

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

GULF OIL CORPORATION

3. ADDRESS OF OPERATOR

P. O. Box 670, Hobbs, New Mexico 88240

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

At surface

1980' FSL & 660' FWL

At proposed prod. zone

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

Approximately 27 miles West of Hobbs, New Mexico

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

960

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

19. PROPOSED DEPTH

13,600'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

3756' GL

22. APPROX. DATE WORK WILL START*

10-01-78

23.

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|-----------------------------|
| 14-3/4" | 11-3/4" | 42# | 450' | 450 sx - Circulate |
| 11" | 8-5/8" | 32# | 5,700' | 1050 sx - Esti TOC @ 1,800' |
| 7-7/8" | 5-1/2" | 17# | 13,600' | 500 sx - Esti TOC @ 10,000' |

Unless Drilling Operations have
Commenced, this drilling approval
Expires 12-22-78

NOTE: See Attached BOP Drawing No. 4

Mud Program: 0' - 450'
450' - 5,700'
5,700' - 12,600'
12,600' - 13,600'Fresh water spud mud;
Brine Water;
Brackish Water;
Polymer

NOTE: Gas is not dedicated.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL"APPROVAL TO FLARE GRANTED
WHILE DRILLING AND TESTING"

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

CCB Ireland

TITLE

Area Production Manager

DATE

09-13-78

(This space for Federal or State office use)

PERMIT NO.

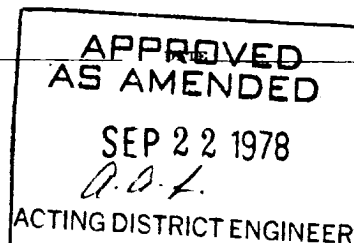
APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side



NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section

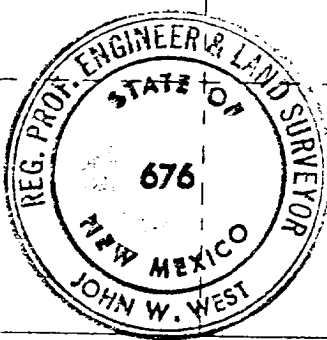
| | | | | | |
|--|--------------------------------------|-----------------------------|-------------------------------------|--|----------------------|
| Operator Gulf Oil Corp. | | | Lease Strange "A" Federal | | Well No. 1 |
| Tract Letter L | Section 15 | Township 19 South | Range 34 East | County Lea | |
| Actual Well Location of Well: 1980 feet from the South line and 660 feet from the West line | | | | | |
| Ground Level Elev. 3756.0 | Producing Formation Morrow | | Pool Quail Ridge Morrow | Dedicated Acreage: 320 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 interests 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 interests, has been approved by the Commission.



GULF OIL CORPORATION

660

CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

C. D. Borland

Name

C. D. BORLAND

Position

Area Production Manager

Company

GULF OIL CORPORATION

Date

09-14-78

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.

