NMOCC COPY

[redacted]

Copy to SF

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-015-22386

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED
DEC 21 1977
U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

RECEIVED
DEC 29 1977
O. C. C.
ARTESIA, OFFICE

5. LEASE DESIGNATION AND SERIAL NO.: NM 0559177

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Nopal Draw ~~Federal~~ Unit

9. WELL NO.: 1

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 8, T-21-S, R-25-E

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER — SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: GULF OIL CORPORATION ✓

3. ADDRESS OF OPERATOR: P. O. Box 670, Hobbs, New Mexico 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FNL & 1980' FWL of Sec. 8, T-21-S, R-25-E
At proposed prod. zone

12. COUNTY OR PARISH: Eddy — 13. STATE: New Mexico

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 9 miles northwest of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 948

17. NO. OF ACRES ASSIGNED TO THIS WELL: 320

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

19. PROPOSED DEPTH: 10,400'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3414.8 GR

22. APPROX. DATE WORK WILL START*: February 1, 1978

23. 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"	48#	400'	300 sx Class "C"
12-1/4"	8-5/8"	24#	2,500'	750 sx Class "C"
7-7/8"	5-1/2"	17#	10,400'	650 sx Class "H"

BOP: See Attached Drawing No. 3

Mud Program:
0' - 400' Fresh water spud mud;
400' - 2,500' Brackish water;
2,500' - 10,400' Salt water polymer with the following properties:
Viscosity, 33-40 sec.
Water loss, 5-20 cc's
Weight, 8.8-9.4
Note: Heavier weight mud will be used if required by well conditions.

Gas is not dedicated.

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 O. T. Berlin — TITLE Assistant Area Production Manager — DATE 12/20/77

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE DEC 23 1977

APPROVED BY Joe G. Lara — TITLE ACTING DISTRICT ENGINEER — DATE DEC 23 1977

CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES MAR 23 1978

NOTIFY USGS IN SUFFICIENT TIME TO WITNESS CEMENTING THE 8 5/8" CASING.

*See Instructions On Reverse Side

DECLARED WATER BASIN

CEMENT BEHIND THE 13 3/8" & 8 5/8" CASING MUST BE CIRC...

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

☆ U.S. GOVERNMENT PRINTING OFFICE : 1963—O-711-396

MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 14-65

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
GULF OIL CORPORATION	Nopal Draw Unit	1

Unit Letter	Section	Township	Range	County
C	8	21 South	25 East	Eddy

Actual Footage Location of Well:
660 feet from the north line and 1980 feet from the west line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3414.8	Morrow	Wildcat	320 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).

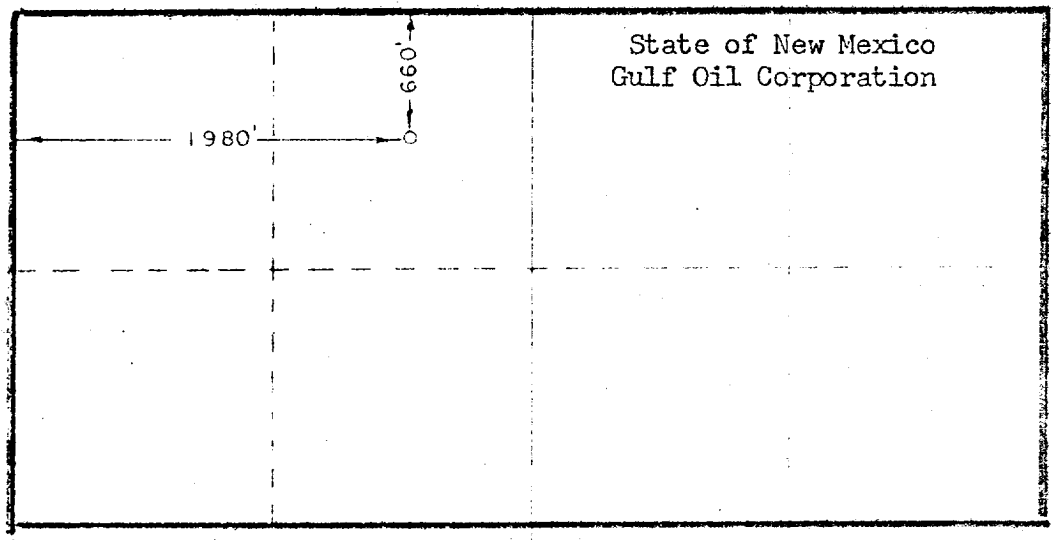
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ 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.

