

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-005-60937

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM 12441		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Western Reserves Oil Company ✓			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR P. O. Box 993 Midland, Texas 79702			8. FARM OR LEASE NAME Beymor '24' Federal		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 1980' FNL & 1980' FWL, Sec. 24, T-5-S, R-24-E At proposed prod. zone Same			9. WELL NO. 2		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 22 miles northwest of Elkins			10. FIELD AND POOL, OR WILDCAT X Undesignated (Abo)		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) --			11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA UL F Sec. 24, T-5-S, R-24-E		
16. NO. OF ACRES IN LEASE 800			12. COUNTY OR PARISH Lea		
17. NO. OF ACRES ASSIGNED TO THIS WELL 160			13. STATE N.M.		
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. APPROX. DATE WORK WILL START* 2/26/81		
22. ELEVATIONS (Show whether DF, RT, GR, etc.) 3938.7' GR			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#	400'	375sx
7 7/8"	4 1/2"	10.5#	5400'	400sx

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 <u>Jerry Franklin</u> TITLE <u>Agent</u> DATE <u>1/12/81</u>	
(This space for Federal or State use only)	
PERMIT NO. (Orig. Sgd.) <u>PETER W. CHESTER</u>	APPROVAL DATE
APPROVED BY <u>JAMES A. GILLHAM</u> DATE <u>MAR 5 1981</u>	TITLE
CONDITIONS OF APPROVAL, IF ANY:	
JAMES A. GILLHAM DISTRICT SUPERVISOR	

\*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-100  
Supersedes O-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

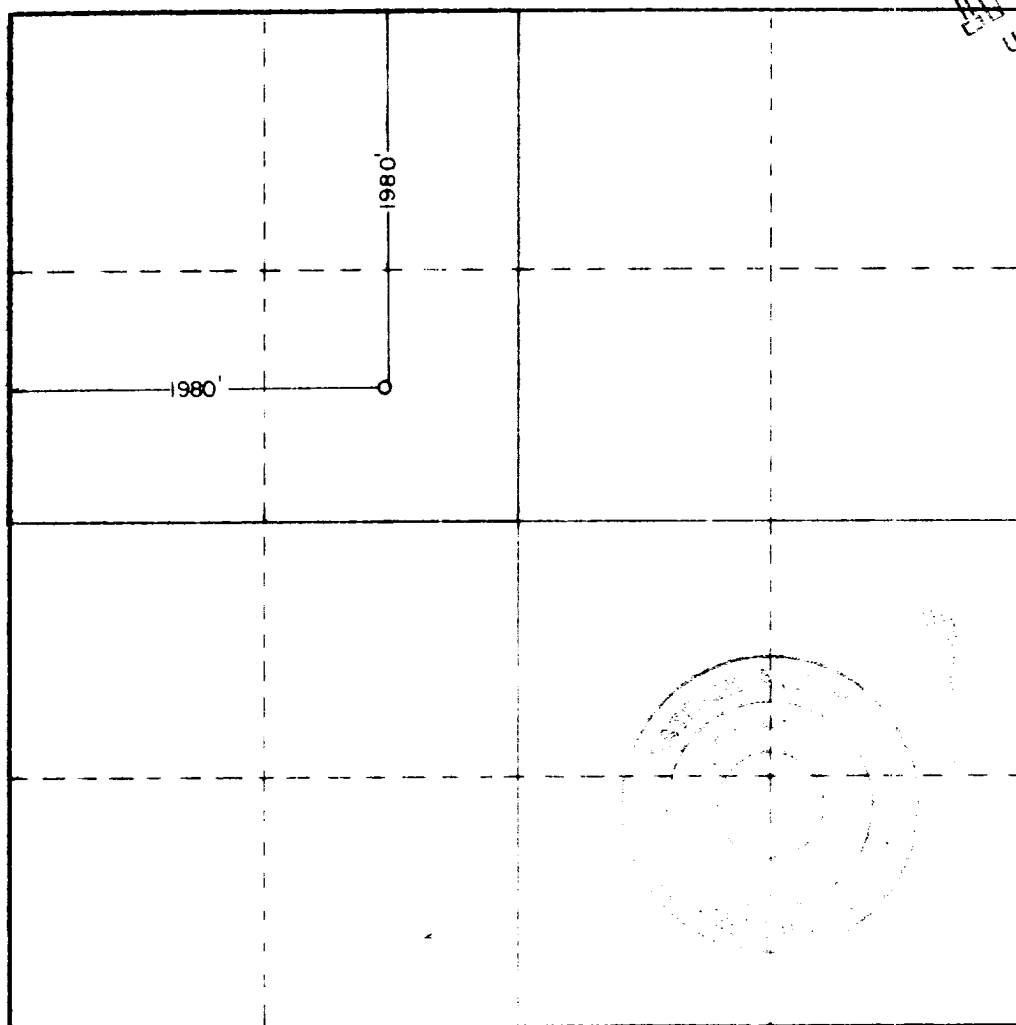
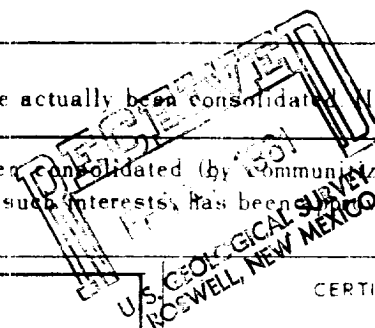
Operator <b>Western Reserves Oil Co.</b>			Lease <b>24</b> <b>Baymor Fed.</b>		Well No. <b>2</b>
Unit Letter <b>F</b>	Section <b>24</b>	Township <b>5 South</b>	Range <b>24 East</b>	County <b>Chaves</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>North</b> line and <b>1980</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3938.7</b>	Producing Formation <b>Abo</b>		Pool <b>Undesignated</b>		Dedicated Acreage: <b>160</b> Acres

