

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

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. <b>LC 031670 (6)</b>
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR <b>CONTINENTAL OIL Co.</b>		7. UNIT AGREEMENT NAME <b>WARREN</b>
3. ADDRESS OF OPERATOR <b>Box 460, Hobbs, N.M. 88240</b>		8. FARM OR LEASE NAME <b>WARREN UNIT</b>
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface <b>660' FSL &amp; 660' FWL of SEC. 21</b> At proposed prod. zone <b>SAME</b>		9. WELL NO. <b>47</b>
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*		10. FIELD AND POOL, OR WILDCAT <b>WARREN BLINERY</b>
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 BLK. AND SURVEY OR AREA <b>SEC. 21, T20S, R38E</b>
16. NO. OF ACRES IN LEASE <b>1920.92</b>	17. NO. OF ACRES ASSIGNED TO THIS WELL <b>40</b>	12. COUNTY OR PARISH <b>LEA</b>
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH <b>7030'</b>	13. STATE <b>N.M.</b>
21. ELEVATIONS (Show whether DF, RT, GR, etc.) <b>3546' GR.</b>		20. ROTARY OR CABLE TOOLS <b>ROTARY</b>
22. APPROX. DATE WORK WILL START*		<b>5-10-77</b>

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8" New	32.30*	1500'	625 SX. CIRC.
8 3/4"	7" New	23 & 26*	7030'	1155 SX.

IT IS PROPOSED TO DRILL A STRAIGHT HOLE TO A TD OF 7030' AND COMPLETE AS A DUAL OIL WELL IN THE BLINERY & TUBB ZONES.

MUD PROGRAM: 0-1500' FRESH WATER; 1500-7030', SALT GEL, 9.0-10.0\*.

SEE ATTACHED FOR B.O.P. PROGRAM.

SEE ATTACHED PROPOSED WELL PLAN FOR FORMATION TOPS, LOGGING, ETC.

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. SIGNATURE Wm. A. Rutherford TITLE ADMIN. SUPERV. DATE 3-2-77

(This space for Federal or State office use)

PERMIT NO. Unless Drilling Operations Have

APPROVAL DATE

Commenced, this drilling approval

APPROVED BY Expires 6-30-77 TITLE

CONDITIONS OF APPROVAL, IF ANY:

"APPROVAL TO FLARE GRANTED WHILE DRILLING AND TESTING."

APPROVED  
AS AMENDED  
MAR 20 1977  
BERNARD MOROZ  
ACTING DISTRICT ENGINEER

\*See Instructions On Reverse Side

USGS (6), NMFCU PARTNERS (4), FILE

RECEIVED

APR 1977

CIL CONSERVA, OF LONNA,  
HOBBS, H. M.

Attachment to Form 9-331 C  
Application for Permit to Drill

Continental Oil Company, Warren Unit No. 47  
660' FSL and 660' FWL of Section 21, T-20S, R-38E  
Lea County, New Mexico

1. The geologic name of the surface formation is Tertiary Sand.
2. The estimated tops of important geologic markers are shown on the attached Proposed Well Plan.
3. The estimated depths at which anticipated water, oil, gas or other mineral-bearing formations to be encountered are as follows:  
  
Santa Rosa SS 300' water  
Salado 1540' salt  
Blinebry 5900' oil  
Tubb 6410' oil
4. The proposed casing program is as follows:  
  
Surface - new 9 5/8" 32.30# K-55 STC set at 1500'  
Production - new 7" 23# and 26# K-55 STC set at 7030'
5. A drawing of an API Series 900 Blowout Preventer Specification is attached. Pipe rams and blinds will be checked to 1,000 PSI for 30 minutes when BOP is installed. BOP will be checked when casing string is set and operated daily for checks.
6. The proposed mud program is as follows:  
  
0-1500' spud mud                      8.5-9.0 pounds per gallon  
1500'-7030' salt gel                9.0-10.0 pounds per gallon
7. The auxiliary equipment to be used is:  
  
(1) kelly cocks  
(2) floats at the bit
8. It is proposed to run GR-CNL-FDC-DLL logs from TD to 2600'.
9. No abnormal pressures or temperatures are expected to be encountered in this well.
10. The anticipated starting date for this well is May 10, 1977, with a duration date of approximately 21 days.

