

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  
ZONE ☒

## 2. NAME OF OPERATOR

General American Oil Company of Texas

## 3. ADDRESS OF OPERATOR

P. O. Box 416 Loco Hills, New Mexico 88255

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

At surface

1650' FSL and 2970' FEL

Sec. 19, T-17S, R-30E

At proposed prod. zone

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

1-1/2 Miles West of Loco Hills

APR 7 1977

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

2970'

(Also to nearest drlg. unit line, if any)

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

750'

## 16. NO. OF ACRES IN TRACT

640

ARTESIA, OFFICE

## 17. NO. OF ACRES ASSIGNED

40

## 19. PROPOSED DEPTH

3600'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

3629' GR

## 22. APPROX. DATE WORK WILL START\*

March 15, 1977

## 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#             | 450           | Circulate          |
| 7-7/8"       | 5-1/2"         | 14#             | 3600          | 350 sacks          |

We propose to drill this well to 3600' and complete in the Grayburg and San Andres.

All zones indicating porosity will be acidized or sand fraced.

Mud Program: Water and native mud will be used, and approximately 100' from  
T.D. we will mud up to get the hole in shape to log.

A 10" 3000# blowout preventer will be used in the drilling of this well.

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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

Rendell Hawkins

TITLE

District Engineer

DATE

February 9, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY  
CONDITIONS OF APPROVAL, IF ANY:THIS APPROVAL IS RESCINDED IF OPERATIONS  
ARE NOT COMMENCED  
WITHIN 3 MONTHS.  
EXPIRES JUL - 6 1977

DATE

\*See Instructions On Reverse Side

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NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section.

|  |   |                             |                                 |                       |                                       |
|--|---|-----------------------------|---------------------------------|-----------------------|---------------------------------------|
| Operator<br><b>GENERAL AMERICAN OIL COMPANY OF TEXAS</b>   |   |                             | Lease<br><b>Burch A</b>         |                       | Well No.<br><b>34</b>                 |
| Unit Letter<br><b>"K"</b>  | Section<br><b>19</b>                                    | Township<br><b>17 South</b> | Range<br><b>30 East</b>         | County<br><b>Eddy</b> |                                       |
| Actual Footage Location of Well:<br><b>1650</b> feet from the <b>South</b> line and <b>2970</b> feet from the <b>East</b> line |   |                             |                                 |                       |                                       |
| Ground Level Elev.<br><b>3629.0</b>  | Producing Formation<br><b>Grayburg &amp; San Andres</b> |                             | Pool<br><b>Grayburg-Jackson</b> |                       | Dedicated Acreage:<br><b>40</b> Acres |

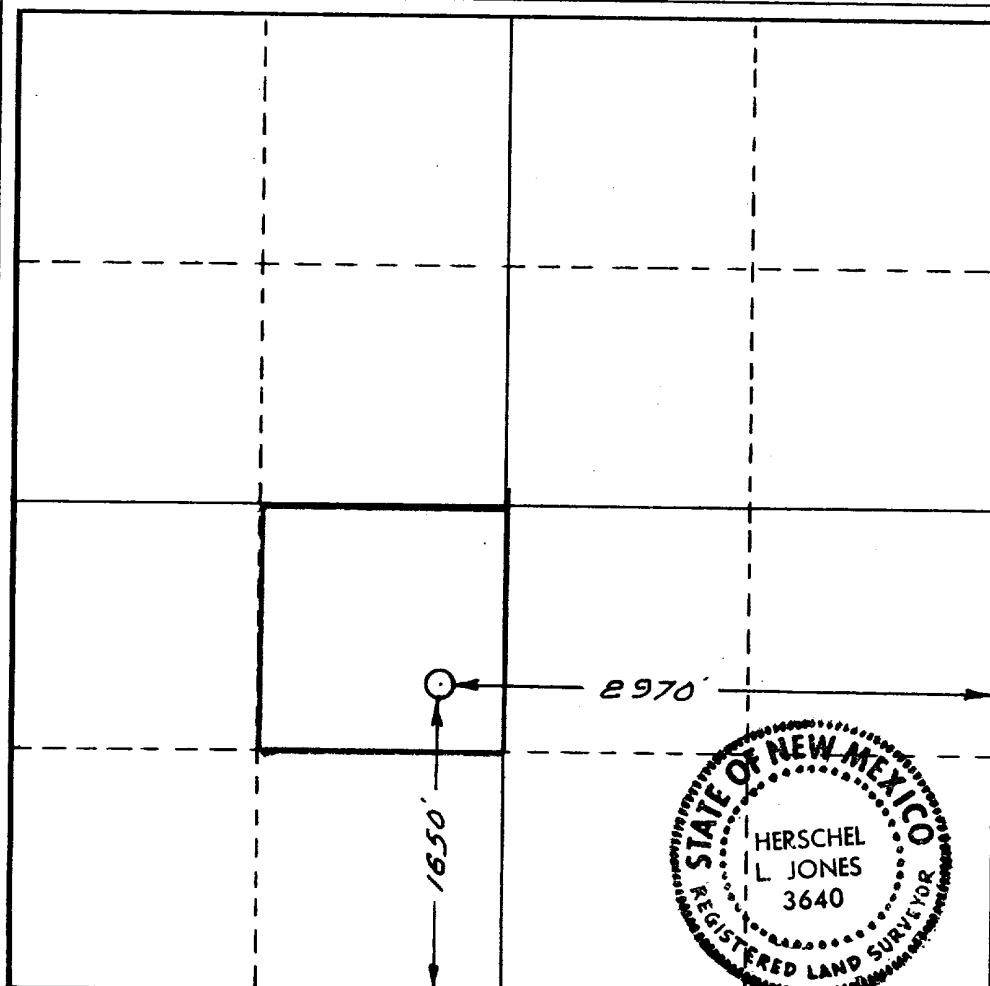
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is 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.

