

30-005-61291

DEPARTMENT OF THE INTERIOR

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 993 Midland, TX. 79702

DEC 17 1981

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

At surface

1980 FSL & 660 FEL Sec 7 T-6-S R-25-E

At proposed prod. zone

O. C. D.
ARTESIA, OFFICE

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 drlg. unit line, if any)18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

16. NO. OF ACRES IN LEASE

580

19. PROPOSED DEPTH

5400'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

20. ROTARY OR CABLE TOOLS

Rotary

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

4100.0 GR

22. APPROX. DATE WORK WILL START*

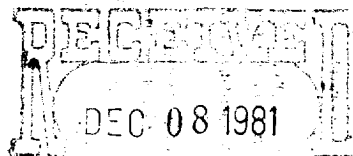
20 Feb. 1982

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 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.

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.

Natural Resources Eng.
Agents forSIGNED J. T. JanicaTITLE Western Reserves Oil Co. February 20, 1982

(This space for Federal or State office use)

PERMIT NO.

APPROVED

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY

DEC 16 1981

JAMES A. GILLHAM

DISTRICT SUPERVISOR

*See Instructions On Reverse Side

N MEXICO OIL CONSERVATION COMMISS
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
 Supersedes C-128
 Effective 1-1-83

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

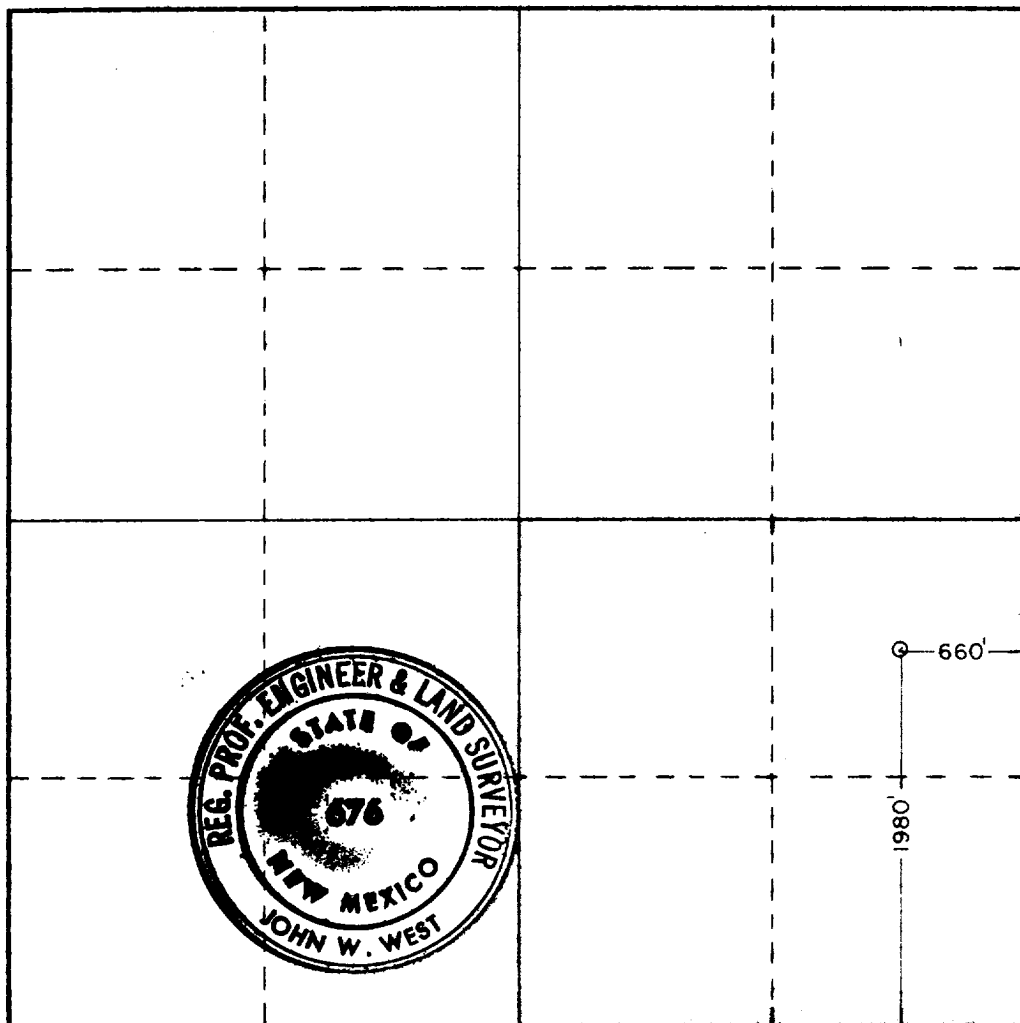
Operator Western Reserves Oil Co.			Lease Bravo Federal		Well No. 1
Unit Letter I	Section 7	Township 6 South	Range 25 East	County Chaves	
Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the East line					
Ground Level Elev. 4100.1'	Producing Formation Undesignated Abo		Pool Abo Undesignated		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.