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form O-124  
Superseded O-124  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

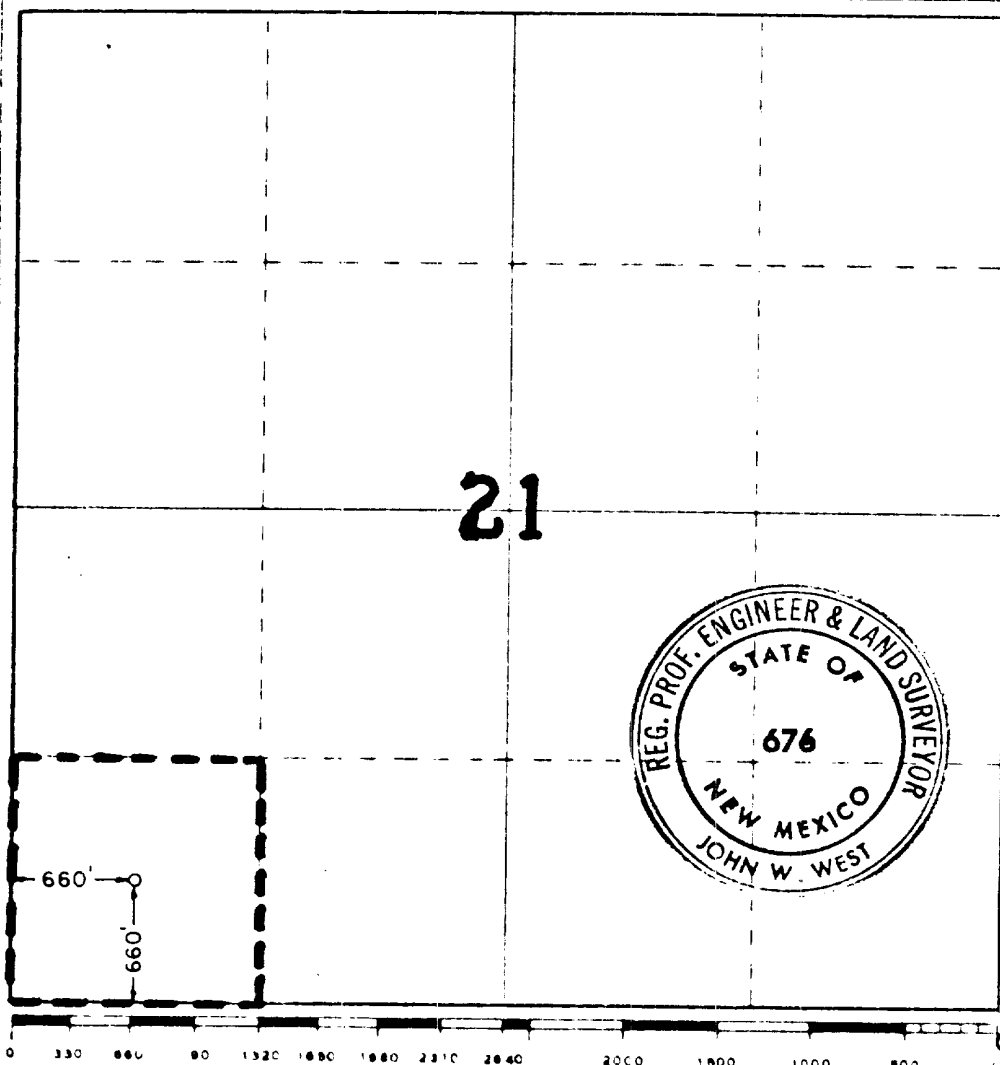
Operator <b>CONTINENTAL OIL COMPANY</b>			Lease <b>WARREN UNIT</b>		Well No. <b>47</b>
Unit Letter <b>M</b>	Section <b>21</b>	Township <b>20 South</b>	Range <b>38 East</b>	County <b>Lea</b>	
Actual Footage Location of Well: <b>660</b> feet from the <b>South</b> line and <b>660</b> feet from the <b>West</b> line					
Ground Level Elev. <b>3545.5</b>	Underlying Formation <b>BLINEBRY &amp; TUBB WARREN</b>			Dedicated Acreage <b>40</b>	

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.

