

N<sup>o</sup> O.C.D. COPYSUBMIT IN TRIPPLICATE  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R1425

EA 344 c/5F

File

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

Orla Petco, Inc.

## 3. ADDRESS OF OPERATOR

P.O. Box 1383, Midland, Texas 79702

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

At surface

1650' FSL &amp; 1650' FEL of Section 31, T-22S, R-28E

At proposed prod. zone

Same

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

3 miles East of Otis

## 10. DISTANCE FROM PROPOSED\*

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

1650'

## 16. NO. OF ACRES IN LEASE

478.08

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.

1320'

## 19. PROPOSED DEPTH

2500'

## 20. ROTARY OR CABLE TOOLS

Cable Tools

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

3056.5' Ground Level

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

September 5, 1980

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT                    |
|--------------|----------------|-----------------|---------------|---------------------------------------|
| 12 3/4"      | 8 5/8"         | 23#             | 350' +        | 250 sx Class C, 2% CaCl cement (cir.) |
| 8"           | 4 1/2"         | 9.5#            | 2500'         | 500 sx Class H (circulated)           |

Surface Formation: Quaternary terrace deposits.

Cable Tool Drilling Rig: Blind Ram Cable Tool Control Head Blowout Preventer.

Estimated Geological Tops: Base of Salt- 2115', Delaware Lime- 2350', Delaware Sand- 2425'.

Pressure Equipment: Blind Ram Cable Tool Control Head.

Estimate will encounter water between 75-125', Encounter oil at 2447'.

Logging: Gamma Ray Log, no coring or drillstem testing.

Anticipated starting date: September 5, 1980.

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ARTESIA, OFFICE

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

James H. C. Riddle, Jr.

TITLE

Vice-President

DATE

August 27, 1980

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

(Orig. Sgd.) GEORGE H. STEWART

ACTING DISTRICT ENGINEER

OCT 14 1980

APPROVED BY

DATE

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

MEXICO OIL CONSERVATION COMMISS. N  
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>ORLA PETCO Inc</b>  |   |                             | Lease<br><b>Gourley-Federal</b>          |                       | Well No.<br><b>4A</b>                 |
| Unit Letter<br><b>J</b>  | Section<br><b>31</b>                        | Township<br><b>22 South</b> | Range<br><b>28 East</b>                  | County<br><b>Eddy</b> |                                       |
| Actual Eastern Location of Well:<br><b>1650</b> feet from the <b>South</b> line and <b>1650</b> feet from the <b>East</b> line |   |                             |  |                       |                                       |
| Ground Level Elev.<br><b>3056.5</b>  | Producing Formation<br><b>Delaware Sand</b> |                             | Pool<br><b>Herradura Bend (Delaware)</b> |                       | Dedicated Acreage:<br><b>40</b> Acres |

