

F

30-045-28150

08-21-90

F. Loc. 1805/N; 1505/E Elev. 6530 GL Spd. Comp. TD PB
 Cu. ft. Cu. ft. Cu. ft.
 Casing S. @ W Sx. Int. @ W Sx. Pr. @ W Sx. T. @
 Csg. Perf. Prod. Stim.

T Gas
R
A
N
S

BO/D Grav. 1st Del. Gas
 I.P. MCF/D After Hrs. SICP PSI After Days GOR 1st Del. Oil

TOPS	NI TD	Well Log	TEST DATA							
Ojo Alamo	C-103	Plat X	Schd.	PC	Q	PW	PD	D	Ref. No.	
Kirtland	C-104	Electric Log								
Fruitland		C-122								
Pictured Cliffs	Ditr	Dfa								
Chacra	Datr	Dac								
Cliff House	E/297.40 Acres									
Menefee										
Point Lookout										
Mancos										
Gallup										
Greenhorn										
Dakota										
Entrada										

P
o
o

BasinFrCoalCo.SJ S 25 T 31N R 10W U G Oper. Arco Oil & Gas Co. Les. Atlantic Frt. 25 No. 1

Atlantic Fruitland 25 #1 G-25-31N-10W

ARCO OIL & GAS CO.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington Resource Area
1235 Laplata Highway
Farmington, New Mexico 87401

TAKE
PRIDE IN
AMERICA

IN REPLY REFER TO:

NM-0607 et al. (WC)
3162.3-1 (019)

RECEIVED

OCT 4 1991

OCT. 03 1991

ARCO Oil and Gas Company
P.O. Box 1610
Midland, TX 79702

OIL CON. DIV
DIST. 3

Gentlemen:

Enclosed are your Applications for Permit to Drill well Nos:

- ✓ 1. 1 Atlantic Fruitland 3 Com, sec. 3, T. 30 N., R. 10 W., San Juan Co., NM, lease NM-0607.
- ✓ 2. 2 Atlantic Fruitland 3 Com, sec. 3, T. 30 N., R. 10 W., San Juan Co., NM, lease SF-080917.
- ✓ 3. 1 Atlantic Fruitland 4, sec. 4, T. 30 N., R. 10 W., San Juan Co., NM, lease SF-080917.
- ✓ 4. 2 Atlantic Fruitland 4, sec. 4, T. 30 N., R. 10 W., San Juan Co., NM, lease SF-080917.
- ✓ 5. 1 Atlantic Fruitland 5, sec. 5, T. 30 N., R. 10 W., San Juan Co., NM, lease SF-080917.
- ✓ 6. 2 Atlantic Fruitland 5, sec. 5, T. 30 N., R. 10 W., San Juan Co., NM, lease SF-080917.
- ✓ 7. 1 Atlantic Fruitland 25, sec. 25, T. 31 N., R. 10 W., San Juan Co., NM, lease NM-013688.
- ✓ 8. 2 Atlantic Fruitland 26, sec. 26, T. 31 N., R. 10 W., San Juan Co., NM, lease NM-0606.
- ✓ 9. 1 Atlantic Fruitland 27, sec. 27, T. 31 N., R. 10 W., San Juan Co., NM, lease NM-0606.
- ✓ 10. 2 Atlantic Fruitland 27, sec. 27, T. 31 N., R. 10 W., San Juan Co., NM, lease NM-0606.

ABANDONED LOCATION

- ✓ 11. 1 Atlantic Fruitland 28, sec. 28, T. 31 N., R. 10 W., San Juan Co., NM, lease NM-0606.
- ✓ 12. 2 Atlantic Fruitland 28, sec. 28, T. 31 N., R. 10 W., San Juan Co., NM, lease NM-0606.
13. 1 Atlantic Fruitland 33, sec. 33, T. 31 N., R. 10 W., San Juan Co., NM, lease SF-080917.
14. 2 Atlantic Fruitland 33, sec. 33, T. 31 N., R. 10 W., San Juan Co., NM, lease SF-080917.
15. 1 Atlantic Fruitland 34, sec. 34, T. 31 N., R. 10 W., San Juan Co., NM, lease SF-080917.

As discussed with Ken Gosnell of your company on, September 26, 1991, the subject APDs are rescinded and returned due to drilling not being commenced within the approved period of time.

