

UNITED STATES  
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  
ZONES ☐

2. NAME OF OPERATOR

ROBERT N. ENFIELD

3. ADDRESS OF OPERATOR

P.O. BOX 2431, SANTA FE, NEW MEXICO 87501

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

At surface

1980' FSL AND 1980' FWL OF SECTION 26

At proposed prod. zone

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

16 AIR MILES NORTHWEST OF CAPROCK, NEW MEXICO

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

800

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

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

-

19. PROPOSED DEPTH

2200'

20. ROTARY OR CABLE TOOLS

ROTARY

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

4009.6 GR

22. APPROX. DATE WORK WILL START\*

JUNE 18, 1982

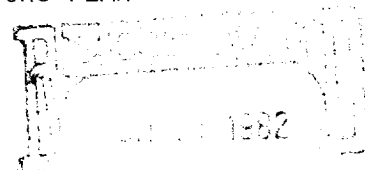
23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24# K-55	350'	SUFFICIENT TO CIRCULATE
7-7/8"	4-1/2"	9.5# K-55	2200'	SUFFICIENT TO CIRCULATE

PRODUCING ZONE WILL BE PERFORATED AND STIMULATED AS NECESSARY.

SEE ATTACHED FOR: SUPPLEMENTAL DRILLING DATA  
BOP SKETCH  
SURFACE USE AND OPERATIONS PLAN



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

Arthur R. Brown

Agent for

ROBERT N. ENFIELD

DATE

JUNE 15, 1982

(This space for Federal or State office use only)

(Orig. Sgd.) GEORGE H. STEWART

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

JUN 23 1982

JAMES A. GILBERT  
CHIEF, DISTRICT OFFICE

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section

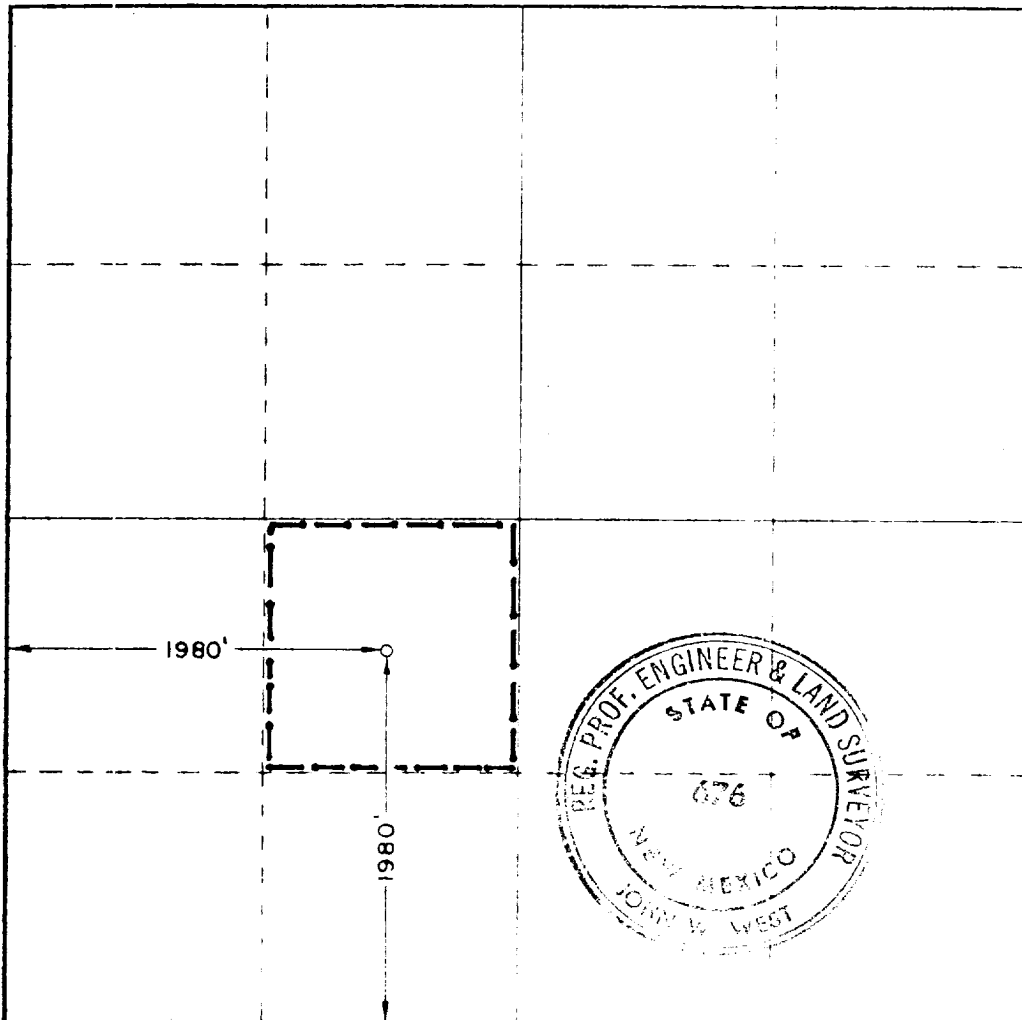
Operator <b>ROBERT N. ENFIELD</b>			Lease <b>FEDERAL 26</b>		Well No. <b>1</b>
Unit Letter <b>K</b>	Section <b>26</b>	Township <b>9 SOUTH</b>	Range <b>29 EAST</b>	County <b>CHAVES</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>SOUTH</b> line and <b>1980</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>4009.6</b>	Producing Formation <b>QUEEN</b>		Pool <b>WILDCAT</b>	Dedicated Acreage <b>40</b> 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.

