

30-005-61483

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

C/SF

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.

NM-12438

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

RECEIVED

7. UNIT AGREEMENT NAME

MAR 16 1982

8. FARM OR LEASE NAME

Bravo Federal O.C.D.

9. WELL NO.

ARTESIA, OFFICE

#4

10. FIELD AND POOL, OR WILDCAT

Pecos Slope (Abo)

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec 30 T-6-S R-25-E

12. COUNTY OR PARISH

Chaves

13. STATE

NM

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

Western Reserves Oil Co.

3. ADDRESS OF OPERATOR

P.O. Box 993 Midland, TX 79702

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

At surface 660' FSL & 660' FEL

At proposed prod. zone

Same

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

20 miles Northwest Elkins

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

16. NO. OF ACRES IN LEASE

749.99

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.

19. PROPOSED DEPTH

4200

20. ROTARY OR CABLE TOOLS

Rotary.

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

3808.0 GR

22. APPROX. DATE WORK WILL START\*

March 9, 1982

23. 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'	1000
**12 1/4"	8 8/5"	2#	1700'	700 sx.
7 7/8"	4 1/2"	10.5#	4200'	250 sx.

\*\* If lost circulation is encountered; drill through same and set 1700' of 8 5/8" 24# casing. If no lost circulation is encountered by 1700', reduce hole size to 7 7/8" and drill to TD.

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

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 Stephanie Knight / J.T.J TITLE Natural Resources Eng. Agents for Western Reserves Oil Co. DATE March 9, 1982

(This space for Federal or State office use)

PERMIT NO.	APPROVED	APPROVAL DATE	SUBJECT TO
APPROVED BY	MAR 12 1982	JAMES A. GILLHAM	GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED
CONDITIONS OF APPROVAL, IF ANY		DISTRICT SUPERVISOR	DATE

\*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.

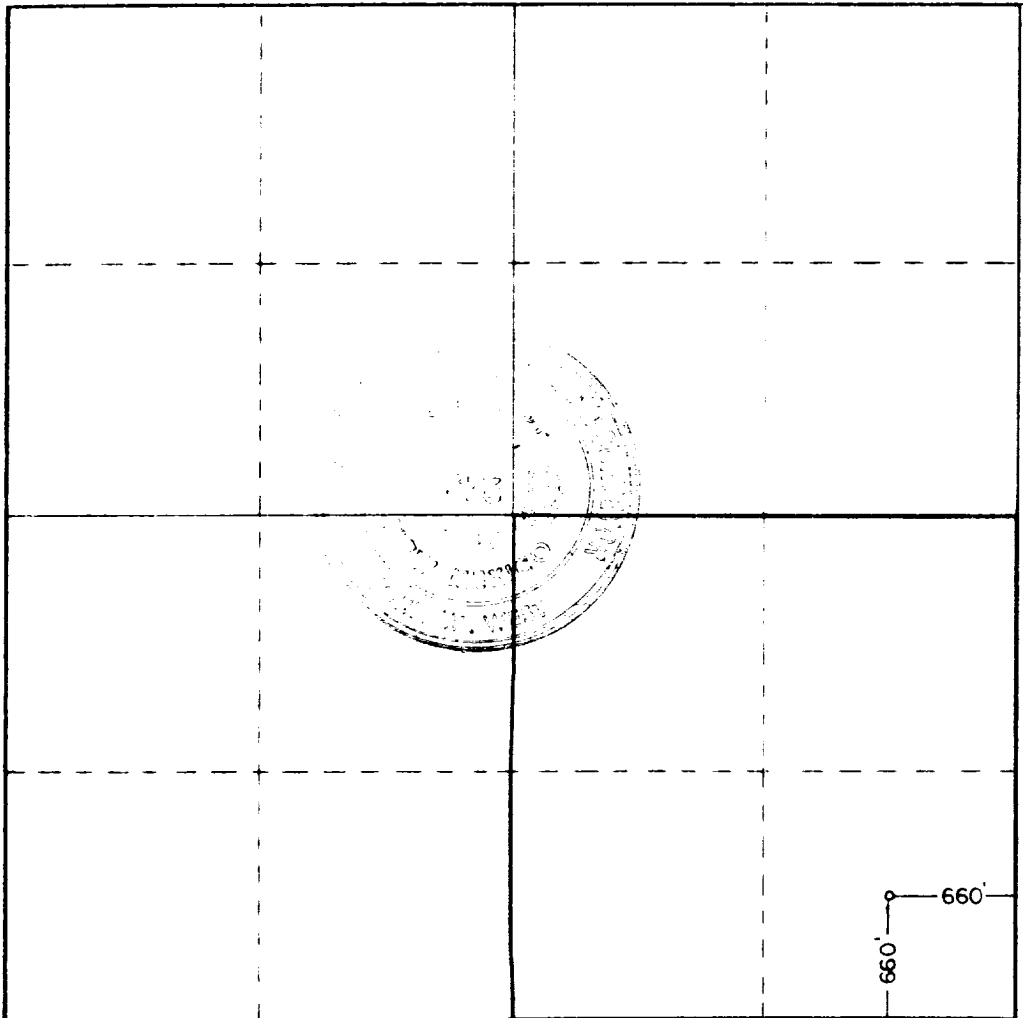
Operator <b>WESTERN RESERVE OIL CO.</b>		Lease <b>BRAVO FED.</b>			Well No. <b>4</b>
Grid Letter <b>P</b>	Section <b>30</b>	Township <b>6 SOUTH</b>	Range <b>25 EAST</b>	County <b>CHAVES</b>	
Actual Well Location of Well: <b>660</b> feet from the <b>SOUTH</b> line and <b>660</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>3808.0</b>	Producing Formation <b>Alco</b>		Foot <b>Pecos Slope Alco</b>		Dedicated Acreage <b>160</b>

