

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-005-61476
RECEIVED

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
Estoril Producing Corporation

3. ADDRESS OF OPERATOR
11th Floor, Vaughn Bldg. Midland, Tx 79701

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
At surface 1980' FSL & 660' FEL, Sec. 11, T-4S, R-23E
At proposed prod. zone Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
35 miles north of Roswell, N.M.

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

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
2310' South Hoff #3

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
4109.9' GR

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	10 3/4"	32.75#	900'	550 sx (Circulate)
* 9 7/8"	7 5/8"	24.00#	1600'	300 sx (Circulate)
7 7/8"	4 1/2"	10.50#	5000'	900 sx

Blowout Prevention:

Cameron 10", 900 series BOP with 3400 psi working pressure with 4 1/2" pipe rams.

* Intermediate string will be set only if there are problems encountered through this section of the hole. If intermediate string is set, will drill out with a 6 1/2" bit under intermediate casing to total depth.

GAS IS DEDICATED.

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MAR 5 1982

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. APPROVED
SIGNED Larry W. Frankler TITLE Agent DATE 3/3/82
(This space for Federal or State office use)
PERMIT NO. MAR 16 1982
FOR GEORGE H. STEWART APPROVAL DATE
APPROVED BY JAMES A. GILLHAM TITLE DISTRICT SUPERVISOR DATE
CONDITIONS OF APPROVAL

Pack 76-2
4-1-83
Exp. Intent

Noted ID-1
API + NL Book
3-19-82

**MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-85

All distances must be from the outer boundaries of the Section

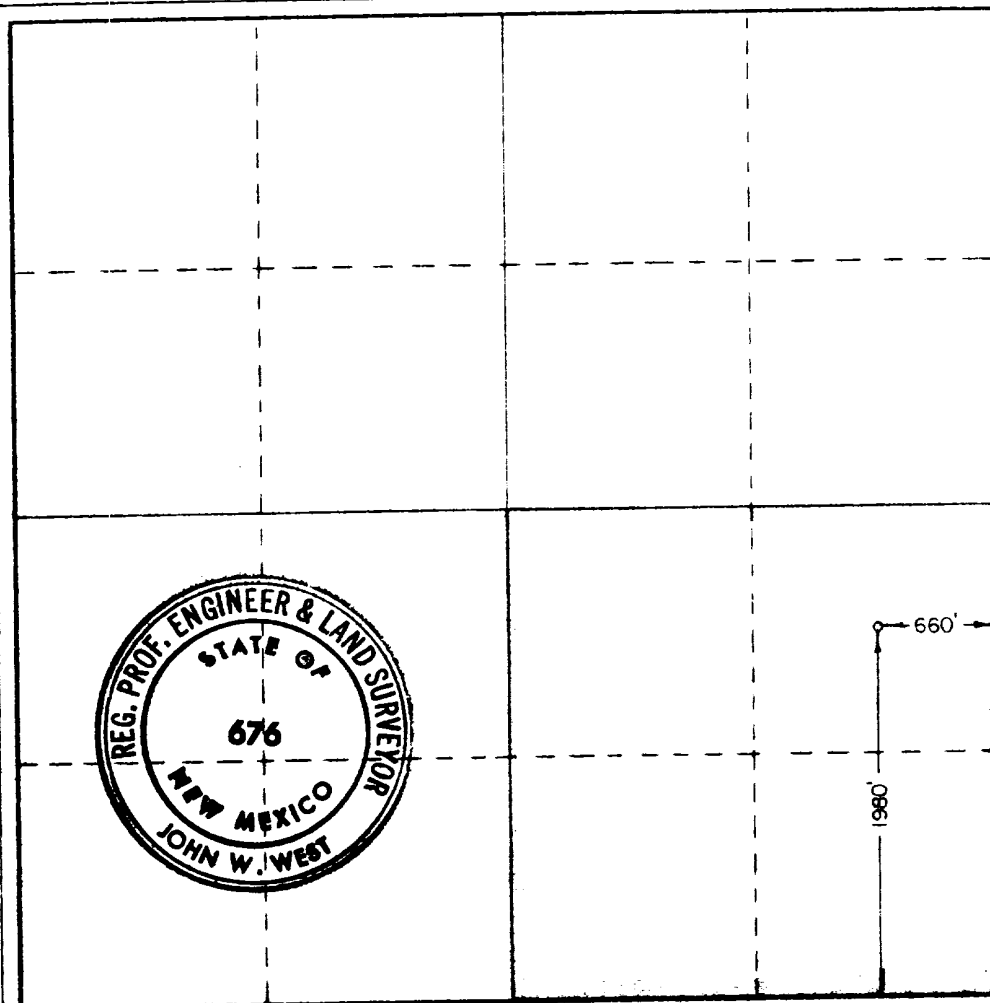
Operator Estoril Producing Corporation		Lease Hoffman Federal		Well No. 4
Unit Letter I	Section 11	Township 4S	Range 23E	County Chaves County
Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the East line				
Ground Level Elev. 4109.9'	Producing Formation ABO	Pool WILDCAT	Dedicated Acreage: 160 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.