RECEIVED
DEC 21 1977
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.

D. T. Berlin

D. T. Berlin

Asst. Area Production Mgr.

GULF OIL CORPORATION

12-21-77

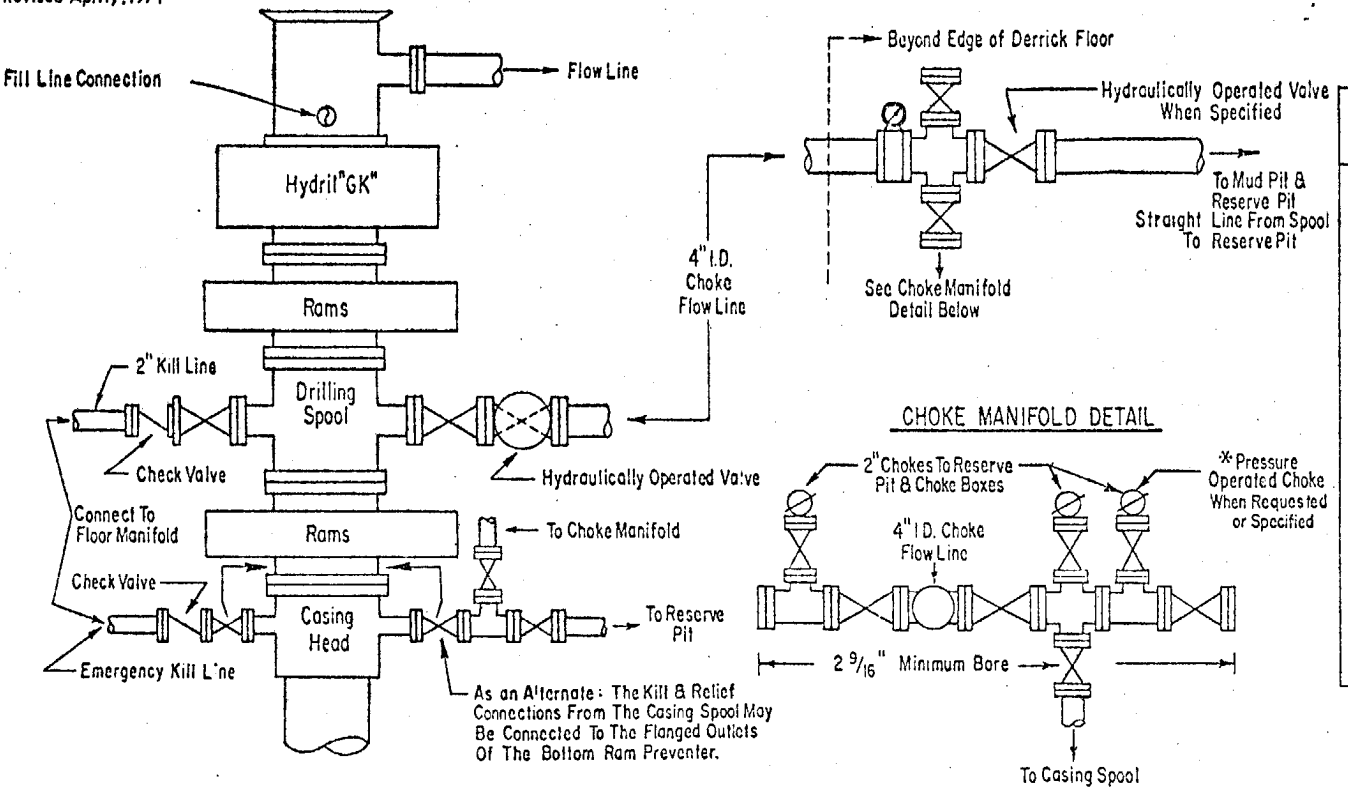
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Dec. 19, 1977

Registered Professional Engineer and/or Land Surveyor

Certificate No.

DRAWING NO. 3
Revised April, 1971



ADDITIONS - DELETIONS - CHANGES SPECIFY

3000 PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

The blowout preventer assembly shall consist of one blind ram preventor and one pipe ram preventor, both hydraulically operated; a Hydril "GK" preventer; valves; chokes and connections as illustrated. If a tapered drill string is used, a ram preventor must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and kill line, except when air or gas drilling. The substructure height shall be sufficient to install a rotating blowout preventer.