*Arthur R. Brown*  
**Arthur R. Brown**

Position  
**Agent for**

Company  
**ROBERT N. ENFIELD**

Date  
**JUNE 15, 1982**

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 of Survey  
**6-4-82**

Registered Professional Engineer and/or Land Surveyor

*John W. West*

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

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960

## SUPPLEMENTAL DRILLING DATA

ROBERT N. ENFIELD

WELL NO. 1 FEDERAL 26

1. SURFACE FORMATION: Quaternary.

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler Anhydrite	850
Yates	1250
Queen	1850

3. ANTICIPATED POSSIBLE HYDROCARBON BEARING ZONES:

Queen	Oil
-------	-----

4. PROPOSED CASING AND CEMENTING PROGRAM:

CASING SIZE	SETTING DEPTH		WEIGHT	GRADE	JOINT
	FROM	TO			
8-5/8"	0	350	24#	K-55	STC
4-1/2"	0	2200	9.5#	K-55	STC

8-5/8" casing will be cemented with sufficient Class "C" cement to circulate to surface.

4-1/2" casing will be cemented with sufficient Light cement, tailed in with 200 sacks of Class "C" cement, to circulate to the surface.

5. PRESSURE CONTROL EQUIPMENT:

Blowout prevention equipment, while drilling below the 8-5/8" casing seat, will be a double ram, 2000 psi working pressure preventer.

BOP sketch is attached.

6. CIRCULATING MEDIUM:

Surface to 350 feet: Fresh water with gel or lime as needed for viscosity control.

350 feet to Total Depth: Water base drilling fluid conditioned as necessary for control of viscosity, pH, weight, and water-loss.

7. AUXILIARY EQUIPMENT:

Drill string safety valves will be maintained on the rig floor while drilling operations are in progress.

8. TESTING, LOGGING, AND CORING PROGRAMS:

Drill stem tests will be made when samples, drilling time, and other data indicate a test is warranted.

It is planned that electric logs will include GR-CNL-FDC logs.

