

UNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☐

RE-ENTER

DEEPEN ☒PLUG BACK ☒

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Marathon Oil Company

3. ADDRESS OF OPERATOR

P O Box 552, Midland, TX 79702

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

At surface

1980' FNL & 660' FWL

At proposed prod. zone

1980' FNL & 660' FWL

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

10 miles ESE of Loco Hills, NM

15. DISTANCE FROM PROPOSED*

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

660'

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

N/A

16. NO. OF ACRES IN LEASE

160

19. PROPOSED DEPTH

4500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3740.6' GR

22. APPROX. DATE WORK WILL START*

October 25, 1990

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8"	32.3	822'	In place
7-7/8"	5-1/2"	15.5	4500'	640 sx - circulate

Propose to drill to a TD of 4500'.

All casing will be run and cemented in accordance with regulations and by approved methods.

Blowout prevention equipment will be applied as outlined in Additional Information. See attached Multipoint Surface Use Plan and Additional Information for specific drilling operations.

This will be the first San Andres well drilled on this lease.

Propose to re-enter the Johnson "B" Federal A/C 1 #2. Wash & drill thru plugs at 0-10-, 722'-922', 3290'-3390' and 3680'-3830' and wash to old TD @ 4200'.

Drill formation to a new TD of 4500'.

Post IO-1
11-2-90
Re-entry

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

TITLE Drilling Superintendent