Minimum operating equipment for the preventers and hydraulically operated valves shall be as follows: (1) Multiple pumps, driven by a continuous source of power, capable of fluid charging the total accumulator volume from the nitrogen precharge pressure to its rated pressure within _____ minutes. Also, the pumps are to be connected to the hydraulic operating system which is to be a closed system. (2) Accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive the aforementioned fluid charge. With the charging pumps shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within _____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least _____ percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pumps; or there shall be additional pumps operated by separate power and equal in performance capabilities.

The closing manifold and remote closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed position. A pressure reducer and regulator must be provided for operating the Hydril preventer. When requested, a second pressure reducer shall be available to limit operating fluid pressures to ram preventers. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. All valves are to be selected for operation in the presence of oil, gas, and drilling fluids. The choke flow line valves connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

* To include derrick floor mounted controls.

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

December 21, 1977

P. O. Box 670
Hobbs, NM 88240

U. S. Geological Survey
P. O. Drawer "U"
Artesia, N.M. 88210

Gentlemen:

We are submitting this plan for the Nopal Draw Federal Unit No. 1, located 660' FNL & 1980' FWL of Section 8, T-21-S, R-25-E. This well is to replace the Nopal Draw Federal Unit No. 1, located 1980' FSL & 1980' FEL Section 5, T-21-S, R-25-E. The well in Section 5 was canceled and replaced in Section 8.

Thank you for your cooperation.

Yours very truly,

by: D. F. Borland
C. D. BORLAND

RMQ:rm

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

P. O. Box 670
Hobbs, NM 88240

December 19, 1977

Re: Application for Permit to Drill
Proposed Nopal Draw Federal Unit
No. 1, Eddy County, New Mexico

U. S. Geological Survey
P. O. Box 1157
Hobbs, New Mexico 88240

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany the application for permit to drill.

Well: Nopal Draw Federal Unit Well No. 1

1. Location: 660' FNL & 1980' FWL of Section 8, T-21-S, R-25-E, Eddy County, N.M.

2. Elevation of Unprepared Ground: 3414.8' GL.

3. Geologic Name of Surface Formation: Quarternary alluvium

4. Type Drilling Tools: Rotary

5. Proposed Drilling Depth: 10,400'

6. Estimated Top of Geologic Markers: Bone Springs, 2665'; Wolfcamp, 7398'; Strawn, 8935'; Atoka, 9600'; Morrow, 9900'; Barnett, 10,400'.

7. Estimated Depth at which Anticipated Gas or Oil-Bearing Formations Expected:

   a. Strawn - 8935'
   b. Atoka - 9600'
   c. Morrow - 9900'

8. Casing Program and Setting Depths:

	SIZE	WEIGHT	GRADE	SETTING DEPTH
Surface	13-3/8"	48#	K-55	400'
Intermediate	8-5/8"	24#	K-55	2,500'
Production	5-1/2"	17#	K-55 & N-80	10,400'

9. Casing Setting Depth and Cementing Program:

   a. Surface casing will be 13-3/8" set at 400' and cemented with 300 sacks of Class "C" with 4% $CaCl_2$.

   b. Intermediate casing will be 8-5/8" set at 2500' and cemented with 500 sacks of Class "C" with 16% gel Gulf mix followed by 250 sacks of Class "C" with 2% $CaCl_2$.

   c. Production casing will be 5-1/2" set approximately 10,400' and cemented with Class "H" cement with 0.75% CFR-2 and 4# KCL.

10. Pressure Control Equipment: The minimum specifications for pressure control equipment can be seen on the attached Drawing No. 3 of Gulf's blowout preventer hook-up for 3000 psi working pressure.

11. Circulating Media: 0' - 400' fresh water spud mud; 400' - 2500', brackish water; 2500' - 10,400', salt water polymer with the following properties: Viscosity, 33-40 sec.; Water Loss, 5-20 cc's, Weight, 8.8-9.4; heavier weight mud will be used if required by well conditions.

12. Testing, Logging and Coring Programs:

   a. Formation testing may be done at any depth where samples, drilling rate, or log information indicate a possible show of oil or gas.

   b. A mud logging unit will be used from 2500' to total depth. Open hole logs will be run at total depth.

   c. Core will be taken in the Morrow formation.

13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: We do not anticipate any abnormal pressure or temperature; however, BOP's with remote control and choke manifold as shown on Drawing No. 3 will be installed prior to drilling below intermediate casing.

