Form 3160-3 (November 1983) (formerly 9-331C)

1a. TYPE OF WORK

b. TIPE OF WELL

DRILL EX

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

PLUG BACK

30-045-28226

UNITED STATES
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

DEEPEN 🗌

Form approved. Budget Buroau No. 1004-0136 Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

SF-078509A
6. IF INDIAN, ALLOTTER OR TRIBE HAME

7. UNIT AGREEMENT NAME

| OIL G | AR YELL X OTHER (| Coal Seam | SINGLE X | MULTIPLE ZONE | 8. 3 | ARM OR LEASE | VAMB | | |
|------------------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------|--------------------------------------------------|---------------------------------------|------------------------------|-----------------------------------------|----------------------------------------|--|--|
| Amoco Product | ion_Company | ATTN: J. | L. Hampton | | T 9. 1 | ank Moun | tain "B" | | |
| P. O. BOX 800 4. LOCATION OF WELL (R | | | _ | ts.*) | | #1 | | | |
| | FNL, 1190 | | | • | # | BRC., T., R., M., C AND SURVEY OR | AREA | | |
| 14. DIRTANCE IN MILES | | | OFFICE* | | | ec. 29, | | | |
| 10. DISTANCE FROM PROFIL LOCATION TO NEARER PROPERTY OR LEARE (Also to Degreet dr) | UBED* T LINE, FT. K. unit line, if any i | 1190' | 317.66 | LEASE 17 | Sa. No. of ACI | n Juan | NM | | |
| 13. DISTANCE FROM PROD TO NEAREST WELL, D OR APPLIED FOR, ON TH | CORED LOCATION* PRILLING, COMPLETED, HIS LEASE, FT. | | 10. PROPOSED DEPTH 20. RO | | | TART OR CABLE TOOLS | | | |
| 21. ELEVATIONS (Show wh | ether DF, RT, GR, etc.) | 45 | 2001 10 | | Rotar | | WORK WILL START | | |
| 23. | OI | PROPOSE COSSING | AND CEMENTING | DROCE AND S | A | s soon as | permitted | | |
| RIZE OF HOLE | BIZE OF CABING | WEIGHT PER FOO | | | HALLOT YO | | | | |
| _12 1/4" | 9 5/8" | | | | DENERAL! | CECOUNTRIMENTS | MENT ALACHED | | |
| 8 3/4" | 7" | 36# 20# | | 20 | m_cr_Ct | ass_B_(ce | ment to surface | | |
| 6 1/4" | 5 1/2" | 23# | 3584' | TD) No | ne | ass B (ce | ment to surface | | |
| T32N-R9W: Sec. 29: | Lots 1,2,7- | 10,15,16, E | | EP1 1 199 CON. 1 | - | #1 2 2 2 2 2 | • | | |
| | | | | DIST. 3 | DIA. | : · · · · · · · · · · · · · · · · · · · | | | |
| • | | | | | | | | | |
| IN ABOVE BEACE DESCRIBE | E PROPOSED PROGRAM:] drill or deepen directions. | If proposal is to deeper onally, give pertinent d | n or plug back, give of lata on subsurface lo | ists on preser cations and m | nt productive easured and | s sone and prop true vertical do | osed new productive pths. Give blowout | | |
| RIGNED | Jamptor | VIB TITLE | Sr. Staff Ad | nin. Supe | rvisor | 8/ | 03/90. | | |
| (This space for Fede | eral of State office Like? | | | | | BATE | 20,10 | | |
| PERMIT NO. | | | APPROVAL DATE | | | * . | | | |
| APPROVED BYCONDITIONS OF APPRO | VAL, IF ANY : | | · | · · · · · · · · · · · · · · · · · · · | | DATH | | | |
| · ok | | | | | | James | Rella | | |
| (G) | 1001 | | llons On Reverse | | Ke | 1 | | | |
| Title 18 U.S.C. Sectio United States any Ints | m 1001, makes it a cr ic. fictitious or fraudi | dine for any person k dent statements or v | nowinely and willfo | illy to make | to any dept | Bilment or ne | ency of the | | |

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 wit 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

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

INTERMEDIATE CASING

| Quantity | Size | Weight | Description | Cement Program |
|----------|------|--------|-------------|------------------------------------------------------------------------------------------------------------------------|
| 3295' | 7" | 20# | K55 ST&C | 922 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.

apdatt.clb disk 210

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

er in Printer and Co

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

DISTRICT 1 P.O. But 1980, Hobbs, NM 88240

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

| | | | All Dist | ances must be | nom the out | er boundanes of m | e section | | | |
|--------------------------|---------------|---------------------|--------------------|-----------------|-------------|------------------------------------------------|---------------------------|----------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AMOCO | PRODL | ICTION | COMPANY | | TANK | MOUNTAIN | /B/ | | Well No. # 1 | |
| ii Letter H | Section 25 | , | Township 32 NOR | TH | Range 9 | WEST | NMPM | County SAI | N JUAN | |
| iual Footage Lo 1680 | feet from | the | NORT | II line and | | 1190 | feet from t | he EA! | line | |
| Gund level Elev. 6752 | 1 | Producing Fwitla | romation Coa | \ | Basin | Fritland | COL G | 25 | Dedicated Act | 317.66 |
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| | r is "no" lis | | | | | consolidated. (Use | reverse side of | | | <u></u> . |
| No allow | | e assigned to | the well until all | | | ed (by communitizat | io s, u nitization | forced-poolin | g, or otherwise) | |
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| | # 42 LES | 3 U & | | | | | | <u>7-2</u> | 5-90 | |
| | SEP11 | 1990 | N. Tank | 29 | | <u> </u> | | SURVEY | OR CERTI | FICATION |
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| | | | | | | | | Signature & Se rofessional 20 | New D. V. | 14. |
| | | | | | 1 | | | ary S | W. W. | 1 /3 |
| | <u> </u> | | | | | . - | | enificie V. | Ann 016 | / \$ - |
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