September 13, 1978

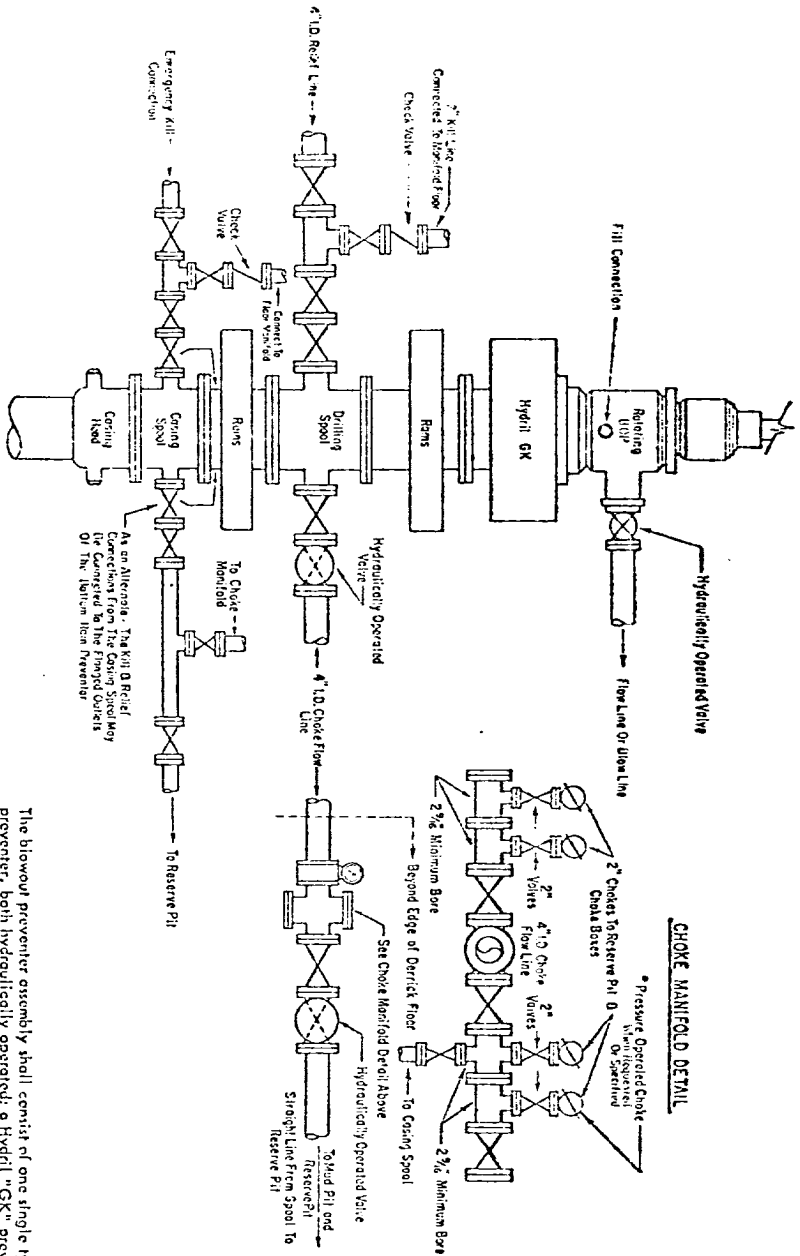
Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. **John W. West**

676

330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900



CHOKES - MANIFOLD DETAIL

ADDITIONS - DELETIONS - CHANGES
SPECIFY

5000 PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

The blowout preventer system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected to as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within _____ seconds after a blowout, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When required, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed position. A pressure reducer and regulator must be provided for operating the Hydril preventer. When required, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be counter-bored or straight on possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If deemed necessary, walkways and stairways shall be erected in and around the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves and relief line valves connected to the drilling spool and well to the preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

X To include derrick floor mounted controls.

Gulf Oil Exploration and Production Company

C. D. Borland
PRODUCTION MANAGER, HOBBS AREA

September 13, 1978

P. O. Box 670
Hobbs, NM 88240

U. S. Geological Survey
P. O. Box 1157
Hobbs, NM 88240

Attention: Mr. J. F. Sims
District Engineer

Gentlemen:

The following is Gulf Oil Corporation's plan for surface restoration associated with the drilling of our Strange "A" Federal Well No. 1, which is located 1980 feet from the south line and 660 feet from the west line of Section 15, Township 19 South, Range 34 East, Lea County, New Mexico.

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible. Any unguarded pits containing fluids will be fenced until they are filled.

After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and the location will be cleaned. The pit area, well pad and all unneeded access roads will be ripped to promote revegetation. Rehabilitation should be accomplished within ninety (90) days after abandonment.

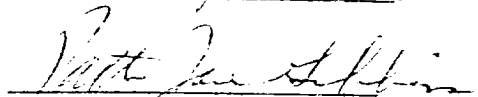
Yours very truly,



C. D. BORLAND

RLV/dch

Subscribed and sworn to before me this 14th day of September, 1978.



