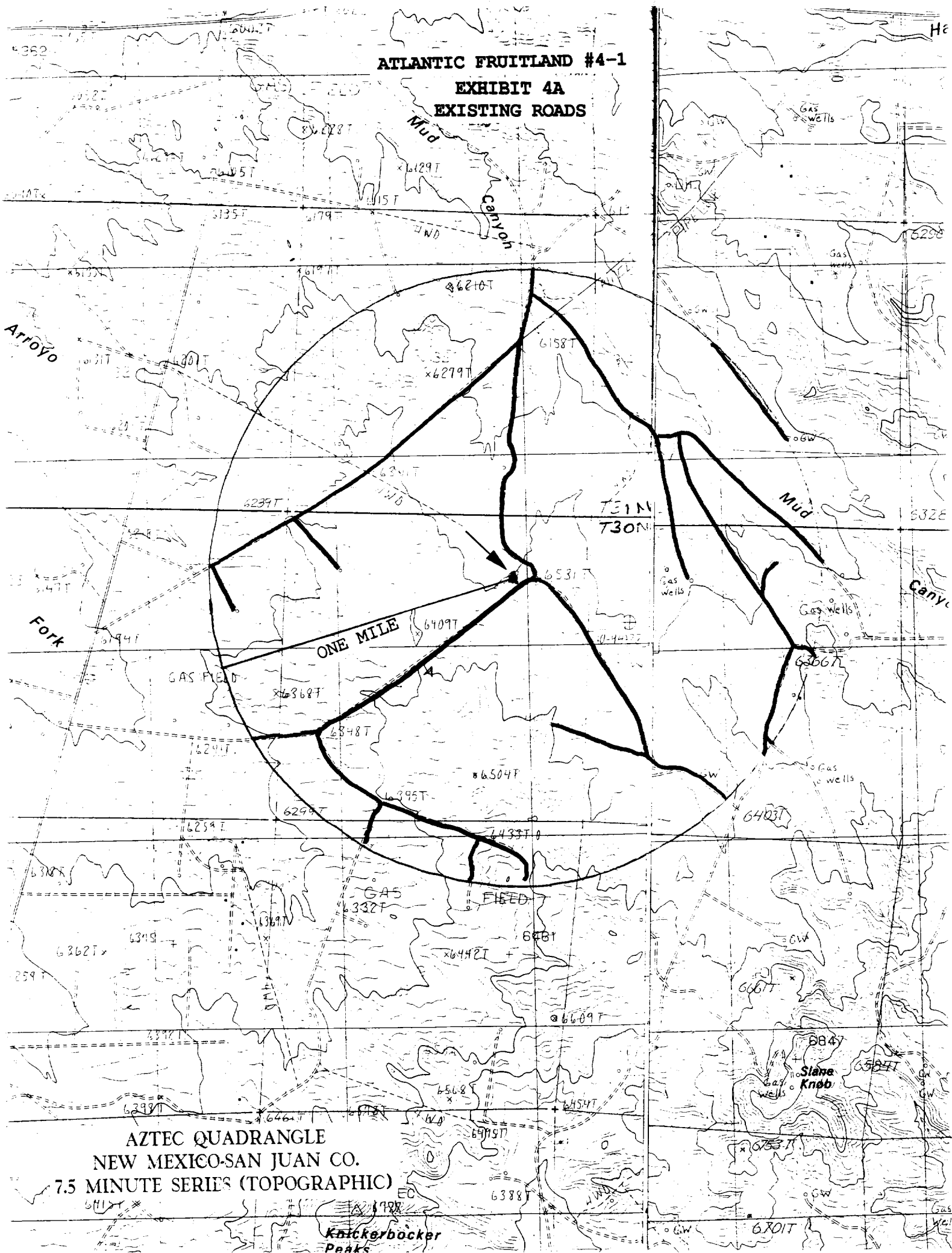
Date Surveyed: **3-10-90**

Signature & Seal of Professional Surveyor: *Roy A. Rush*
Certificate No. **8894**
REGISTERED PROFESSIONAL LAND SURVEYOR



ATLANTIC FRUITLAND #4-1

EXHIBIT 4A
EXISTING ROADS



AZTEC QUADRANGLE

NEW MEXICO-SAN JUAN CO.

7.5 MINUTE SERIES (TOPOGRAPHIC)

Knickerbocker
Peaks

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0113
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

5. Lease Designation and Serial No.

SF-080917

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

ARCO Oil & Gas Company

3. Address and Telephone No.

P. O. Box 1610, Midland, TX 79702

915 688-5672

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1086 FNL & 1371 FEL
4-30N-10W

8. Well Name and No.

Atlantic Fruitland 4#1

9. API Well No.

NA

10. Field and Pool, or Exploratory Area

Basin-Fruitland Coal Gas Pool

11. County or Parish, State

San Juan, NM

2. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment
☐ Recompletion
☐ Plugging Back
☐ Casing Repair
☒ Altering Casing
☒ Other

- ☐ Change of Plans
☐ New Construction
☐ Non-Routine Fracturing
☐ Water Shut-Off
☐ Conversion to Injection

Cementing data as requested

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

3. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Propose to extend surface casing depth to 500' for well control.
See cementing data as requested.

Hole	Casing	Weight	Depth	Cement
12 1/4	8 5/8	24	500	325 sx C1"B" w/2% cc + 1/4# CF, 1.18 yld, 384 cu ft.
7 7/8	5 1/2	15.5	0-TD	Lead: 600 sx 65/35/6 C1"B"/POZ/Gel w/1/4# CF, 1.8 yld, 1080 cu ft. Tail: 200 sx C1"B" w/1/4# CF, 1.18 yld, 236 cu ft. Actual volume for Lead & Tail will be Caliper volume + 15% excess.

4. I hereby certify that the foregoing is true and correct

Signed Ken W. Gosnell

Title Regulatory Coordinator

Date 6/19/90

(This space for Federal or State office use)

Approved by _____

Title _____

Date _____

Conditions of approval, if any:

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 statement or representations as to any matter within its jurisdiction.