DATE

10/5/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

AREA

CARLSBAD RESOURCE AREA

DATE

10-23-90

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

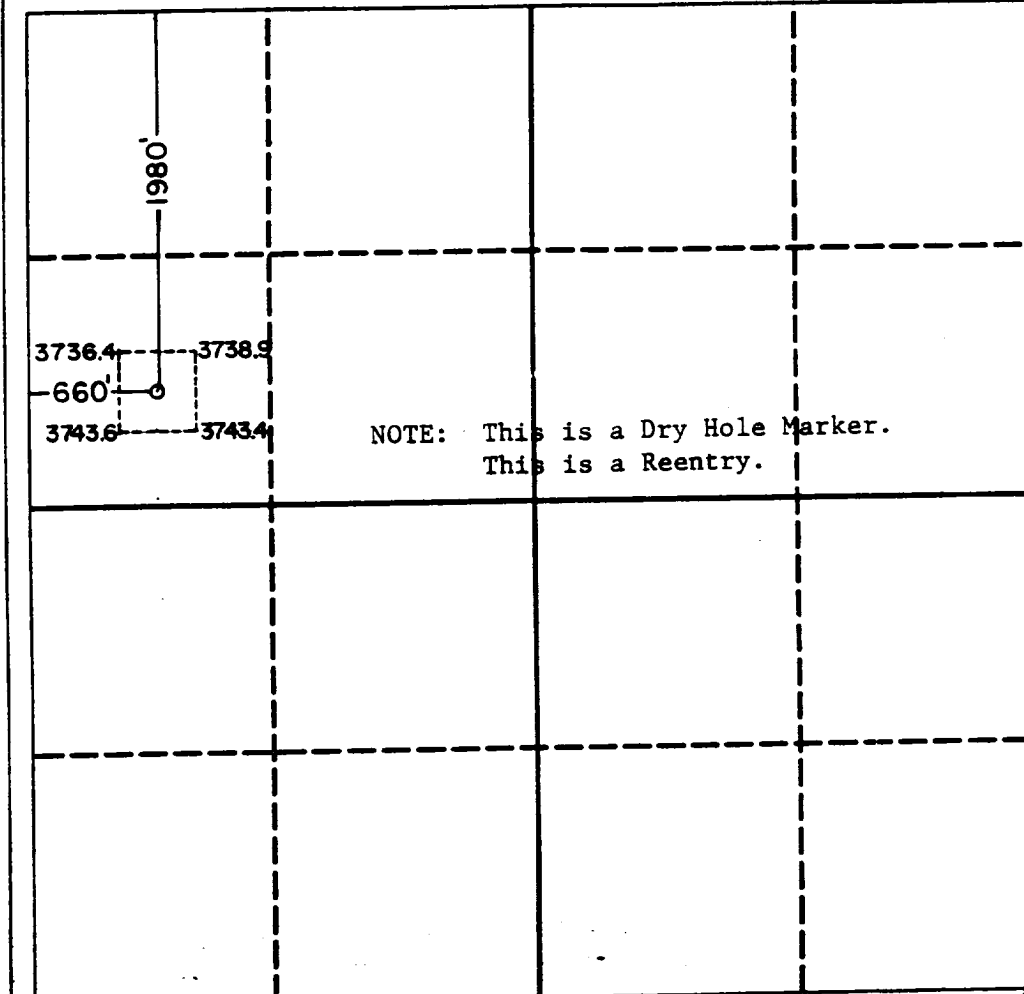
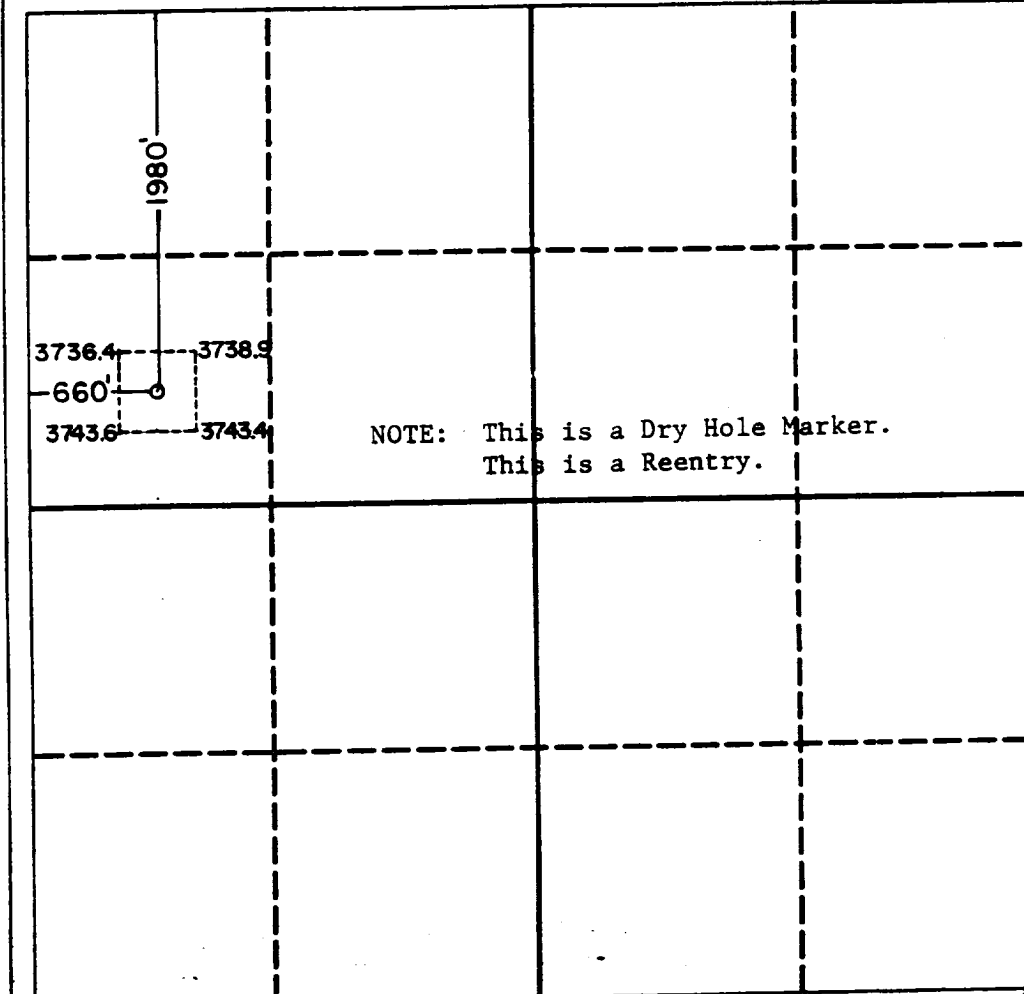
DISTRICT I
P.O. Box 1900, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Blanco Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MARATHON OIL CO.		Lease Johnson B Federal AC 1		Well No. 2
Unit Letter E	Section 11	Township 18 South	Range 31 East	County Eddy
Actual Footage Location of Well: 1980 feet from the North line and 660 feet from the West line				
Ground level Elev. 3740.6	Producing Formation Grayburg/San Andres	Pool Shugart North	Dedicated Acreage: 40 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.</p> <p>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).</p> <p>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.? <input type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes" type of consolidation _____</p> <p>If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>				
			OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature _____ Printed Name S. L. Atnipp Position Drilling Superintendent Company Marathon Oil Company Date 10/5/90	
			SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was determined from field notes of actual survey or under my supervision and is true and correct to the best of my knowledge and belief. NO. Date Surveyed September 8, 1990 Signature of Professional Engineer JOHN W. WEST Professional Engineer JOHN W. WEST 26630	