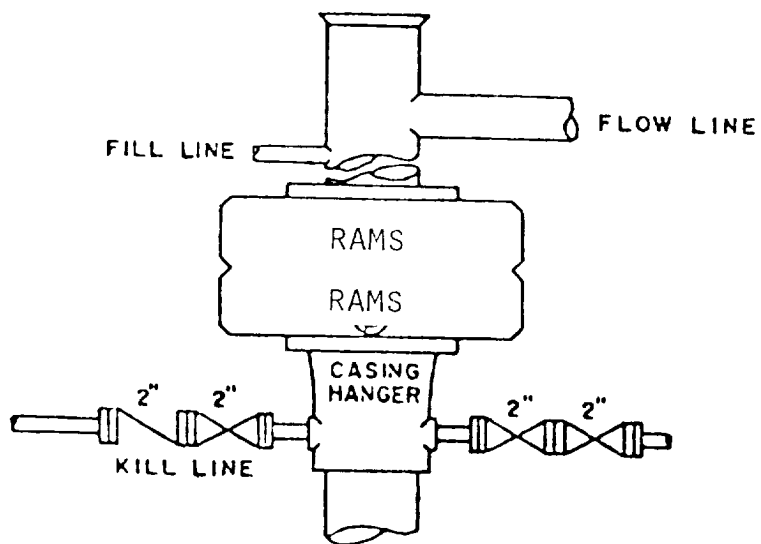
No coring is planned.

9. ABNORMAL PRESSURES, TEMPERATURES, OR HYDROGEN SULFIDE GAS:

None anticipated.

10. ANTICIPATED STARTING DATE:

It is planned tha work will start as soon as this application is approved with drilling and completion operations lasting about 30 days.



BOP STACK

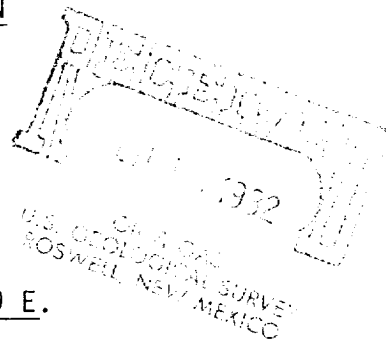
2000 PSI WORKING PRESSURE

BOP ARRANGEMENT

SURFACE USE AND OPERATIONS PLAN

FOR

ROBERT N. ENFIELD  
WELL NO. 1 FEDERAL 26  
1980' FSL & 1980' FWL SEC. 26, T. 9 S., R. 29 E.  
CHAVES COUNTY, NEW MEXICO



LOCATED: 16 air miles northwest of Caprock, New Mexico.

FEDERAL LEASE NUMBER: NM-15876

LEASE ISSUED: July 1, 1972. Lease expires June 30, 1982, absent production or diligent drilling operations in progress on such date.

RECORD LESSEE: Robert N. Enfield.

ACRES IN LEASE: 800.

SURFACE OWNERSHIP: Federal.

GRAZING PERMITTEE: Sand Ranch  
Carleton Davis  
2400 Ross  
Clovis, New Mexico 88101

POOL: Wildcat.

POOL RULES: Statewide. 40 acre spacing for oil.

EXHIBITS: A. Road Map  
B. Plat Showing Existing Wells and Existing Roads  
C. Drilling Rig Layout  
D. Topo Plat

1. EXISTING ROADS:

- A. Exhibit "A" is a road map showing the location of the proposed well as staked. Point "A" on the plat is on US 380 at Milepost 187.2, approximately 41 miles west of Tatum, New Mexico. To go to the proposed well site from this point, exit US 380 to the north onto the caliche road. There is a Sand Ranch sign here. Go northerly and northeasterly, as shown on Exhibits "A" and "D", approximately 5.3 miles, passing the Glenn ranch house at about 3.6 miles, to a point where the ranch road intersects El Paso's pipeline road. Turn northwest onto the pipeline road and go about 0.6 mile. The proposed well site is about 0.8 mile north-northeast of this point.
- B. Exhibits "B" and "D" show existing roads in the vicinity of the well site. Existing roads are color coded on Exhibit "B".