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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: **Paul Janice**  
Position: **Agent**  
Company: **Western Res Oil Co**  
Date: **3/10/82**

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.

Date Surveyed: **2-25-82**

Registered Professional Engineer and/or Land Surveyor  
**John West**

Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6868**  
**Ronald J. Eidson 3239**

APPLICATION TO DRILL

9/9-673-5523

Western Reserves Oil Co.  
Bravo Federal #4  
Section 7, T-6-S, R-25-E  
Chaves County, New Mexico

In response to questions asked under Section II B of Bulletin NTL-6, the following answers are provided for your consideration:

1. Location: 660' FSL & 660' FEL, Section 30, T-6-S R-25-E, Chaves County, New Mexico.
2. Elevation Above Sea Level:
3. Geologic Name of Surface Formation: Alluvium
4. Drilling Tools and Associated Equipment: Conventional rotary drilling rig using mud for the circulation medium.
5. Proposed Drilling Depth: 5400'±.
6. Estimated Geological Marker Tops: San Andres 625'; Glorietta 1500'; Abo 3630'; Wolfcamp 4400'.
7. Mineral Bearing Formation: Water bearing - none; gas bearing - Abo 3830±; Oil bearing - none.
8. Casing Program: (A) Surface casing - 13 3/8", 48# new.  
(B) Intermediate casing - 8 5/8" 28# new. (C) Production casing - 4 1/2", 10.5# new.
9. Setting depth of casing and cement for same: (A) 13 3/8" casing set @ 900' cemented with 400 sx. Halliburton light cement w/ 1/2 lb/sx. Flocele & 4% CaCl, 300 sx. of Thixset cement w/ 2% CaCl 300 sx. Class "C" cement w/ 2% CaCl.  
(B) 8 5/8" casing set @ 1700'. Cemented with 200 sx. Thixset w/2% CaCl 300 sx. of Halliburton light cement w/ 1/2 lb/sx. Flocele 2% CaCl, and 200 sx. of Class "C" cement w/ 2% CaCl.  
(C) 4 1/2" casing set @ 4200' cemented with 250 sx. Class "C" cement w/0.3% Halad-4, 0.2% CFR-2 & 5 lb/sx. KCl.

10. Pressure Control Equipment: A blow-out preventer will be installed on the surface casing. It will be a 12" 3000 psi Schaffer Model 39 adapted for the drilling contractor's 4 1/2" drill pipe. The preventer will be Hydraulically operated. The blow-out preventer will be tested to 1500 psi after installed on surface casing.
11. Proposed Circulation Medium: Mud will be used for the circulating medium for all depths in this well. The following mud properties will be maintained. Surface hole 350' will use spud mud to surface casing point. 350' - 1600' will use native mud 33 to 35 viscosity. 1600' - 4200' will use same fluid in previous interval, circulating reserve and cleaning up the drilling fluid, converting to a controlled brine (9.0 to 9.2 lbs/gal) using Caustic Soda for ph control, 9.0 to 10 ph. 4200' - 5400' will use salt gel and maintain 36 to 38 viscosity sufficient to clean hole and get good samples.
12. Testing, Logging, and Coring Programs: (A) All testing will be performed after the well has been drilled and casing has been set and cemented. (B) Logging: At total depth, the following logs will be run: 1) 0' - 5400' sidewall neutron porosity with gamma ray and claiper; 2) 5400' - 3400' dual laterolog - micro-SFL (C) No coring.
13. Potential Hazards: No abnormal pressure or temperature zones are anticipated. Hydrogen sulfide gas is not expected to be a problem; however, the drilling rig will be so situated as to allow all gas vapors to be expelled away from all personnel gathering sites and engine exhausts.
14. Anticipated Starting Date and Duration of Operation: Commence March 17, 1982. Two weeks to complete. March 31, 1982.
15. Other Facets of Operations: After running 4 1/2" casing, cased hole gamma ray collar correlation logs will be run from total depth to 4000±. The Abo pay will be perforated and stimulated. The well will be swab tested and potentialled.

TEX-MEX Drilling Company  
Rig #2

Rig Arrangement

EXHIBIT "D"  
WESTERN RESERVES OIL CO.  
Bravo Federal #4  
Sec 30 T-6-S R-25-E