    The presence of hydrogen sulfide gas is not anticipated.

14. Anticipated Starting Date: Drilling operations should begin between January 15, 1978 and February 15, 1978.

15. Other Facets of the Proposed Operation: None

By: D. F. Berlin
C. D. BORLAND
Area Production Manager

Attachments

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

P. O. Box 670
Hobbs, NM 88240

December 19, 1977

Re: Surface Development Plan
Nopal Draw Federal Unit
Well No. 1, 660' FNL & 1980'
FWL of Section 8, T-21-S, R-25-E,
Eddy County, New Mexico

U. S. Geological Survey
P. O. Box 1157
Hobbs, N.M. 88240

Gentlemen:

The surface use and operations plan for the porposed well are as follows:

1. Existing Road

A. Exhibit "A" is a portion of a general lease map showing the location of the proposed well as staked. Go approximately nine (9) miles northwest of Carlsbad, New Mexico on U.S. Highway 285. Turn left and proceed southwest on New Mexico State Road 137 approximately 2.2 miles. Turn right onto a caliche road and follow it northwest approximately 1/4 mile, turn left on proposed road and go .3 mile to location.

B. Exhibit "B" is a portion of a lease map showing all existing roads within a one mile radius of the well site.

C. Portions of the existing lease road from State Road 137 to near the proposed location will require some patching and leveling to repair eroded caliche furface. This section of road is colored brown on Exhibit "B".

2. Planned Access Roads

A. Length and Width: New road required will be 12' wide and approximately 1600' long. The new road is colored red on Exhibits "A" and "B".

B. Surfacing Material: Six inches of caliche, water compacted and graded.

C. Turnouts: None required.

D. Culverts: None required.

2. Planned Access Roads (Continued)

E. Cuts and Fills: None required.

F. Gates and Cattleguards: A cattleguard will be constructed at the entrance of the existing lease road from State Road 137.

3. Location of Existing Wells

A. Existing wells within a one mile radius are shown on Exhibit "B".

4. Location of Proposed Facilities

Should this well be completed as a commercial producing well, new tank battery facilities will be required. These facilities will be constructed within the 400' X 400' work area as staked. All lines will be installed above ground and located as shown on Exhibit "C".

5. Location and Type of Water Supply

A. Water for drilling well will be purchased from a supplier and transported by truck to the well site over existing and proposed roads shown in Exhibit "B".

6. Source of Construction Material

A. Caliche for surfacing the road and the well pad will be obtained from an existing pit in the SW/4 of NE/4 of Section 5 which belongs to the surface owner.

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 stored 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" of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on Exhibit "D".

7. Methods of Handling Waste Disposal (Continued)

F. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities

A. None required.

9. Well Site Layout

A. Exhibit "D" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit, and location of major rig components.

B. Only minor levelling of the well site will be required. No significant cuts and fills will be necessary.

C. The reserve pit will be plastic lined.

D. The pad and pit area has 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 location cleaned of all trash and junk to leave the well site in an aesthetically pleasing condition as possible.

B. Any unguard pits containing fluids will be fenced until they are filled.

C. After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and location will be cleaned. The pit area, well pad, and all unneeded access roads will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment.

11. Other Information

A. Topography: The well site is located in a level area surrounded by draws on the North, South, and East. The undisturbed elevation at the wellsite is 3414.8 feet.

B. Soil: Soil is a deep, fine sand underlain by caliche.

11. Other Information (Continued)

C. Flora and Fauna: The vegetative cover is generally sparse and consists of yucca and perennial native grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove, quail, and other birds.

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

E. Residences and Other Structures: The nearest occupied dwelling is a ranch house 2.2 miles east of the wellsite. The nearest water well is located 1/2 of a mile east of the proposed location.

F. Archeological, Historical and Cultural Sites: None observed in the area.

G. Land Use: Grazing and hunting (in season).

H. Surface Ownership: Surface is fee land owned by Marvin L. Watts. All surface damages will be settled with Mr. Watts before construction begins.