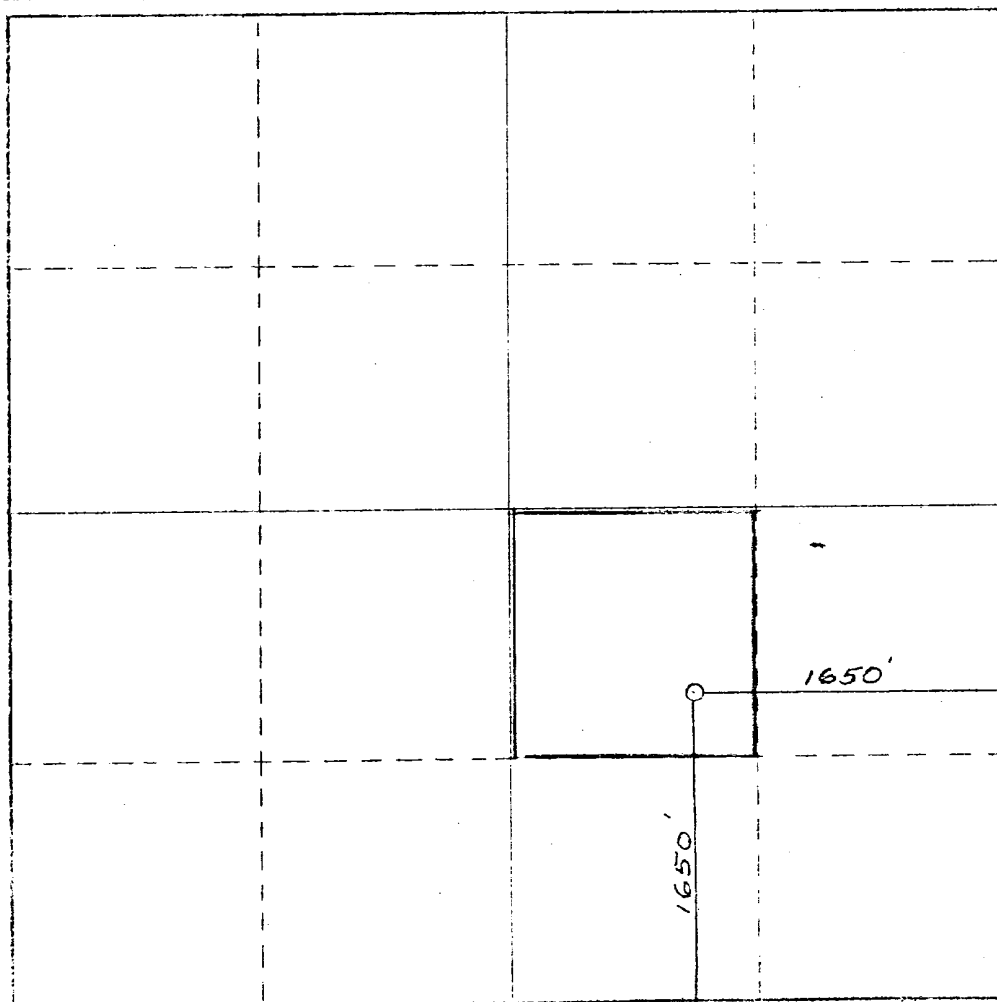
- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated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

**RECEIVED**  
**SEP 30 1980**  
**U.S. GEOLOGICAL SURVEY**  
**ARTESIA, NEW MEXICO**



**CERTIFICATION**

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

Signature

**James M.C. Ritchie, Jr.**

Position

**Vice-President**

Company

**Orla Petco, Inc.**

Date

**April 10, 1980**

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

**Apr. 8, 1980**

Registered Professional Engineer and/or Land Surveyor

Certificate No.

**NMLS #020**



## United States Department of the Interior

GEOLOGICAL SURVEY

## SPECIAL APPROVAL STIPULATIONS

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O. C. D.  
ARTESIAL OFFICE

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

|                                 |                  |
|---------------------------------|------------------|
| ORLA PETCO Inc Gouley Fed No. 5 |                  |
| OPERATOR                        | WELL DESIGNATION |
| 31-225-28K                      | EDDY             |
| S-T-R                           | COUNTY           |
| NM 26684                        |                  |
| LEASE NO.                       |                  |

THE SPECIAL STIPULATIONS CHECK MARKED BELOW ARE APPLICABLE TO THE ABOVE-DESCRIBED WELL AND APPROVAL OF THIS APPLICATION TO DRILL IS CONDITIONED UPON COMPLIANCE WITH SUCH STIPULATIONS. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE SPECIAL STIPULATIONS PURSUANT TO TITLE 30 CFR 290.

- ☒ A. 85/8" surface casing should be set in the Rustler Anhydrite formation and cement circulated to the surface. If surface casing is set at a lesser depth, the \_\_\_\_\_ casing must be cemented from the casing shoe to the surface or cemented to the surface through a stage tool set at least 50 feet below the top of the Rustler after cementing around the shoe with sufficient cement to fill to the base of the salt section.