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be 15 feet wide and approximately 4300 feet long. The proposed new road is labeled and color coded red on Exhibit "B" and the center line of the new road has been staked and flagged. Blading and minor spot repair may be necessary for the 2.3 miles of existing ranch and pipeline road to be utilized for access road north of the Glenn ranch house. See Exhibit "D".
- B. Surfacing Material: Caliche. Watered, compacted, and graded.
- C. Maximum Grade: One percent.
- D. Turnouts: One.
- E. Drainage Design: The new road will be crowned with drainage to both sides.
- F. Culverts: None required.
- G. Cuts and Fills: None necessary.
- H. Gates and Cattle Guards: A cattle guard will be installed in the fence which is located about 0.6 mile south of the well site.

3. LOCATION OF EXISTING WELLS:

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

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. There are no production facilities on the leasehold at the present time. If this proposed well is productive, necessary production facilities will be located on the well pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is not contemplated that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site over existing and proposed roads, or will be moved to the well site by temporary pipeline laid on the ground alongside existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche needed for construction work will be taken from an existing pit on privately owned land in the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 35, T.9 S., R.29 E., Chaves County, New Mexico, and will be moved to the well site over existing and proposed roads. Location of the caliche pit is shown on Exhibit "D".

7. METHOD OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits.
- D. Oil produced during tests will be stored in test tanks until sold.
- E. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of the trash pit is shown on Exhibit "C".
- F. All trash and debris will be buried or removed from the well site within 30 days after completion of drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.



9. WELL SITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, and trash pit and the location of major rig components.
- B. No cut and fill will be necessary. Clearing and levelling of the well site will be required.
- C. The pad and pit area has been staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are dry.
- C. After abandonment, all equipment, trash and junk, will be removed and the well site will be cleaned. Any special rehabilitation and/or special revegetation requirements of the surface management agency will be complied with and will be accomplished as rapidly as possible.

11. OTHER INFORMATION:

- A. Topography: Regionally the land surface is gently undulating and dunny. In the immediate area, the land surface slopes gently to the south.
- B. Soil: Top soil at the well site is sand.
- C. Flora and Fauna: The vegetative cover is sparse and consists of mesquite, yucca, shinnery oak, sand sage, weeds and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, lakes, streams, or ponds in the immediate area.
- E. Residences and Other Structures: None within two miles of the proposed well site.
- F. Archaeological, Historical, or Other Cultural Sites: None observed in the area.

G. Land Use: Grazing and wildlife habitat.

H. Surface Ownership: Federal.

12. OPERATOR'S REPRESENTATIVE:

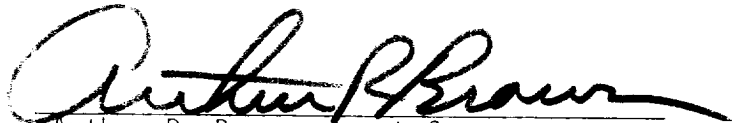
The representative responsible for assuring compliance with the approved Surface Use and Operations Plan is:

