

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

HOBBS, NEW MEXICO 88240

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   
 SINGLE ZONE  MULTIPLE ZONE

2. NAME OF OPERATOR  
 Samedan Oil Corporation

3. ADDRESS OF OPERATOR  
 10 Desta Drive, Suite 240 East, Midland, Texas 79705

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
 At surface: 1980' FNL & 1980' FEL  
 At proposed prod. zone: Unit G

5. LEASE DESIGNATION AND SERIAL NO.  
 NM 2244

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
 Sarah B

9. WELL NO.  
 6

10. FIELD AND POOL, OR WILDCAT  
 Lower Padlock  
 Cline-Blinebry

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
 Sec 12, T-23-S, R-37-E

12. COUNTY OR PARISH  
 Lea

13. STATE  
 NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
 8 miles South-Southeast of Eunice

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 660'

16. NO. OF ACRES IN LEASE  
 1395.95

17. NO. OF ACRES ASSIGNED TO THIS WELL  
 40

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1650'

19. PROPOSED DEPTH  
 6300'

20. ROTARY OR CABLE TOOLS  
 Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
 3311.3 GR

22. APPROX. DATE WORK WILL START\*  
 Upon approval

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT                   |
|--------------|----------------|-----------------|---------------|--------------------------------------|
| 17 1/2       | 13 3/8         | 48#             | 900           | 465 sx <b>CIRCULATE</b>              |
| 12 1/4       | * 8 5/8        | 24# & 32#       | 4000          | * To be determined by hole condition |
| 7 7/8        | 5 1/2          | 15.5#           | 6300          | * 615 sx                             |

\* tie cement back 200' minimum into previously run csg(s).

\* A 12 1/4" hole will be drilled to 4000' and 8 5/8" casing shall be run and cemented if significant water flow is encountered. If there is no water flow, the hole size will be reduced to 7 7/8" and drilled to 6300'.

After setting production casing, pay zone will be perforated and stimulated as necessary.

See attachments for: Supplemental Drilling Data  
 BOP Sketch  
 Surface Use and Operations Plan

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 Judy Thronberry TITLE Division Production Clerk DATE 8-16-93  
 (This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_  
 APPROVED BY [Signature] TITLE AREA MANAGER DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY :

APPROVAL SUBJECT TO  
 GENERAL REQUIREMENTS AND  
 SPECIAL STIPULATIONS  
 ATTACHED

\*See Instructions On Reverse Side

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

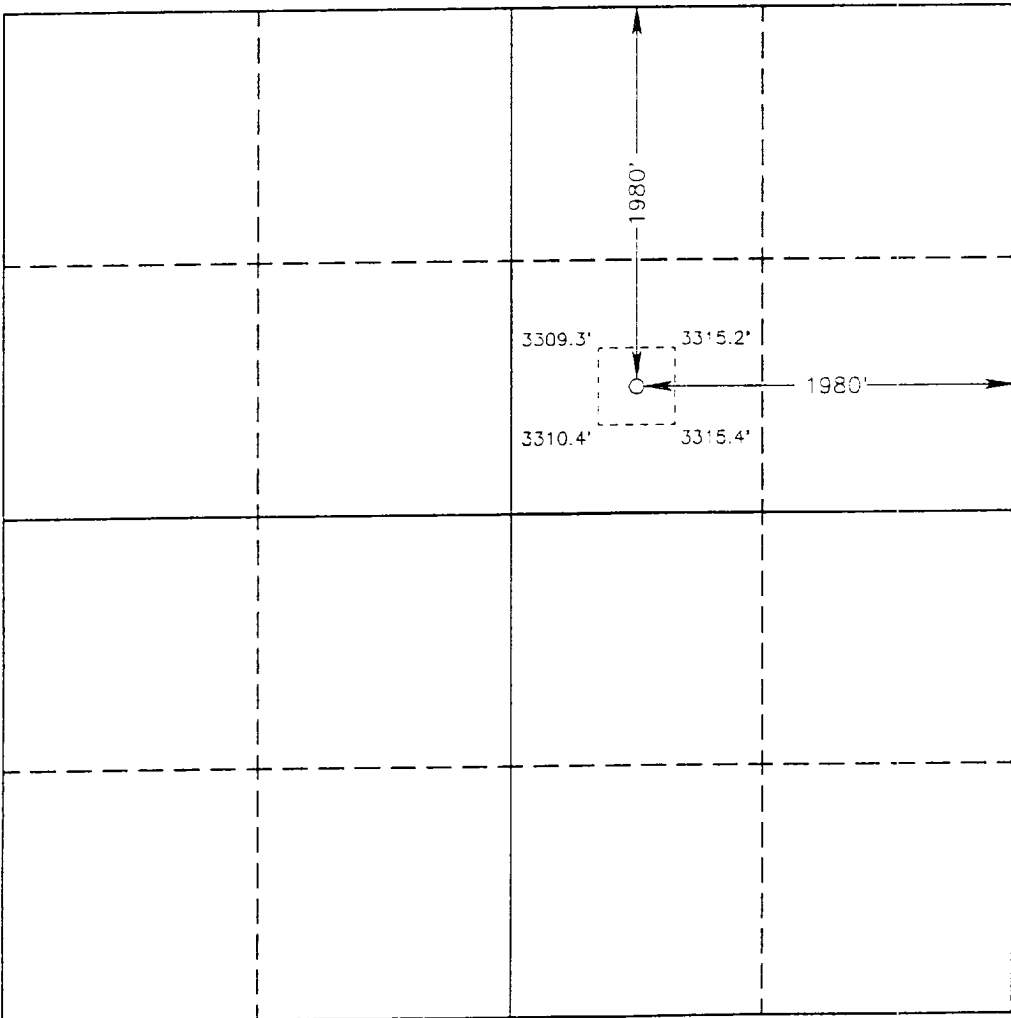
**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