CABLE  
TOOLS

- ☐ B. Before drilling below the \_\_\_\_\_ casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- ☐ C. Casing protectors will be run on drill pipe while drilling through the \_\_\_\_\_ casing. Protectors will be of sufficient number and of sufficient outside diameter to protect the casing.
- ☐ D. Minimum required fill of cement behind the \_\_\_\_\_ casing is to \_\_\_\_\_.
- ☐ E. After setting the \_\_\_\_\_ casing string and before drilling into the \_\_\_\_\_ formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
- ☐ F. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the \_\_\_\_\_ formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- (1) A recording pit level indicator to determine pit volume gains and losses.
- (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
- (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.

- ☒ G. All pits containing toxic liquids will be fenced and covered with a fine mesh netting, if necessary for the protection of livestock or wildlife.
- ☒ H. Above ground permanent structures and equipment shall be painted in accordance with the Painting Guidelines. The paint color is to simulate:

☒ Sandstone Brown, Fed. Std. 595-20318 or 30318

OR ☒ Sagebrush Gray, Fed. Std. 595-20357 or 36357

☐

- ☐ I. A kelly cock will be installed and maintained in operable condition.
- ☒ J. The ARTESIA Sub-District Office is to be notified in sufficient time for a representative to witness:
- (a) Spudding ☒
- (b) Cementing casing
- \_\_\_\_\_ inch
- \_\_\_\_\_ inch
- \_\_\_\_\_ inch
- (c) ~~BOP tests~~
- ☐ K. A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the U. S. Geological Survey, P. O. Box 26124, Albuquerque, New Mexico 87125. The effective date of the agreement must be prior to any sales.
- ☐ L. A Gamma Ray-Compensated Neutron log is required from the base of the salt section to the surface with cable speed not to exceed 30 feet per minute.
- ☒ M. At least one working day prior to constructing the well pad, access roads and/or related facilities, the operator or dirt contractor shall notify the authorized officer (Bureau of Land Management, CARLSBAD area). He shall also notify the Authorized Officer within two working days after completion of earth-moving activities.
- ☒ N. All access roads constructed in conjunction with the drilling permit (APD) will be limited to a 12 foot wide driving surface, excluding turn-arounds. Surface disturbance associated with construction and/or use of the road will be limited to 20 feet in width. If well is a producer, all roads will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts and/or any other measures deemed necessary by the authorized officer of the BLM. The following is a general guide for the spacing of water bars:
- % Slope
- |              |         |
|--------------|---------|
| less than 2% | 200 ft. |
| 2% to 4%     | 100 ft. |
| 4% to 5%     | 75 ft.  |
| more than 5% | 50 ft.  |
- ☒ O. Other special stipulations:

Any permanent pit containing waste oil must be fenced and covered with mesh wire.



3. LOCATION OF EXISTING WELLS:

See Exhibit No. 2 for the location of the existing wells in a one mile radius of the proposed drilling location.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

See Exhibit 3 for the plat showing the proposed location of the tank battery and flowlines associated with the proposed well in the event of production.

See Exhibit 5 for the plat showing the proposed location of power line poles needed to electrify the well.

5. LOCATION AND TYPE OF WATER SUPPLY:

Type of Water Supply: City of Carlsbad water,  
Location of Supply: B & E Truck Lines yard, water will be stored at water tank(Exhibit 4) at wellsite. Very little water needed ( approx. 140 bbls.) for a Cable Tool Rig.  
Transport Method: Truck  
Transport Route: Access road to drillsite (Exhibit 3 ) for access road and proposed road. Proposed road to be used is marked in yellow.

6. SOURCE OF CONSTRUCTION MATERIALS:

Caliche for surfacing the road and well pad will be obtained from an existing pit in the SW/4 NW/4 of Sec. 5, T-23S, R-28E, The pit is owned by Julius Roberson. Location of the pit is shown on Exhibit 1.