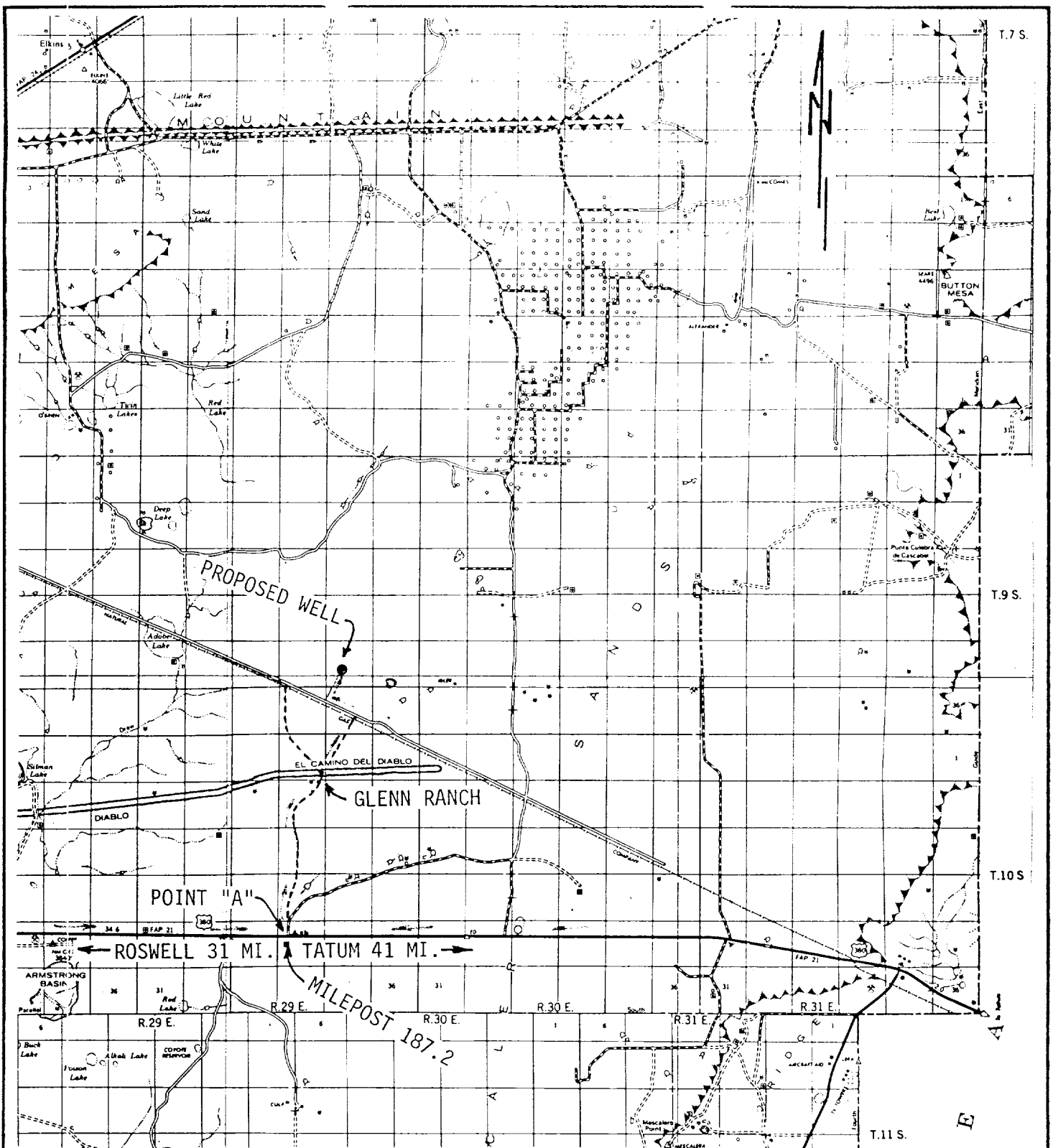
James F. O'Briant  
O'Briant Engineering  
P.O. Box 10487  
Midland, Texas 79702  
Office Phone: 915-683-5511  
Home Phone: 915-694-8907

13. CERTIFICATION:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Robert N. Enfield and his contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

