#### SUBMIT IN TRIPLICATE\*

(Other instruction reverse side)

Form approved. Budget Bureau No. 42-R1425.

5. LEASE DESIGNATION AND SERIAL NO.

## UNI.\_D STATES DEPARTMENT OF THE INTERIOR

**GEOLOGICAL SURVEY** APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK DRILL 🔀 7. UNIT AGREEMENT NAME DEEPEN PLUG BACK [ b. TYPE OF WELL WELL X MULTIPLE ZONE 8. FARM OR LEASE NAME OTHER 2. NAME OF OPERATOR CONTINENTAL OIL COMPANY 10. FIELD AND POOL, OR WILDCAT Mar Dolaware 1650' FEL OF Sec. 35 AND DIRECTION FROM NEAREST TOWN OR POST OFFICE 15. DISTANCE FROM PROPOSED\*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT 16. NO. OF ACRES IN LEASE NO. OF ACRES ASSIGNED TO THIS WELL (Also to nearest drlg. unit line, if any) 494.05 24.90 18. DISTANCE FROM PROPOSED LOCATION\*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 20. ROTARY OR CABLE TOOLS COTARY
22. APPROX. DATE WORK WILL START\* 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 309 12-12.76 PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE SIZE OF CASING WEIGHT PER FOOT QUANTITY OF CEMENT 12-4" 8 3/ NOW スソダ 400 SX CIRC 400 SX IT 15 Proposed to Drill A Straight Hole to A T.D. of 4600' and complete As A Oil Well IN The El Mar Dolowire, See Attached For B.O.P. Program, Mud Program Formation TOPS, LOSSING ETC. Connenced, Suin emilling approved 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. (This space for Federal or State office use) PERMIT NO. APPROVAL DATE: APPRUVED AS AMENDED APPROVED BY CONDITIONS OF APPROVAL, IF ANY: COMPRIORS OF 4565-6, File ACTING DISTRICT ENGINEER \*See Instructions On Reverse Side

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

Contiental Oil Company, North El Mar Unit No. 60 500' FSL and 1650' FEL of Section 35, T-26S, R-32E Lea County, New Mexico

- 1. The geologic name of the surface formation is Triassic SS, Sh.
- 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 330' water Salado 720' salt Base salt 4280' Lamar 4480' Lime Ramsey 4520' oil, gas and water

4. The proposed casing program is as follows:

Surface New 8 5/8" 24# K55 STC set at 650' Production New 5 1/2" 14# K55 STC set at 4600'

- 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:

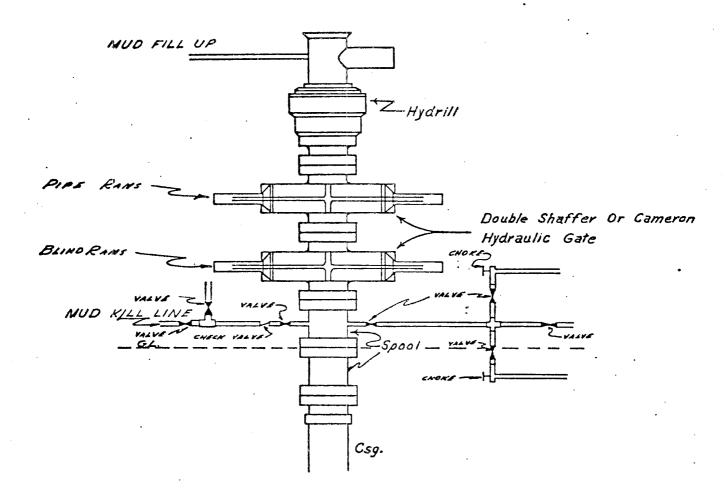
0-650' spud mud 8.5-9.0 pounds per gallon 650' - 4600' salt gel 9.0-10.0 pounds per gallon

- 7. The auxiliary equipment to be used is:
  - (1) kelly cocks
  - (2) floats at the bit
- 8. It is proposed to run 2" and 5" GR-BHC Sonic Logs from TD to 3800' and DIL from TD to 4000'.
- No abnormal pressures or temperatures are expected to be encountered in this well.
- 10. The anticipated starting date for this well is December 12, 1976 with a duration date of approximately ten days.