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

Marathon Oil Company

JOHNSON "B" FEDERAL A/C 1 #2 (Re-entry)
1980' FNL & 660' FWL
Section 11, T-18-S, R-31-E
Eddy County, New Mexico
Lease: LC-029388

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

1. Existing Roads

Exhibit "A" is a portion of a topographic map showing the location of the proposed well as staked. Proceed west from Hobbs, NM, on U.S. Highway 180. Turn west on NM Highway 529. After 31 miles, turn west on U.S. Highway 82 for 1/2 mile to Highway 222. Turn south on Highway 222 for 2 miles to caliche road, NM 249. Go east 1.3 miles. Turn N.E. on dirt road for 1.3 miles; turn north on dirt road for .9 mi. to location. All existing roads used to access the proposed location shall be maintained in the same or better condition than presently found.

2. Planned Access Roads

A. Length and Width

No access road will be needed as the location falls beside an existing resource road.

B. Surfacing Material

None required.

C. Maximum Grade

Three Percent (3%)

D. Turnouts

None Required

E. Drainage Design

Natural drainage.

F. Culverts

None required.

G. Cuts and Fills

None required.

H. Gates, Cattlegaurds and Fences

None Required.

3. Location of Existing Wells

Exhibit "B" is a map showing the location of all the wells within a one mile radius of the proposed well.

4. Location of Existing and Proposed Facilities

A. Exhibit "C" is a map of the existing roads with the proposed well location.

B. In the event of a producible oil well, oil will be stored at the battery location on the Johnson "B" Federal A/C 1 #2 pad with production metered at the location. The gas will be piped to existing flow lines in a manner to be determined at a later date.

5. Location and Type of Water Supply

Water will be furnished and trucked by a Contractor.

6. Source of Construction Materials

Caliche for surfacing the drilling pad will be obtained from a pit in the NW/4, SW/4 and NE/4 of the NW quarter section of Section 15, T-18-S, R-31-E. This area has been cleared for construction by the following archaeological clearance numbers, #85-195, #85-345.

7. Methods of Handling Waste Disposal

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be vacuumed from the reserve pit and hauled to an approved disposal well. Reserve pit contents will be allowed to dry and pitwalls backfilled. All areas of the pad and reserve pit not necessary to production will be re-contoured. Top soil will be redistributed and reseeded with the recommended seed mixture.

Multipoint Surface Use and Operations Plan

Page 3

- C. Water produced during tests will be disposed of in the drilling pits and hauled to an approved salt water disposal well.
- 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 stored in a trailer on location and hauled to an approved disposal site.
- F. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and completion operations.

8. Ancillary Facilities

None required.

9. Wellsite Layout

Exhibit "D" shows the relative location of the rig components and reserve pits.

