

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER Coal Seam

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Amoco Production Company

ATTN: J. L. Hampton

3. ADDRESS OF OPERATOR

P. O. Box 800 Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

830' FNL, 940' FEL, NE/NE

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

10. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

830'

16. NO. OF ACRES IN LEASE

2,240.00

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320 acres E/2

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH

2634' TD

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

6236' GR

22. APPROX. DATE WORK WILL START*

As soon as permitted

This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4

PROPOSED CASING AND CEMENTING PROGRAM

DRILLING OPERATIONS AUTHORIZED ARE

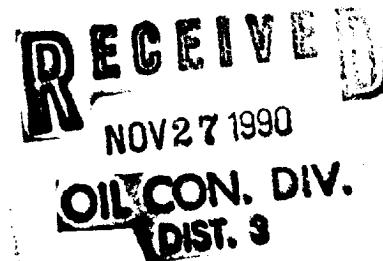
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

| SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|----------------|-----------------|---------------|------------------------------------|
| 12 1/4" | 9 5/8" | 36# | 250' |
| 8 3/4" | 7" | 20# | 2434' |
| 6 1/4" | 5 1/2" | 23# | 2634' (TD) |
| | | | 200 cf Class B (cement to surface) |
| | | | 681 cf Class B (cement to surface) |
| | | | None |

Notice of Staking was Submitted: 10/22/90

Lease Description:

See attached



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

J. L. Hampton

TITLE Sr. Staff Admin. Supervisor

DATE

10/30/90

(This space for Federal or State Office Use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Amoco proposes to drill the well to further develop the Fruitland Coal reservoir. The well will be drilled to the surface casing point using native mud. The well will then be drilled to the intermediate casing point with a non-dispersed mud system. The attached modified 12" 3000 psi blowout preventer will be used. Amoco will attempt to complete the Fruitland coal by drilling the interval with water and air. A service unit will probably be used to drill into the coals using the attached modified 6" 3000 psi BOP. If commercial productivity is established, then the well will be completed as an open hole.

SURFACE CASING

| <u>Quantity</u> | <u>Size</u> | <u>Weight</u> | <u>Description</u> | <u>Cement Program</u> |
|-----------------|-------------|---------------|--------------------|--|
| 250' | 9 5/8" | 36// | K55 ST&C | 200 cf Class B, 2% CaCl ₂ 15.6 ppg |

INTERMEDIATE CASING

| <u>Quantity</u> | <u>Size</u> | <u>Weight</u> | <u>Description</u> | <u>Cement Program</u> |
|-----------------|-------------|---------------|--------------------|--|
| 2434' | 7" | 20// | K55 ST&C | 681 cf Class B, 65:35:5 10% salt, .25% dispersant 13.1 ppg 118 cf Class B 2% CaCl ₂ 15.6 ppg |

The above casing design is based upon a 9.0//gallon mud weight.

CONTINGENCY OPERATIONAL PLAN

In the event the well does not yield commercial volumes of gas from the open hole completion, the water filled hole will be mudded-up and weighted-up as necessary (9-11//gal.) for hole stability and well control. The well will then be deepened approximately 200' into the Pictured Cliffs formation to provide necessary footage for a cased and cemented completion technique. The Fruitland coals will then be perforated and fracture stimulated. The Pictured Cliffs formation will be isolated with cement.

CONTINGENCY LINER

| | | | | |
|------|--------|--------|----------|----------------|
| 650' | 4-1/2" | 11.6// | K55 LT&C | 250 cf Class B |
|------|--------|--------|----------|----------------|

The contingency string is based upon an 11.0//gallon mud weight.

EVALUATION

Mud logs will be the only logs run if the well is completed as an open hole. The log surveys (FDC/GR/CAL, Microlog, Mudlogger) will be run only if the well is drilled into the Pictured Cliffs formation, and only if well condition is suitable to allow proper wireline log interpretation.