7. METHODS OF HANDLING WASTE DISPOSAL:

Cuttings: Cuttings will be covered when the plastic lined slush pit is leveled. Pit will be covered with a minimum of 24" of topsoil.

Garbage and Trash: To be buried in slush pit, small paper waste will be placed in barrel containers and hauled off of location.

Additional Requirements for Waste Disposal:  
The small amount of drilling fluids needed will be allowed to evaporate in the slush pit.

8. ANCILLARY FACILITIES:

None Required.

9. WELLSITE LAYOUT:

Exhibit 4 shows the relative location and dimensions of the well pad, mud pit, and location of major rig components. The drilling pad will be constructed using compacted crushed caliche rock, if needed.

10. PLANS FOR RESTORATION OF THE SURFACE:

Stockpiling Topsoil: The topsoil covering the drillsite will be stockpiled when the drilling pad and slush pit are constructed and will be replaced upon completion of operations.

Leveling: Upon completion of drilling operations, the slush pit will be leveled and covered with a minimum of 24" of the original topsoil. All trash will be cleaned off location.

Reseeding: Because vegetation consists of random clumps of grass and mesquite bushes, reseedling of the drillsite will not be attempted.

Seed Mixture: Not Applicable

11. OTHER INFORMATION:

A. Topography: Land surface is undulating to gently rolling and dunny. From an elevation of 3056.5' at wellsite, the land surface slopes gently towards the south at about 25'/mile.

B. Soil: Terrace Gravel

C. Flora and Fauna: Creosote bushes, Sage, Broom snakeweed, Crown of thorns.

D. Ponds and Streams: There are no ponds or streams in the area.

E. Residences and Other Structures: The nearest dwelling is a ranch house approximately  $\frac{1}{2}$  mile SE of the wellsite.

F. Land Use: Grazing

G. Surface Ownership: The surface is owned by the Federal Government.

12. OPERATOR'S REPRESENTATIVE:

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

Harry R. Sindorf  
1002 N. Mesa St. Apt. 16  
Vista del Sol Apartments  
Carlsbad, New Mexico 88220  
(505) 885-9978

or

Bucky Ritchie  
One Marienfeld Place  
Suite 155  
Midland, Texas 79701  
(915) 684-4762  
Home Phone= (915) 684-8797

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 Orla, Petco, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