12. Operator's Representative:

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

Gulf Energy and Minerals Company-U.S.
A Division of Gulf Oil Corporation
P. O. Box 670
Hobbs, New Mexico 88240
Telephone: (505) 393-4121
Area Production Manager: C. D. Borland

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 Gulf Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

12-20-77
Date

Sy: O. F. Berlin
C. D. BORLAND
Area Production Manager

Re: N/2 of N/2, SE/4 of NE/4 and
E/2 of SE/4 of Section 8, T-21-S,
R-25-E, Eddy County, New Mexico

Gulf Energy and Minerals Company-U.S.
P. O. Box 670
Hobbs, New Mexico 88240

Attention: Mr. C. D. Borland

Gentlemen:

I am the owner of the surface of the above described property and it is my understanding that your Company intends to drill the Nopal Draw Unit No. 1 well to be located 660 feet from the north line and 1980 feet from the west line of said Section 8.

This letter will acknowledge my consent to your drilling on the said property, subject to the following conditions:

(1) You will pay me $500 per location.

(2) You will pay me $2 per rod for any new roads constructed on my property and maintain gates, roads and bridges used by you.

(3) You will conduct your operations on my property in a good and workmanlike manner and will not interfere with my use and possession of the said property except as may be reasonably required in the operation of the said well.

(4) Upon abandonment of the said well, you will comply with all governmental rules and regulations pertaining thereto, and will, by way of illustration, but not of limitation, clean up the location and leave the premises, roads and fences in the same condition as you found them, provided that you are/are not required to rip and reseed the drilling pad.

Signed this 19 day of Dec., 1977.