# NEW MEXICO OIL CONSERVATION COMMISSION WELL LO TION AND ACREAGE DEDICATION PL

All distances must be from the outer boundaries of the Section North Elmar CONTINENTAL OIL COMPANY wr. sr. ip 26 South 32 East Lea 500 1650 El Mar Dolaware Delaware 3093.5 1. Outline the acreage dedicated to the subject well by colored penul or hachure marks on the plat below 2. If more than one lease is dedicated to the well, only re each and identify the ownership thereof (both as to working interest and rovalty) 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. Tes No. If answer is "ves." type of consolidation If answer is "no," list the owners and tract descriptions which have actually been consolidated. I se 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 Commis-CERTIFICATION Bill Genty Admin. Supervisor Continental oiles. Partial Soction 10-19.76 I hereby certify that the well location shown on this plat was plotted from field knowledge and belief Carryon Sept. 19, 1976 1650

# CONTINENTAL OIL COMPANY Blow-out Preventer Specifications



API Series 900

## 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.

N. El Mar UNIT NO. 60

WELL NAME: North El Mar Unit #60

COUNTY: Lea County, New Mexico

LOCATION: 500' FS & 1650' FEL, Sec. 35,

STATE: 3085' est. grd. 3095' est DF

T-26S, R-32E

			· TYPE OF		CASING		ſŭ 🏲	20 L	MUD	
EPTH	FORMATION	DRILLING	FORMATION	HOLE			FRACTURE	FORNATION PRESSURE GRADIENT		
	TOPS B TYPE	PROBLEMS	EVALUATION	SIZE	SIZE	DEPTH	FRAC	FORN PRES	V:EIGHT	ТҮРЕ
	Triassic ss	ł .								
	Santa Rosa 553	30' Wfr.	•							Fresh
	Rustler 510 R	earl		12-1/4	8-5/8	650			8.5 9.0	Water
	Salado 720 🔏	er	·					·	2	
										-
							•	•	•	
		;	•			٠				
		,								
		·		•						-
		•			·					
		•		٠.						
		· .				•				
		•	•		·					
			•	1						
		7 OU 5 FU								-
	11 11200	Logs 2" & 5" BHC Sonic			.		•			Salt
	Basa 5a/f 4280 Lamar 4480' La	w/gamma ray TD 3800'			-		70.0	Less	9.0	Water
	Ramsey 4520'	DIL TD 4000'		7-7/8	5-1/2	4600	12.0 13.0	than 8.5	10.0	Ge1
	(Includes 45'	1D 4000							İ	
	shoe jt.)		•	-						İ
	·	•						[		7
-			] 				.	I		
							- 1	1		7
				.	l				1	
		•	•				1			
		-		}						
		•	·					1		
			.						1	
								.		
			į		. 1			•		
						1		.		
							1	1	1	
				-						
	Ī				.  -	-			1	
			• .	.						
					ŀ					
										-
	·									
:e			Prepared	by '	~~~~ <u>~</u>				•	

					CANTENNAM CONTRACTOR PORTS
:c	en un	Prep	ared by t	a terrego presidente e la pro-	•
roved			THE STATE OF THE STATE OF		144
Control	AND A STATE OF THE PARTY OF THE		Grand to an and the state of the		

### SURFACE USE PLAN

Continental Oil Compay, North El Mar Unit No. 60 500' FSL and 1650' FEL of Section 35, T-26S, R-32E Lease NM02791A, Lea County, NM

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 42 miles on a direct line southwest of Eunice, 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 500' FSL and 1650' FEL of Section 35, T-26S, R-32E, 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 maps from Eunice, New Mexico are as follows: from the blinking light at Conoco station in Eunice, travel 2.5 miles south; turn west on Delaware Basin Road and go 32.2 miles to Highway No. 128; turn west and travel 9.3 miles; turn south on the Orla Highway and go 13.4 miles and turn east 3.3 miles, turn south .2 mile, turn east .1 mile, turn south .2 mile, turn east .4 mile and the location road stakes are on the north side of the road.
- C,D,E. The access roads are shown on Exhibits "B" and "C".

