

UNITED STATES  
DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT  
NEW MEXICO NM 88210

30-415-26417  
LEASE IDENTIFICATION NUMBER

NM 33437A

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

Enron Oil & Gas Company

RECEIVED

3. ADDRESS OF OPERATOR

P. O. Box 2267, Midland, Texas 79702

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

At surface  
560' FSL & 2125' FWL

At proposed prod. zone

560' FSL & 2125' FWL

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

12 miles SE from Loco Hills

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT. 560  
(Also to nearest drlg. unit line, if any) 560

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

16. NO. OF ACRES IN LEASE

640

19. PROPOSED DEPTH

8800'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3608.5' GR

22. APPROX. DATE WORK WILL START\*

July 1, 1990

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         | 42# H-40 ST&C   | 700'          | 750 sx Circulated  |
| 11           | 8-5/8          | 28 & 32 K-55 &  | N-80 2500'    | 1000 sx Circulated |
| 7-7/8        | 5-1/2          | 17# K-55 LT&C   | ST&C 8800'    | 1550 sx            |

BOP - Install at 2500' with 5000# cap.

Gas is dedicated.

Post ID-1  
7-6-90  
New Loc & API

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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

Betty Gildon

TITLE

Regulatory Analyst

DATE

6-12-90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

Dave Stout

TITLE

AREA MANAGER

CARLEAD RESOURCE AREA

DATE

6-29-90

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

|   |                                    |                      |                                       |                |                                |
|---|------------------------------------|----------------------|---------------------------------------|----------------|--------------------------------|
| Operator<br>ENRON OIL & GAS COMPANY   |                                    |                      | Lease<br>Sand 7 <sup>th</sup> Federal |                | Well No.<br>4                  |
| Unit Letter<br>N  | Section<br>7                       | Township<br>18 South | Range<br>31 East                      | County<br>NMPM | Eddy                           |
| Actual Footage Location of Well:<br>560 feet from the South line and 2125 feet from the West line |                                    |                      |                                       |                |                                |
| Ground level Elev.<br>3608.5  | Producing Formation<br>Bone Spring |                      | Pool<br>Shugart, North                |                | Dedicated Acreage:<br>40 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 interest 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 interest, has been approved by the Division.

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Betty Gildon

Printed Name

Betty Gildon

Position

Regulatory Analyst

Company

Enron Oil & Gas Company

Date

6/12/90

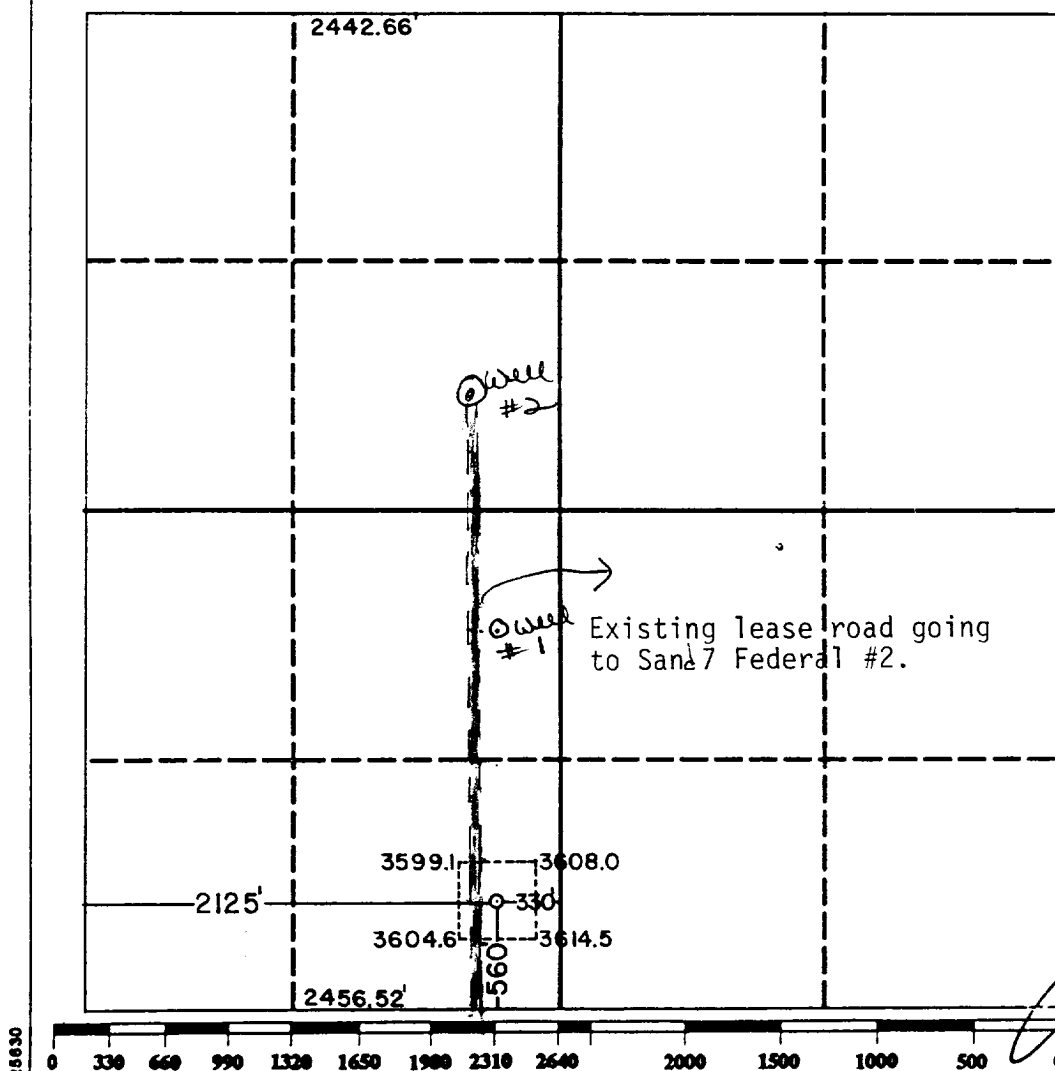
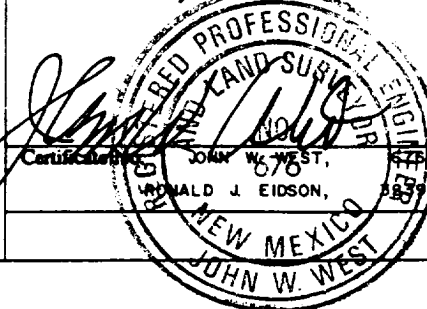
SURVEYOR CERTIFICATION

