

INMOCC COPY

SUBMIT IN TRIPPLICATE*
(Other instructions on
reverse side)Form approved.
Budget Bureau No. 42-R1425.UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-015-22480

5. LEASE DESIGNATION AND SERIAL NO.

NM-4986

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Pacheco Federal

9. WELL NO.

2

10. FIELD AND POOL, OR WILDCAT

Angell Ranch Morrow

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA

Sec. 1, T-20S, R-27E

12. COUNTY OR PARISH

Eddy

13. STATE
New Mexico

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

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

1980' FNL & 1980' FEL of Sec. 1, T-20-S, R-27-E

At proposed prod. zone

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

O.C.C.
ARTESIA, OFFICE

15. DISTANCE FROM PROPOSED*

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

16. NO. OF ACRES IN LEASE

929

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

11,200'

20. ROTARY OR CABLE TOOLS

Rotary

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

3380' GL

22. APPROX. DATE WORK WILL START*

May 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#	420'	Circulate
12-1/4"	8-5/8"	24#	3,000'	Circulate
7-7/8"	5-1/2"	17#	11,200'	600 sx - TOC 8500'

Mud Program: 0' - 3000', fresh water spud mud and fresh water; 3000' - 8500',
salt water; 8500' - TD, salt water polymer.

BOP: See Drawing No. 4 attached.

Gas is not dedicated.

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ARTESIA, NEW MEXICO

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

W. B. Bland

TITLE Area Production Manager

DATE 3-17-78

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APR 3 - 1978

APPROVED BY

Joe D. Lara

TITLE ACTING DISTRICT ENGINEER

DATE APR 3 - 1978

CONDITIONS OF APPROVAL, IF ANY:

THIS APPROVAL IS RESCINDED IF OPERATIONS
ARE NOT COMMENCED WITHIN 3 MONTHS.
EXPIRES JUL 3 - 1978

*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

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

All distances must be from the outer boundaries of the Section

Operator Gulf Oil Corp.			Lease Pacheco Fed.		Well No. 2
Tract Letter G	Section 1	Township 20 South	Range 27 East	County Eddy	
Actual Footage Location of Well:					
1980 feet from the North line and		1980 feet from the East line			
Ground Level Elev. 3379.6	Producing Formation Morrow	Pool Angell Ranch Morrow		Dedicated Acreage: 320.16 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 interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

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ARTESIA, NEW MEXICO**

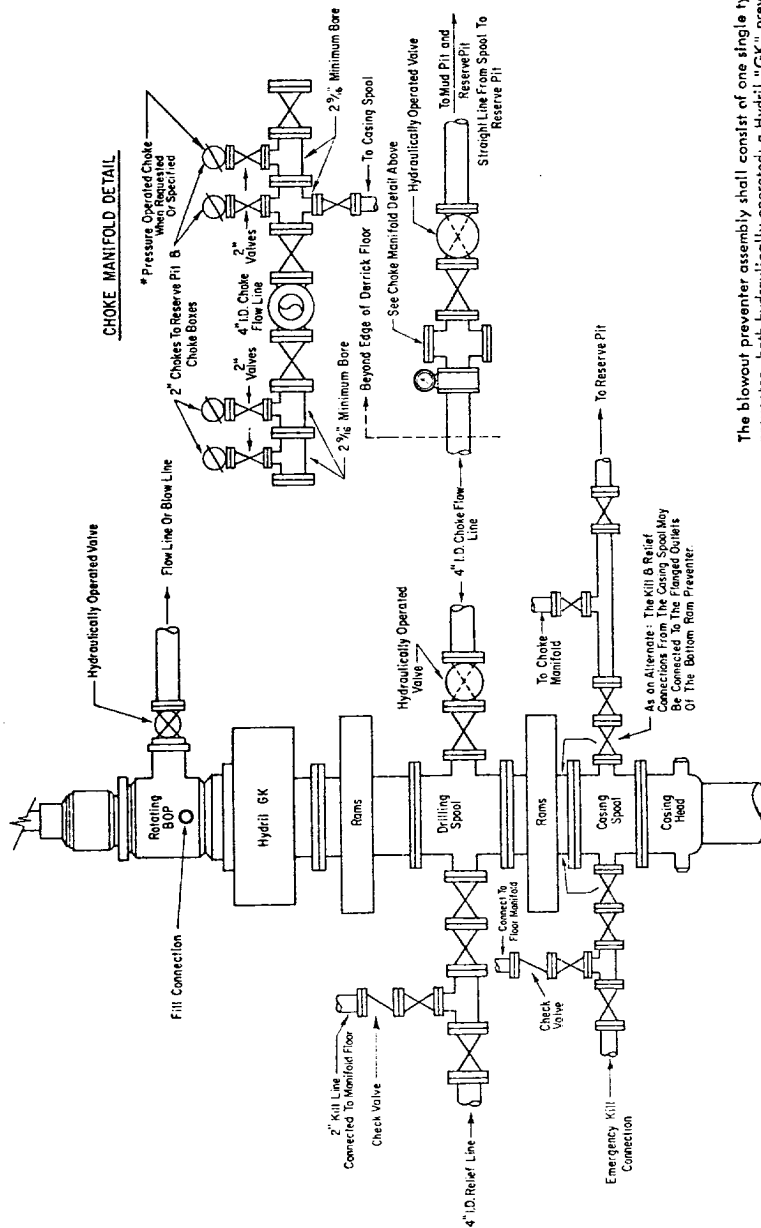
☐ Yes ☐ No If answer is "yes," type of consolidation _____

