

NM OIL & GAS COMMISSION  
Drawer DL  
ARTESIAN STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUBMIT IN TRI. ATE\*  
(Other instructions on  
reverse side)

Form approved.  
Budget Bureau No. 42-R1425.

30-005-61475

C/SF

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

'990' FNL & 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

16. NO. OF ACRES IN LEASE

2400

17. NO. OF ACRES ASSIGNED TO THIS WELL

160

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

3960' NE Hoff #2

19. PROPOSED DEPTH

5000'

20. ROTARY OR CABLE TOOLS

Rotary

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

4064.2' GR

22. APPROX. DATE WORK WILL START\*

3/22/82

23. PROPOSED CASING AND CEMENTING PROGRAM

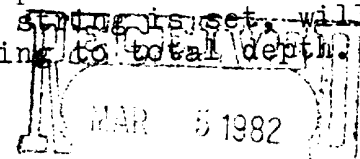
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
14 3/4"	10 3/4"	32.75#	900'	550 sx (Circulate)
* 9 7/8"	7 5/8"	24.00#	1600'	300 sx (Circulate)
7 7/8"	4 1/2"	10.50#	5000'	900 sx

Blowout Prevention:

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

\* Intermediate string will not be set if there is no 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.



OIL & GAS  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

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 Jerry W. Franklin TITLE Agent DATE 3/3/82

(This space for Federal or State office use)

PERMIT NO.

GEORGE H. STEWART

APPROVAL DATE

APPROVED BY

MAR 13 1982

TITLE

DATE

CONDITIONS OF APPROVAL FOR ANY:

JAMES A. GILLHAM  
DISTRICT SUPERVISOR

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

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

Form O-10,  
Supersedes O-128  
Effective 10-65

All distances must be from the outer boundaries of the Section

**Estoril Producing Corp.**

**Hoffman Federal**

**3**

**A**

**11**

**4 South**

**23 East**

**Chaves County**

**990**

**North**

**660**

**East**

**4064.2**

**ABO**

**WILDCAT**

*Abw*

**160**

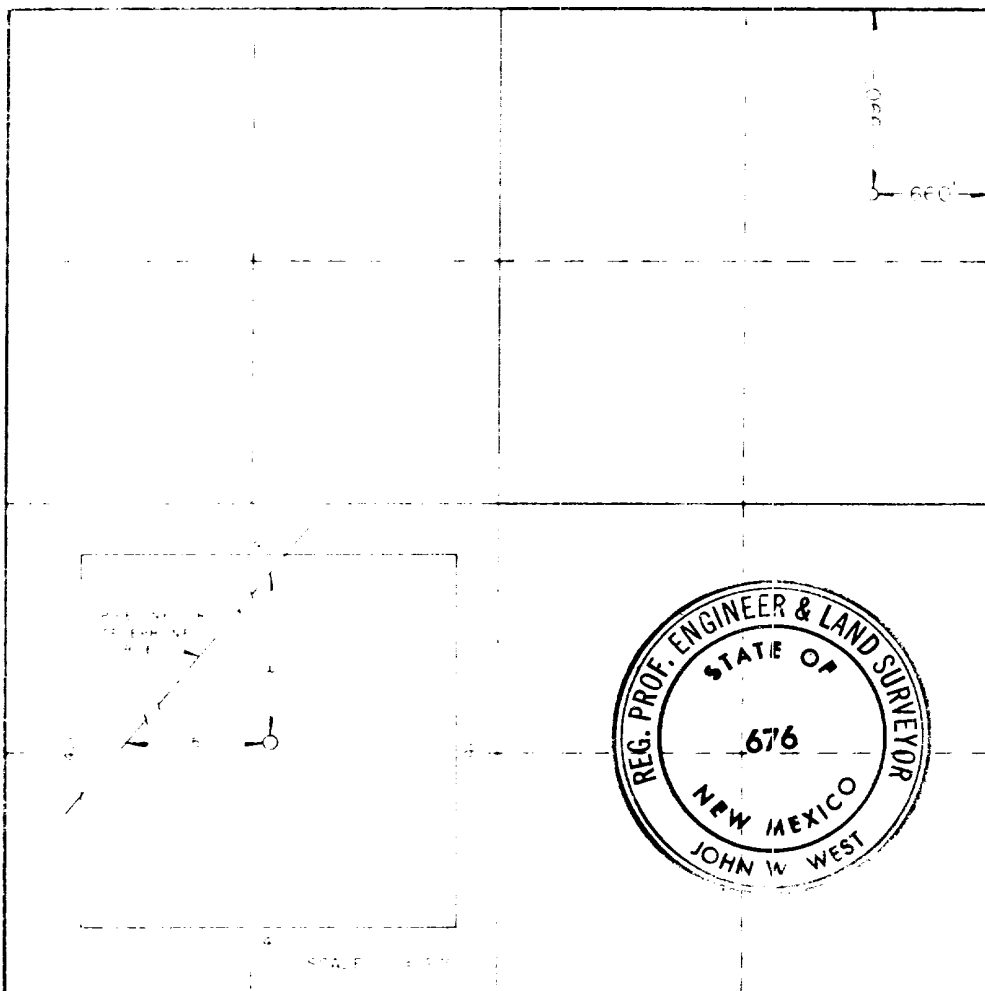
Acres

1. Define 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 allocation will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-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.

**Terry W. Franklin**

**AGENT**

**ESTORIL PRODUCING CORP.**

**3/1/82**

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.

**February 18, 1982**

Registered Professional Engineer  
In the State of New Mexico

Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6863**  
**Ronald J. Eidson 3239**

## APPLICATION TO DRILL

### ESTORIL PRODUCING CORPORATION

Hoffman Federal No. 3  
990' FNL & 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: 990' FNL & 660' FEL, Section 11, T-4S, R-23E, Chaves County, New Mexico.
2. Location Above Sea Level: 4064.2'
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 590'; Glorietta 1580'; Abo 3395'; Wolfcamp 3857'; Pennsylvanian 4046'; Granite Wash 4760'.
7. Mineral Bearing Formation: Gas Bearing at 3550'.
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: March 22nd-April 3rd for drilling operations. Completion to begin with 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.



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