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

May 29, 1990

Signature & Seal of  
Professional Surveyor



APPLICATION FOR PERMIT TO DRILL

1. The geologic surface formation is Quaternary.
2. The estimated tops of important geologic markers are:
  1. 1st Bone Spring Sand 7350' 6. \_\_\_\_\_
  2. 2nd Bone Spring Carb 7700' 7. \_\_\_\_\_
  3. Roche Sand Zone 8350' 8. \_\_\_\_\_
  4. \_\_\_\_\_ 9. \_\_\_\_\_
  5. \_\_\_\_\_ 10. \_\_\_\_\_
3. Depths at which oil, water, or gas bearing formations are expected to be encountered.

Bone Spring 7350' to 8800'
4. Brief description of testing, logging, and coring programs.

Drill Stem test as necessary  
Gamma Ray - Surface to TD  
Sonic and/or Neutron Density 2300' +/- to TD  
Mud Logger 2300' +/- to TD  
No coring anticipated.
5. Any anticipated abnormal pressures or temperatures expected? Any potential hazards - H<sub>2</sub>S?

No abnormal pressures/temperatures anticipated.

No H<sub>2</sub>S zones expected.

1. (A) Pressure control equipment to be used.

1 - 5000# WP Cameron Iron Works double type "U" blowout preventor with pipe & blind rams.

- (B) Pressure ratings (or API series).

1 - 1500 series - 5000# WP

- (C) Testing procedures and frequency.

BOP will be tested at installation point as indicated on Application for Permit to Drill.

- (D) Schematic Diagram.

See attached Exhibit "C"

2. Mud Program

Type and Characteristics

0 - 700' 8.5 - 8.8 Native  
700 - 2500' 10.0 brine water  
2500' - 8700' 8.4 fresh water

Quantities and types of weighting material to be maintained

500 sacks barite on location.

ENRON OIL & GAS COMPANY  
MULTI-POINT SURFACE USE AND OPERATIONS PLAN

Sand 7 Federal, Well No. 4  
560' FSL & 2125' FWL  
Section 7, T18S, R31E  
Eddy County, New Mexico

This plan is submitted with the Application for Permit to Drill the above-described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation

1. EXISTING ROADS:

Proposed location is just east of an existing lease road running north & south & going to Enron's Sand 7 Federal #2. See NMAS 1990-32-MY (figure 2) attached.

PLANNED ACCESS ROADS:

None

3. LOCATION OF EXISTING WELLS:

Existing wells in the surrounding area include Enron's Sand 7 Federal #1 located 1420' to the north, Sand 7 Federal #2 located 2743' to the north, and proposed Canadian Kenwood 18 Federal #2 located 1060' to the south in Section 18, T18S, R31E.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

There are no existing production facilities. If production is encountered, a temporary facility will be established on the drill pad, and if warranted a production facility would be built at a later date in the immediate area of the drill-pad location. If the well is productive, the flowline would also be located on the drill-pad site and no additional disturbance will occur.