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.

40.12 ② 40.04 ① USA Yates Petroleum	1980' USA GULF OIL CORPORATION	1980' USA GULF OIL CORPORATION

CERTIFICATION	
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.	
	Name
C. D. Borland	Position
Area Production Manager	Company
GULF OIL CORPORATION	Date
3-17-78	
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.	
March 15, 1978	
Date Surveyed	
Registered Professional Engineer and Land Surveyor	



5000 # PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

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 positions. 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, or an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief 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. If deemed necessary, walkways and stairways shall be erected in and around 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 and relief line valves connected to the drilling pool 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.

ADDITIONS - DELETIONS - CHANGES SPECIFY

The blowout preventer assembly shall consist of one single type blind ram preventer and one single type pipe ram preventer, both hydraulically operated; a Hydril "GK" preventer; a rotating blowout preventer; valves; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer 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 4-inch I.D. relief line, except when air or gas drilling. All preventer connections are to be open-face flanged.

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 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.

Gulf Oil Exploration and Production Company

C. D. Borland
PRODUCTION MANAGER, HOBBS AREA

March 16, 1978

P. O. Box 670
Hobbs, NM 88240

Re: Application for Permit to Drill
Proposed Pacheco Federal No. 2,
Eddy County, New Mexico

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

Gentlemen:

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

Well: Pacheco Federal Well No. 2

- (1) Location: 1980'FNL and 1980'FEL of Section 1, T-20-S, R-27-E, Eddy County, New Mexico.
- (2) Elevation of Unprepared Ground: 3380' GL.
- (3) Geologic Name of Surface Formation: Quarternary alluvium.
- (4) Type Drilling Tools: Rotary
- (5) Proposed Drilling Depth: 11,200'.
- (6) Estimated Top of Geologic Markers: Yates, 520'; Delaware Sand, 2650'; Bone Spring, 4250'; Wolfcamp, 8610'; Strawn, 9200'; Atoka, 10,150'; Morrow, 10,680'; Barnett, 11,100'.
- (7) Estimated Depths at which Anticipated Gas or Oil-Bearing Formations Expected:
 - (a) 9,200' - 9,950' in Strawn
 - (b) 10,650' - 11,000' in Morrow
- (8) Casing Program and Setting Depths:

	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Setting Depth</u>
Surface	13-3/8"	48#	H-40	420'
Intermediate	8-5/8"	24#	K-55	3,000'
Production	5-1/2"	17#	K-55 & N-80	11,200'