*Wm. A. Dunning*  
**ADMIN. SURV.**  
**CONTINENTAL OIL CO.**  
**3-2-77**

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.

**February 8, 1977**

Date Surveyed

Registered Professional Engineer and Land Surveyor

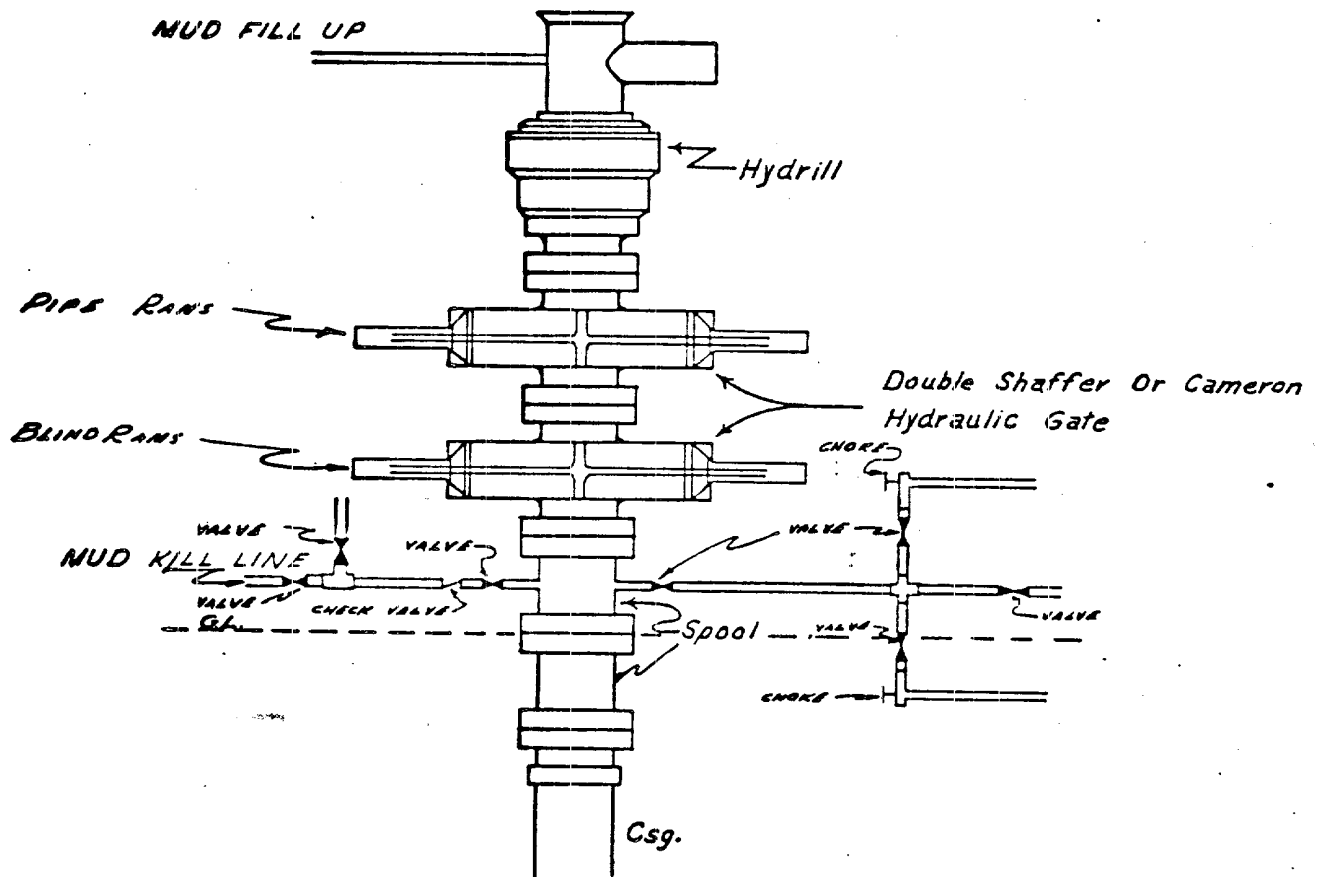
*John W. West*  
676

LOCATION: 660' FSL & 660' L of  
Sec. 21, T20S, R38E

STATE: Mexico

DEPTH	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE (IN)	CASING		FRACTURE GRADIENT (PPG)	FORMATION PRESSURE GRADIENT (PPG)	MUD	
					SIZE (IN)	DEPTH (FT)			WEIGHT (PPG)	TYPE
	Tertiary Surface									
	Santa Rosa SS. 300-600									
	Rustler Anhy 1450 Salado Salt 1540			12-1/4	9-5/8	1500			8.5 9.0	Fresh Water
	Tansill Anhy 2590 Yates SS 2730									
	San Andres dolo 4250									
	Glorieta SS 5430									
	Blinebry dolo 5900		GR-CNL-FDC DLL TD 2600				14.9	Less than 8.5		
	Tubb SS 6410									
	Drinkard dolo 6670							Less than 8.5		
	TD 7030									
				8-3/4	7"	7030	15.1		9.0 10.0	Salt Gel

CONTINENTAL OIL COMPANY  
Blow-out Preventer Specifications



NOTE:

Manual and Hydraulic controls with closing unit no less than 75' from well head.  
Remote controls on rig floor.

*DUE TO SUBSTRUCTURE CLEARANCE,  
HYDRILL MAY OR MAY NOT BE USED.*

**CONTINENTAL OIL CO.  
WARREN UNIT NO. 47**

March 3, 1977

District Engineer  
U. S. Geological Survey

Gentlemen:

RE: Warren Unit NO. 47

This refers to the Form 9-331C, Application to Drill, Deepen or Plugback accompanying this letter. The undersigned hereby states that he has personally contacted Earl Kornejok, the owner of the surface land where the proposed work is to be conducted and advised him of the proposed work, the construction site and pertinent roads included in the project. It is further stated that, upon being fully advised of the extent of the work and the effect upon the surface, said owner has consented to the said work and that agreement as to the compensation for damages to the surface estate has been reached.