Yours very truly,

Marvin L. Watts

MARVIN L. WATTS

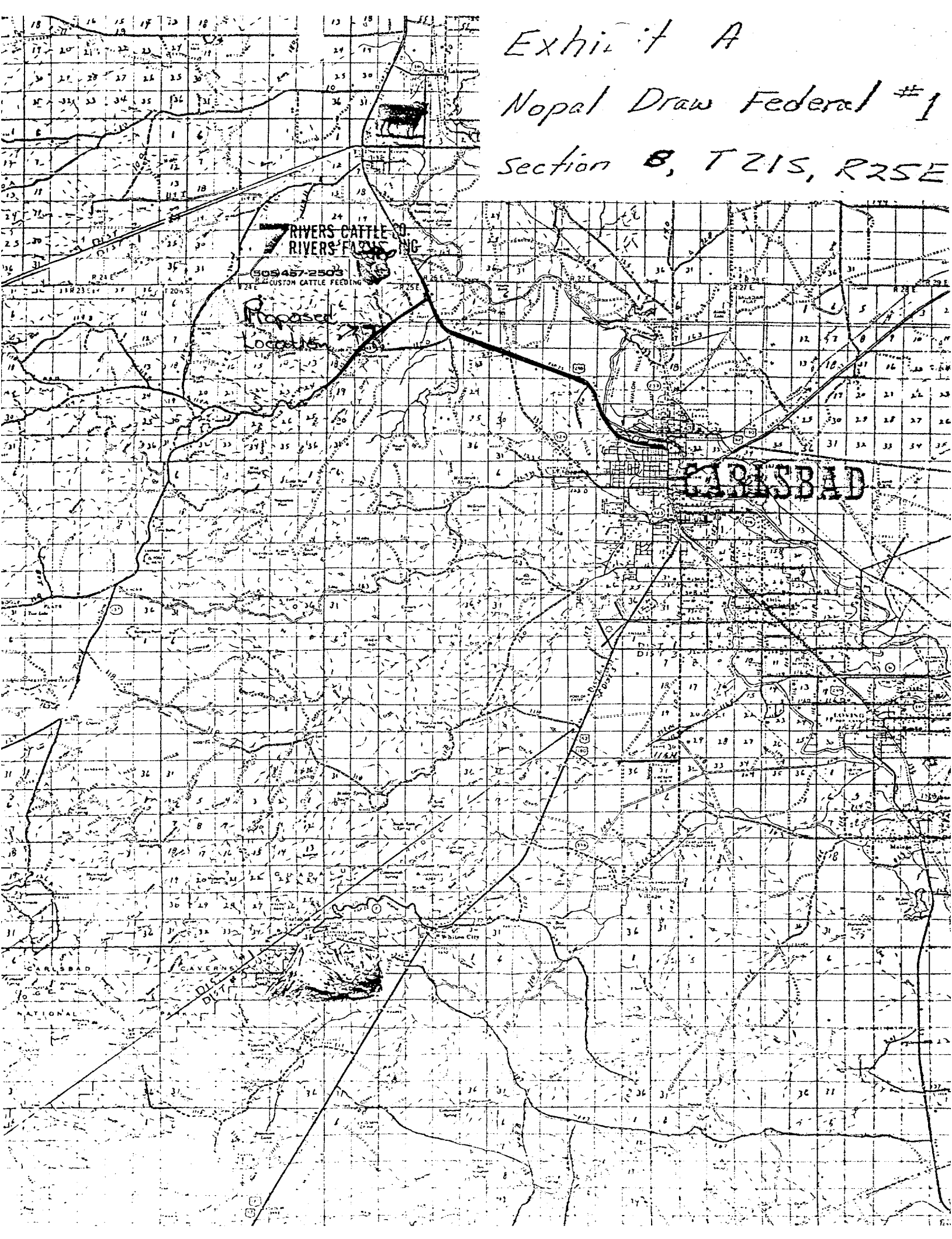


Exhibit A
Nopal Draw Federal #1
Section 8, T21S, R25E
7 RIVERS CATTLE CO.
RIVERS FARMS INC
(505) 457-2503
CUSTOM CATTLE FEEDING
Proposed Location
CARLSBAD
CARLSBAD
CAVERNS
NATIONAL