- (9) Casing Setting Depth and Cementing Program:
- (a) Surface casing will be 13-3/8" set at 420' and cemented with 200 sacks of Class "C" with 6% gel, 1/4#/sack Flocele, 2% CaCl₂ and 150 sacks of Class "C" with 2% CaCl₂.
 - (b) Intermediate casing will be 8-5/8" set at 3,000' and cemented with 300 sacks of Halliburton thickset with 12#/sack gilsonite, 1/4# per sack Flocele, 2% CaCl₂ followed by 700 sacks of Class "C" with 16% gel Gulfmix and 200 sacks of Class "C" with 2% CaCl₂.
 - (c) Production casing will be 5-1/2" set approximately 11,200' and cemented with Class "H" with 0.75% CFR-2, 5#/sack KCL with volume necessary to bring cement top to 8500' using caliper survey for volumes.
- (10) Pressure Control Equipment: The minimum specifications for pressure control equipment can be seen on the attached Drawing No. 4 of Gulf's blowout preventer hook-up for 5000 psi working pressure.
- (11) Circulating Media: 0-420', fresh water spud mud; 420-3000', fresh water; 3000-8500', brackish water; 8500-11,200', salt water polymer with the following properties: Viscosity 34-38 sec, Water loss 5 cc's or less, Weight 9.6-10.6 ppg. 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) Open hole logs will be run at total depth.
 - (c) No cores are anticipated.
- (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. 4 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 April 15, 1978 and May 15, 1978.
- (15) Other Facets of the Proposed Operation: None.

Yours very truly,



C. D. BORLAND
Area Production Manager

Gulf Oil Exploration and Production Company

C. D. Borland
PRODUCTION MANAGER, HOBBS AREA

March 16, 1978

P. O. Box 670
Hobbs, NM 88240

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

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MAR 17 1978
U. S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

Re: Surface Development Plan - Pacheco
Federal Well No. 2, 1980'FNL and
1980'FEL Section 1-T20S-R27E,
Eddy County, New Mexico

Gentlemen:

The surface use and operations plan for the proposed 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 north on Canal Street, out of Carlsbad, New Mexico on State Highway 239 approximately 11 miles north of the Pecos River. Turn left onto existing road and follow for approximately 0.3 miles, then turn left and follow road for approximately 0.2 miles to proposed well site.
- (b) Exhibit "B" is a portion of a lease map showing all existing roads within a one mile radius of the well site and the planned access road.

(2) PLANNED ACCESS ROAD

- (a) Length and Width: There is 0.2 miles of road that will be improved. Improved road is color coded brown on Exhibits "A" and "B".
- (b) Surfacing Material: None required.
- (c) Turnouts: None required.
- (d) Culverts: None required.
- (e) Cuts and Fills: A cut of 2' on the north side and a fill of 2' on the south side will be required on the proposed location.
- (f) Gates and Cattleguards: None required.

(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 "D".

(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 roads shown on Exhibit "B".

(6) SOURCE OF CONSTRUCTION MATERIAL

- (a) Caliche will be used from the pit in the NE/4 of Section 1. This caliche will be bought by contractor and hauled over roads shown on Exhibit "B".

(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 "C".
- (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 "C" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit and location of major rig components.
- (b) There should be approximately a 2 foot cut on the north side and a 2 foot fill on the south side.
- (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 unguarded 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 road will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment.

(11) OTHER INFORMATION

- (a) Topography: Land surface undulating to rolling sand dunes. The undisturbed elevation at the proposed wellsite is 3380'.
- (b) Soil: Soil is a deep, fine sand underlain by caliche.
- (c) Flora and Fauna: The vegetative cover is generally sparse and consists of yucca, shinny oak, 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 miles southeast of the well site. The nearest water well is located at the ranch house.
- (f) Archeological, Historical and Cultural Sites: None observed in the area.
- (g) Land Use: Grazing and hunting.
- (h) Surface Ownership: Surface is Federal land.