Notary Public
Lea County, New Mexico

My Commission Expires:

8-21-81



Gulf Oil Exploration and Production Company

September 13, 1978

C. D. Borland
PRODUCTION MANAGER, HOBBS AREA

P. O. Box 670
Hobbs, NM 88240

Re: Application for Permit to Drill
Strange "A" Federal Well No. 1
Lea County, New Mexico

U. S. Geological Survey
P. O. Box 1157
Hobbs, NM 88240

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany application for permit to drill.


Well: Strange "A" Federal Well No. 1.

- (1) Location: 1980'FSL & 660'FWL Section 15, T-19-S, R-34-E, Lea County, New Mexico.
- (2) Elevation of Unprepared Ground: 3756' GL.
- (3) Geologic Name of Surface Formation: Quarternary alluvium.
- (4) Type Drilling Tools: Rotary.
- (5) Proposed Drilling Depth: 13,600'.
- (6) Estimated Tops of Geologic Markers: Anhydrite 1600', Yates 3500', Bone Spring 8100', Wolfcamp 10,800', Strawn 12,200', Atoka 12,800', Morrow 13,100', Barnett 13,600'.
- (7) Estimated Depths at which Anticipated Gas or Oil Bearing Formations Expected:
 - (a) Atoka Section 12,900-13,000' may produce gas.
 - (b) Morrow Section 13,300-13,500' may produce gas.
- (8) Casing Program and Setting Depths:

| | <u>Size</u> | <u>Weight</u> | <u>Grade</u> | <u>Setting Depth</u> |
|--------------|-------------|---------------|--------------|----------------------|
| Surface | 11-3/4" | 42# | H-40 | 450' |
| Intermediate | 8-5/8" | 32# | K-55 | 5,700' |
| Production | 5-1/2" | 17# | N-80 & S-95 | 13,600' |
- (9) Casing Setting and Cementing Program:
 - (a) Surface casing will be set at 450', cemented with 350 sacks Howco lightweight cement and 100 sacks Class C neat with 2% CaCl₂.



- (9) (b) Intermediate casing will be set at 5700' and cemented with 850 sacks Class C Gulfmix with 16% gel and 200 sacks of Class C neat.
- (c) Production casing will be set at 13,600' and cemented with adequate volume of Class H cement with 0.75% CFR-2 and five pounds KCL per sack to bring cement top to approximately 10,000', or above Wolfcamp formation. NOTE: Volume of cement to be determined after running caliper log at total depth.
- (10) Pressure Control Equipment: The minimum specifications for pressure control equipment can be seen on the attached Drawing No. 4 of Gulf's blowout preventer hook-up for 5000 psi working pressure.
- (11) Circulating Media: 0-450' fresh water and spud mud; 450-5700' brine water; 5700-12,600' brackish water; 12,600-13,600' salt water polymer with the following properties: viscosity 32-37 sec, water loss 20-4 cc, weight 9-10.0 ppg. Heavier weight mud will be used if required by well conditions.
- (12) Testing, Logging and Coring Programs:
- (a) Formation testing may be done at any depth where samples, drilling rate or log information indicate a possible show of oil or gas.
- (b) Open-hole logs will be run prior to running casing at total depth.
- (c) Coring is not planned.
- (13) Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: We do not anticipate any abnormal pressure or temperature; however, the following equipment will be installed while nipping up on intermediate casing for pressure control and detection: remote-controlled adjustable choke on flow manifold, drilling separator with gas vent line to burn pit, pit level sensors, flow line sensors and remote control BOP as shown on Drawing No. 4.
- The presence of hydrogen sulfide gas is not anticipated.
- (14) Anticipated Starting Date: Drilling operations should start October 1, 1978.
- (15) Other Facets of the Proposed Operation: None.


C. D. BORLAND
Area Production Manager