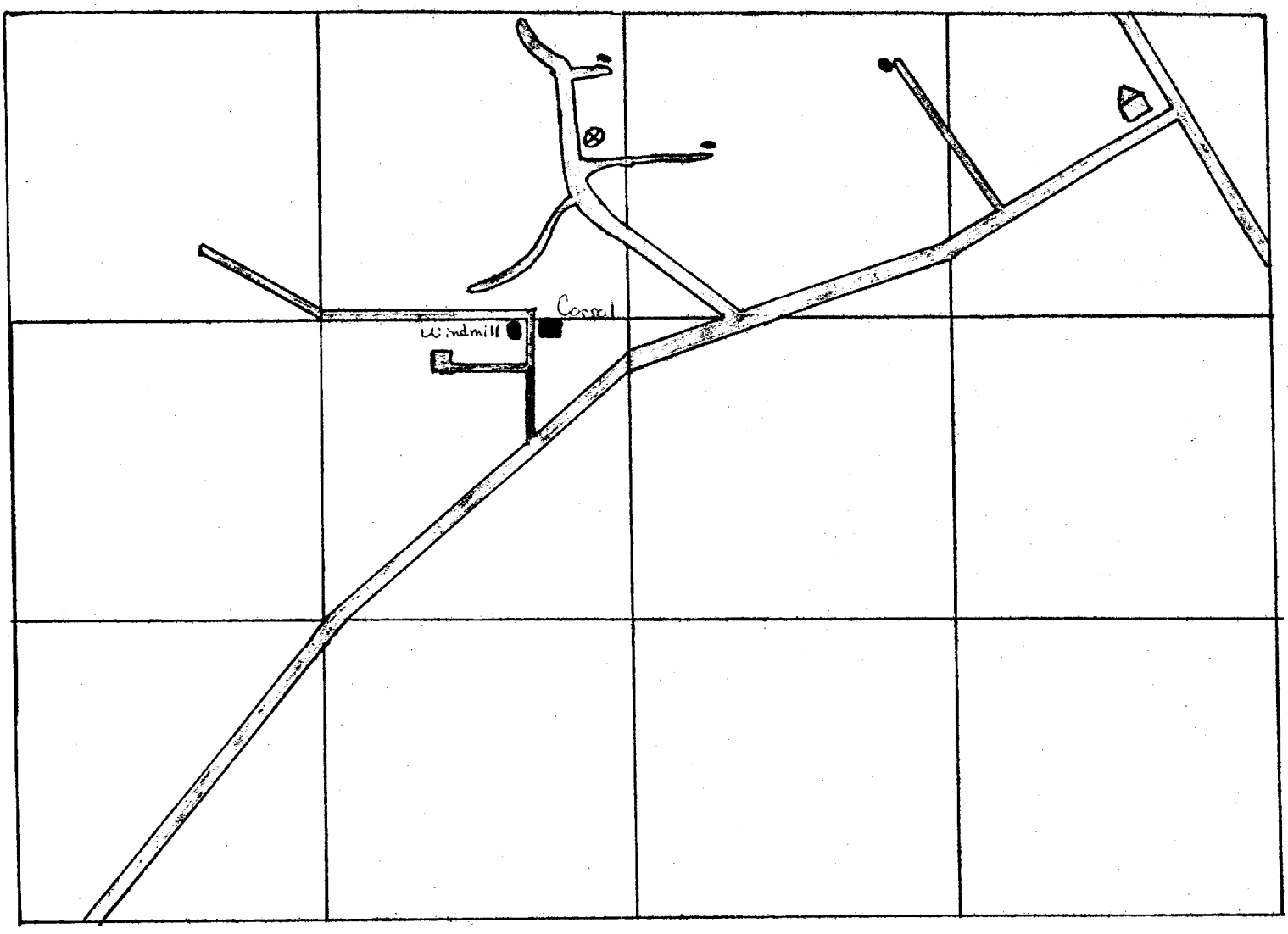


Exhibit B

Nopal Draw Federal #1
Section 8, T21S, R25E
Eddy Co., New Mexico

Existing Roads	—
Proposed New Access	—
Road to be improved	—
Caliche Pit	⊗
Residence	△

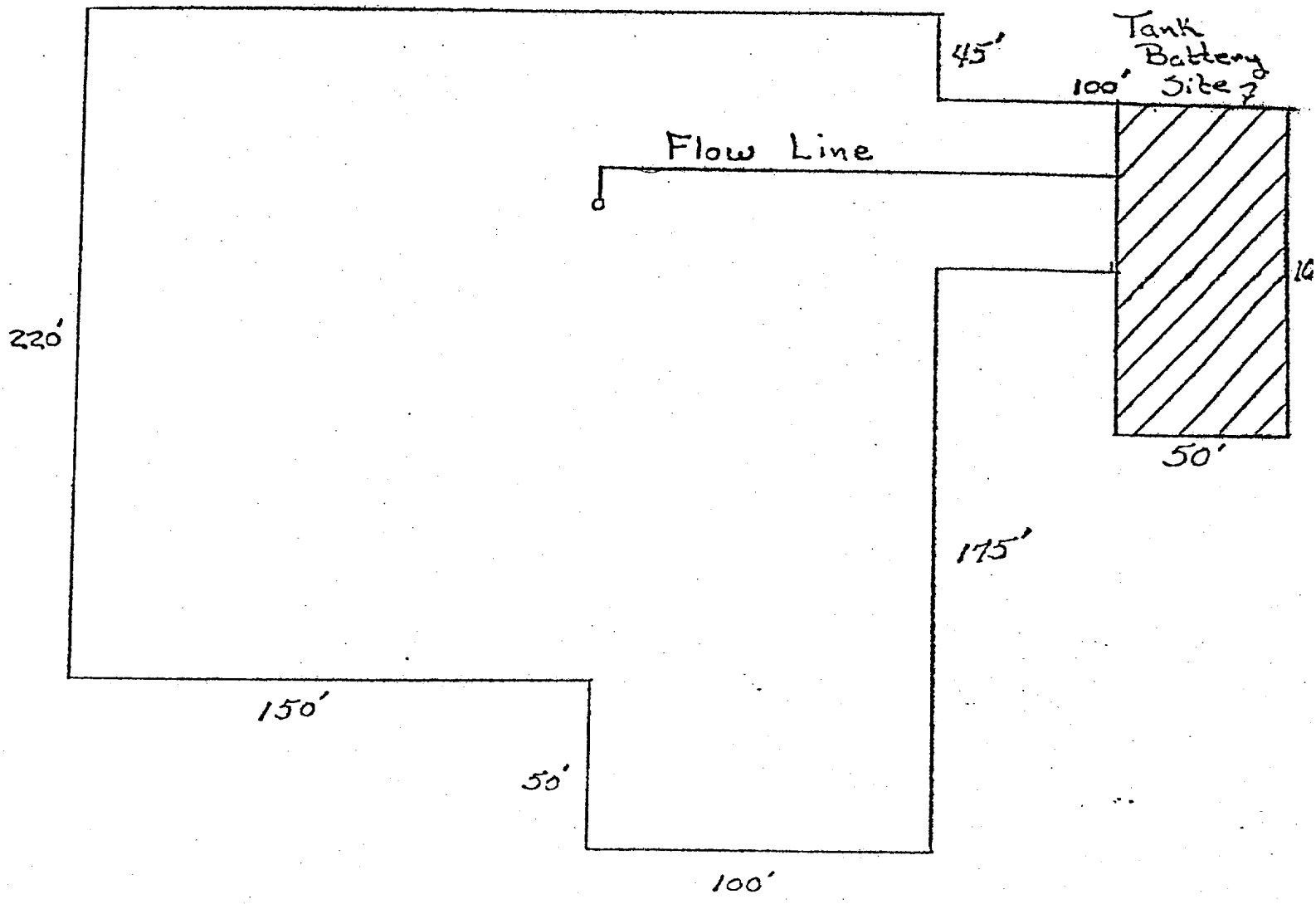


Exhibit C

Production Pad Layout
Nopal Draw Federal #1
Section 8, T21S, R25E
Eddy Co., New Mexico