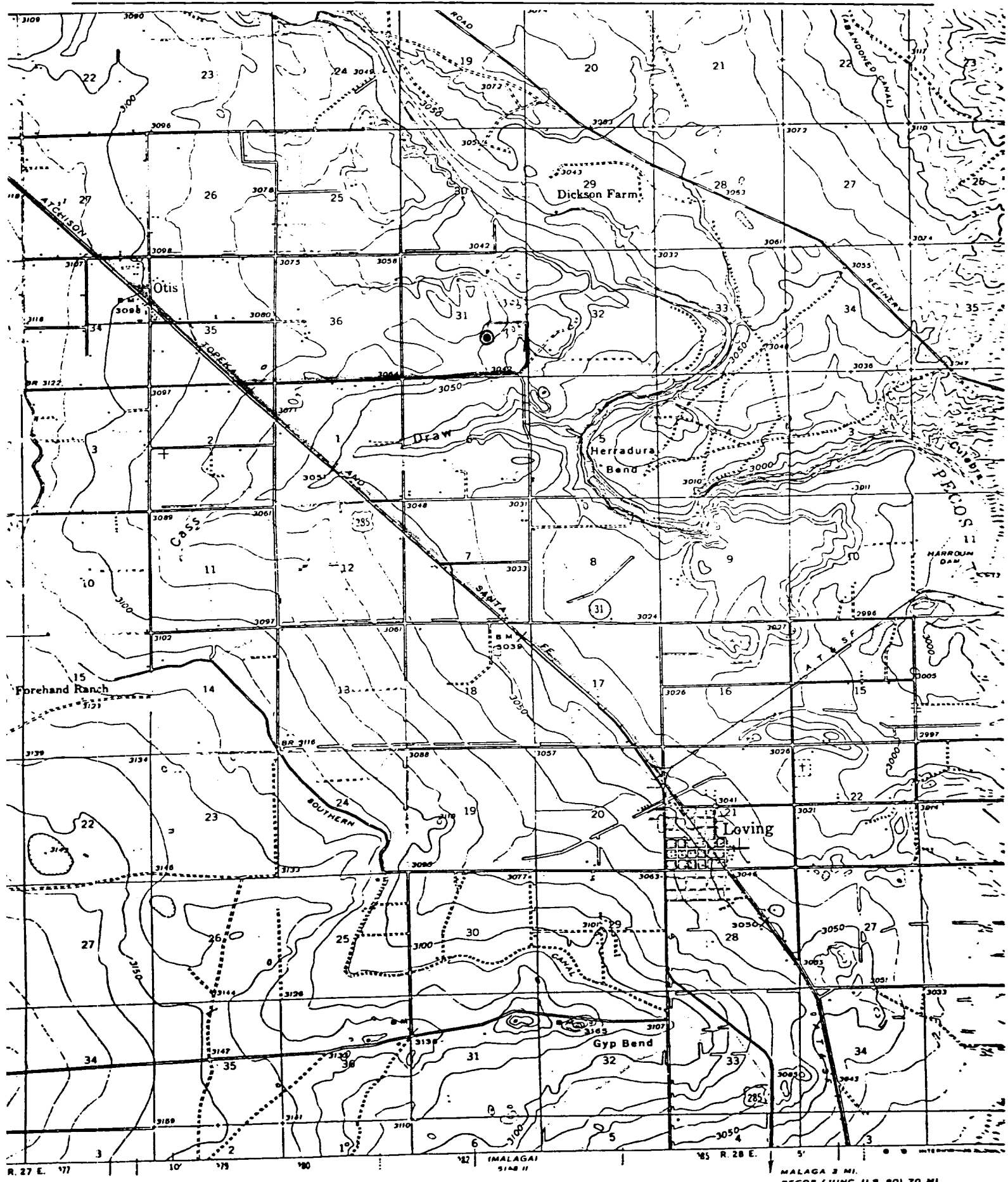
Date August 27, 1980

Bucky M. C. Ritchie Jr.  
Name  
Vice-President  
Title



ORLA PETCO, INC.  
 GOURLEY-FEDERAL No. 4-A  
 EXHIBIT 1  
 EXISTING AND PROPOSED ROADS

- Paved Highway 285 to Carlsbad  
 — Existing Access Road  
 — Existing Lease Road  
 — New Proposed Access Road ( Approx. 550' Long & 12'wide)  
 ● Proposed Drillsite



SCALE 1:62,500

MALAGA 3 MI.  
 PECOS (JUNC. U.S. 80) 70 MI.

4 MILES

EXHIBIT

No. 2

LAND MAP EXISTING WELLS - 1 mile radius  
Gourley-Federal No. 4-A Lease  
Section 31, T-22S, R-28E, Eddy County,  
New Mexico 1" = 2000'

22

28

25

30

29

Pan Am.

Yates  
I-HV

Coq.

