

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IS TRIPLICATE*
(Other instructions on
reverse side)

30-045-27931
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 34
4. LOCATION OF WELL (Report clearly and in accordance with any State requirements.) At surface 1755' FNL & 1653' 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) 1653'	16. NO. OF ACRES IN LEASE 2538.18	11. SEC., T., M., OR BLK. AND SURVEY OR AREA Sec 34, T31N-R10W
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1325'	19. PROPOSED DEPTH 3108'	12. COUNTY San Juan
21. ELEVATIONS (Show whether GH or KB) 6313' GR		13. STATE NM
22. APPROX. DATE WORK WILL START Spud 6/90		

23. PROPOSED DRILLING 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 3/8"
7-7/8"	5-1/2"	15.5#	3108'	1200 cuft 13/16"

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, continueing 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 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

APPROVED

JUN 22 1990
Ken Townsend

FOR AREA MANAGER

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 CON. DIV.
DIST. 3

NMOCD

THE GAZA

1947-1948

1948-1949

RECEIVED

1948-1949

1948-1949

1948-1949

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

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

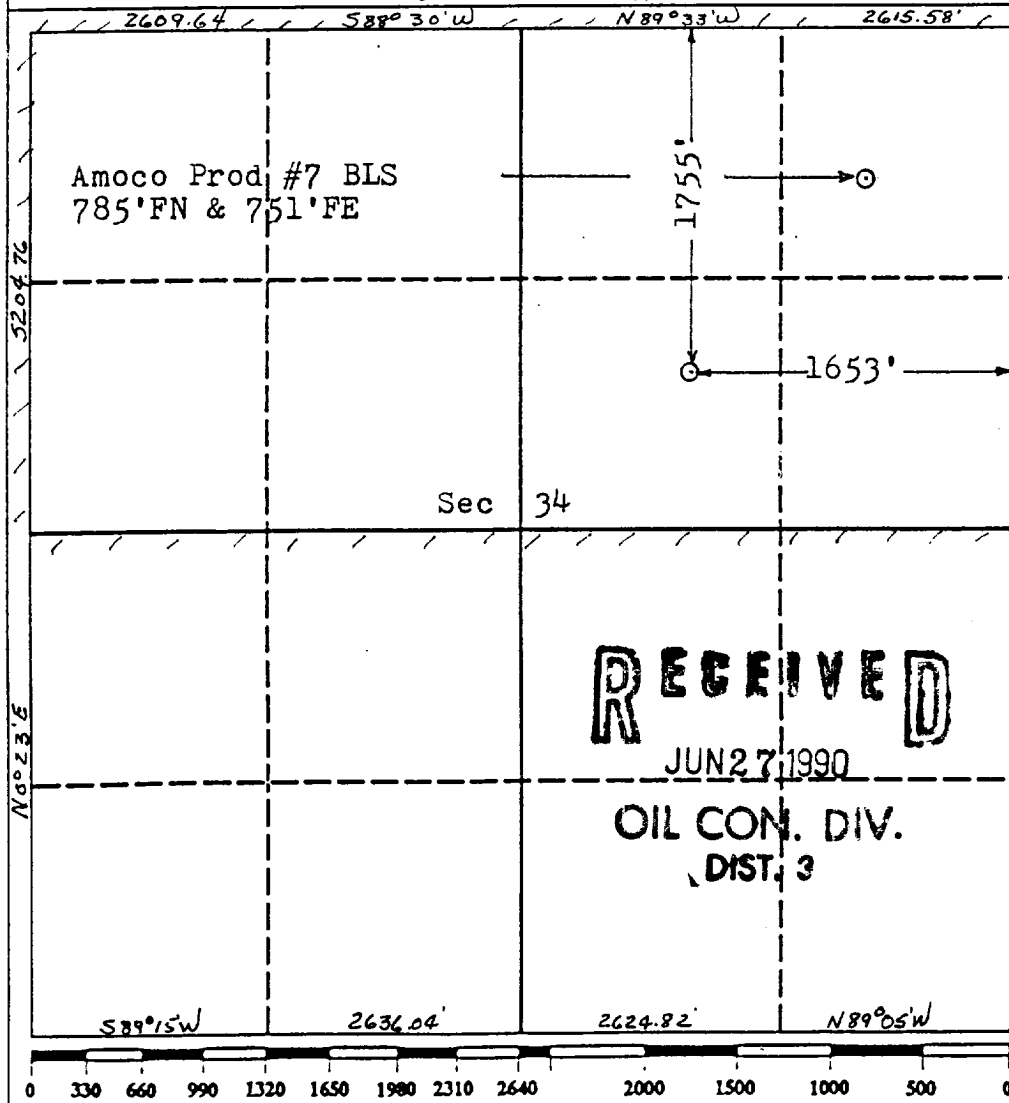
WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Arco Oil & Gas Company		Lease Atlantic Fruitland 34		Well No. 1
Unit Letter G	Section 34	Township 31 N.	Range 10 W.	County San Juan