You are required to request surface rehabilitation instructions from this office if construction activities occurred on the referenced drill site. If this office does not receive comment within 30 days, we will presume that no construction occurred and proceed accordingly. Later discovery that construction activities have in fact occurred, may result in assessment of liquidated damages.

Sincerely,

/s/ John L. Keller

John L. Keller
Chief, Branch of Mineral Resources

Enclosures

cc:

~~New Mexico Oil Conservation Division~~ 100 Rio Brazos Rd., Aztec, NM 87410

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IS TRIPLICATE*
(Other instructions on
reverse side)

30-045-28150
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 - 136887 013688	
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 25	
4. LOCATION OF WELL (Report clearly and in accordance with any State requirements.) At surface 1805' FNL & 1505' FEL (Unit Letter G) At proposed Prod. zone Approximately the same				9. WELL NO. #1	
13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 8 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) 1505'		16. NO. OF ACRES IN LEASE 2440 2066.440		17. NO. OF ACRES ASSIGNED TO THIS WELL 320 E/2 297.46	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 600'		19. PROPOSED DEPTH 3365' 3280'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether GR or KB) 6530' GR				22. APPROX. DATE WORK WILL START Spud 7/90	
23. PROPOSED CASING AND CEMENTING PROGRAM This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS", II					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	
12-1/4"	9 5/8"	24# 36	300' 250	231 250 cuft Surface	
7-7/8" 8 3/4	7 5/8"	15.5# 23	3365' 2470	835 1200 cuft Surface	
			3280'		

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 Towns TITLE Regulatory Coordinator DATE 5-16-90
(This space for Federal or State Use)

PERMIT NO. _____ APPROVED BY _____ DATE _____
APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY: _____

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AUG 21 1990

NMOCD

OIL CON. DIV.

See Instructions On Reverse Side

AUG 16 1990
Ken Towns

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.

OK
C

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form 6-10
Revised 1-1-90

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 25		Well No. 1
Unit Letter G	Section 25	Township 31 N	Range 10 W	County San Juan	

Actual Footage Location of Well:

1805 feet from the North line and 1505 feet from the East line

Ground level Elev. 6530	Producing Formation Fruitland	Pool Basin-Fruitland coal Gas Pool	Dedicated Acreage E/2 320-297.40
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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.?