J. T. Janica
 Name

J. T. Janica
 Position

NREE, Agents for
 Company

Western Reserve Oil Co.

Date

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.

Date Surveyed

Nov. 4, 1981

Registered Professional Engineer
 and/or Land Surveyor

John W. West

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

0 320 640 960 1280 1600 1920 2240 2560 2880 3200 3520 3840 4160 4480 4800 5120 5440 5760 6080 6400

APPLICATION TO DRILL

Western Reserves Oil Co.
Bravo Federal #1
Section 7 T-6-S, R-25-E
Chaves County, New Mexico

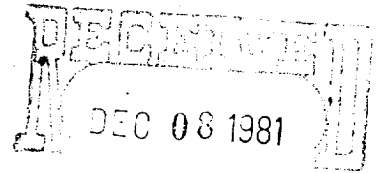
In response to questions asked under Section II B of Bulletin NTL-6, the following answers are provided for your consideration:

1. Location: 1980' FSL, & 660' FEL, Section 7, T-6-S, R-25-E, Chaves County, New Mexico.
2. Elevation Above Sea Level: 4100.0 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 February 20, 1981. Four weeks to complete. March 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.
Bravo Federal #1
Section 7 T-6-S R-25-E
Chaves County, New Mexico



OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, 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 20 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 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