# 2. Planned Access Roads

- A. Width and Length: New road required will be 12 feet wide and 360' long. This new road is labeled and color coded on Exhibits "B" and "C". (staked)
- B. Turnouts: None
- C. <u>Drainage Design</u>: New road will have a drop of 6 inches from center line on each side.
- D. Culverts, Cuts and Fills: Culverts None. The location cut will be 1' x 175' x 200' north to south. The cut from stake south will be 1' x 125'.
- E. Surfacing Material: Six inches of caliche, bladed, watered and compacted.

- F. Gates, Cattleguards, Fences: One cattleguard will be installed in fence approximately .5 mile southwest of the well site on existing road. The fence runs east and west along the New Mexico Texas line.
- G. The proposed road is staked.

## 3. Location of Existing Wells:

See Exhibit "D"

# 4. Location of Existing and/or Proposed Facilities:

### A. Tank Batteries:

The existing tank battery is located in the SW/4 of Section 25 and located on Exhibit "D". The production header is located in the SE/4 of Section 26.

- B. Producing Facilities: No additional producing facilities are required.
- C. Oil Gathering Lines:

The flowline will lay (not buried) approximately 3000° north to the production header in SE/4 of Section 26 as shown on Exhibit "D".

## D. Other Lines

13

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 water supply line will be installed from the tank battery in Section 25, 1000' southwest to Well No. 33; 2800' south along the road to Well No. 52; 1320' west, 360' north, to the location.

# 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/4 SE/4 of Section 27, T-26S, R-32E as shown on Exhibits "B" and "C".
- B. Caliche to be purchased from BLM by the dirt contractor.
- C. The caliche to be hauled, from the location, go 360' south; west .4 mile; north .2 mile; west .1 mile; north .2 mile; west .2 mile and the pit is on the north side of road.

#### 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 "E" 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 "E" 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.  $\frac{\text{Terrain}}{\text{map of area}}$  Low rolling sand hills. See Exhibit "B", topographic
- b. Soil Sandy.
- c. Vegetation Mesquite
- d. Surface Use Grazing
- e. Ponds and Steams None within one mile
- f. Water Wells 8,000' northeast of location
- g. Residences and Buildings Three miles northwest to Madera ranch house
- h. Arroyos, Canyons, Etc. There are no significant surface features, see attached Exhibit "B".
- i.  $\underline{\text{Well Sign}}$  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 C. R. Paschal, D. A. Sowers or D. S. Anderson 1001 North Turner Hobbs, New Mexico 88240 Phone: 393-4141

