

NM OIL CONS. COMMISSION  
Drawer DD  
Artesia, UNIT 1 STATES  
DEPARTMENT OF THE INTERIOR

SUBMIT IN TRIPLICATE\*  
(Other instructions  
reverse side)

Form approved.  
Budget Bureau No. 42-R1425.

30-005-61290

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  
Western Reserves Oil Co. ✓ RECEIVED

3. ADDRESS OF OPERATOR  
P.O. Box 933 Midland, TX. 79702 DEC 17 1981

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At surface  
660' FNL & 1980' FEL Sec 13 T-5-S, R-24-E O.C.D.  
At proposed prod. zone ARTESIA OFFICE

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

22 Miles Northwest Elkins

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  
800

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  
5400'

20. ROTARY OR CABLE TOOLS  
Rotary

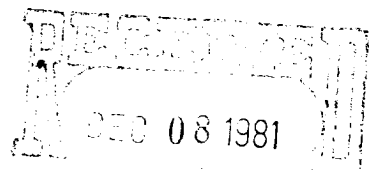
21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3932.8 GR

22. APPROX. DATE WORK WILL START\*  
20 Jan. 82

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 CIRCULATE
** 12 1/4"	8 5/8"	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.



GAS IS DEDICATED.

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. Natural Resources Eng.  
Agents for  
SIGNED JT Janica TITLE Western Reserves Oil Co DATE January 20, 1982

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE

APPROVED BY CONDITIONS OF APPROVAL, IF ANY: TITLE DATE

DEC 16 1981

JAMES A. GILLHAM  
DISTRICT SUPERVISOR

\*See Instructions On Reverse Side

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

All distances must be from the outer boundaries of the Section.

regions dedicated to the subject well by colored pencil or hatchure marks on the plat below.

Each machine or lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and leasehold).

...the use of different ownership is dedicated to the well, have the interests of all owners been consolidated through consolidation, unitization, force-pooling, etc?

5. If answer is "yes," type of consolidation

10. List the owners and tract descriptions which have actually been consolidated. Use reverse side of

...has been assigned to the well-intended interests have been consolidated by communitization, unitization, or otherwise, until a non-standard unit, eliminating such interests, has been approved by the Commis-

### CERTIFICATION

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

9-9 Garcia

J. T. Janica

NREE, Agents for

Western Reserves Oil Co.

December 7, 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.

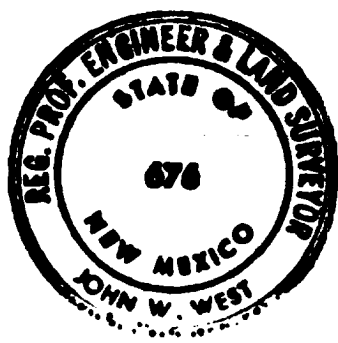
1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.

11-10-81

Registered Professional Engineer  
No. 10,000, 1960

Chas. A. West

Certificate No	JOHN W. WEST	676
	PATRICK A. ROMERO	6663
	Ronald J. Eidson	3239





## APPLICATION TO DRILL

Western Reserves Oil Co.  
Bevmor 24 Federal #4  
Section 13 T-5-S, R-24-E  
Chaves County, New Mexico

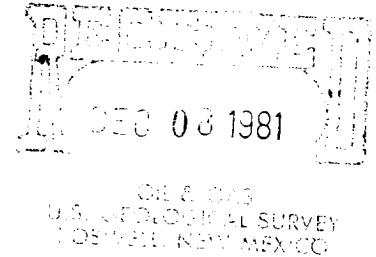
In response to questions asked under Section II B of Bulletin NTL-6, the following answers are provided for your consideration:

1. Location: 660' FNL, & 1980' FEL, Section 13, T-5-S, R-24-E, Chaves County, New Mexico.
2. Elevation Above Sea Level: 3932.8 GR
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 January 20, 1981. Four weeks to complete. February 20, 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 potentialied.

## SURFACE USE AND OPERATION PLAN

Western Reserves Oil Co.  
Bevmor 24 Federal #4  
Section 13 T-5-S R-24-E  
Chaves County, New Mexico



### I. Existing Roads

- A. Exhibit "A" is a portion of an ownership map showing the location of the proposed well as staked. Proposed location is approximately 22 miles northwest of Elkins, New Mexico.
- B. Exhibit "B" is a map showing existing roads in the area of the proposed location.

### II. Access Roads

- A. Planned access roads are shown of Exhibit "B".
- B. The road will be constructed of caliche and will be 12' wide by 600' long.

### III. Location of Existing Wells

- A. Existing wells in the area are shown of Exhibit A.

### IV. Location of Tank Batteries, etc.

- A. No tank battery anticipated.

### V. Location and type of Water Supply

- A. There is no known surface water in the immediate area.
- B. All water in drilling operations will be trucked to the drillsite from commercial sources.

### VI. Source of Construction Materials

- A. Construction materials, if used, will be caliche, which will be purchased by dirt contractors. The barrow pit is situated in NE1/4 NE1/4, Section 22, T-5-S, R-24-E, Chaves County, New Mexico.

### VII. Methods for Handling Waste Disposal

- A. Well cuttings will be disposed in the reserve pit. All other waste will be buried in a separate pit.

VII. Methods for Handling Waste Disposal (cont.)

- B. After completion, any produced water will be collected in tanks and trucked to an approved disposal system.
- C. During testing operations, all produced fluids will be collected in tanks and trucked from the wellsite.

VIII. Auxiliary Facilities

- A. None anticipated.

IX. Wellsite layout

- A. Exhibit "C" is a plot of the wellsite and rig layout.