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  
**Joe T. Janica**  
Position  
**Agent**  
Company  
**Western Reserves Oil Co.**  
Date  
**1/7/81**

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.

Date Surveyed  
**1-3-81**  
Registered Professional Engineer  
and Land Surveyor  
*Patrick A. Romero*  
Certificate No. **JOHN W. WEST 676**  
**PATRICK A. ROMERO 6868**  
**Ronald J. Eidson 3239**

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600 6930 7260 7590 7920 8250 8580 8910 9240 9570 9900 0

## APPLICATION TO DRILL

Western Reserves Oil Co.  
Bevmor '24' Federal #2  
Section 24, 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: 1980' FNL; & 1980' FWL, Section 24, T-5-S, R-24-E, Chaves County, New Mexico
2. Elevation Above Sea Level: 3938.7 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<sup>+</sup>
6. Estimated Geological Marker Tops: San Andres 600'; Glorietta 1605'; Abo 3670'; Wolfcamp 4430'
7. Mineral Bearing Formation: Water bearing - none; gas bearing - Abo 3830<sup>+</sup>; Oil bearing - none.
8. Casing Program: (A) Surface casing - 13 3/8", 48# new. (B) Production casing - 4 1/2" 10.5# new.
9. Setting Depth of Casing and Cement for Same: (A) 13 3/8" casing set at 400'. Cemented with 375 sacks Class C, 2% CaCl. Cement circulated to surface. (B) 4 1/2" casing set at 5400'. Cemented with 400 sacks of Halliburton Lite, 8# salt/sack, 1/4# flocele/sack.
10. Pressure Control Equipment: A blow-out preventer will be installed on the surface casing. It will be a 10" 3000 psi test series QRC preventer adapted for the drilling contractor's 4 1/2" drill pipe. The preventer will be mechanically 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 salt gel and lime 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 caliper; 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 26, 1981. Four weeks to complete.  
March 26, 1981.
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 $\pm$ . The Abo pay will be perforated and stimulated. The well will be swab tested and potentialled.

## SURFACE USE AND OPERATION PLAN

Western Reserves Oil Co.  
Bevmor '24' Federal #2  
Section 24, T-5-S, R-24-E  
Chaves County, New Mexico

RECEIVED  
JAN 27  
1964  
ELKINS, 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 on Exhibit 'B'.
- B. The road will be constructed of caliche and will be 12' wide by 1780' long.

### III. Location of Existing Wells

- A. Existing wells in the area are shown on Exhibit 'B'.

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

- A. Exhibit 'C' shows the proposed tank battery.

### 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 material will be caliche, which will be purchased by dirt contractors. The barrow pit is situated in NE $\frac{1}{4}$  NE $\frac{1}{4}$ , 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 'D' 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 Calcic Gypsiorthid subgroups and its intergrades.
- C. Vegetation: Consists of Prosopis Juliflora, yucca glauca. Some observed cacti including Opuntia Umbricata and Opuntia Macrocentra.
- D. Fauna: Consists of crotalus and sistrurus, 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 privately owned.
- G. No cultural resources or archaeological sites present.