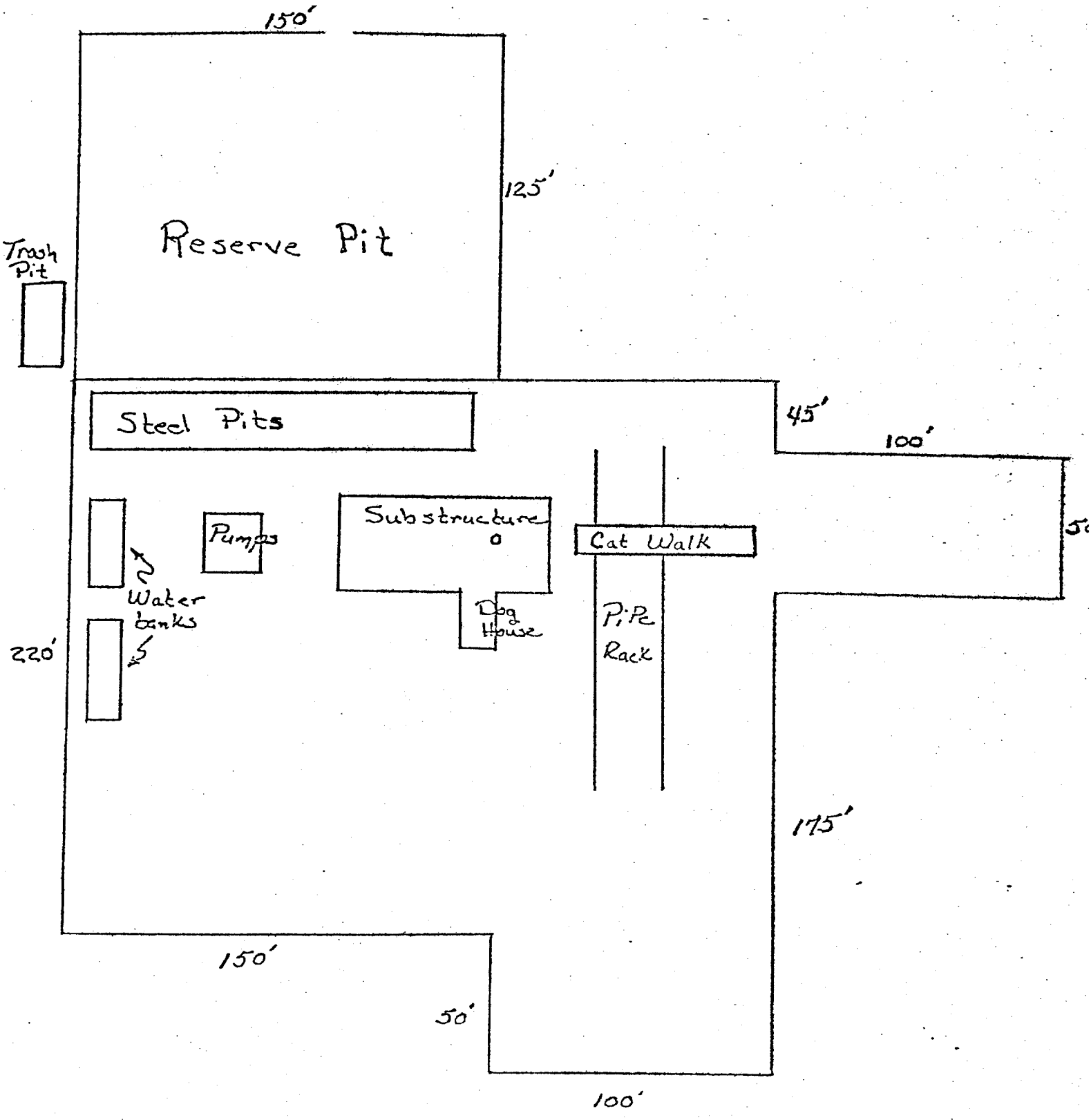


Exhibit D

Drilling Pad Layout

Nopal Draw Fed #

Section 8, T21S, R2

Eddy Co., New Mex.