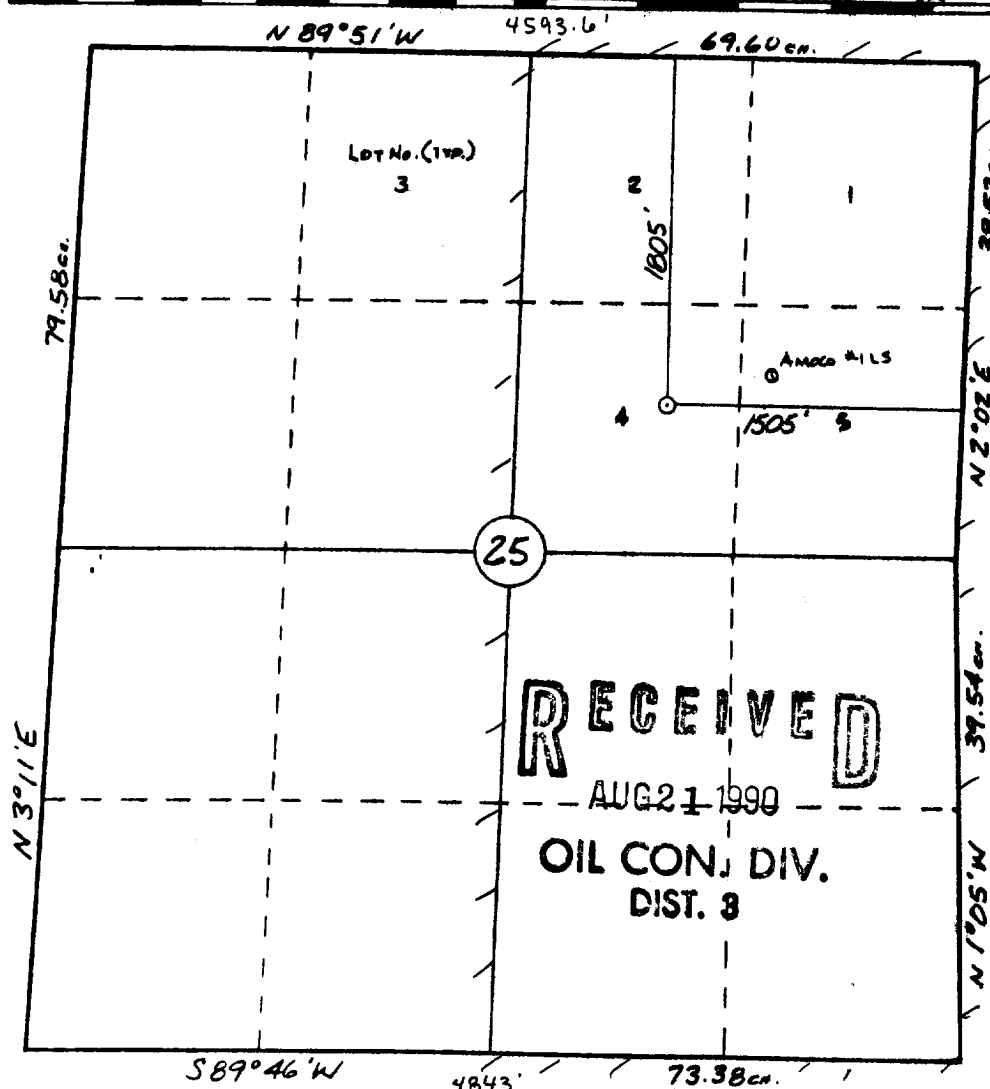
☐ Yes

☐ 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, force-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 5-16-90

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.

4-16-90

Date Surveyed
William E. Mahoke II
Signature & Seal of Professional Surveyor
NEW MEXICO #8466 CARRIE W. PROFFER, PROFESSIONAL LAND SURVEYOR

4. Proposed Casing Program

	<u>Hole Size</u>	<u>Interval</u>	<u>Casing Size</u>	<u>Weight & Grade</u>
Surface	12-1/4"	0-250'	9-5/8"	36.0# K-55
Production	8-3/4"	0-2970'	7"	23# N-80
Open-Hole	6-1/4"	2970- 3280	NA	NA

Surface Casing cemented to surface with 200 sx (236 ft³) of Cl "B" containing 2% CaCl₂.

Production casing cemented to surface with \pm 400 sx (720 ft³) 65/35/6 Cl "B"/Poz/Gel w/ 1/4# CF lead and 100 sx (118 ft³) Cl "B" tail.

If hole stability is a problem, a 5-1/2" liner will be set uncemented across the open-hole section. The liner will overlap the 7" casing 100' and it will be perforated across the coal.

5. Type and Characteristics of Proposed Drilling Fluids

<u>Depth</u>	<u>Mud Type</u>	<u>Weight ppg</u>	<u>Funnel Viscosity</u>	<u>Water Loss</u>
0-250'	Spud Mud	9.0	35-45	NC
250'-2970'	Low Solids	8.7-9.5	32-45	<10
2970-3280'	Water/Air	8.4-1.0	28	NC