XII. Operator's Representative

Natural Resources Evaluation and Engineering, Inc.  
P. O. Box 2188  
Hobbs, New Mexico 88240  
Office: 505-393-6364

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.

2/12/81  
Date

Terry W. Franklin  
Terry W. Franklin  
Agent for  
Western Reserves Oil Co.

SHANNON DRAW (ADRANGLE)  
NEW MEXICO-CHAVES CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

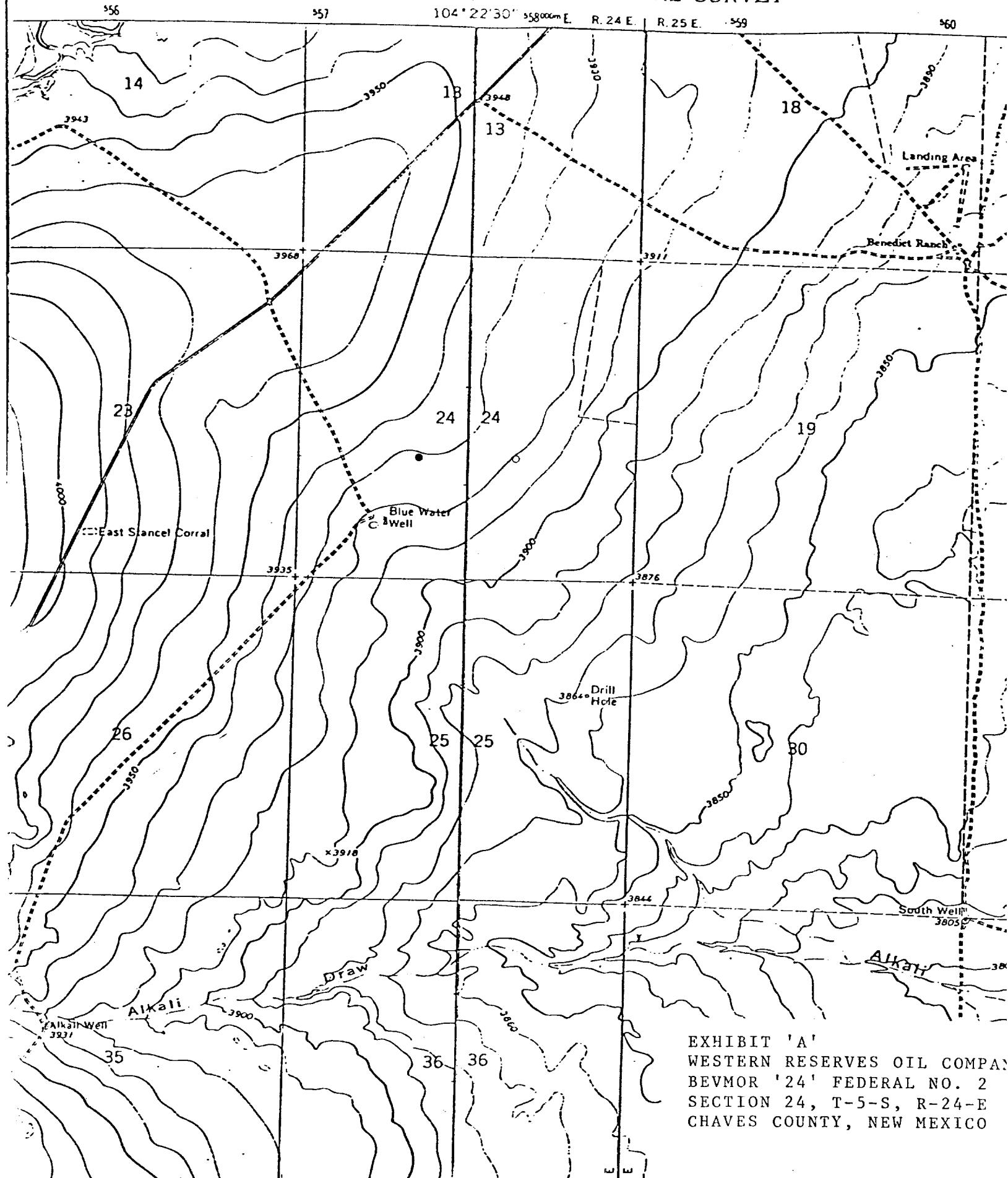


EXHIBIT 'A'  
WESTERN RESERVES OIL COMPANY  
BEVMOR '24' FEDERAL NO. 2  
SECTION 24, T-5-S, R-24-E  
CHAVES COUNTY, NEW MEXICO