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CERTIFICATION

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

*Lendell Hawkins*

Name  
**Lendell Hawkins**

Position  
**Engineer**

Company  
**General American Oil Co. of Tex**

Date  
**February 9, 1977**

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  
**February 9, 1977**

Registered Professional Engineer and/or Land Surveyor

*Herschel Jones*

Certificate No.  
**3640**



## DRILLING PROGNOSIS

- I. OBJECTIVE: Drill 4 infill wells in the Grayburg Jackson Field, Eddy County, New Mexico. These wells will continue the infill pattern on 20 acre spacing as already established. These wells will be approximately 3200'-3600' deep.
- II. LOCATION: These wells will be located in Sections 23, Township 17 South, Range 29 East and Section 19 and 30 of Township 17 South, Range 30 East, Eddy County, New Mexico.
- III. PROJECTED TOTAL DEPTH, HOLE SIZE, SLOPE TEST:
- A. 12-1/4" hole to the top of the salt to accomodate 8-5/8" surface casing. (Approximately 350'-500').
  - B. 7-7/8" hole to approximately 3200'-3600' to accommodate 5-1/2" production casing.
  - C. Estimated drilling time 6-7 days per well.
  - D. Slope test will be run on each bit trip or 500' intervals.
  - E. If any coring or drill stem testing is done pipe will be strapped out of hole prior to coring or testing.
- IV. DRILLING CONTRACTOR:
- A. Contractor: W.E.K. Drilling Company, Inc. (Probable)
  - B. Type Contract: Footage
  - C. Contract Depth: 3200'-3600'
- V. MUD PROGRAM: Probably will be furnished by Mudco or IMC.
- | Interval                     | Type Mud           | Weight | Viscosity | Water Less |
|------------------------------|--------------------|--------|-----------|------------|
| 0'-3400'                     | Fresh & Salt Water | 9-10   | 28 - 30   | NC         |
| 3400'-3600'                  | Salt Mud           | 10-11  | 36 - 38   | NC         |
| (Will mud up 200' from T.D.) |                    |        |           |            |
- VI. TYPICAL GEOLOGICAL TOPS FOR WELL IN SECTION 24-17S-29E: (Middle of Unit Area)
- | Tops                 | Vertical Depth | Subsea |
|----------------------|----------------|--------|
| Queen                | 1880'          | +1715' |
| Loco Hills           | 2340'          | +1255' |
| Main Metex           | 2450'          | +1145' |
| San Andres           | 2585'          | +1010' |
| Lovington            | 2690'          | + 905' |
| Jackson Pays         | 2870'          | + 725' |
| Lower San Andres Pay | 3150'          | + 445' |
| Keely Pay            | 3330'          | + 265' |
| Sub-Keely Pay        | 3450'          | + 145' |
- VII. SAMPLES:
- A. 10' Samples from 2200' to T.D. or as directed by Company Representative.
- VIII. CORES AND DRILL STEM TESTS:
- A. At the present time no cores or drill stem tests are planned.

IX: LOGS:

- A. Proposed logging program will be a Sidewall Neutron, Gamma Ray, Caliper from 0'-T.D.

X: CASING AND TUBING PROGRAM:

- A. Surface: 8-5/8" 20-23# range 2 casing to be set approximately (350'-500') and cemented with 100 sacks Class "C" cement with 2% CaCl.

- B. Production: 5-1/2" K-55 15.5# ST&C casing will be run.

Cementing of production casing will be with Class "H" cement with 1/4# floccel, 3/4 of 1% CFR-2, 5# salt, 10# sand per sack.

XI: SAFETY PROGRAM:

Blowout preventers will be used as well as close observation by company personnel to assure the well is safely drilled.