It has been agreed, subject to change at that time, that upon abandonment of operations the roads shall be (ripped or left intact) and the pad shall be (ripped or left intact).

Dave Samers

STATE OF NEW MEXICO  
COUNTY OF LEA

Subscribed and sworn to before me this 7th day of March, 1977

U. M. Hoover  
Notary Public

My commission expires 2-20-81

SURFACE USE PLAN  
Continental Oil Company, Warren Unit No. 47  
660' FSL and 660' FWL of Section 21, T-20S, R-38E,  
Lease LC031670(b), Lea County, NM

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately ten miles south of Hobbs, New Mexico. The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

- A. The proposed well site is 660' FSL and 660' FWL of Section 21, T-20S, R-38E, Lea County, New Mexico.
- B. Exhibit "A" is a portion of a New Mexico road map showing existing black top roads. Directions to the location (outlined in red on map) from Hobbs, New Mexico are as follows: From the Stanolind Road on the south edge of Hobbs travel south 9.6 miles on Highway 18 and turn west at "Bicentennial Cattleguard". Go west 1.3 miles, go north .5 mile to Well No. 10, then west .25 mile and north .25 mile to Well No. 43. Proposed location is one location west of Well No. 43.
- C,D,E. The access roads are shown on Exhibits "B" and "C".
- F. No improvement or maintenance are anticipated for the existing roads.

2. Planned Access Roads

- A. Width and Length: New road required will be 12' wide and 1320' long. This new road is labeled on Exhibit "B" and color coded on Exhibit "C". (staked)
- B. Turnouts: None
- C. Drainage Design: New road will have a drop of 6" from center line on each side.
- D. Culverts, Cuts and Fills: None. No cuts required, only the location must be leveled.
- E. Surfacing Material: Six inches of caliche, bladed, watered and compacted.