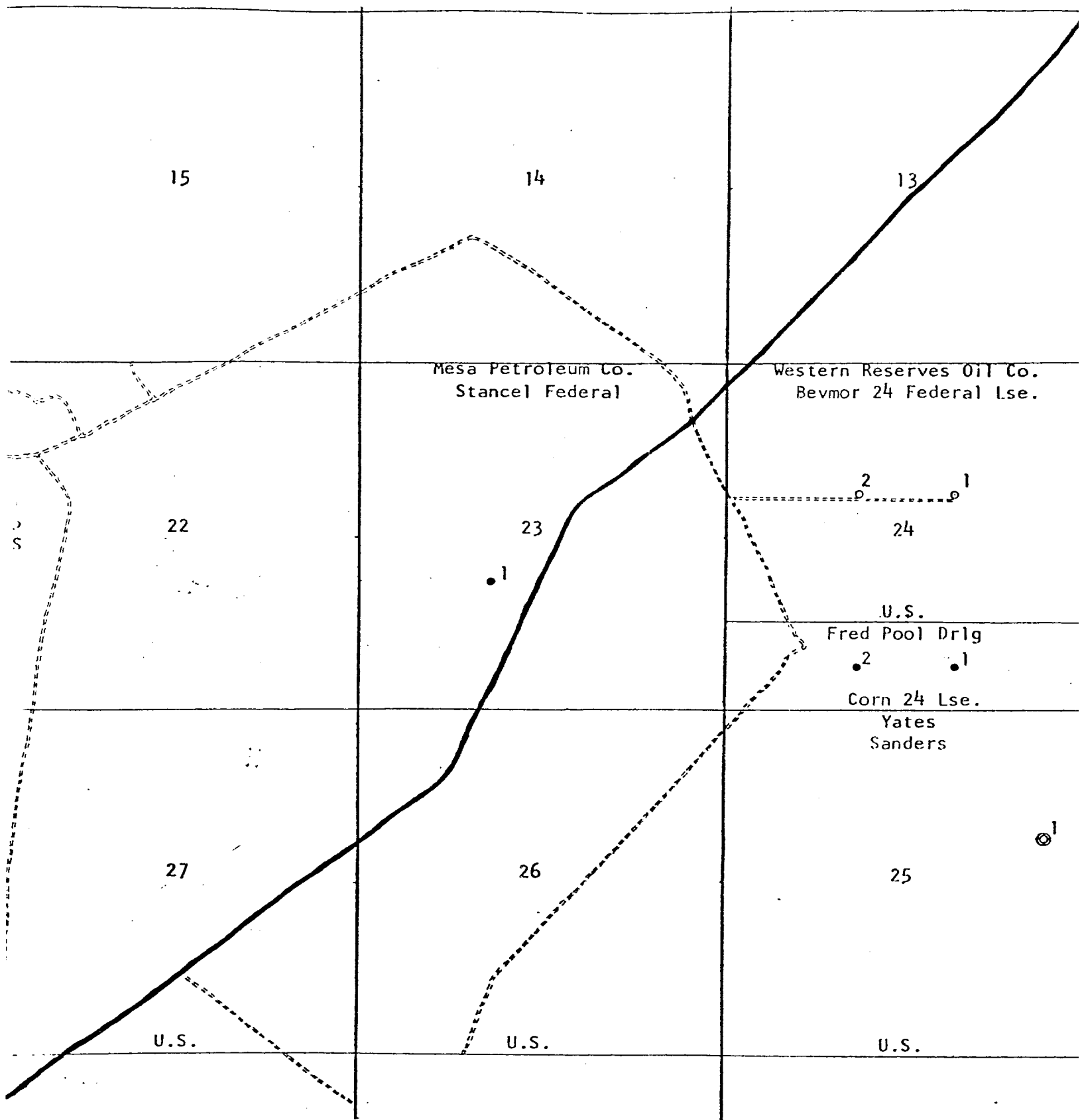
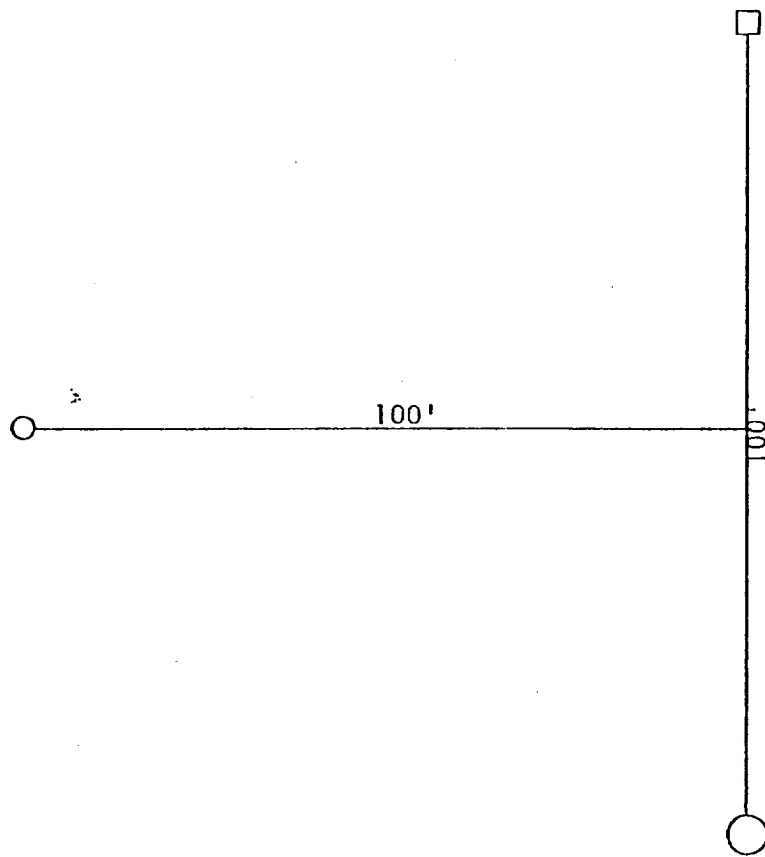