(12) OPERATOR'S REPRESENTATIVE:

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

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

March 16, 1978

(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 sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

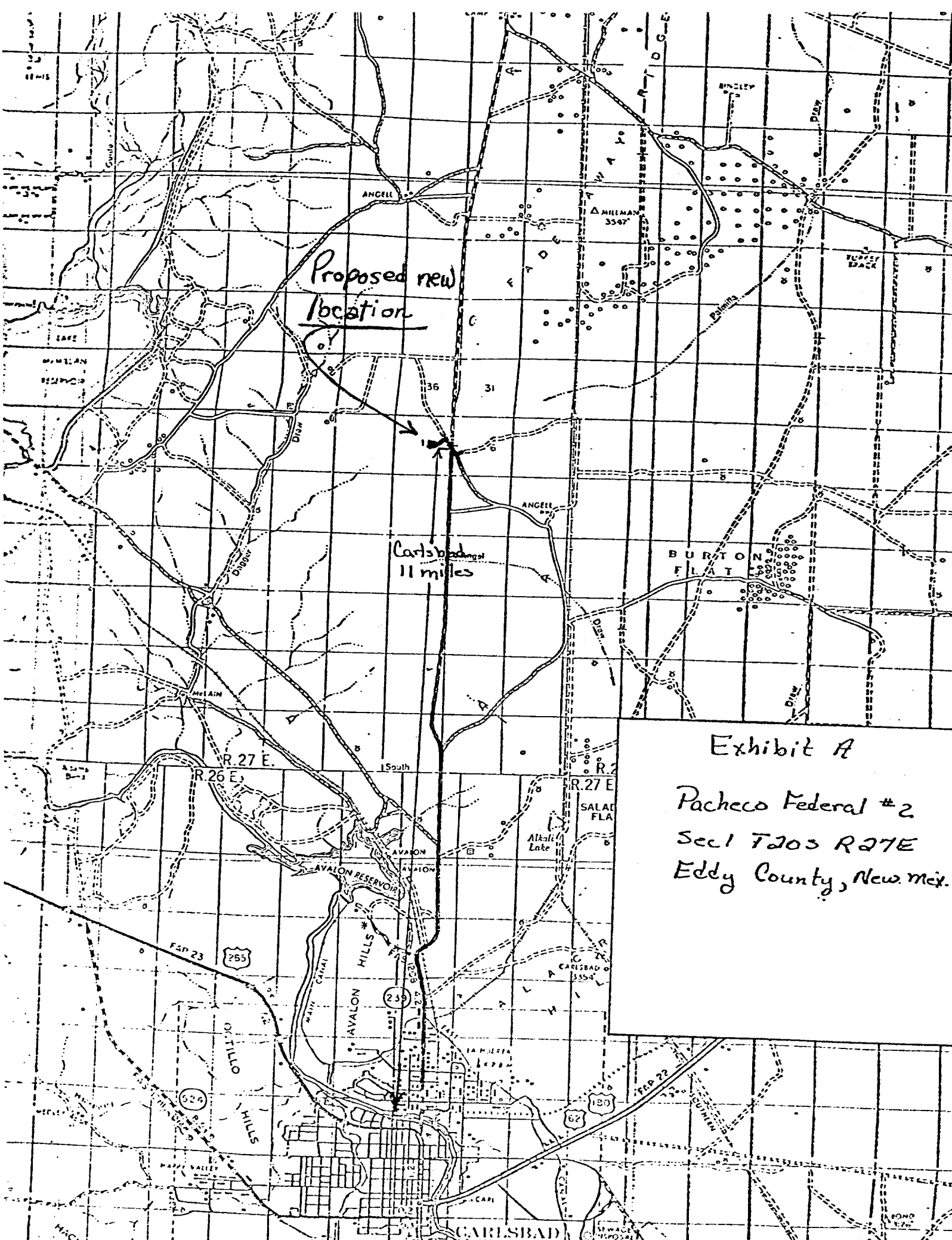
3-17-78

Date



C. D. BORLAND
Area Production Manager

LVT/dch

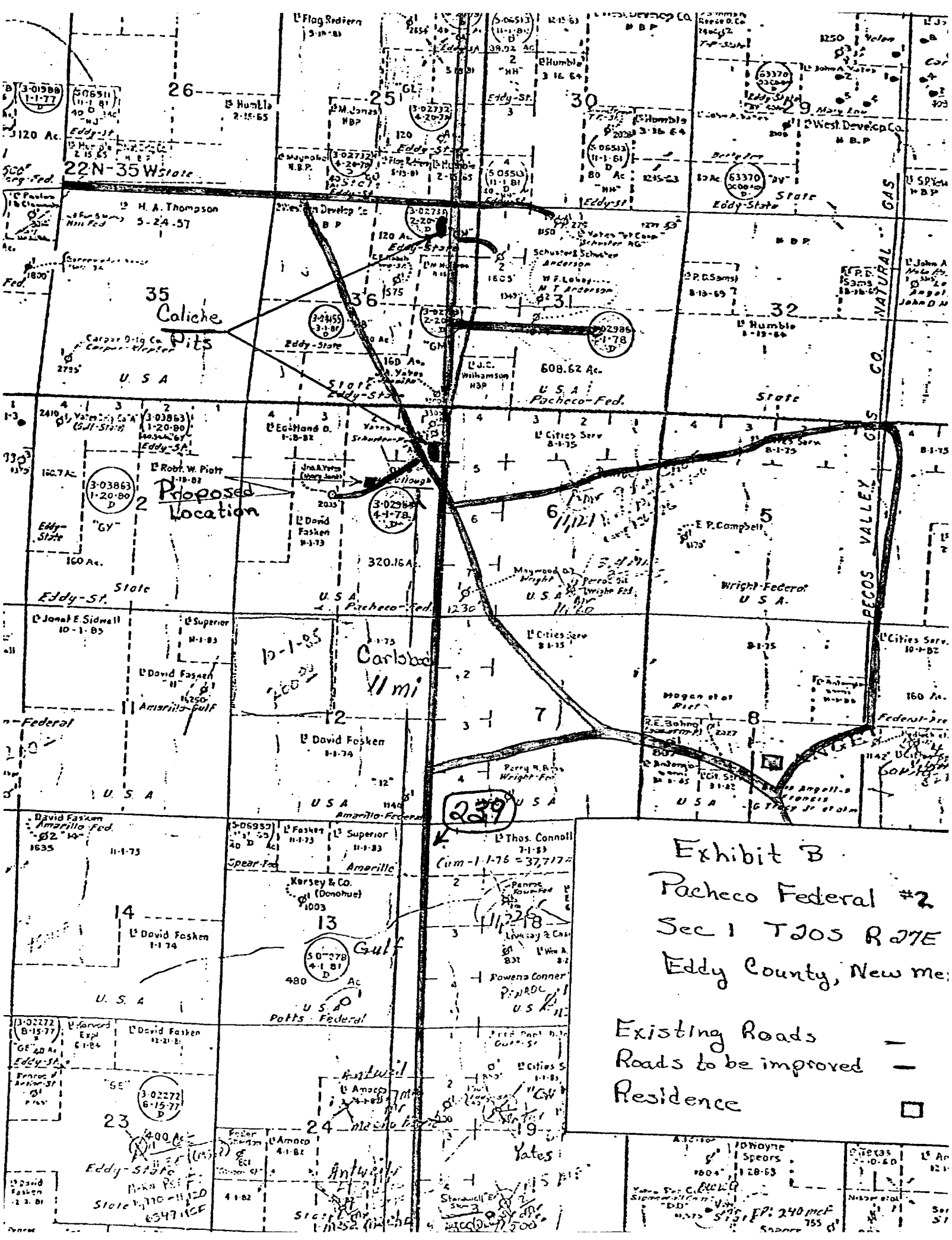


Proposed new
location

Carlsbad
11 miles

Exhibit A

Pacheco Federal #2
Sec 1 T20S R27E
Eddy County, New Mex.