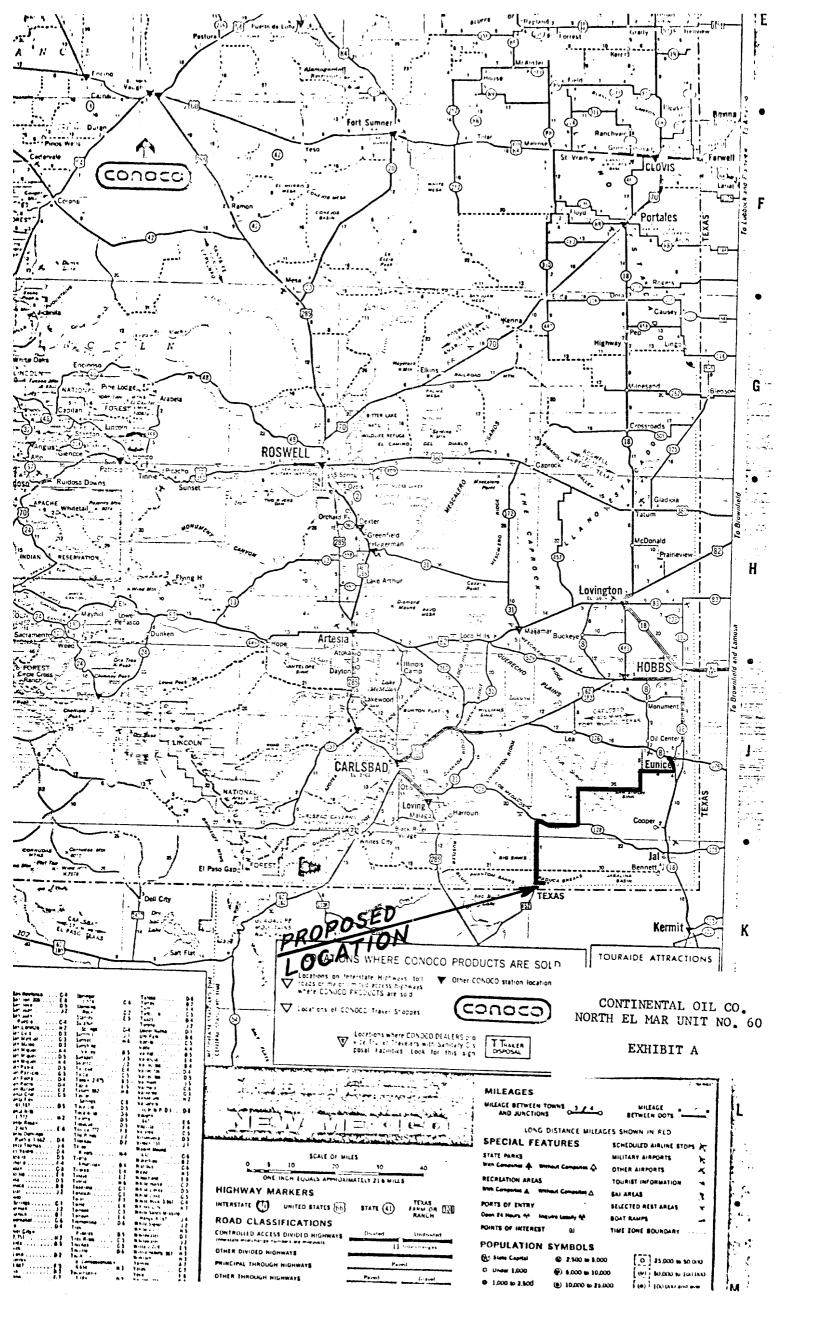
13. Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that 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.