XII: THIRD PARTY SERVICES:

|                 |   |
|-----------------|---|
| Surveying:      | Jones & Company and John West Engineering |
| Dirtwork:       | Jabo Rowland and Sweatt Construction      |
| Cementing:      | Halliburton and B.J.                      |
| Logging:        | Dresser Atlas                             |
| Drilling Mud:   | Mudco and IMC                             |
| Water Trucking: | I & W and Caprock                         |

SURFACE USE PLAN  
GENERAL AMERICAN OIL COMPANY OF TEXAS, WELL: BURCH "A" #34  
LEASE: LC-028793-a EDDY COUNTY, NEW MEXICO

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ARTESIA, NEW MEXICO

The subject well is located approximately 24 miles East of Artesia, New Mexico on the south side of Highway U.S. 82. 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. AERIAL ROAD MAP - Exhibit "A" is a portion of the Artesia Quadrangle Map #106 and Maljamar Quadrangle Map #107 showing well site in relation to U.S. Highway 82. Access road, which is shown on Exhibit "B" exits the highway about 24 miles East of Artesia, New Mexico.
2. LOCATION OF EXISTING WELLS - The location of existing wells in the immediate area of the proposed well is shown on Exhibit "B".
3. PROPOSED WELL MAT AND IMMEDIATE AREA - Refer to Exhibit "C" for direction orientation and road access.
  - a. MAT SIZE - 140' x 180'.
  - b. SURFACED - Will be topped with 6" of caliche, bladed, watered, and compacted. Caliche to be purchased from B.L.M. by dirt contractor.
  - c. RESERVE PIT - 60' x 70' pit unlined, joining mat to North.
  - d. CUT & FILL - Location is basically flat except for small sand dunes. No fill will be needed except existing sand dunes leveled and topped with caliche.
  - e. DRILL SITE LAYOUT - Exhibit "C" shows the location and layout including position of the Rig, Mud Tank, Reserve Pits, Pipe Racks, etc. The Rig will be erected with the V-Door to the East.
  - f. SETTING AND ENVIRONMENT
    - (1) Terrain - Low rolling sand hills.
    - (2) Soil - Sandy Soil.
    - (3) Vegetation - Sparse vegetation, being mostly mesquite, shennery, weeds, and other semi-desert plants with some grass.
    - (4) Surface Use - Grazing.
    - (5) Other - Drillsite - which is in sandy semi-arid desert country, is in a low environmental risk area. The total effect of drilling and producing this and other wells in this area would be very minimal.
  - g. DISTANCES TO:
    - (1) Ponds and Streams - There are no surface waters within 3/4 mile.
    - (2) Water Wells - There are no water wells within 1/2 mile.
    - (3) Residences and Building - General American Oil Company Camp is located near this location. The camp consists of five family residences, one office building, two shop buildings and two storage buildings. The nearest structures are two residences approximately 400' from this location shown on Exhibit "B".
    - (4) Arroyos, Canyons, Hills, etc. - Outside of small sand dunes there are no surface features.

h. WELL SIGN - Sign identifying and location proposed well will be maintained at the drill site commencing with the spudding of the well.

i. OPEN PITS - All pits containing mud or other liquids will be guarded.

4. ROADS

a. EXISTING ROADS - All existing roads within the immediate area of well site are shown on Exhibit "B".

b. PLANNED ROADS - Planned access road will require less than 400 feet of new road that is 12 feet wide. The road will be surfaced with caliche. The proposed road is colored blue and a suggested route to the location is colored red on Exhibit "B". Little improvement will be required on existing access road.

c. FENCES, GATES AND CATTLE GUARDS - Will be maintained as General American already operates several hundred wells in the immediate area.

5. TANK BATTERY - If production is encountered no additional battery will be required as sufficient facilities are already on the lease.

6. LEASE - PIPELINES

a. EXISTING - All existing pipelines are shown on Exhibit "B".

b. PLANNED - If production is encountered, flowline will consist of about 750' of 2" steel line on top of ground shown in orange on Exhibit "B".

7. WASTE DISPOSAL - Barrel trash containers will be in accessible locations within the drill site area during drilling and completion operations. A waste disposal pit will be deep enough to handle waste and will be covered with a minimum of 2 feet of top soil. See Exhibit "C" for pit location. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be disposed of through the currently existing S.W. D. system.

8. WATER SUPPLY - Water supply to drill this well will be furnished through a steel line already laid through the drilling area.

Location of the water line is shown on Exhibit "B".

9. ARCHAEOLOGICAL RESOURCES - None were observed.

10. RESTORATION OF SURFACE - If well is productive, pits will be backfilled and leveled as soon as practical. Upon final abandonment of well, well site will be leveled and cleaned, with land returned as near as possible to original condition.