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

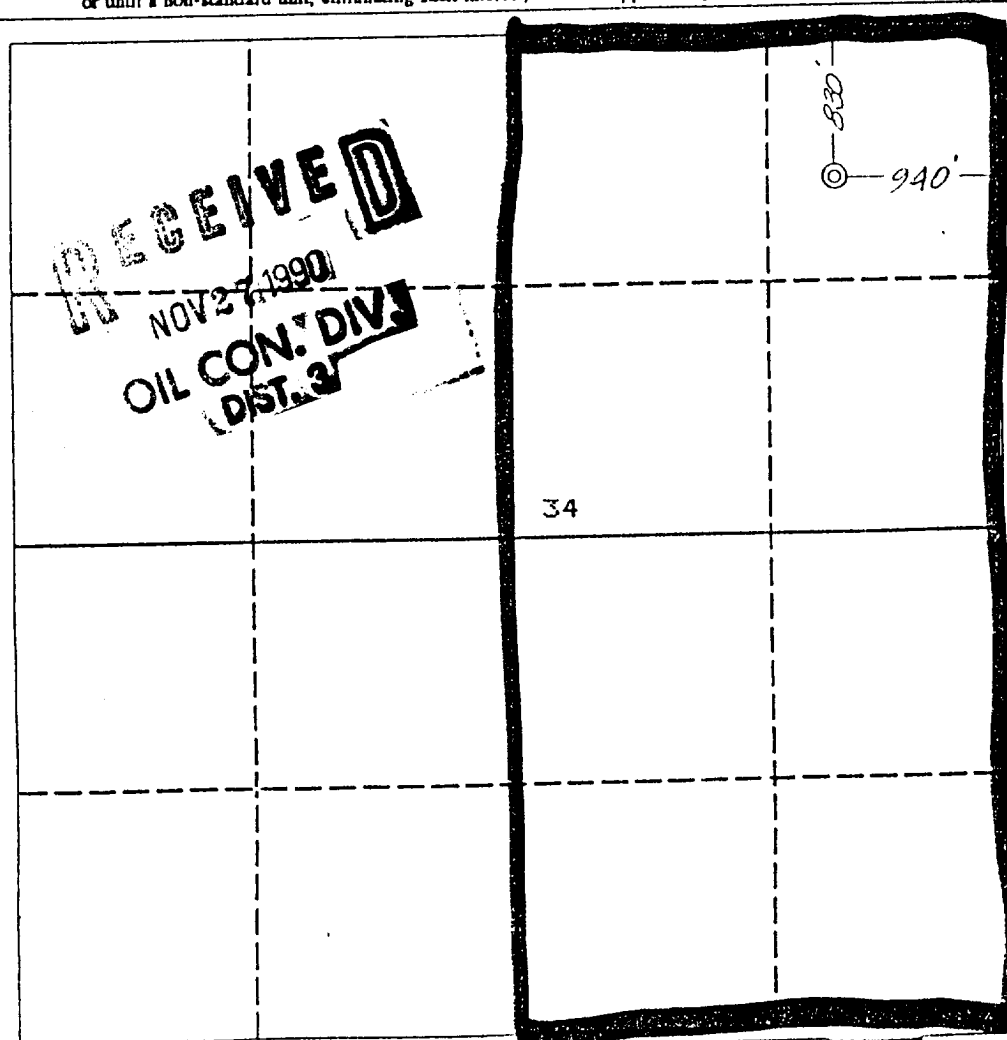
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| | | | | | |
|--|--|-----------------------------|---|---------------------------|--|
| Operator AMOCO PRODUCTION COMPANY | | | Lease NEWBERRY /A/ | | Well No. # 9 |
| Unit Letter A | Section 34 | Township 32 NORTH | Range 12 WEST | County SAN JUAN | |
| Actual Footage Location of Well: 830 feet from the NORTH line and 940 feet from the EAST line | | | | | |
| Ground level Elev. 6236 | Producing Formation Fruitland Coal | | Pool Basin Fruitland Coal Gas | | Dedicated Acreage: E/2 320.00 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.

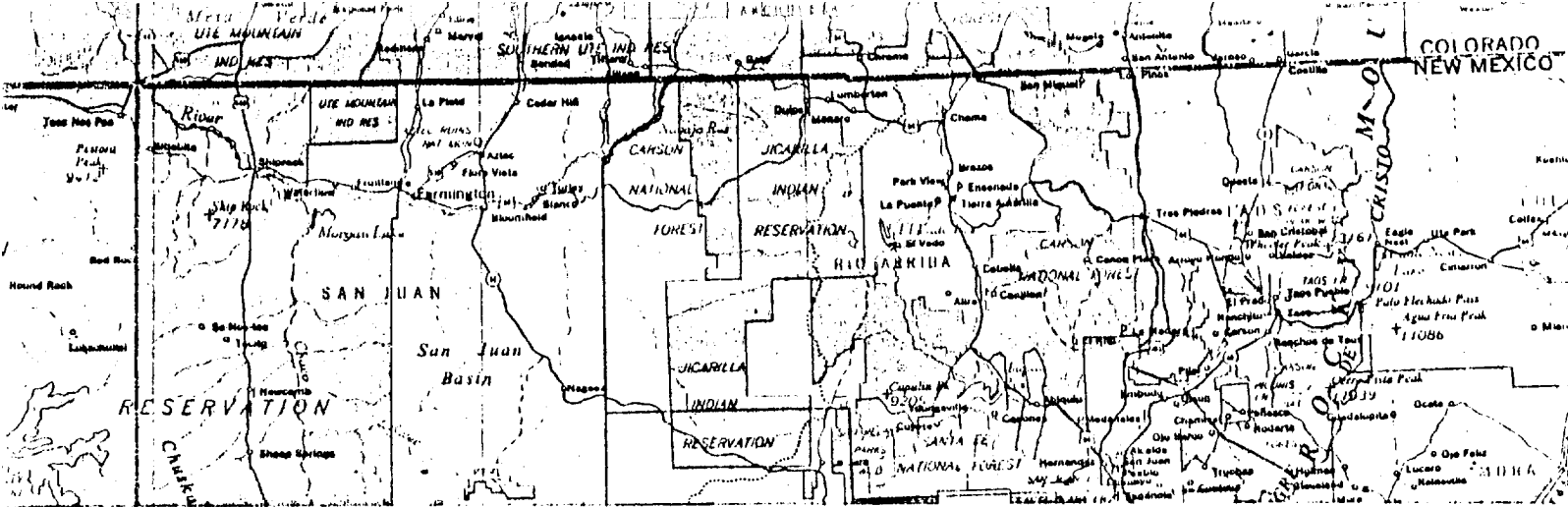
Signature *[Signature]*
Printed Name **J L Hampton**
Position **Sr Staff Admin Supr**
Company **Amoco Prod.**
Date **10/1/90**

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 **September 14, 1990**

Signature & Seal of Professional Surveyor
[Signature]
GARY D. VANN
New Mexico
REGISTERED PROFESSIONAL LAND SURVEYOR
7016



NEWBERRY /A/ # 9

B30' F/NL 940' F/EL

SEC. 34, T32N, R12W, NMPM

RAIL POINT: 144 mi - Montrose, Co.

MUD POINT: 12 mi - Aztec, NM

CEMENT POINT: 26 mi - Farmington, NM

NEWBERRY /A/ # 9

0.17

FARMINGTON GRADE

8.81

STATE ROAD 173

14.0

13.0

0.0

AZTEC

FARMINGTON

ELCOMFIELD