X. Plans for Restoration of the Surface

- A. After completion of the well, pits will be filled and the location cleaned of all trash and junk to leave the wellsite in good condition.
- B. Any unguarded pits containing fluids will be fenced off until they are filled.
- C. The reserve pits will be backfilled and leveled and the surface returned to its original contour.

XI. Other Information

- A. Topography: Terrain in the area is more or less east to west trending ridge. This landform is marked by a gentle gradient. Surficial deposits are composed of silt loams and silty clay loams.
- B. Soil: Areal soils belong to the typic Gypsiorthid and Typic Palerothid subgroups.
- C. Vegetation: Consists of Prosopis Julifora, Yucca Gluaca and Opuntia Macrocentra.
- D. Fauna: Consists of crotalus and sistruris, Canis latrans, lepus allene and mephitis mephitis.
- E. The surface of the land is being utilized to a limited extent as grazing land.
- F. The surface is privatley owned.
- G. No cultural resources or archaeological sites present.

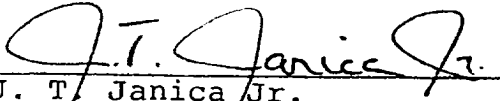
XII. Operator's Representative

Natural Resources Engineering, Inc.  
P. O. Box 2188  
Hobbs, New Mexico 88240  
Office: 505-393-6363

XIII. Certification

I hereby certify that I, or persons under my direct supervision; have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Western Reserves Oil Co. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

12-7-81  
Date

  
J. T. Janica Jr.  
Natural Resources Engineering  
Agents for: Western Reserves  
Oil Company



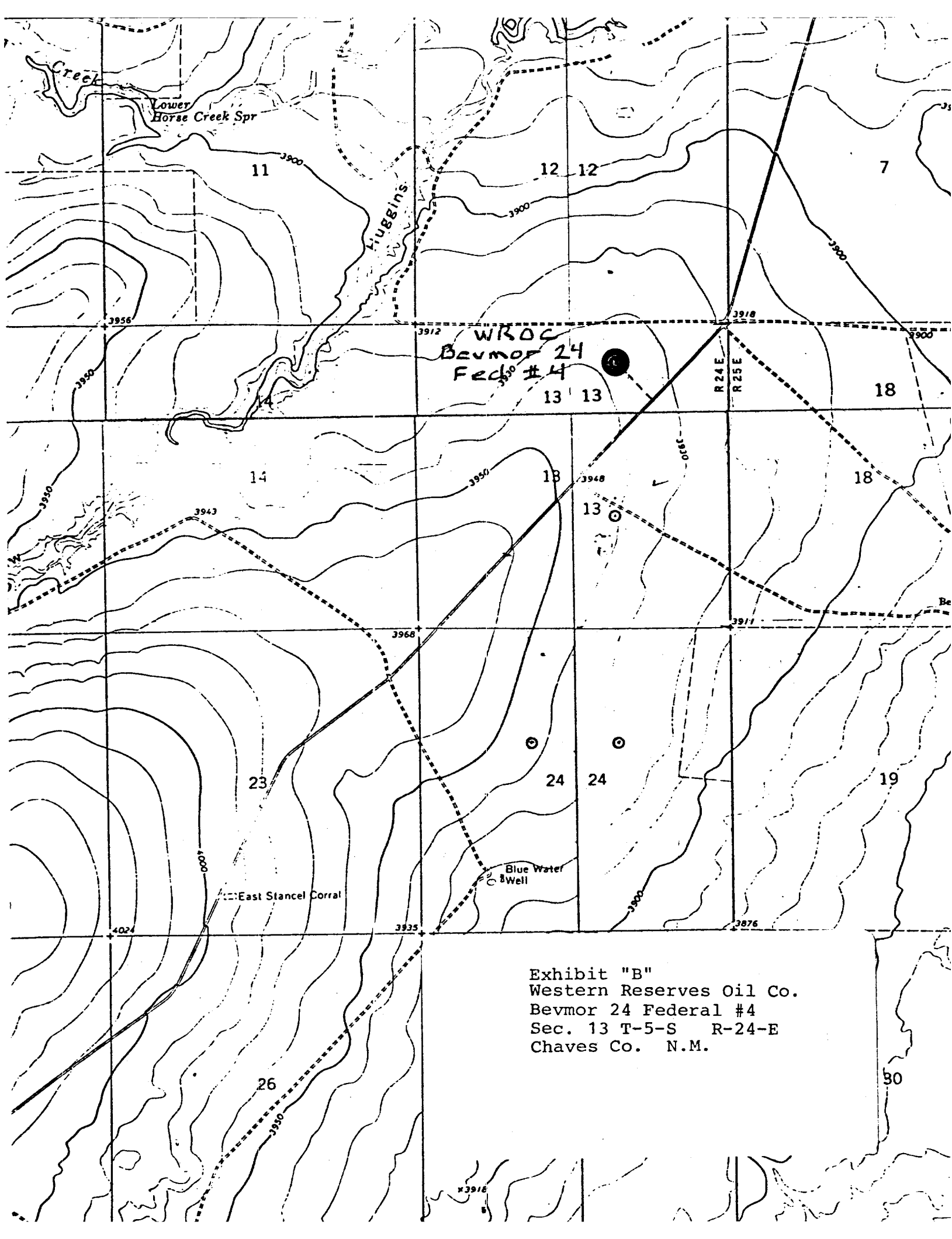


Exhibit "B"  
Western Reserves Oil Co.  
Bevmor 24 Federal #4  
Sec. 13 T-5-S R-24-E  
Chaves Co. N.M.