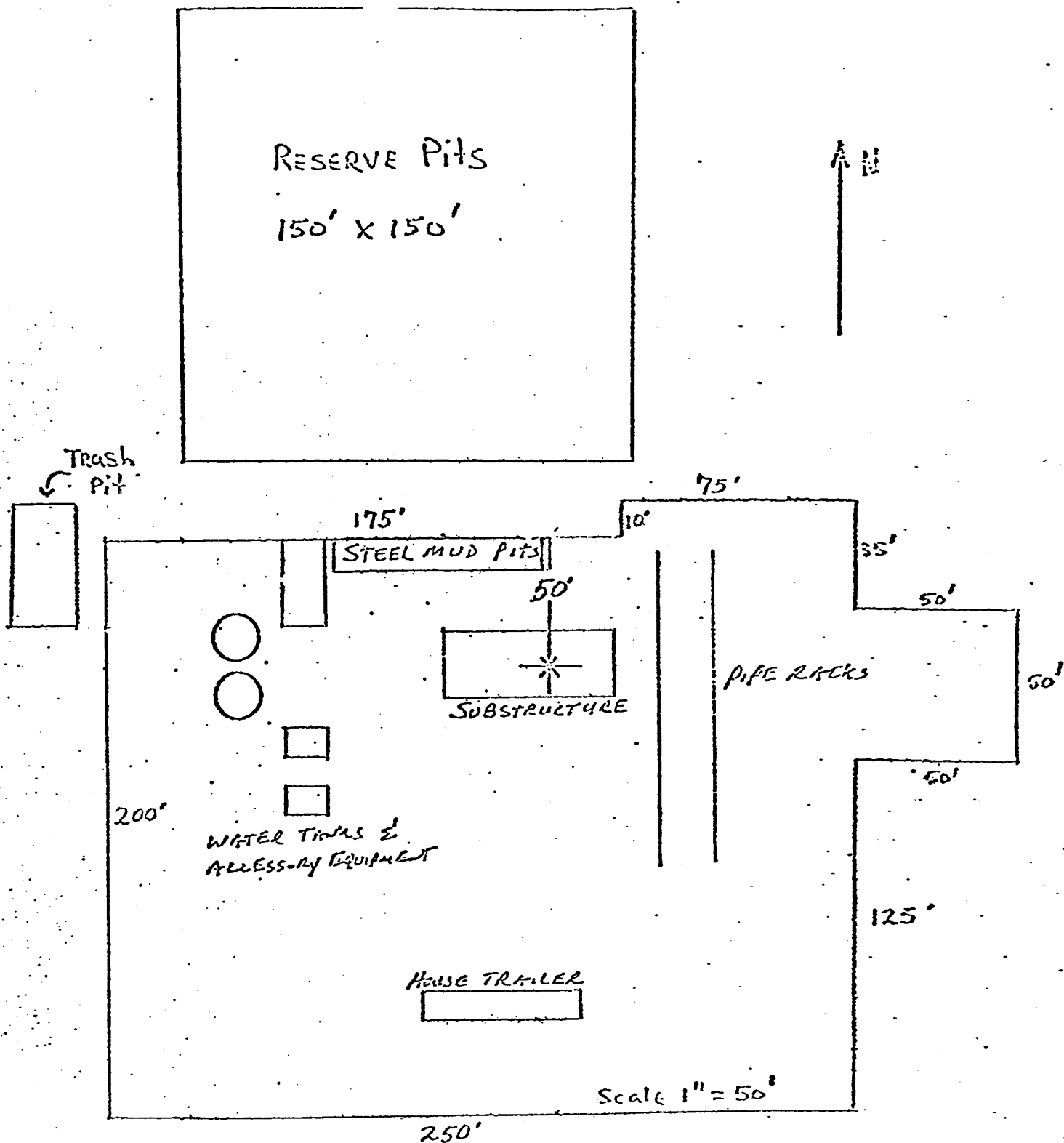


Exhibit C
Drilling Pad Layout
Pacheco Federal #2
Sec 1 T20S R27E
Eddy County, New Mexico