5. LOCATION AND TYPE OF WATER SUPPLY:

Water will purchased from commercial sources and transported to the well site over the roads as shown.

6. SOURCE OF CONSTRUCTION MATERIALS:

Will use Federally-owned pit located in the SE/4 NE/4 of Section 13, T18S, R30E.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- 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 "B".
- F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion of operations.

8. ANCILLARY FACILITIES:

None required.

9. WELLSITE LAYOUT:

- A. Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, trash pit and location of major rig components.
- B. Only minor levelling of the well site will be required.
- C. The reserve pit will be plastic lined.
- D. The pad and pit area have 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 locations cleaned of all trash and junk to leave the well in an aesthetically pleasing condition as possible.

- B. Any unguarded pits containing fluid will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with current Federal laws and regulations. Pits will be filled and location will be cleaned. The pit area, and well pad will be removed to promote vegetation.

11. OTHER INFORMATION:

- A. Topography: Land surface is undulatory and duned; slope is 0.60°
- B. Soil: Soils are made up of loose sand & sandy clay loams.
- C. Flora & Fauna: Vegetation primarily consists of shinnery oak, sand sage, plains yucca, mesquite, and various other grasses native to the area. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles and some birds.
- D. Ponds & Streams: None in the immediate vicinity
- E. Residences & other structures: None
- F. Archaeological, Historical & Cultural Sites:

Archaeological Sites:

NM 5942 (Category 2) located NW1/4SE1/4SE1/4SW1/4, SW1/4NE1/4SE1/4SW1/4, Section 7, T18S, R31E, NMPM. UTM: Zone 13, N3,624,580; E602,200. See NMAS 1990-32-MY attached. Location is 25' from cultural remains. A fence 300' in length will be located on the east side of proposed location to prevent interference with this site.

NM-06-4506 is within 1600' of proposed location.

NMAS 5084 is within 1900' of proposed location.

NMAS 5878 is within 1300' of proposed location.

PAC/ED is within 4000' of proposed location.