10. Plans for Restoration of Surface

- A. After finishing drilling and completion operations all equipment and other materials not necessary for operations will be removed. Pits will be filled and leveled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as is possible.
- B. Any unguarded pits containing fluids or trash will be fenced until they are filled or leveled.
- C. After abandonment of well, equipment will be removed, the location will be cleaned, and the pad and access road will be ripped and returned to as near the original appearance as is possible.
- D. In the event of a producer, the land not necessary for production operations will be re-contoured and seeded with the recommended mixture submitted by the BLM.

11. Other Information:

A. Topography

The location is situated on a duned landform.

B. Soil

Typic Torripsamment subgroup.

C. Flora and Fauna

The vegetation cover consists of native range grasses with yucca plants, cactus and mesquite. Wild life in the area includes rabbits, dove, quail, and other inhabitants typical of semi-arid climate.

D. Ponds and Streams

Local drainage in this area is internal.

E. Residence and Structures

None nearby.

F. Archaeological, Historical and Cultural Sites

None observed in the area. The Archaeological Inspection Report is being forwarded by Archaeological Consultants, Inc.

G. Land Use

Grazing with hunting in season.

H. Surface Ownership

The proposed wellsite is on land owned by the Federal Government.

12. Operators Representative

Stanley L. Atnipp
P. O. Box 552
Midland, TX 79702
(915) 682-1626

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 place are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by Marathon Oil Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



S. L. Atnipp
Drilling Superintendent



Date

MARATHON OIL COMPANY

JOHNSON "B" FEDERAL A/C 1 #2
ADDITIONAL INFORMATION
Comply with Order 1

In conjunction with Form 9-331C, Application to drill subject well, Marathon Oil Company submits the following items of information in accordance with BLM requirements:

1. Geological Name of Surface Formation

Quaternary Alluvium

2. Estimated Tops of Important Geological Markers

Rustler	777'	"C" Sand	4022'
Base of Salt	2075'	"D" Sand	4108'
Yates	2180'	San Andres	4306'
Seven Rivers	2636'	"A" Sand	4374'
Queen	3330'		
Grayburg	3850'		
"B" Sand	3966'		

3. Estimated Depths of Anticipated Water, Oil or Gas Bearing Formations

Yates (water)	2180'	"D" Sand (water & oil)	4108'
Seven Rivers (water)	2636'	San Andres (water & oil)	4306'
Queen (water & oil)	3330'	"A" Sand (water & oil)	4374'
Grayburg (water & oil)	3850'		
"B" Sand (water & oil)	3966'		
"C" Sand (water & oil)	4022'		

4. Casing and Cementing Program

9-5/8" Surface to 822':	Cmt'd w/ 350 sx trinity regular w/ 3% gel (in place)
5-1/2" Production to 4500':	Cement to surface w/ 390 sxs Class "C" + 6% gel, tail in w/ 250 sxs Class "C" + 2% CaCl ₂

5. Pressure Control Equipment (Exhibit E)

9-5/8" Surface:	11" 3000 psi working pressure annular preventer tested to 2000 psi
	11" 3000 psi working pressure pipe and blind rams tested to 3000 psi 11" rotating head

6. Proposed Mud Program

0 - 722 Brine; Mud Wt: 10.0, Viscosity 28-30 Sec
722 - 4,500 Brine; Mud Wt: 10.0, Viscosity 34-40 Sec

7. Auxiliary Equipment

A safety valve and subs to fit all strings will be kept on the floor at all times. An upper kelly cock valve will be utilized with the handle available on the rig floor. A pit volume totalizer and gas separator will be installed at rig up.

8. Testing, Logging, and Coring Programs

A. Coring Program:

None anticipated.

B. Testing Program:

None anticipated.