CERTIFICATION

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

Name *erry W. Franklin*
Position AGENT
Company ESTORIL PRODUCING CORP.
Date 12/31/81

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.

12/18/81

Date Surveyed

Registered Professional Engineer
and/or Land Surveyor

Patrick A. Romero
Certificate No. **JOHN W. WEST 676**
PATRICK A. ROMERO 6483
Ronald J. Eidson 3239

0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000

APPLICATION TO DRILL

ESTORIL PRODUCING CORPORATION
Hoffman Federal No. 4
1980' FSL & 660' FEL
Section 11, T-4S, R-23E
Chaves County, New Mexico

The following answers are provided for your consideration in response to your outline under Section II of Bulletin NTL-6:

1. Location: 1980' FSL & 660' FEL, Section 11, T-4S, R-23E, Chaves County, New Mexico.
2. Elevation Above Sea Level: 4109.9'
3. Geologic Name of Surface Formation: Alluvium
4. Drilling Tools and Associated Equipment: Conventional rotary drilling tools using mud for the circulation medium.
5. Proposed Drilling Depth: 5000'+or-
6. Estimated Geological Marker Tops: San Andres 570'; Glorietta 1530'; Abo 3485'; Wolfcamp 3760'; Penn 4040'; Granite Wash 4740'.
7. Mineral Bearing Formation: Gas bearing at 3580'.
8. Casing Program: (A) Surface casing: 10 3/4", 32.75# new casing. (B)*Intermediate casing: 7 5/8", 24.0# new casing. (C) Production casing: 4 1/2", 10.5# new casing.
9. Setting Depth of Casing and Cement for Same: (A) 10 3/4" casing set at 900'. Cement will be circulated to surface using 550 sacks of class 'C', 3% CaCl. (B)*7 5/8" casing set at 1600' +or-. Cement will be circulated to surface using 300 sacks of class 'C' cement. This string of casing will be run only if there are problems encountered in this section of the hole. (C) 4 1/2" casing set at 5000'+or-. Cement will be brought up to cover the Abo section using 700 sacks of Pacesetter 'C', 1# Perma Check/sk, 1/4# Cello-Seal/sk, 2% KCl, followed by 200 sacks of 50-50 Pozmix, .6% CF-9, .3% TF-4, 3% KCl.
10. Pressure Control Equipment: After surface casing is set, blowout preventers will be installed. They will be Cameron 10" 900 series BOP with 3400 psi working pressure with 4 1/2" pipe rams. The blowout preventers will be tested to 1000 psi after they are installed.
11. Proposed Circulation Medium: Surface hole: 14 3/4" to 900'. Spud mud containing the following properties- viscosity 32-35 with a mud weight of 9.5 ppg. Intermediate hole: 9 7/8" hole to 1600'.

Drill out under surface casing with brine water. Add paper for seepage. Production hole: 7 7/8" hole to 5000'+or-. Brine water. 3400'-TD: Salt mud with 3-6% oil content with a water loss of 10cc to get through the Abo shale. *If intermediate casing is set, reduce the hole size to 6 1/2" to total depth and run 4 1/2" casing as planned.

12. Testing, Logging, and Coring Program: (A) Testing: All testing will be commenced after the well has been drilled and casing set and cemented. (B) Logging: At total depth the following logs will be run: 1. Compensated Neutron Formation Density with Gamma Ray and Caliper. 2. Dual Laterolog-RXO. (C) No coring is anticipated.
13. Potential Hazards: No abnormal pressure or temperature zones are anticipated.
14. Anticipated Starting Date and Duration of Operations: April 5th-15th for drilling operations. Completion to commence with the availability of completion unit.
15. Other Facets of Operation: After running 4 1/2" casing, cased hole gamma ray correlation logs will be run from total depth over and above the pay zones. The zones of interest will then be tested for commercial production.