F. Gates, Cattleguards, Fences: None required

G. The proposed road is staked.

3. Location of Existing Wells

See Exhibit "C"

4. Location of Existing and/or Proposed Facilities

- A. Tank Batteries: The existing production header is located in the SW/4 of Section 27, and located on Exhibit "C".
- B. Producing Facilities: No additional producing facilities are required.
- C. Oil Gathering Lines: The flowline will lay (not buried) approximately 10,500' south and east following roads to the production header in SW/4 of Section 27, as shown on Exhibit "C".
- D. Other Lines: No additional gas gathering, injection or disposal lines will be required.
- E. Rehabilitation: Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.

5. Water Supply

The supply of water will be hauled from Eunice, New Mexico.

6. Source of Construction Materials

- A. Caliche for surfacing the new road and the well pad will be obtained from an existing pit in the SE/SE Section 15, T-20S, R-38E as shown on Exhibits "B" and "C".
- B. Caliche to be purchased from Mr. Earl Kornegay.
- C. The caliche to be hauled, from the location of caliche pit, travel 1 3/4 miles south on Highway 18, west 1.3 miles, north .5 mile, west .25 mile and north .25 mile to Well No. 43, then west .25 mile on new road to No. 47 location.

7. Methods for Handling Waste Disposal

Waste Disposal: Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible locations within

drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" of dirt. See Exhibit "D" for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be collected in tanks until hauled to an approved disposal system, or separate disposal applications will be submitted to the survey for appropriate approval.

8. Ancillary Facilities

None

9. Well Site Layout

Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, reserve pit, trash barrel, etc. The reserve pit will be lined with plastic. The pad and pits are staked.

10. Plans for Restoration of Surface

Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.

11. Other Information

- A. Terrain: Low rolling sand hills. See Exhibit "B", topographic map of area.
- B. Soil: Sandy
- C. Vegetation: Sparse, Shinnery
- D. Surface Use: Grazing
- E. Ponds and Streams: None within one mile
- F. Water Wells: None within one mile
- G. Residences and Building: None within one mile
- H. Arroyos, Canyons, Etc.: There are no significant surface features, see attached Exhibit "B".
- I. Well Sign: Sign identifying and locating well will be maintained at drill site with the spudding of the well.
- J. Open Pits: All pits containing mud or other liquids will be fenced.

K. Archaeological Resources: None observed

12. Operator's Representative

Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

Production and Drilling  
W. D. Cates or D. A. Sowers  
1001 North Turner  
Hobbs, New Mexico 88240  
Phone: 393-4141

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 Continental Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