|  |                                 |                      |                                      |      |                                |
|--|---------------------------------|----------------------|--------------------------------------|------|--------------------------------|
| Operator<br>SAMEDAN OIL CORPORATION  |                                 |                      | Lease<br>SARAH "B"                   |      | Well No.<br>6                  |
| Unit Letter<br>G   | Section<br>12                   | Township<br>23 SOUTH | Range<br>37 EAST                     | NMPM | County<br>LEA                  |
| Actual Footage Location of Well:<br>1980 feet from the NORTH line and 1980 feet from the EAST line |                                 |                      |                                      |      |                                |
| Ground Level Elev.<br>3311.3'  | Producing Formation<br>Blinebry |                      | Pool<br>Cline Lower Haddock Blinebry |      | Dedicated Acreage:<br>40 Acres |

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.) \_\_\_\_\_
- No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, 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  
*Judy Throneberry*  
 Printed Name  
 Judy Throneberry

Position  
 Div. Production Clerk

Company  
 Samedan Oil Corporation

Date  
 8-16-93

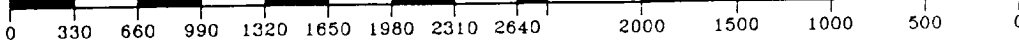
**SURVEYOR CERTIFICATION**

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  
 CHARL L. JONES 1993

Signature & Seal of Professional Surveyor  
*Charles L. Jones*  
 REGISTERED PROFESSIONAL SURVEYOR  
 7977

Certificate No. JOHN W. WEST, 676  
 RONALD J. EIDSON, 3239  
 GARY L. JONES, 7977



SUPPLEMENTAL DRILLING DATA

SAMEDAN OIL CORPORATION  
WELL NO. 6 SARAH B LEASE

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

|            |      |          |      |
|------------|------|----------|------|
| Yates      | 2640 | Paddock  | 5390 |
| Penrose    | 3680 | Blinebry | 5640 |
| Grayburg   | 3730 | Tubb     | 6080 |
| San Andres | 4020 | Drinkard | 6190 |
| Glorieta   | 5100 |          |      |

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

|            |          |      |
|------------|----------|------|
| Primary:   | Blinebry | 5640 |
| Secondary: | Penrose  | 3680 |
|            | Graybury | 3730 |
|            | Paddock  | 5390 |
|            | Tubb     | 6080 |
|            | Drinkard | 6190 |

4. PROPOSED CASING AND CEMENTING PROGRAM:

| <u>CASING SIZE</u> | <u>SETTING DEPTH</u> |           | <u>WEIGHT</u> | <u>GRADE</u> | <u>JOINT</u> |
|--------------------|----------------------|-----------|---------------|--------------|--------------|
|                    | <u>FROM</u>          | <u>TO</u> |               |              |              |
| 13 3/8"            | 0'                   | 900'      | 48#           | H-40         | ST&C         |
| 8-5/8"             | 0'                   | 4000      | 24 & 32#      | J-55         | ST&C         |
| 5 1/2"             | 0'                   | 6300'     | 15.5#         | J-55         | ST&C         |

Equivalent or adequate grades and weights of casing may be substituted at time casing is run, depending on availability.

13 3/8" casing will be cemented with 265 sacks class "C" Lite + 200 sacks class "C" w/2% CaCl + 1/4# cello seal. Cement to circulate to surface.