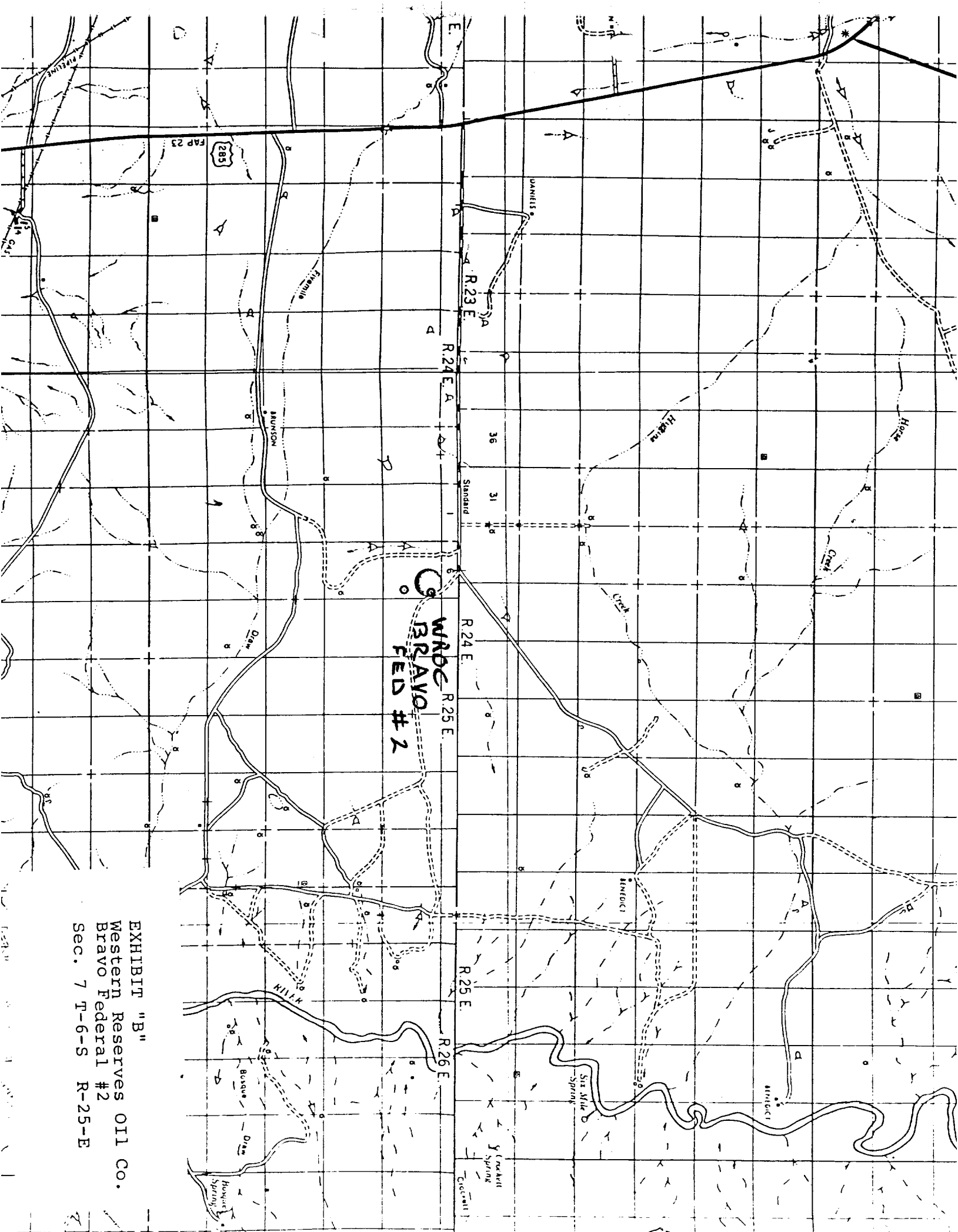


EXHIBIT "B"
Western Reserves Oil Co.
Bravo Federal #2
Sec. 7 T-6-S R-25-E

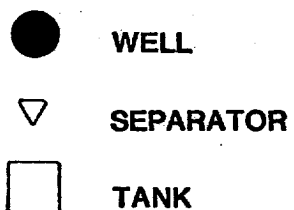
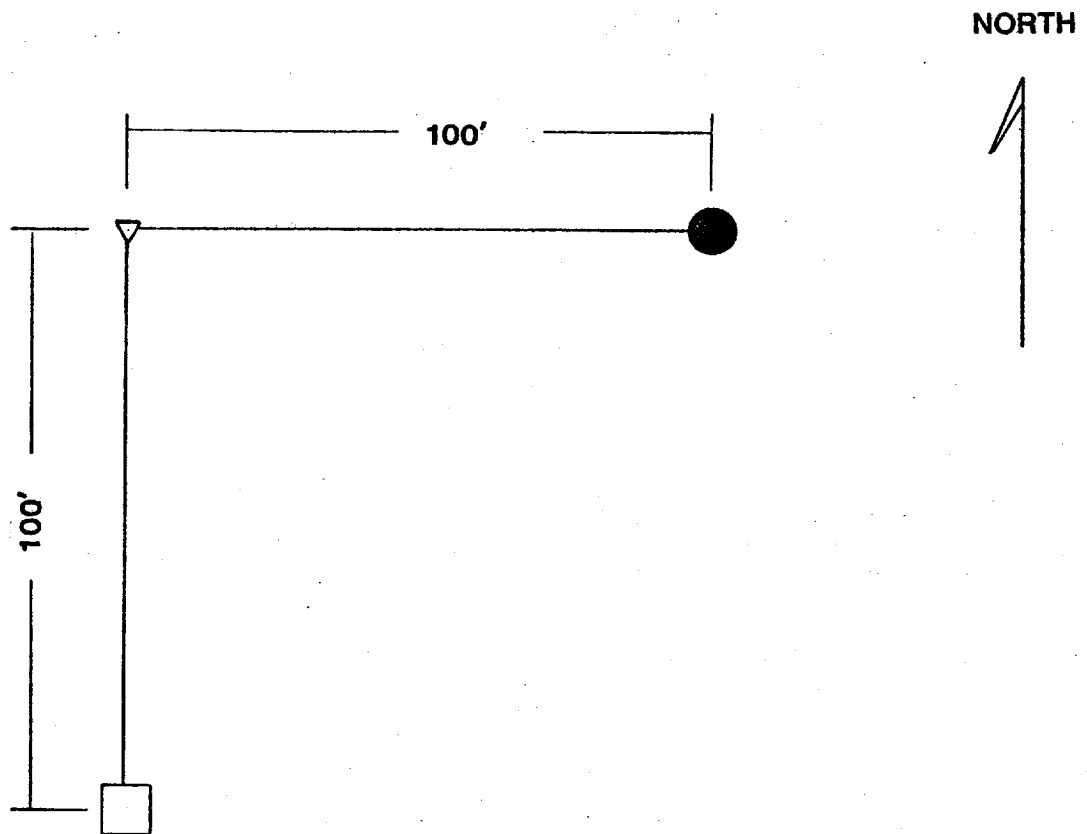
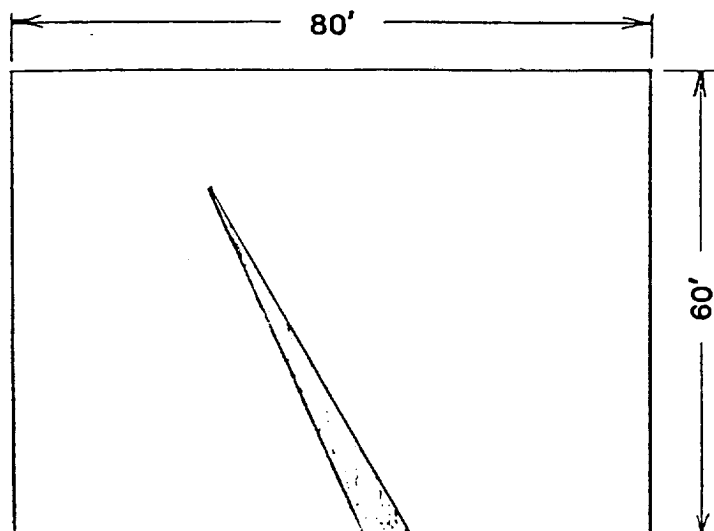


EXHIBIT C.

WESTERN RESERVES OIL CO.
BRAVO FED #1
SEC. 7 T-6-S R-25-E
CHAVES CO. NM



TEX-MEX Drilling Company
Rig #2

Rig Arrangement

EXHIBIT "D"
WESTERN RESERVES OIL CO.
Bravo Federal #1
Sec 7 T-6-S R-25-E