3-7-77

Date

D. A. Sowers

D. A. Sowers

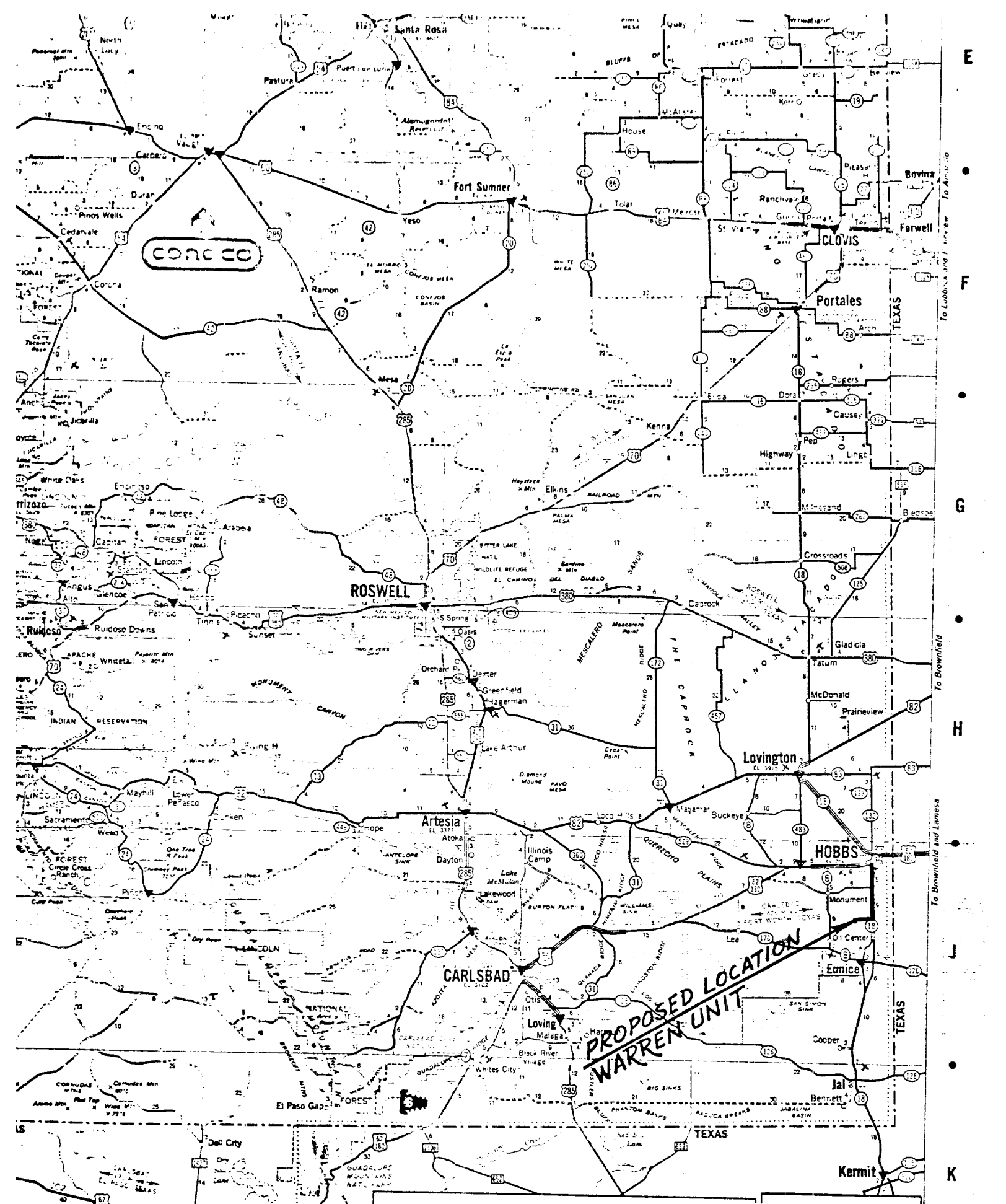
Production Superintendent

rej

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OIL CONSERVATION COMM.  
HOBBS, N. M.



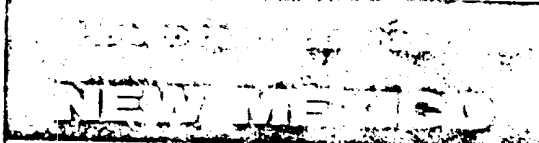
LOCATIONS WHERE CONOCO PRODUCTS ARE

- ▼ Locations on Interstate Highways, toll roads, or major highways where CONOCO Fuel Stops are open.
  - ▼ Locations of CONOCO Fuel Dispensers.




CONTINENTAL OIL CO.  
WARREN UNIT  
NO. 46 & 47

EXHIBIT "A"

[illegible]

SCALE OF MILES



ONE INCH EQUALS APPROXIMATELY 21.6 MILES

## HIGHWAY MARKERS

INTERSTATE  UNITED STATES  STATE  TEXAS FARM OR 

## ROAD CLASSIFICATIONS

CONTROLLED ACCESS DIVIDED HIGHWAYS	Divided	Undivided
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OTHER DIVIDED HIGHWAYS

### PRINCIPAL THROUGH HIGHWAYS

OTHER THINGS TO REMEMBER

### MILEAGES

MILEAGE BETWEEN TOWNS  
AND JUNCTIONS 

MILEAGE BETWEEN DOTS           

## SPECIAL FEATURES

STATE PARKS

With Campaigns  $\Delta$       Without Campaigns  $\Delta$

RECREATION AREAS

With Computers  $\Delta$       Without Computers  $\Delta$

**PORTS OF ENTRY**

POINTS OF INTEREST

POINTS OF INTEREST

## POPULATION SYMBOLS

State Capital 2,500 to 5,000

☐ Under 1,000      ☒ 5,000 to 10

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**MILITARY AIRPORTS**

OTHER AIRPORTS

TOURIST INFORMATION      ✱

SKI AREAS 7

SELECTED REST AREAS T

BOAT RAMP

TIME ZONE BOUNDARY . . . .