Actual Footage Location of Well: 1755' feet from the North line and 1653' feet from the East line				
Ground level Elev. 6313'	Producing Formation Fruitland	Pool Basin-Fruitland Coal Gas Pool	Dedicated Acreage: N/2-320 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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 Talley*
Printed Name: *Joel Talley*
Position: *Drilling Engineer*
Company: *ARCO Oil & Gas*
Date: *3-16-90*

SURVEYOR CERTIFICATION

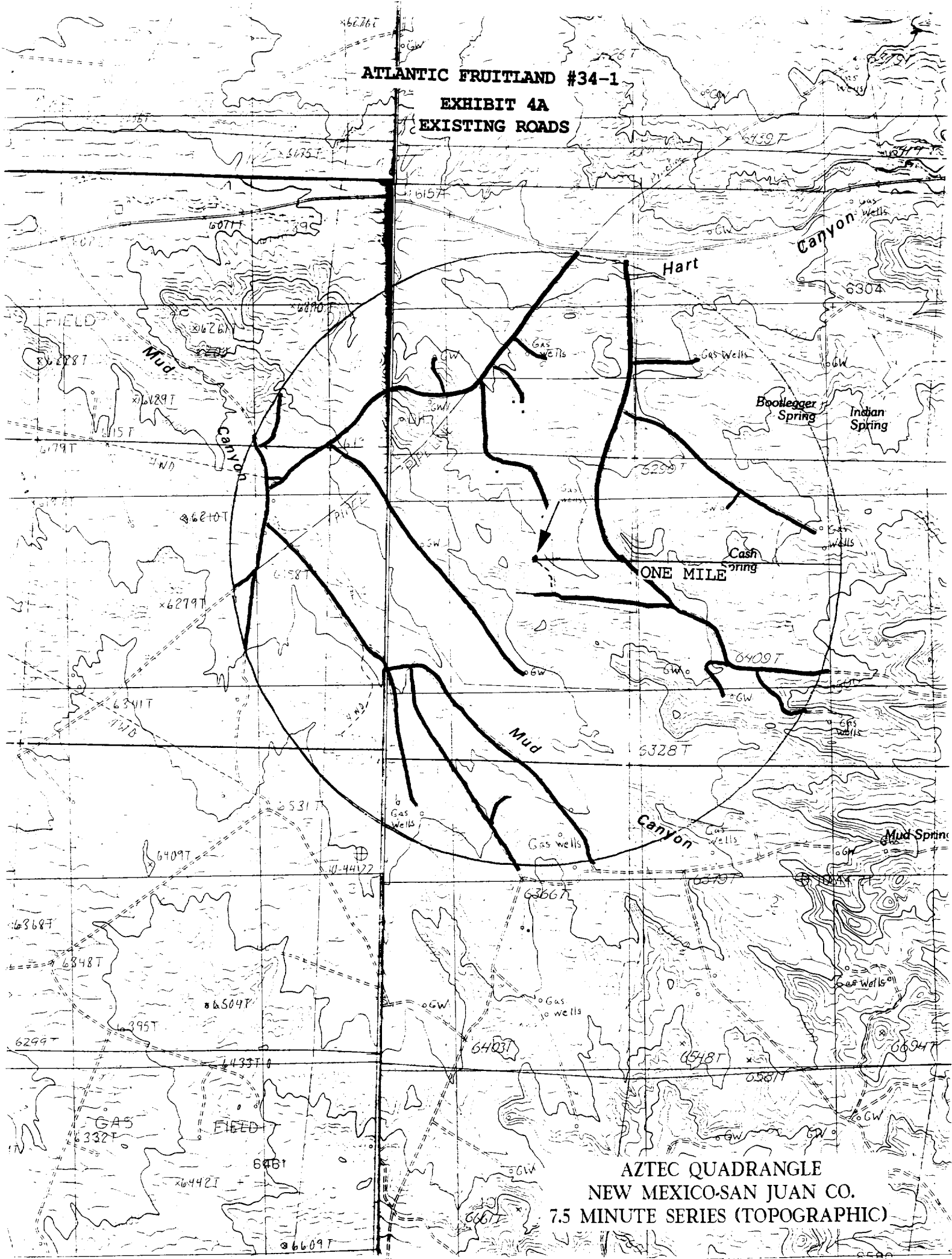
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed: *3-16-90*

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

ATLANTIC FRUITLAND #34-1

EXHIBIT 4A
EXISTING ROADS



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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
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)

1755 FNL & 1653 FEL
34-31N-10W

8. Well Name and No.

Atlantic 34#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

12. 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
Recommendation Report and Log form.)

13. 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.

14. 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.