

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-02527301

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
Sun Oil Company

3. ADDRESS OF OPERATOR
P. O. Box 1861 - Midland,

4. LOCATION OF WELL (Report location clearly and in accordance with applicable requirements.)
 At surface 1980' FWL & 660' FNL Unit Ltr. "C"
 At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE
14 miles South from Maljamar, NM

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

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1320'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3637' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 3/4	8 5/8	24#	400±	375 sx CIRCULATE
7 7/8	5 1/2	14#	2750±	530 sx (Circ) CIRCULATE
			3150 TD	

5. LEASE DESIGNATION AND SERIAL NO.
NM 025497
 6. IF INDIAN, ALLOTTEE OR TRIBE NAME
 7. UNIT AGREEMENT NAME
 8. FARM OR LEASE NAME
Jennings "B" Federal
 9. WELL NO.
4
 10. FIELD AND POOL, OR WILDCAT
Northeast Lusk-Yates
 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 15, T 19 S, R 32 E
 12. COUNTY OR PARISH
Lea
 13. STATE
NM

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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. SIGNATURE Denis Williams TITLE Sr. Accounting Assistant DATE 2-17-81

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY GEORGE H. STEWART TITLE ACTING DISTRICT ENGINEER DATE FEB 24 1981
 CONDITIONS OF APPROVAL, IF ANY:

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-132
Supersedes C-128
Effective 10-65

All distances must be from the outer boundaries of the Section

Owner Sun Oil Co.		Section Journal "B" Fed.		Area 4
Well C	Section 15	Range 19 South	Meridian 1 East	Loc 100
Distance 660	feet from the North	Distance 1000	feet from West	
Section 3637.0	YATES	NORTHEAST LUSK-YATES		40

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, or pooling, etc?

Yes No If answer is "Yes" type of consolidation _____

If answer is "no" list the owners and their descriptions which have actually been consolidated (Use reverse side of this form if necessary) _____

Consolidation will be assigned to the well until all interests have been consolidated (by communitization, unitization, or pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

980	0
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CERTIFICATE

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

Doris Williams
Doris Williams
Sr. Accounting Assistant
Sun Oil Company
18 February 1981

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.

2-13-81

John W. West
JOHN W. WEST 876
PATRICK A. RIMFRO 663
Board of Engineers 12-66

SUN OIL COMPANY (DELAWARE)
JENNINGS "B" FEDERAL NO. 4

NEW MEXICO LEASE N.M. 025497
LEA COUNTY, N.M.

1. GEOLOGIC NAME OF SURFACE FORMATION: "QUATERNARY"

2. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

Rustler	1300±	Feet
Yates	2822±	Feet

3. ANTICIPATED HYDROCARBON BEARING ZONES:

Yates	2822±	Feet
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4. CASING PROGRAM

<u>Size</u>	<u>Footage</u>	<u>Grade</u>	<u>WT/FT</u>
8-5/8"	400±	K-55	24 lb. New
5-1/2"	2750±	K-55	14 lb. New
	3150± TD		

5 & 7. OPERATORS MINIMUM SPECIFICATIONS FOR PRESSURE AND BLOW OUT EQUIPMENT TO BE USED:

After setting the 8-5/8" casing string and before drilling into the Yates formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.

Pipe rams and the annular-type preventer shall be actuated at least once each 24 hours and the blind rams each time the drill pipe is out of the hole.

Accumulators shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers.

A drill string safety valve in the open position shall be maintained on the rig floor at all times while drilling operations are being conducted.

Blowout prevention drills shall be conducted as necessary to insure that each drilling crew is properly trained to carry out emergency duties.

Good drilling practices will be implemented on the duration of this well. Visual monitoring of pit levels will be continual to allow for detection, before or during, of possible problems or well kicks. This will allow for quick action to deal with the successful handling of a well kick.

When coming out of the hole with drill pipe, the annulus shall be filled with mud before the mud level drops below 150 feet. The volume of mud required to fill the hole shall be watched, and any time there is an indication of swabbing, or influx of formation fluids, proper blowout prevention precautions must be taken. The mud shall not be circulated and conditioned except on or near bottom, unless well conditions prevent running the pipe to bottom.

A copy of these requirements shall be posted on the rig floor or in the dog house during the drilling of the well.

6. TYPE AND MUD SYSTEM CHARACTERISTICS:

From	To	Wt. Lbs/Gals	WL	Vis	Type Mud
0	400	8.6 - 8.9	NC	33-35	Gel-Lime
400	2500	9.8 - 10.0	NC	28-32	Sat Brine-Lime
2500	3100 (TD)	10.0 - 10.0	15	34-40	Salt Gel Caustic Soda

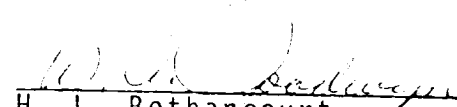
8. Anticipate no drill stem tests. Such tests, if later determined necessary, will be conducted under established prudent industry practice.

Schlumberger: CNL/FDC/GR Cal TD to 2000'
DLL/GR TD to 2000'

9. No abnormal pressures, temperatures or hydrogen sulfide gas is expected.

Sun has drilled eight wells in the area: (1) Shearn Federal #1; (2) Jennings Federal #1; (3) Sloan Federal #1; (4) Jennings Federal "A" #1; (5) Jennings Federal "B" #1; (6) Shearn Federal #2; (7) Jennings "A" Federal #2 and (8) Jennings "B" Federal #3.

10. Estimated starting date: As soon as possible - subject to approval of permit and data presented herein.


H. L. Bethancourt
District Drilling Manager