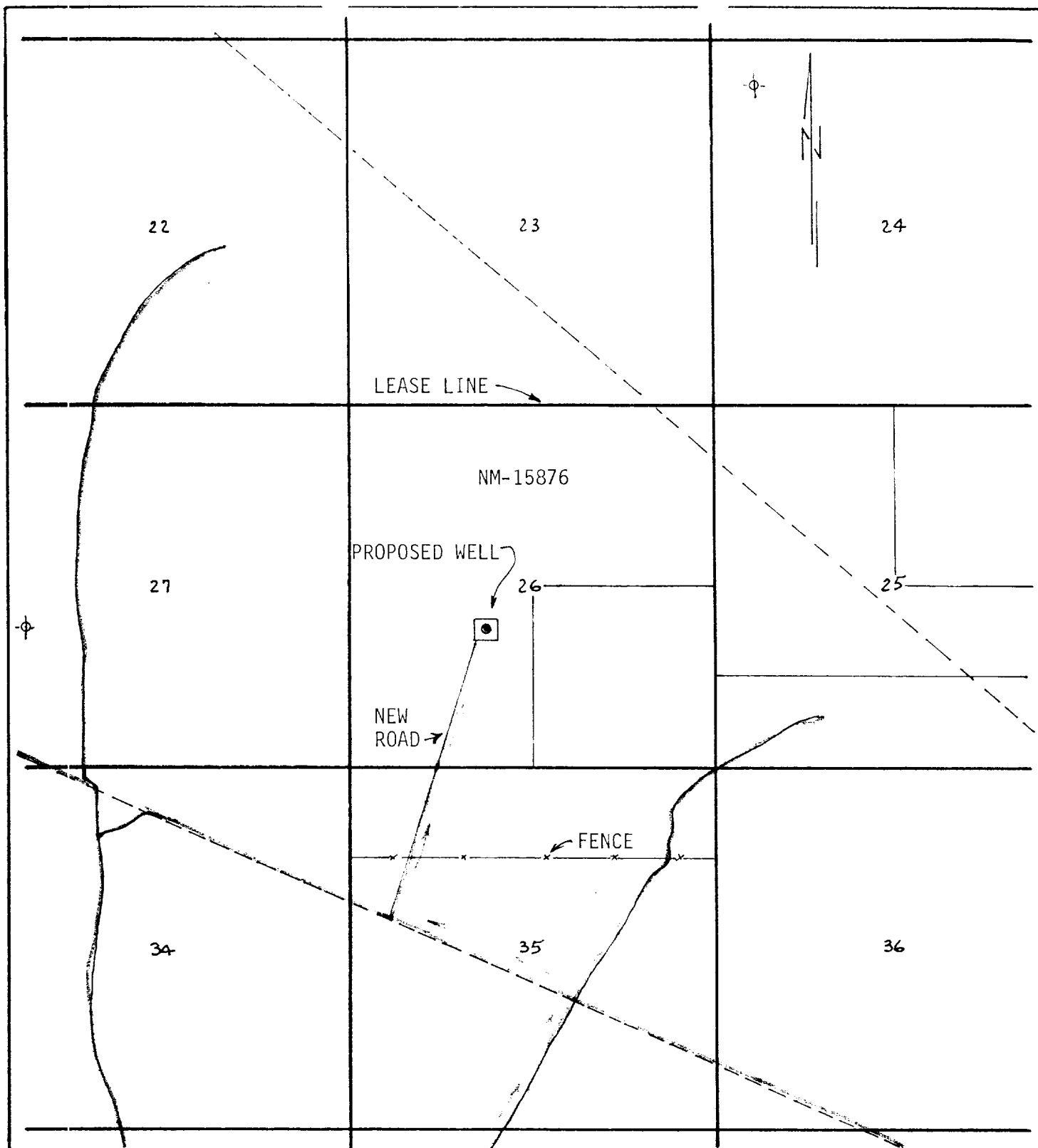
June 14, 1982  
Date:

  
Arthur R. Brown, Agent for  
ROBERT N. ENFIELD



# EXHIBIT "A"

ROBERT N. ENFIELD  
 WELL NO. 1 FEDERAL 26  
 1980'FSL & 1980'FWL SEC.26, T.9 S., R.29 E.  
 CHAVES COUNTY, N.M. SCALE: 1/3" = 1 MI.