555

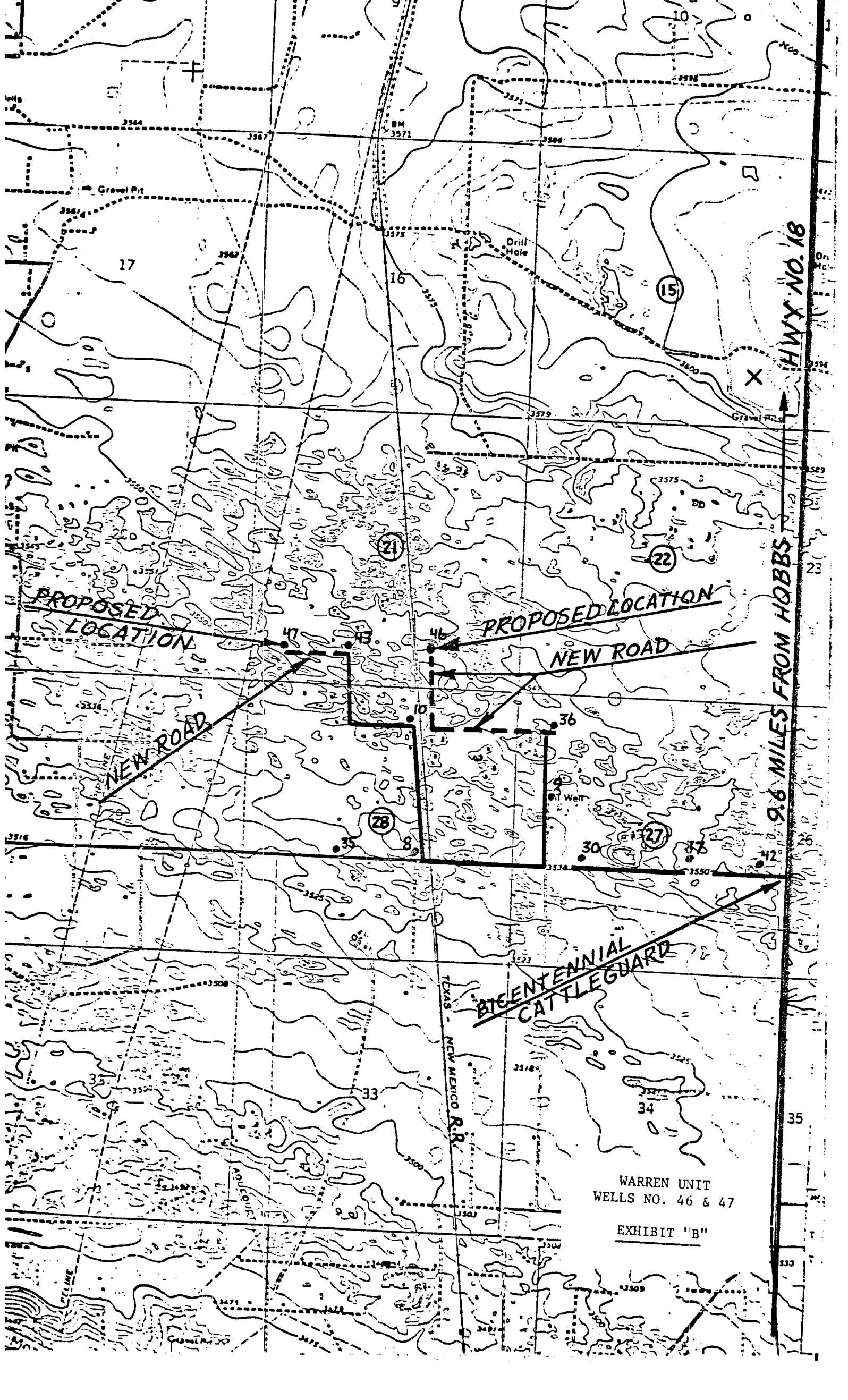
☒ 25,000 to 30,000

☒ 50,000 to 100,000

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APR 1977

OIL CONSERVATION COMM.  
DOBBY, N. M.