C. Logging Program:

TD-Surface - GR/SP/DIL, GR-LDT-CNL

9. Abnormal Pressures, Temperatures or Potential Hazards

None anticipated

10. Anticipated Starting Date

As soon as possible

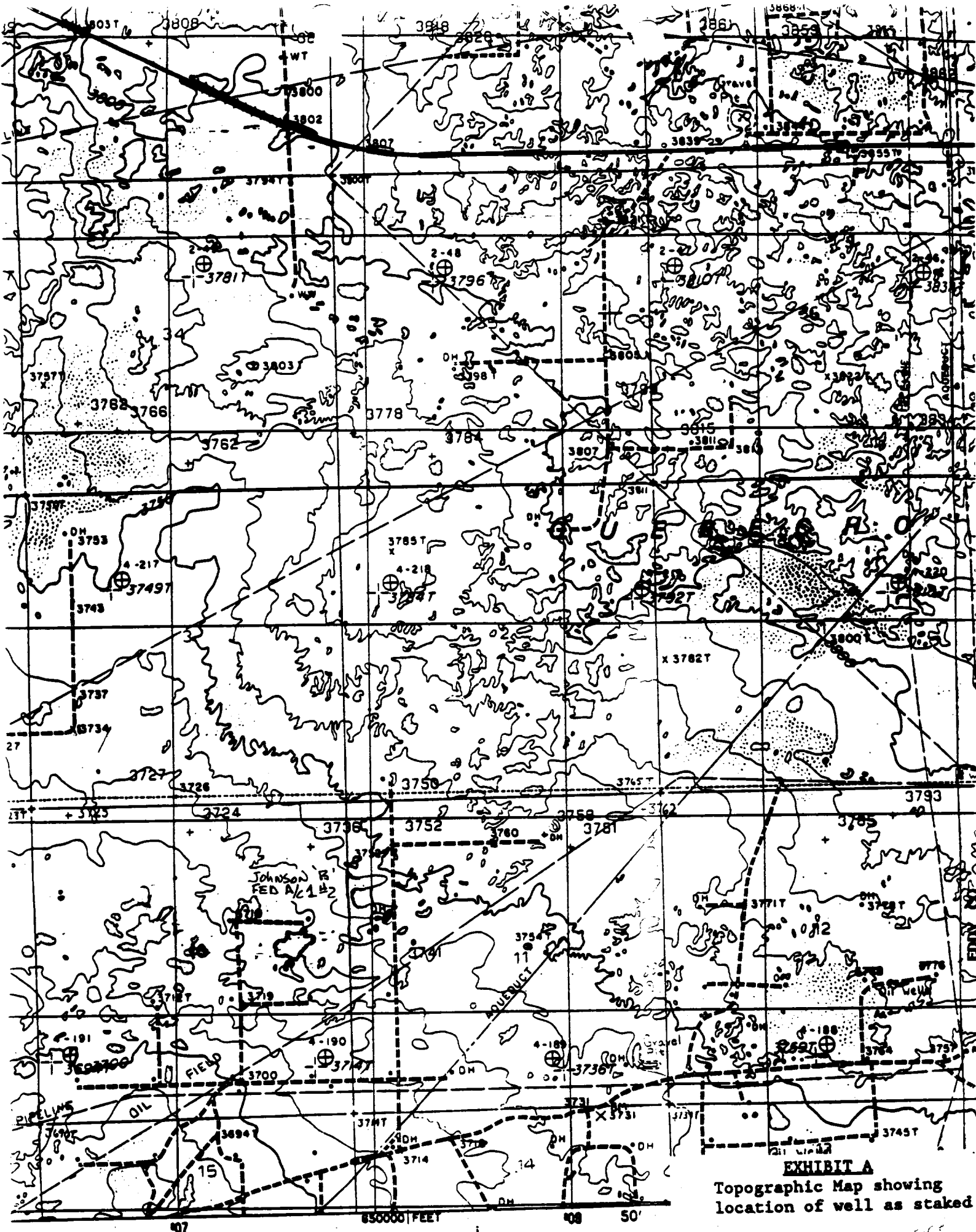


EXHIBIT A
Topographic Map showing
location of well as staked

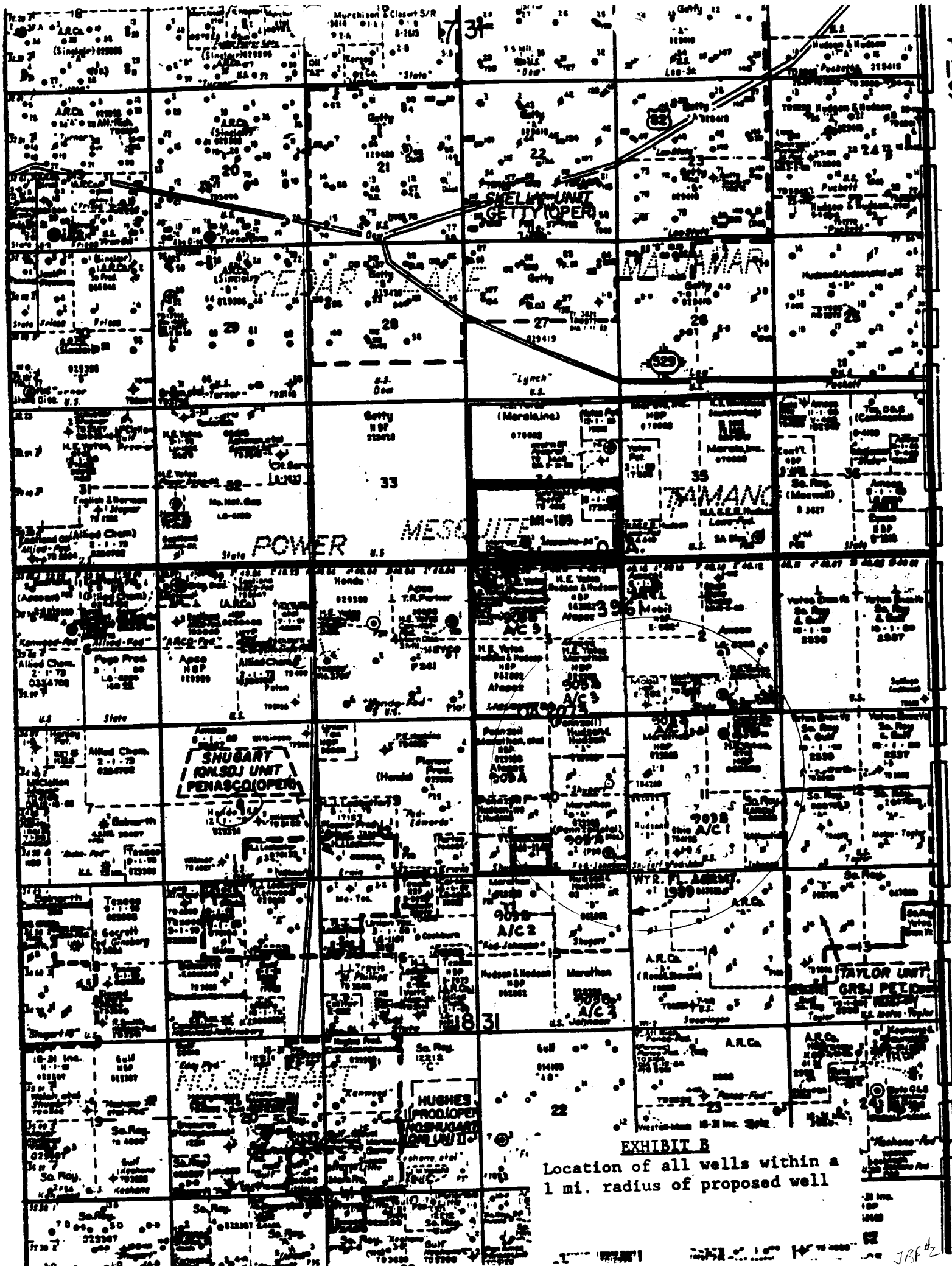