6. Testing, Coring and Logging Program

A. Drill Stem Testing - None Anticipated

B. Coring - None Anticipated

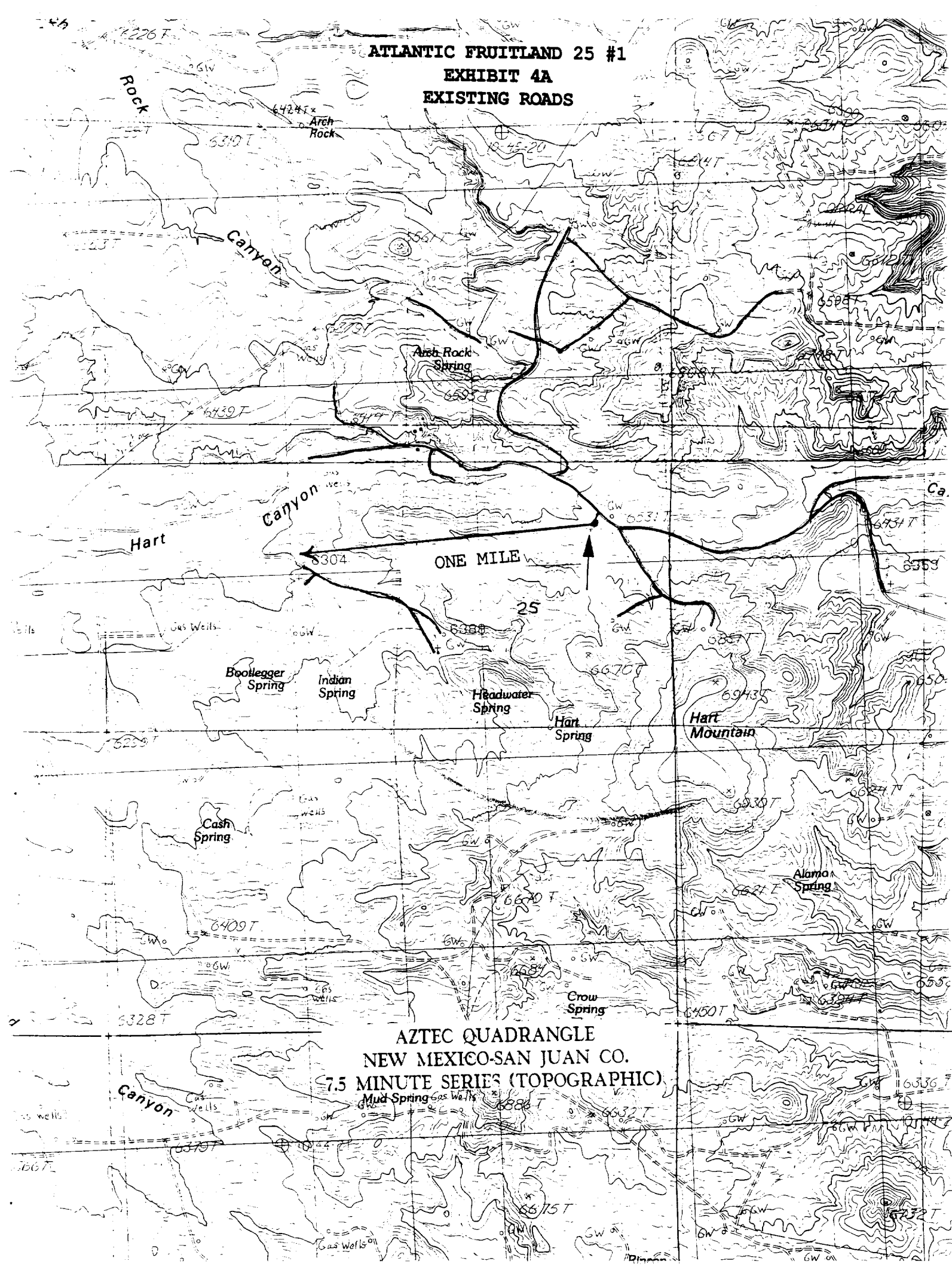
C. Logging-

Open Hole
Mud Logger from 7" casing point
to TD.

Cased Hole
Temperature Survey if cement does not circulate

D. The well is planned to be completed Open-Hole style. The Fruitland will be drilled out from under 7" Casing using a Completion Rig and utilizing water as the drill fluid. After reaching TD, air will be added to the water to induce gas/water flow from the coal. Should wellbore stability be a problem, a 5-1/2" liner will be run to TD with 100' overlap across the 7" casing. The liner will not be cemented but will be perforated.

ATLANTIC FRUITLAND 25 #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 purposes.

3. Lease Designation and Serial No.
NM-013688
4. If Indian, Agency or Tribe Name

SUBMIT IN TRIPLICATE

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OIL CON. DIV.
DIST 8

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)

1805 FNL & 1505 FEL (Unit Letter G)
25-31N-10W

5. Well Name and No.
Atlantic Fruitland 25#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

TYPE OF ACTION

☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

☐ Abandonment
☐ Recommission
☐ Plugging Back
☐ Casing Repair
☒ Altering Casing
☒ Other

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

Casing & Cementing Program

(Note: Report results of mudlog correlation on Well Completion or Recommission 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 measures and true vertical depths for all markers and zones pertinent to this work.)

Propose to change casing & cementing program (For the last time, I hope) back to a cased hole program.

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 information on this form is true and correct.

Signed Ken W. Townsend

Title Regulatory Coordinator

(This space for Federal or State office use)

Approved by _____
Conditions of approval, if any:

Title _____

APPROVED
Date 9/19/90

OCT 15 1990

Ken Townsend

Title 18 U.S.C. Section 1001. MAKING A FALSE STATEMENT OR WILLFULLY TO MAKE AN ANY STATEMENT OR AGENCY OF THE UNITED STATES OR REPRESENTATIONS AS TO ANY FACTS WHICH IS FALSIFICATION.

FOR AREA MANAGER
FARMINGTON, N.M.

*See instruction on Reverse Side