EXHIBIT 'B'  
WESTERN RESERVES OIL COMPANY  
BEVMOR '24' FEDERAL NO. 2  
SECTION 24, T-5-S, R-24-E  
CHAVES COUNTY, NEW MEXICO



- Well
- Separator
- Tank

EXHIBIT 'C'  
WESTERN RESERVES OIL COMPANY  
BEVMOR '24' FEDERAL LEASE  
SECTION 24, T-5-S, R-24-E  
CHAVES COUNTY, NEW MEXICO

Reserve pits 4 ft. deep

Working pits 5 ft. deep

Fred Pool Drilling, Inc.

Location plat

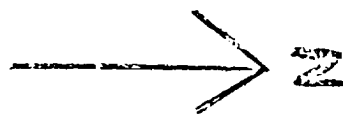
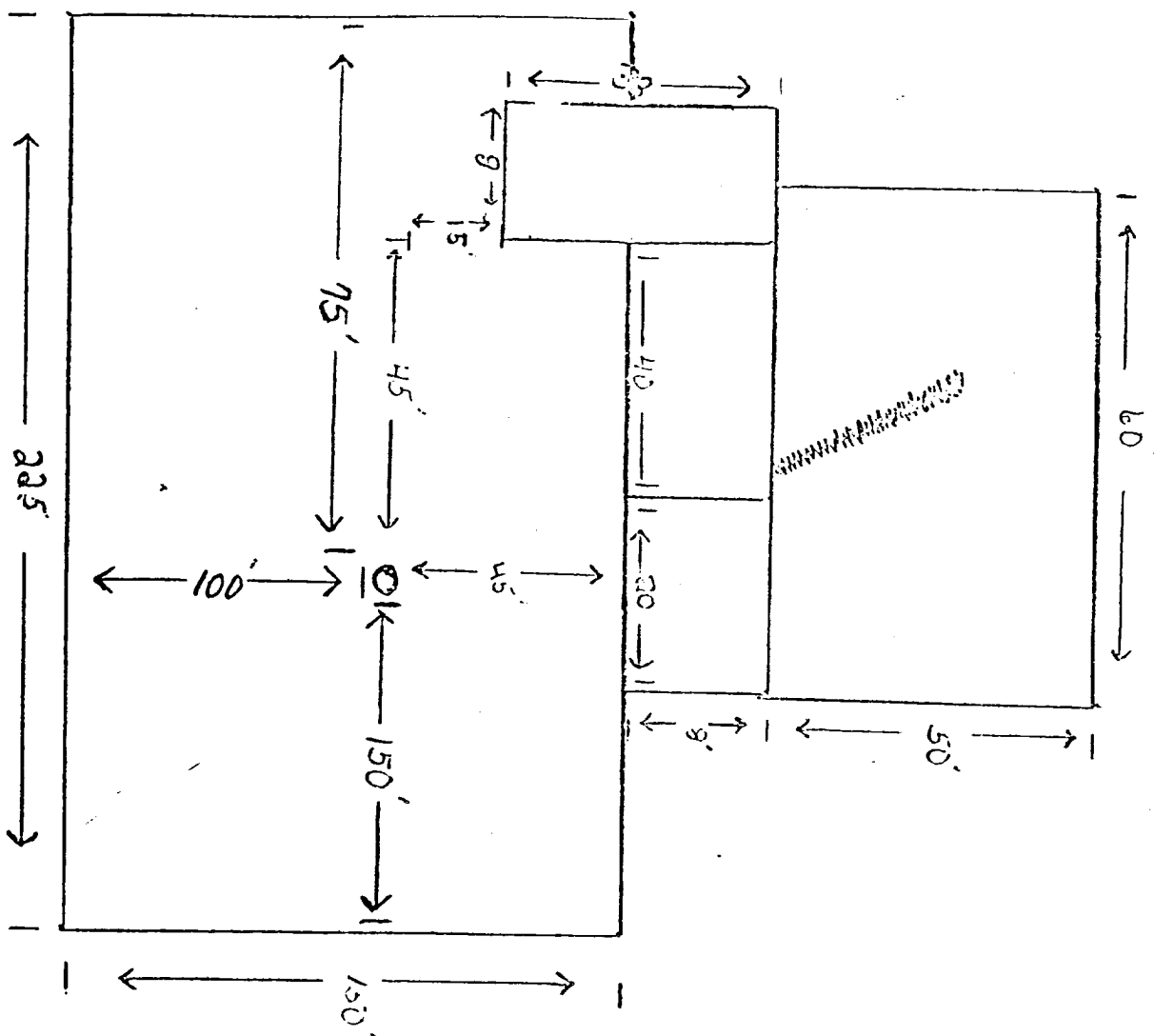
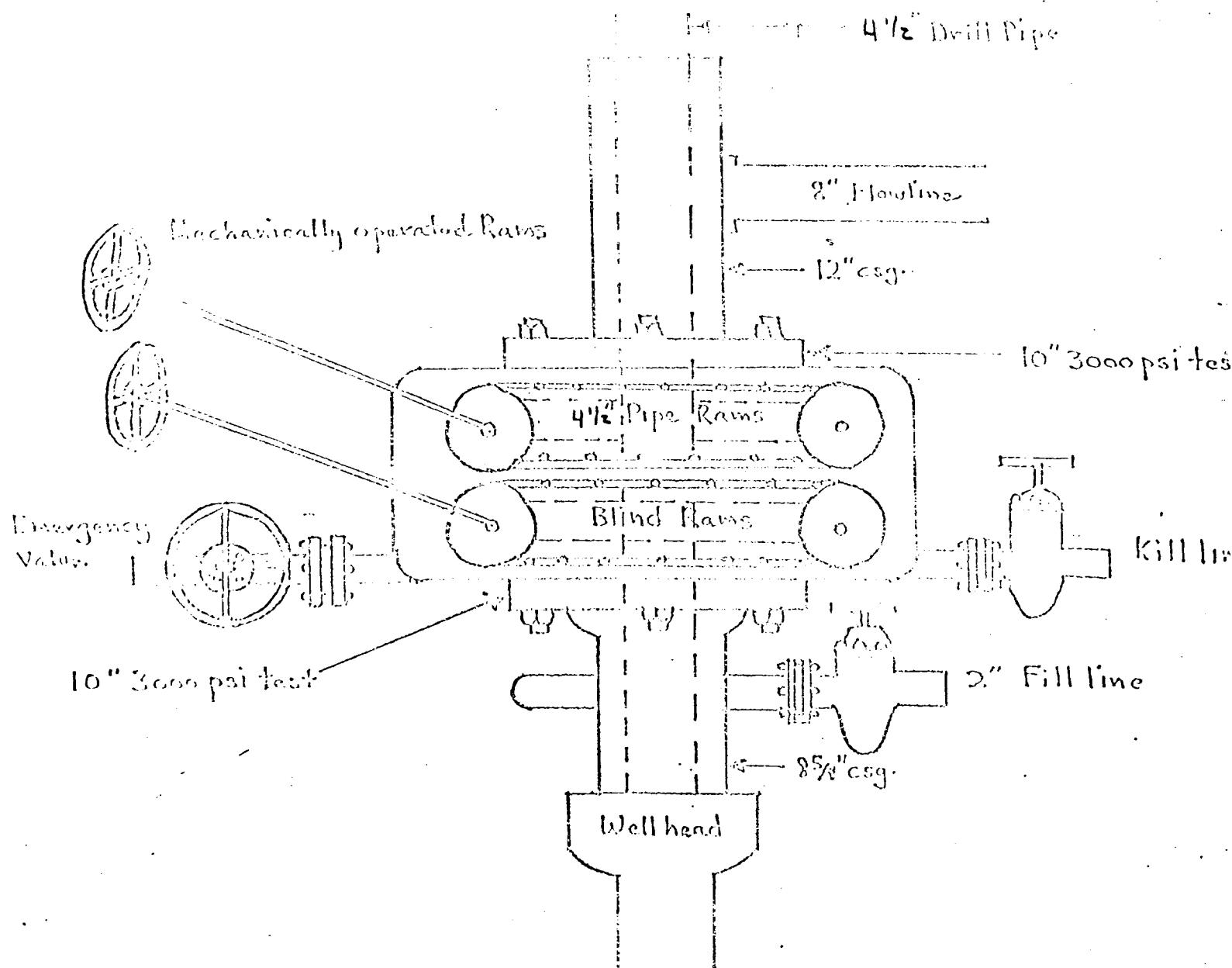