12. OPERATOR'S REPRESENTATIVE:


The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

Mr. John R. Frick  
3406 Meadowridge Lane  
Midland, Texas 79701

Phones: Business: (915) 686-3725  
Home: (915) 694-4323

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

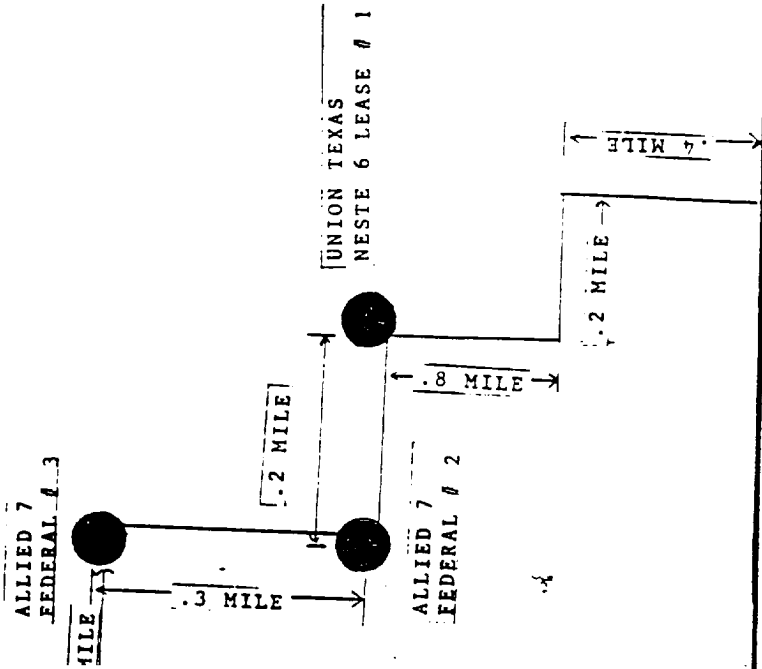
  
\_\_\_\_\_  
Ray L. Ingle  
Operations Manager



SUGART, North Field

SECTION 7. TOWNSHIP 18 SOUTH,  
RANGE 31 EAST  
EDDY COUNTY, NEW MEXICO

EDERAL



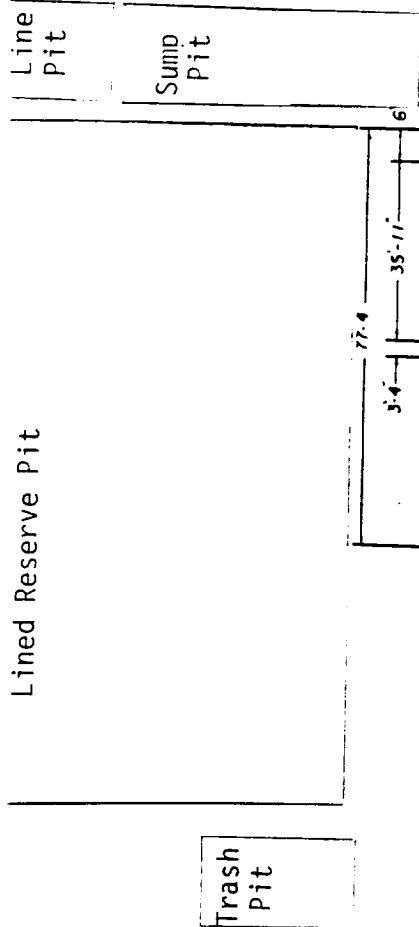
NORTH

HIGHWAY 82

2.8 MILES

EXHIBIT "A"

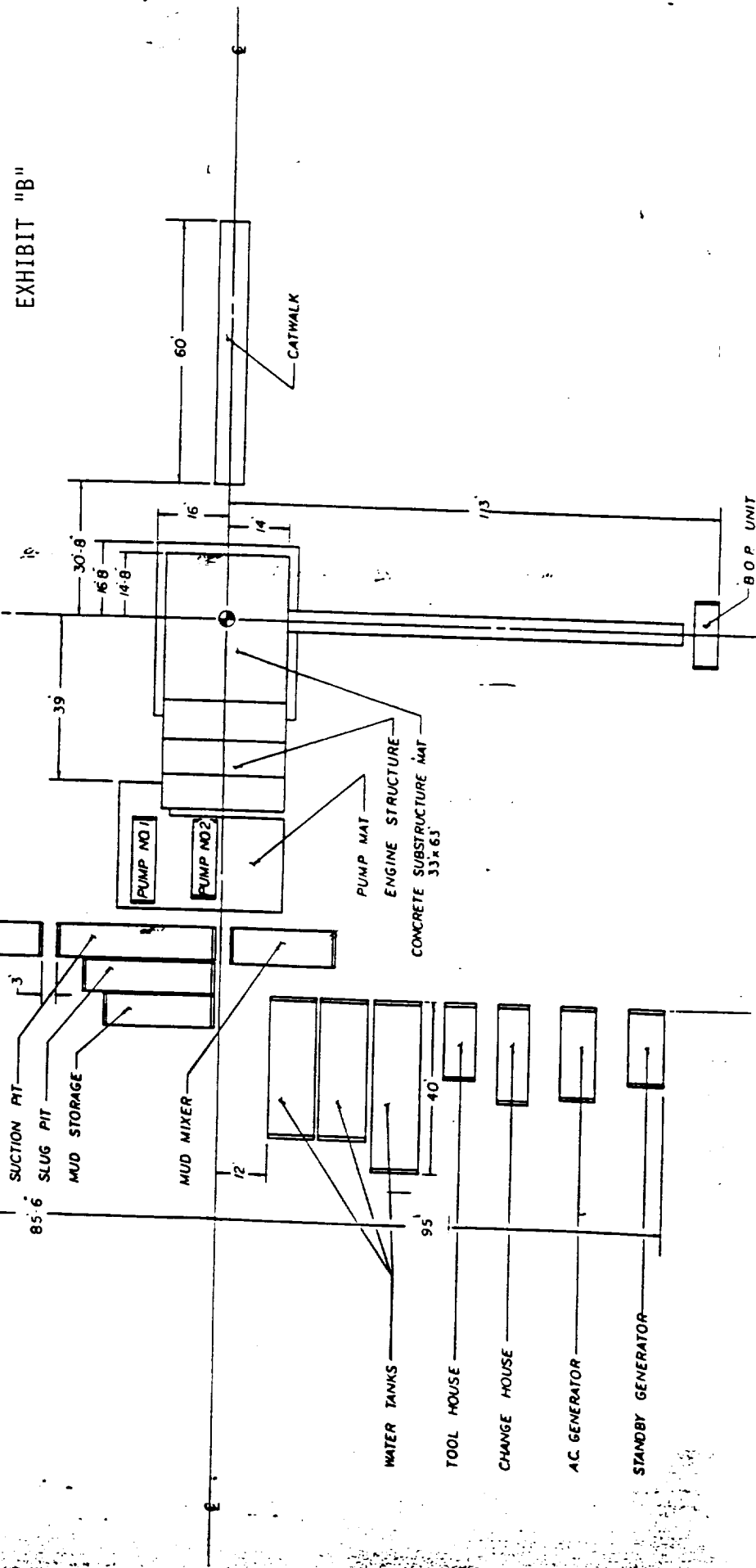
Lined Reserve Pit



LOCATION MEASURES 300' x 350'

V-Door to face west

EXHIBIT "B"



# EXHIBIT "C"

