

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

|   |  |   |  |   |  |
|---|--|---|--|---|--|
| 1a. TYPE OF WORK<br>DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>  |  |   |  | 5. LEASE DESIGNATION AND SERIAL NO.<br>NM 03551                       |  |
| b. TYPE OF WELL<br>OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/> |  |   |  | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME                                  |  |
| 2. NAME OF OPERATOR<br>Caulkins Oil Company   |  |   |  | 7. UNIT AGREEMENT NAME  |  |
| 3. ADDRESS OF OPERATOR<br>P.O. Box 780 Farmington, New Mexico 87499   |  |   |  | 8. FARM OR LEASE NAME<br>Breech "E"                                   |  |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)<br>At surface 1625' From North & 790' From West<br>At proposed prod. zone Same   |  |   |  | 9. WELL NO.<br>89 M   |  |
| 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE<br>30 Miles Southeast of Blanco, New Mexico  |  |   |  | 10. FIELD AND POOL, OR WILDCAT<br>Blanco MV Basin Dakota              |  |
| 15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any)<br>1625   |  | 16. NO. OF ACRES IN LEASE<br>2240   |  | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA<br>Section 3, 26N 6W |  |
| 18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.<br>780   |  | 19. PROPOSED DEPTH<br>7520'   |  | 12. COUNTY OR PARISH<br>Rio Arriba                                    |  |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.)<br>6532 Gr. SUBJECT TO COMPLIANCE WITH ATTACHED DRILLING OPERATIONS AUTHORIZED ARE   |  |   |  | 13. STATE<br>New Mexico   |  |
| 23. PROPOSED PROGRAM AND CEMENTING PROGRAM<br>This action is subject to administrative appeal pursuant to 30 CFR 290.   |  |   |  | 22. APPROX. DATE WORK WILL START<br>June 20, 1985                     |  |
| SIZE OF HOLE<br>12 3/4"<br>7 7/8"   |  | SIZE OF CASING<br>9 5/8"<br>5 1/2"  |  | WEIGHT PER FOOT<br>32.3#<br>15.5 & 17#                                |  |
| SETTING DEPTH<br>400'<br>7520'  |  | QUANTITY OF CEMENT<br>Sufficient to circulate 300 Cu.Ft<br>3 Stages - 2000 Cu.Ft. Total |  |   |  |

Surface formation San Jose. No abnormal pressure or temperature anticipated.

It is proposed to drill new hole, surface to 7520' using 9.0 Gel based mud. Float will be run in drill pipe at bit. ES Induction and Density Logs will be run.

A Schaeffer 10" Model LWP 6000# test BOP will be in use at all times while drilling below surface casing. BOP will be tested at least one time during each 24 hour period and results recorded on daily drilling report.

New 9 5/8" 32.30# H-40 8rd thd, short collars surface casing will be set at approx 400' and cemented with sufficient cement to circulate to surface.

New 5 1/2" 15.5 & 17# K-55 short and long collar 8rd thd Smls casing will be cemented top to bottom in 3 stages. First stage thru shoe with 412.50 Cu.Ft.

50-50 Poz, 6% Gel, 12 1/4# Gilsomite per sack followed by 118 Cu.Ft. Neat Cement.

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 <u>Charles E. Vargen</u> TITLE <u>Superintendent</u> |               | APPROVAL<br>DATE<br>DEC 11 1984<br>AS AMENDED<br>DEC 11 1984<br>FARMING |
| (This space for Federal or State office use)                    |               |   |
| PERMIT NO. <u>DEC 13 1984</u>                                   | APPROVAL DATE |   |
| APPROVED BY <u>OIL CON. DIV.</u> TITLE <u>NMOCC</u>             | DATE          |   |
| CONDITIONS OF APPROVAL, IF ANY:<br><u>DIST. 3</u>               |               |   |

\*See Instructions On Reverse Side

Second stage thru too set at approx 5520' with 412.5 Cu.Ft. 50 50 Poz, 6% Gel, 12 1/4# Gilsonite per sack followed by 118 Cu.Ft. Neat Cement.

Third stage thru tool set at approx 3500' with 825 Cu.Ft. 50 50 Poz, 6% Gel, 12 1/4# Gilsonite per sack followed by 118 Cu.Ft. Neat Cement.

Centralizers will be run on casing thru Mesa Verde and Dakota Zones.

Well will be completed in Mesa Verde and Dakota Zones.

All Zones will be perforated and fractured to stimulate production.

Packer will be set between Mesa Verde and Dakota Zones.

New 1 1/2" EUE 2.90# V-55 10rd thd Smls tubing will be run thru Packer to Dakota Zone.

New 1 1/4" NU 2.33# V-55 10rd thd Smls tubing will be run for Mesa Verde production.

Gas produced from this well contracted to Gas Company of New Mexico.

Estimated Formation Tops:

|                 |       |
|-----------------|-------|
| Alamo           | 2405' |
| Pictured Cliffs | 2995' |
| Chacra          | 3915' |
| Mesa Verde      | 4645' |
| Graneros        | 7220' |
| Dakota          | 7355' |