8 5/8" casing shall be run if a significant water flow is encountered. It shall be cemented with a volume to circulate.

5 1/2" casing will be cemented with 250 sacks Super "C" + 365 sacks class "C" + 5/10% CF-14 + 3/10% Thrifty Lite. If need for a stage tool is indicated, it will be positioned to best suit hole conditions at time casing is run. Cement to tie back to last casing string.

Cement may have lost circulation or other additives depending on hole conditions at the time casing is run.

5. PRESSURE CONTROL EQUIPMENT:

Blow out prevention equipment, while drilling below the 13 3/8" casing seat, will be a 3000 psi working pressure BOP stack. A BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 900 feet: Fresh water spud mud. Viscosity 30 to 36 as required for hole cleaning.

900' to 5100': Brine conditioned as necessary for control of viscosity. Weight 9.8 to 10. PH 9 to 10. Viscosity 32 to 36.

5100' to T.D.: Brine base drilling fluid conditioned as necessary for control of weight, viscosity, ph and water-loss.

7. AUXILIARY EQUIPMENT:

A mud logging trailer will be in use while drilling below 3000'.

8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill stem tests will be made when well data indicate a test is warranted.

It is planned that electric logs will include CNL-FDC-GR and DLL-MSFL-SDL

Mud Logger survey will begin at 3000'.

No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

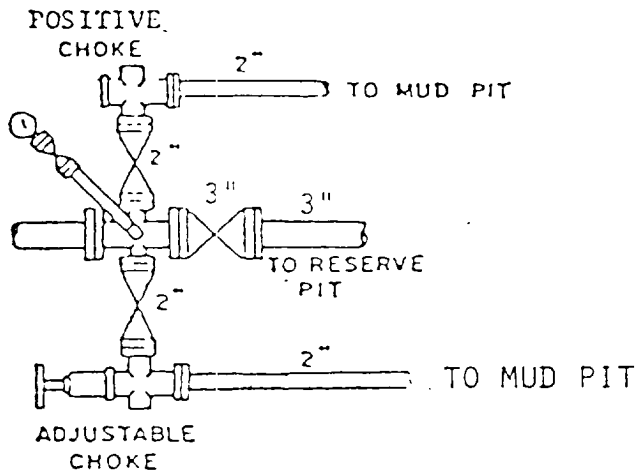
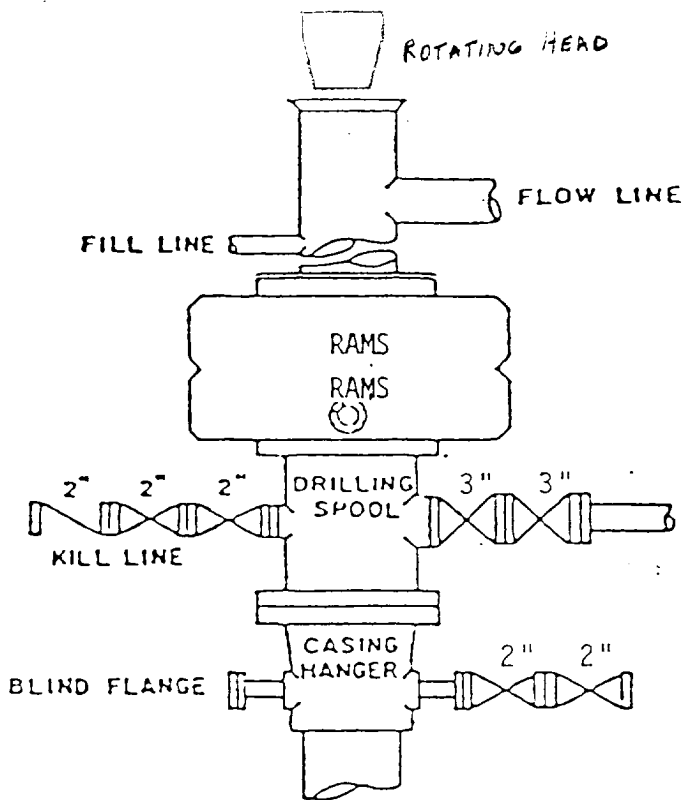
None anticipated.

Expected bottom hole pressure is approximately 3500 psi.  
Expected bottom hole temperature is approximately 125 degrees Fahr.

Hydrogen Sulfide Drilling Operations Plan is attached.

10. ANTICIPATED STARTING DATE:

It is planned that operations will commence upon approval of this application, with drilling and completion operations lasting about 30 days.



BOP STACK

3000 PSI WORKING PRESSURE

BOP ARRANGEMENT