I-B

I-A

I-A

36

31

32

Proposed well



2

I-C

2-A

3

1

4

1

1

1

1

1

6

1

5

1

2

1

1

1

1

Amoco

1

12

7

8

1

ROAD LOCATION &  
TANK BATTERY LOCATION

EXHIBIT 3

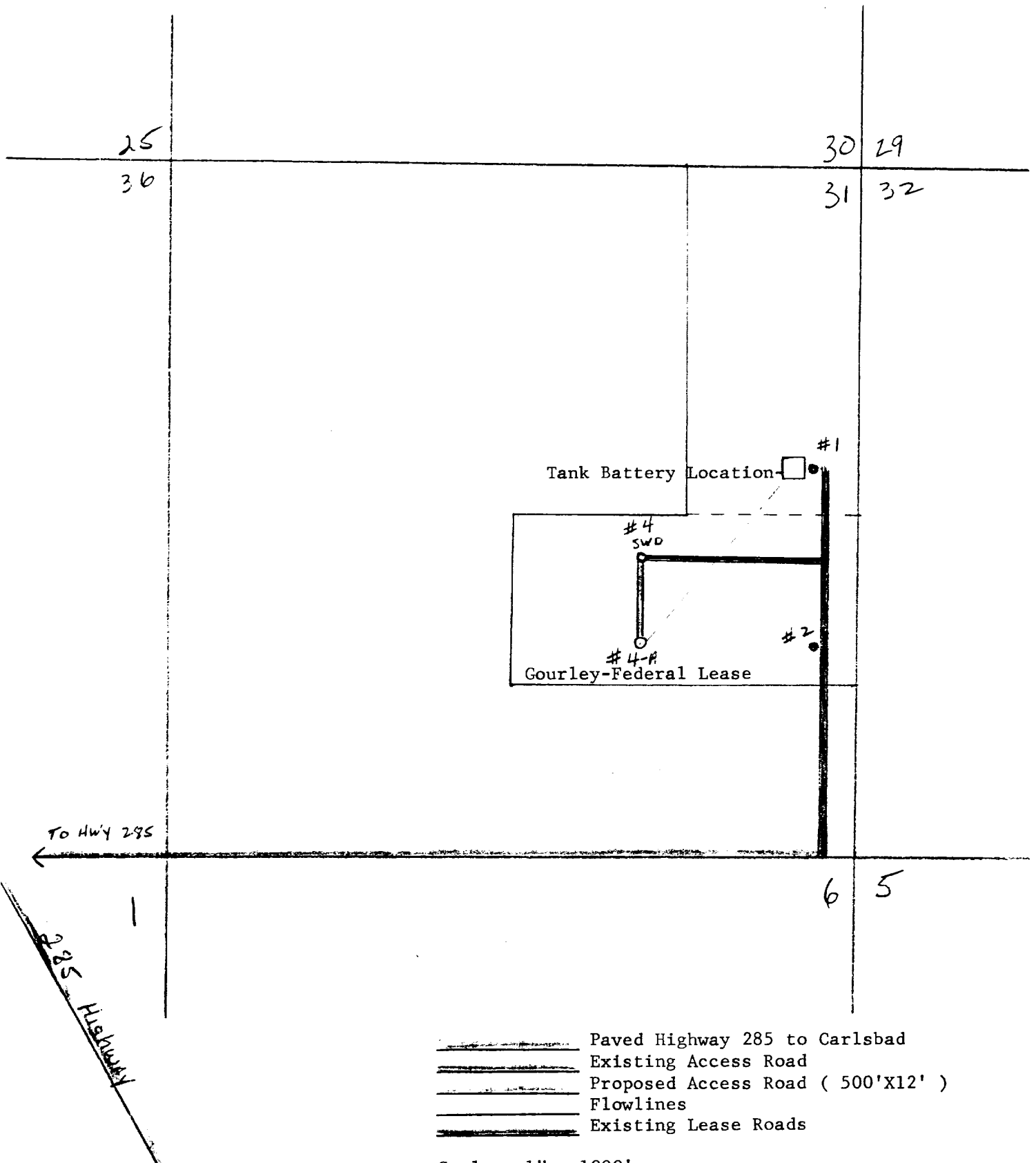