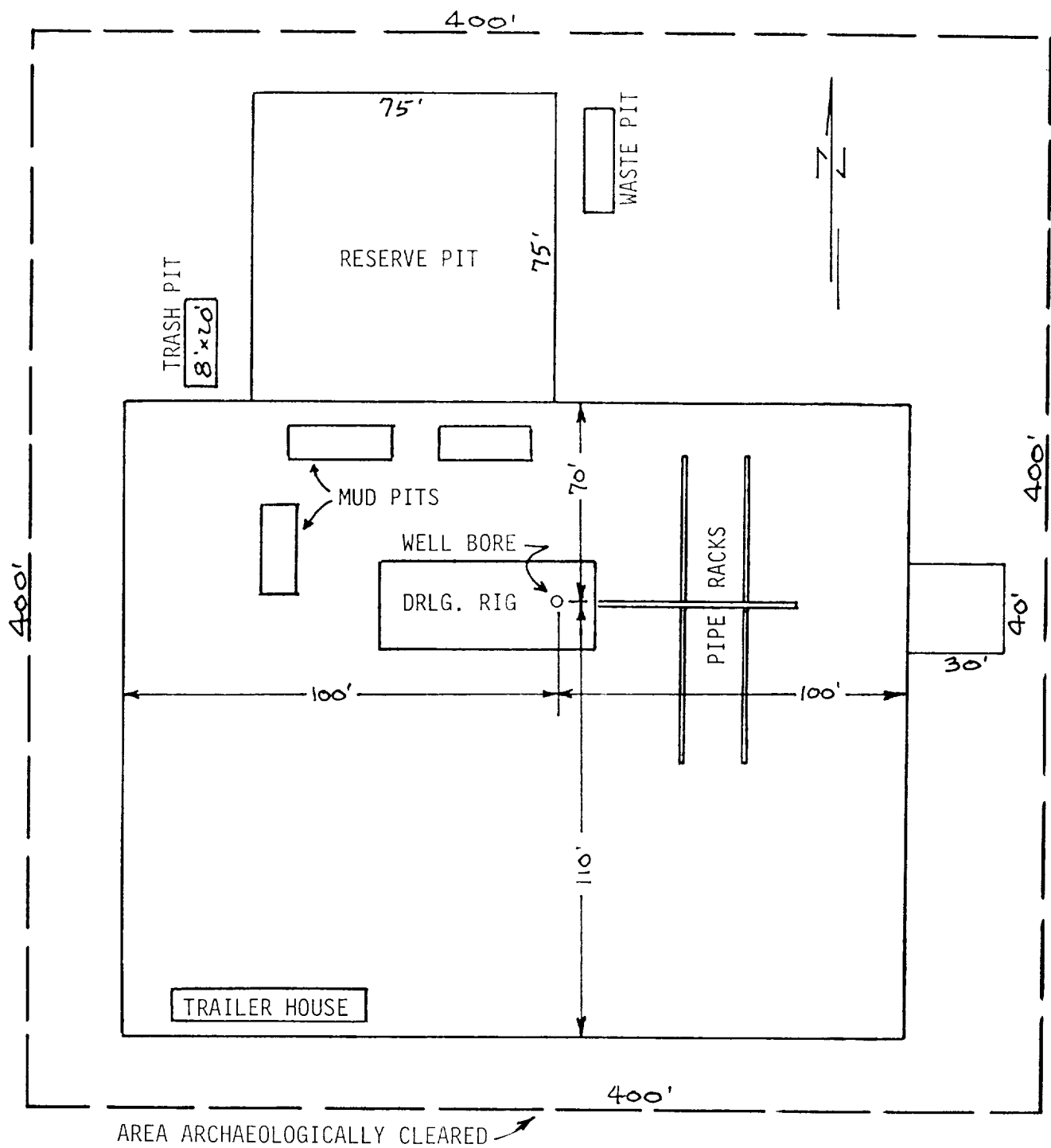


LEGEND:

- ⊕ Plugged Well
- Proposed Well
- Ranch or Pipeline Road
- Proposed New Road

EXHIBIT "B"

ROBERT N. ENFIELD  
 WELL NO. 1 FEDERAL 26  
 1980' FSL & 1980' FWL SEC. 26, T. 9 S., R. 29 E.  
 CHAVES COUNTY, N.M. SCALE: 1" = 2000'



# EXHIBIT "C"

ROBERT N. ENFIELD  
 WELL NO. 1 FEDERAL 26  
 DRILLING RIG LAYOUT  
 SCALE: None