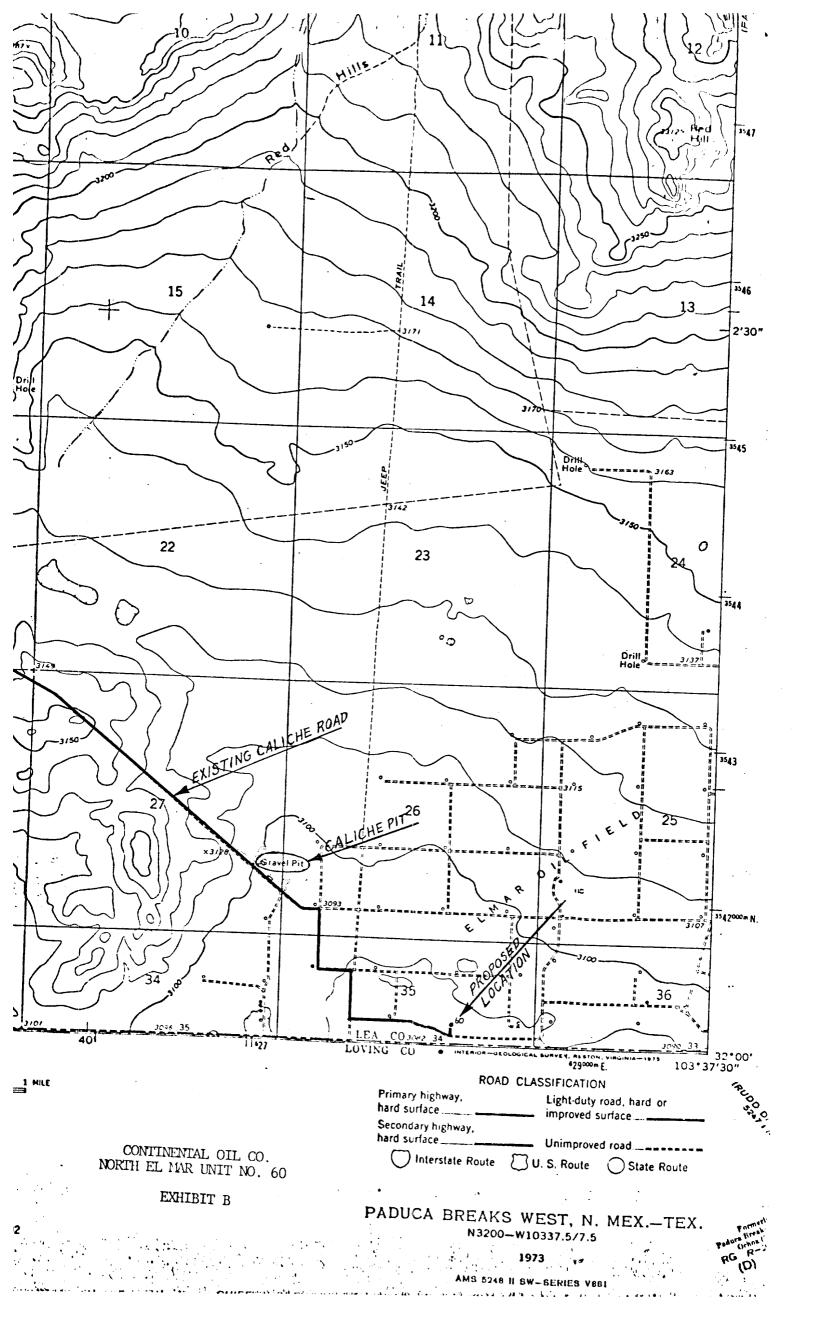
10/19/76 Date

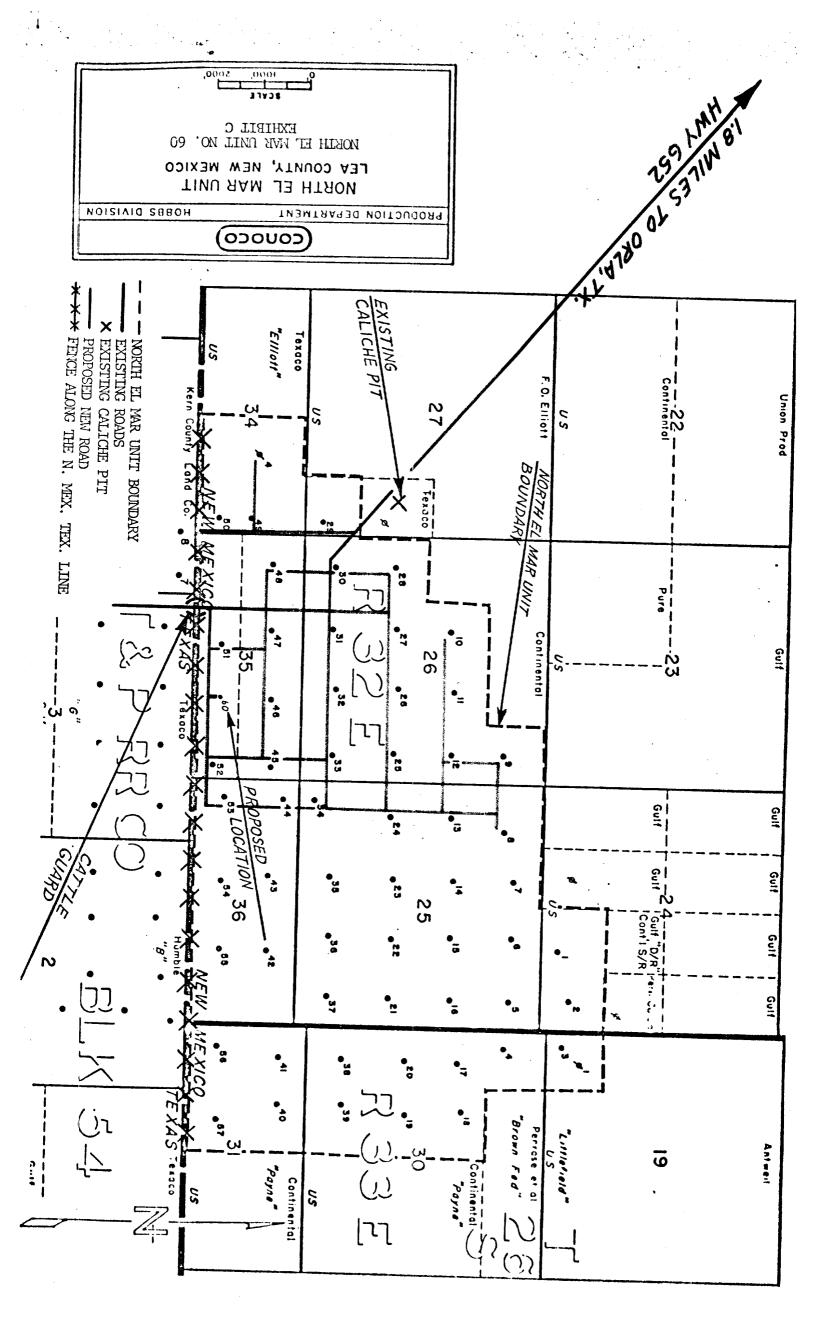
D. S. Anderson Senior Foreman

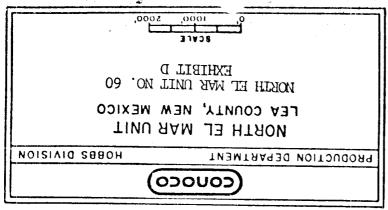
rej

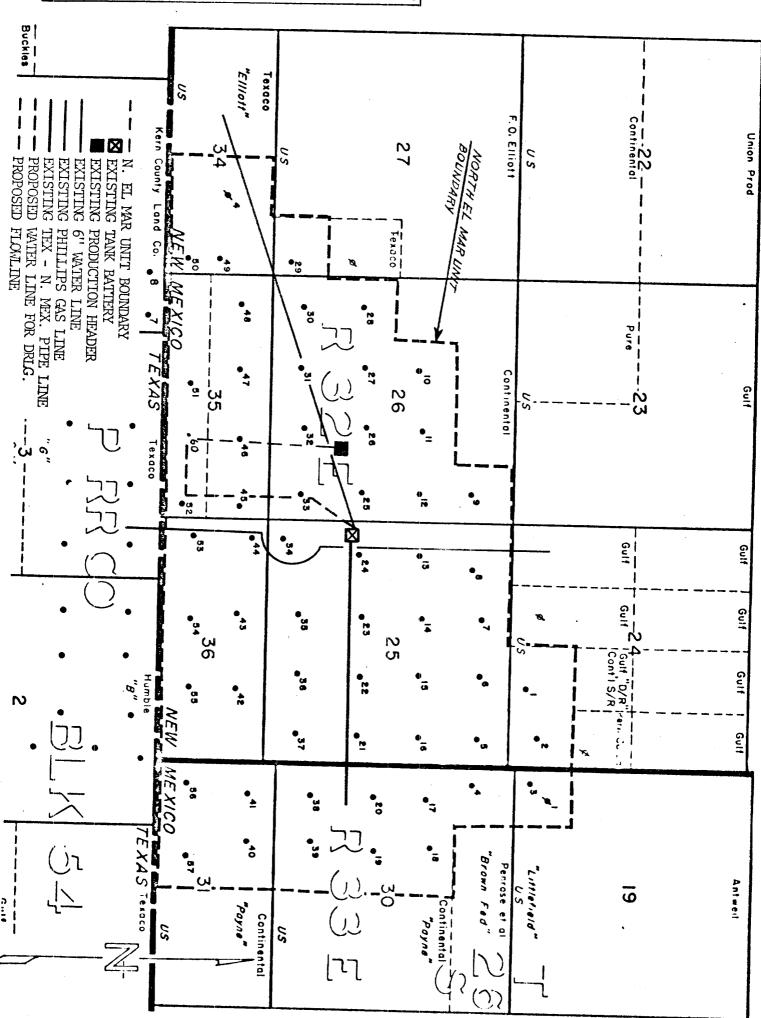
حاد

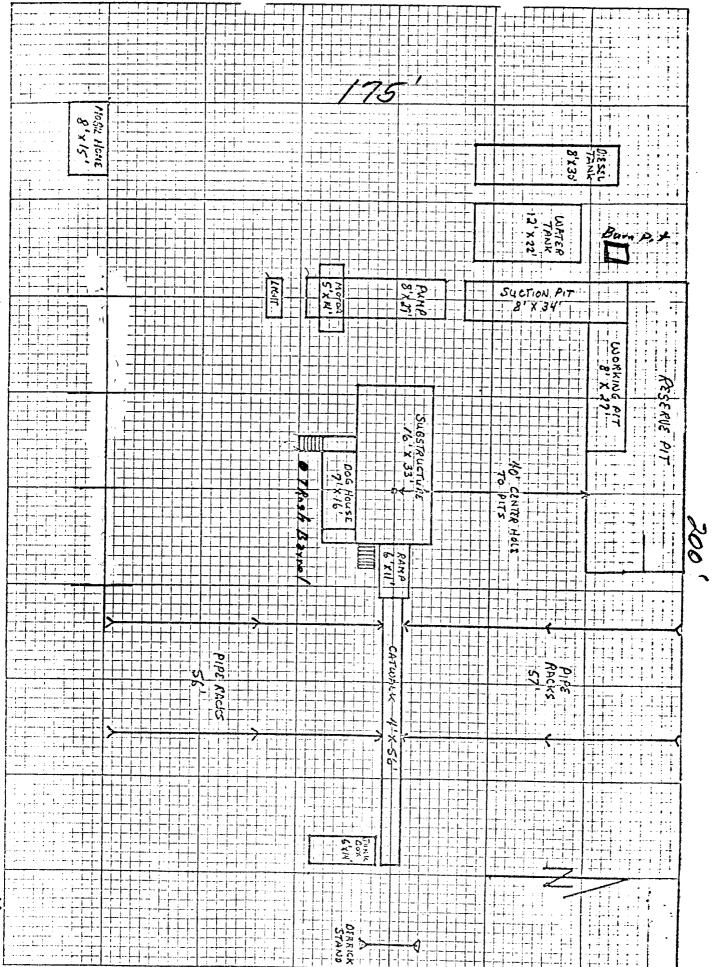












CONTINENTAL OIL CO. N. El Mar umit No. 60

EXHIBIT E

U. S. CEOLOGICAL SURVEY
P. O. Box 1157
Hobbs, New Mexico 38240

HOBES DISTRICT

Continental Oil Co.
No. 60 North El Mar Unit
Lot 2, sec. 35-26S-32E
Lea County, N. M.

Above Data Required on Well Sign

# CONDITIONS OF APPROVAL

- 1. Drilling operations authorized are subject to the attached sheet for general requirements for drilling and producing operations.
- 2. Notify this office (telephone (505) 393-3612) when the well is spudded and in sufficient time for a representative to witness cementing operations.

  After bffice hours and weekends, call C. L. Coshow 393-8244
- 3. Immediate notice is required of all blowouts, fires, spills, and accidents involving life-threatening injuries or loss of life.
- 4. Secure prior approval before changing the approved drilling program or commencing plugging operations, plug-back work, casing repair work, or corrective cementing operations.
- 5. Blowout prevention equipment is to be installed, tested, and in working order before drilling below the surface casing and shall be maintained ready for use until drilling operations are completed.
- 6. A kill-line is to be properly installed and is not to be used as a fill-up line.
- 7. Blowout preventers are to have proper casing rams when running casing.
- Drill string safety valve(s) to fit all pipe in the drill string to be maintained on the rig floor while drilling operations are in progress.
- 9. Blowout prevention drills are to be conducted as necessary to assure that equipment is operational and that each crew is properly trained to carry out emergency duties. All BOP tests and drills are to be recorded on the driller's log.