

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

50-045-28369
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 - 078478	
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, a Division of Atlantic Richfield Co.		7. UNIT AGREEMENT NAME -----	
3. ADDRESS OF OPERATOR P.O. Box 1610, Midland, Texas 79702		8. FARM OR LEASE NAME Marron W.N Federal <input checked="" type="checkbox"/>	
4. LOCATION OF WELL (Report clearly and in accordance with any State requirements.) At surface 1762' FNL & 730' FEL (Unit letter G) At proposed Prod. zone Approximately the same		9. WELL NO. #8	
13. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE approximately 21 miles SE of Blanco, New Mexico		10. FIELD AND POOL, OR WILDCAT Basin-Fruitland Coal Gas <input checked="" type="checkbox"/>	
15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. line, if any) 730'		11. SEC., T., M., OR BLK. AND SURVEY OR AREA G Sec 23, T27N-R8W	
16. NO. OF ACRES IN LEASE 2560 72-0		12. COUNTY San Jaun	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320, E/2		13. STATE NM	
18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 161'		20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show whether GR or KB) 5988.0' GR		22. APPROX. DATE WORK WILL START Spud 11/90	
23. PROPOSED CASING AND CEMENTING PROGRAM			

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT, "GENERAL REQUIREMENTS"
12-1/4"	8-5/8"	24#	500'	384 cuft/325 SX
7-7/8"	5-1/2"	15.5#	2318'	502 cuft/313 SX

It is proposed to drill a 12-1/4" hole to 500' 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 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 Kenn W. Gossnell TITLE Regulatory Coordinator DATE 9-14-90
(This space for Federal or State Use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*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.

Held C-104 FOR NISL
NMOCD

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OIL CON. DIV.
DIST. 3

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 and Gas Company			Lease Marron W.N. Federal		Well No. 8
Unit Letter G	Section 23	Township 27 North	Range 8 West	County NM PM San Juan	
Actual Footage Location of Well: 1762 feet from the North line and 730 feet from the East line					
Ground level Elev. 5988	Producing Formation Fruitland	Pool Basin-Fruitland Coal Gas			Dedicated Acreage: 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, 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
Ken W. Gosnell
Printed Name
Ken W. Gosnell
Position
Regulatory Coordinator
Company
ARCO Oil & Gas Co.
Date
9-14-90

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
August 20, 1990

Signature & Seal of Professional Surveyor
Edgar L. Risenhoover
Certificate No. 5920
Edgar L. Risenhoover
REGISTERED LAND SURVEYOR
NEW MEXICO
1979

RECEIVED
NOV 06 1990
OIL CON. DIV.
DIST. 3

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

ARCO Marron W.N FED #8

Exhibit 4A

Existing Roads