EXHIBIT 'D'  
 WESTERN RESERVES OIL COMPANY  
 NEWMOR '24' FEDERAL NO. 2  
 SECTION 24, T-5-S, R-24-E  
 CHAVES COUNTY, NEW MEXICO

# FRED POOL DRILLING CO.

## Blowout Preventer Specifications



1500 QRC Blowout preventer with closing unit



# NMAS

## New Mexico Archaeological Services, Inc.

P. O. Box 1341

Carlsbad, New Mexico 88220

(505) 887-7646

12 January 1981

Reconnaissance

Excavation

Analysis

Explanation

Curation

Mr. Joe T. Janica

Agent

WESTERN RESERVE OIL COMPANY

P.O. Box 2188

Hobbs, New Mexico 88240

CHAVES COUNTY  
WELL, NEW MEXICO

Dear Mr. Janica:

Enclosed please find NMAS' Archaeological Clearance Report for WESTERN RESERVE OIL COMPANY's proposed Bevmor Federal 24 Well No. 1, Bevmor Federal 24 Well No. 2, and their associated access roads in Section 29, T5S, R29E, NMPM, Chaves County, New Mexico. No cultural resources were recorded during this reconnaissance, and hence NMAS is *suggesting* clearance for this project.

If you have any questions pertaining to this report, please call my office. Thank you for asking NMAS to do this reconnaissance.

Yours sincerely,

Dr. J. Loring Haskell  
Principal Investigator

Enclosure

cc: Ms. Ann Ramage, BLM, Roswell  
Mr. George Stewart, USGS, Roswell  
Mr. Curtis Schaafsma, Laboratory of Anthropology,  
Santa Fe  
Mr. Thomas W. Merlan, SHPO, Santa Fe

as

Archaeological Clearance Report

for

WESTERN RESERVE OIL COMPANY

Bevmor Federal 24 Well No. 1

Bevmor Federal 24 Well No. 2

Prepared

By

Dr. J. Loring Haskell

Submitted

By

Dr. J. Loring Haskell  
Principal Investigator  
New Mexico Archaeological Services, Inc.  
Carlsbad, new Mexico

12 January 1981

Permit No. 80-NM-193

## ABSTRACT

New Mexico Archaeological Services, Inc., representing WESTERN RESERVE OIL COMPANY, undertook an archaeological reconnaissance of Bureau of Land Management lands scheduled to be impacted by the construction of two drill locations and their associated access roads. The investigated locations and their associated access roads are situated in Section 24, T5S, R24E, NMPM, Chaves County, New Mexico. No cultural resources were recorded during this reconnaissance, and hence NMAS is *suggesting* clearance for WESTERN RESERVE OIL COMPANY's proposed work.

## Introduction

On 10 January 1981, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, undertook for WESTERN RESERVE OIL COMPANY, an archaeological reconnaissance of federal lands administered by the Bureau of Land Management in Chaves County, New Mexico. Reconnoitered areas will be impacted by the construction of two drill locations and their associated access roads. This project was advanced by Mr. Terry Franklin, Agent, WESTERN RESERVE OIL COMPANY, and administered by Dr. J. Loring Haskell, Principal Investigator, NMAS, Inc. This reconnaissance was undertaken by Dr. J. Loring Haskell and Mr. John C. Haight.