11. OPERATOR'S REPRESENTATIVE - Field personnel who can be contacted concerning compliance of this surface use plan are as follows:

DRILLING AND PRODUCTION

Lendell Hawkins  
P. O. Box 416  
Loco Hills, New Mexico 88255  
Office Phone: 505 677-2481  
Home Phone: 505 677-2277

OR

Fred Starkey  
P. O. Box 416  
Loco Hills, New Mexico 88255  
Office Phone: 505 677-2481  
Home Phone: 505 746-9397

12. 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 as they actually exist; that the statements made in this plan are, to be the best of my knowledge, true and correct; and that the proposed work performed by General American Oil Company and its Contractors and Sub-Contractors will conform to this plan.

2-10-77  
DATE

Lendell Hawkins  
Lendell Hawkins, District Engineer





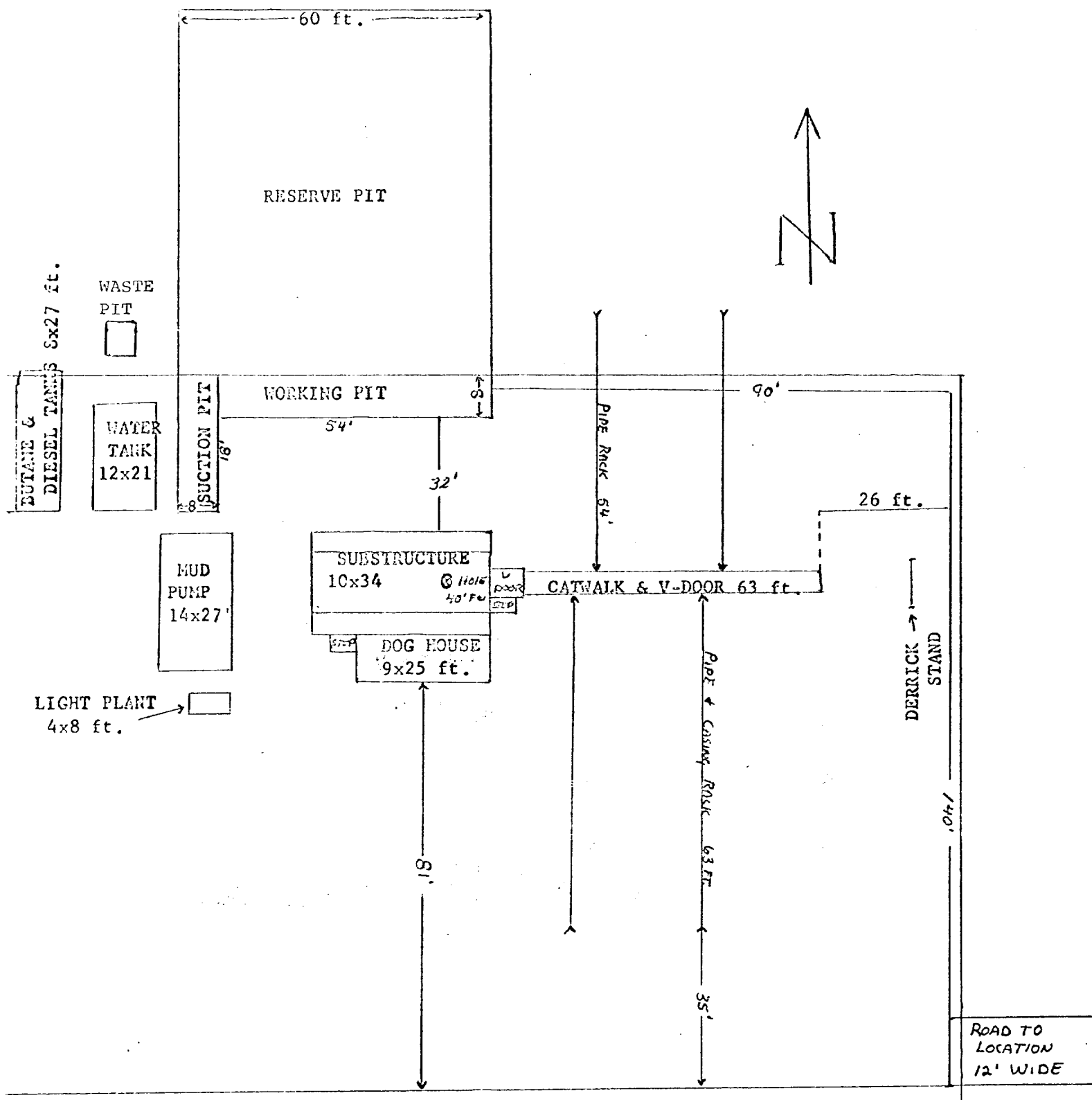


Exhibit "C"

SCALE: 1" = 25'