HWY NO. 18

9.6 MILES FROM HOBBS

WARREN UNIT  
WELLS NO. 46 & 47

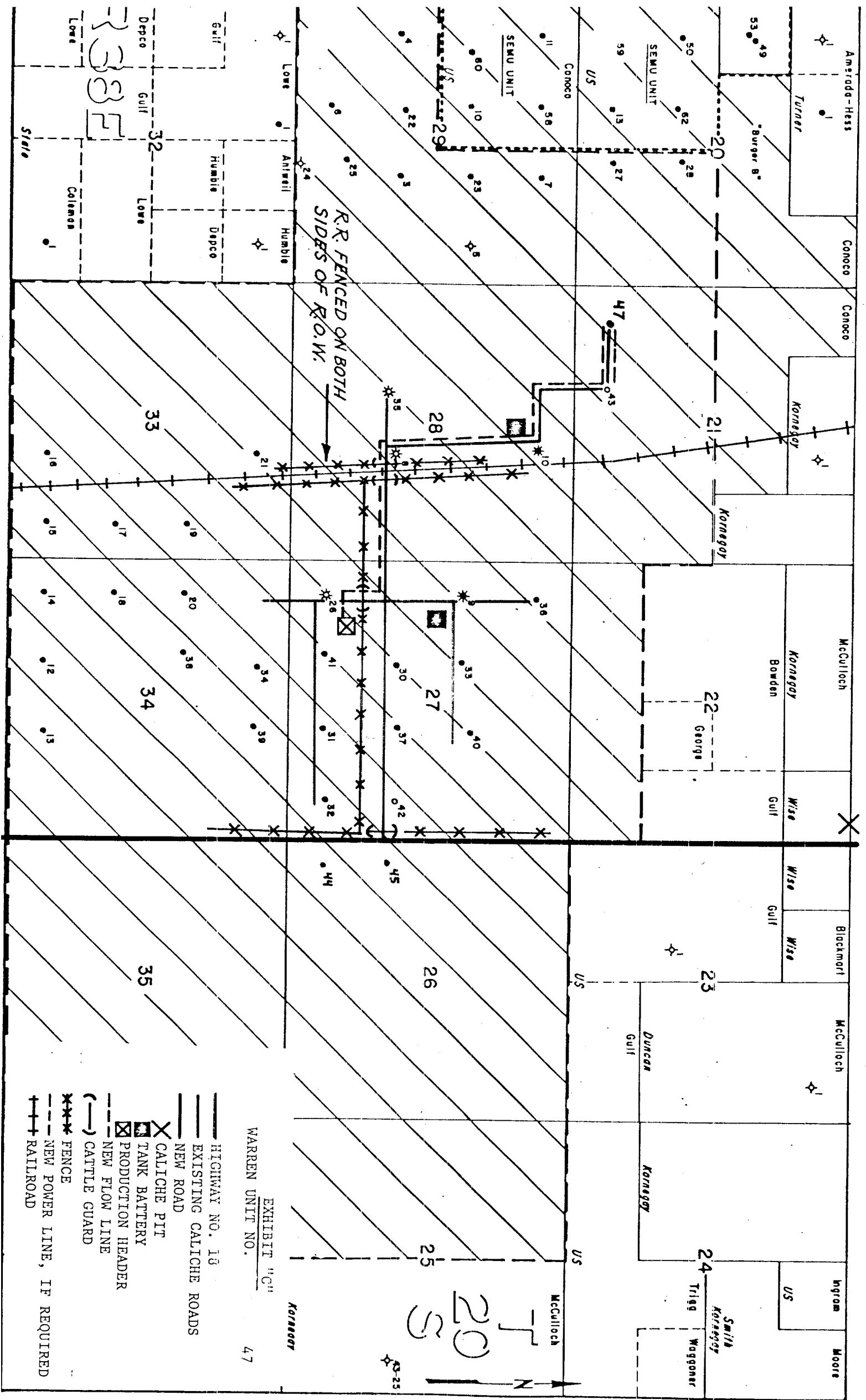
EXHIBIT "B"

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HOBBS, R. M.





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OIL CONSERVATION COMM.  
HOBBS, N. M.



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CH. COMM. & INTR. COMM.  
HARRIS, R. M.