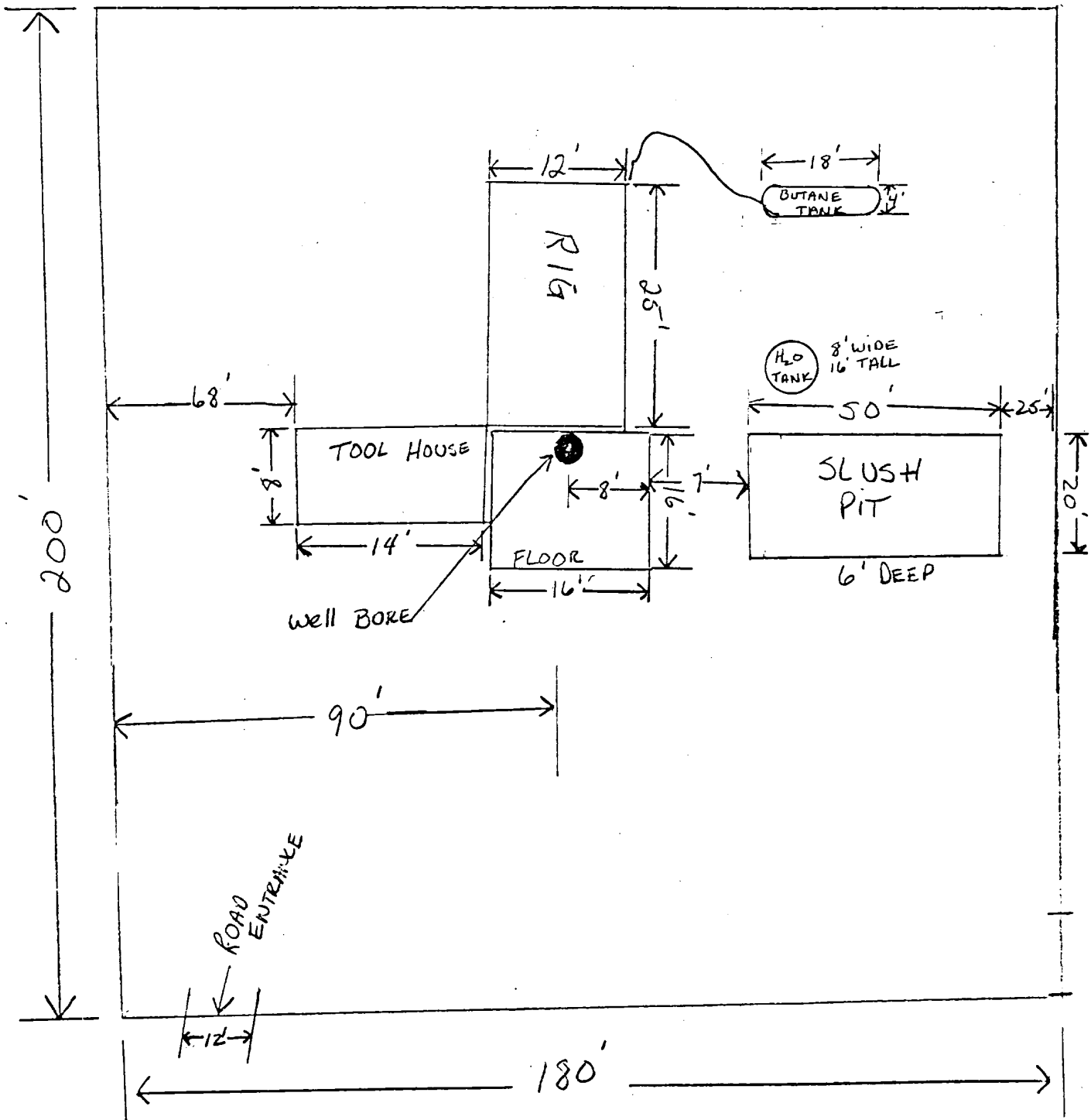


EXHIBIT 4  
RIG LAYOUT




FOOTAGE IS APPROXIMATE

EXHIBIT 5

Road Location & Power Line Poles

Existing Lease Roads

 Proposed New Lease Road ( 500'X12' )

 Power Line Poles

ORLA PETCO, INC.  
GOURLEY - FEDERAL LEASE