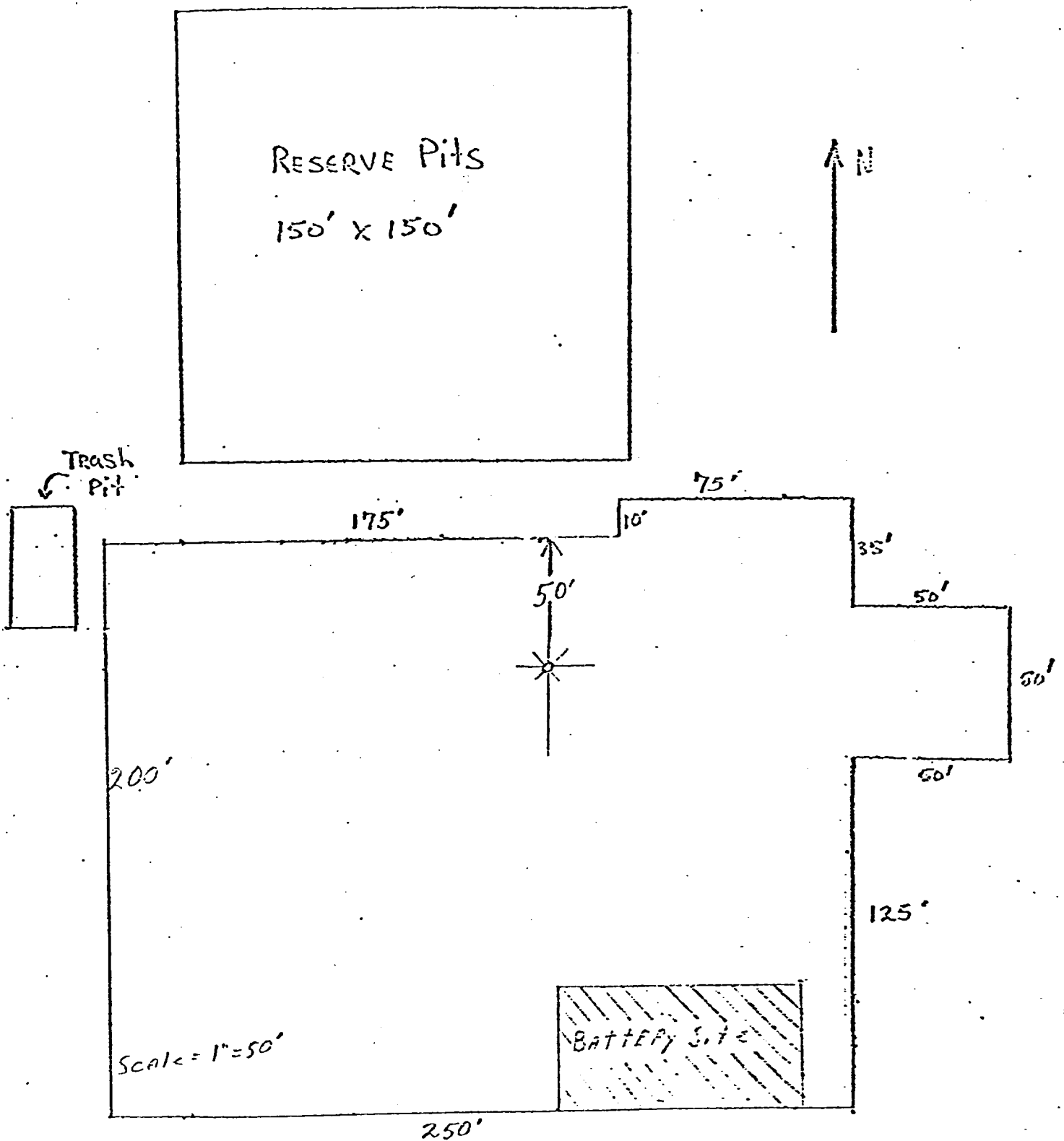


Exhibit D
Production Pad Layout
Pacheco Federal # 2
Sec 1 T20S R27E
Eddy County, New Mexico