## Survey Technique

For this investigation, WESTERN RESERVE OIL COMPANY's proposed locations were reconnoitered for evidence of man's past activities by walking them in a series of 20 ft wide, close interval (15° or less), zigzag transects. In addition an added zone embracing to 20 ft on each side of the staked 400 X 400 ft locations, and hence lying outside the bounds of the proposed work areas, was reconnoitered by a similar means as were their access roads. Methodologically, this procedure served to promote optimal conditions for the visual examination of areas to be impacted by construction-related activities.

Bevmor Federal 24 Well No. 1

## Location

The proposed location will measure 400 X 400 ft on federal lands and will be situated 1980 ft from the north line and 1980 ft from the east line of:

Section 24, T5S, R24E, NMPM, Chaves County, NM



Thus it will be situated in the:

SW $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 24, T5S, R24E, NMPM, Chaves County, NM

The associated access road will measure approximately 20 X 1300 ft and will be situated in the:

SW $\frac{1}{4}$ NE $\frac{1}{4}$ , Section 24, T5S, R24E, NMPM, Chaves County, NM  
SE $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 24, T5S, R24E, NMPM, Chaves County, NM

Map References: USGS COTTONWOOD DRAW QUADRANGLE, 15 Minute Series, 1967.  
USGS SHANNON DRAW QUADRANGLE, 15 Minute Series, 1967.

### Terrain

WESTERN RESERVE OIL COMPANY's proposed location will be situated on the south-facing shoulder of a more or less east-west trending ridge. As a whole, this landform is marked by a gentle gradient. Surficial deposits are composed of generally loose silt loams and silty clay loams belonging to the Calcic Gypsiorthid subgroup and its intergrades. Limestone gravels commonly occur in most soils.

### Floristics

Areal soils host a low overstory of *Prosopis juliflora* and less frequent *Yucca glauca*. Observed cacti occurring on local soils include *Opuntia imbricata* and *Opuntia macrocentra*. Chief forbs of this association are *Perezia nana*, and *Gutierrezia sarothrae*. The Gramineae is represented mainly by *Scleropogon brevifolius*, *Hilaria mutica*, and *Bouteloua* sp.

### Cultural Resources

No cultural resources were observed during the course of this reconnaissance. Their overall absence is due mainly to the fact that lithic material essential for flaked-tool manufacture is lacking in the immediate vicinity as is shelter and potable water.

### Recommendations

NMAS recommends clearance for WESTERN RESERVE OIL COMPANY's proposed

Bevmor Federal 24 Well No. 1 and its access road and suggests that work-related activities proceed in accordance with company plans. Clearance, of course, is granted by the Bureau of Land Management.

#### Bevmor Federal 24 Well No. 2

#### Location

The proposed location will measure 400 X 400 ft on federal lands and will be situated 1980 ft from the north line and 1980 ft from the west line of:

Section 24, T5S, R24E, NMPM, Chaves County, NM

Thus it will be situated in the:

SE $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 24, T5S, R24E, NMPM, Chaves County, NM

The associated access road will measure 20 X 1780 ft and will be situated in the:

SE $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 24, T5S, R24E, NMPM, Chaves County, NM  
SW $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 24, T5S, R24E, NMPM, Chaves County, NM

Map Reference: USGS SHANNON DRAW QUADRANGLE, 15 Minute Series, 1967.

#### Terrain

The investigated location is situated on the slope of a gently trending slope of an extensive ridge system situated due west of the Pecos River. Local soils host limestone gravels in most instances. Pedons are dominated by the silt and clay separates and belong to the Calcic Gypsiorthid subgroup.

#### Floristics

Principal plants of this association are *Prosopis juliflora* and *Yucca glauca*. Forbs of this community are *Perezia nana*, *Gutierrezia sarothrae*, and *Euphorbia* sp. The Gramineae is represented by *Hilaria mutica* and *Scleropogon brevifolius*. The Cactaceae is represented by *Opuntia imbricata* and *Scleropogon brevifolius*.

### Cultural Resources

No cultural resources were recorded during this reconnaissance. In the past, this landform was occupied by task-specific social units engaged in hunting. Albeit not encountered, resources reflecting this type of usage include isolated projectile points and scrapers.

### Recommendations

NMAS recommends clearance for WESTERN RESERVE OIL COMPANY's proposed Bevmor Federal 24 Well No. 2 and its access road and *suggests* that work-related activities proceed in accordance with company plans. Clearance, of course, is granted by the Bureau of Land Management.