EXHIBIT B
Location of all wells within a
1 mi. radius of proposed well

JRF

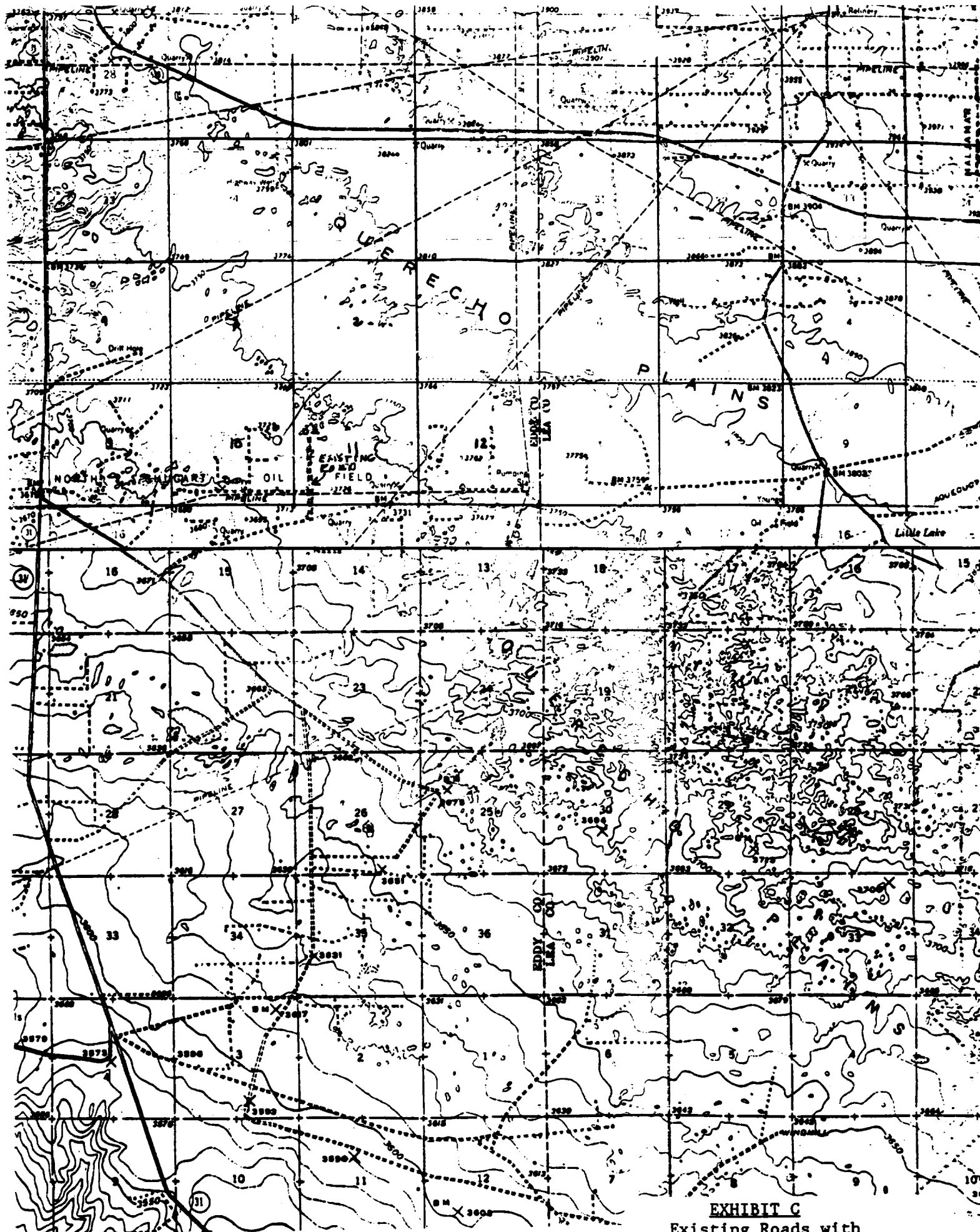


EXHIBIT C
Existing Roads with
proposed access road

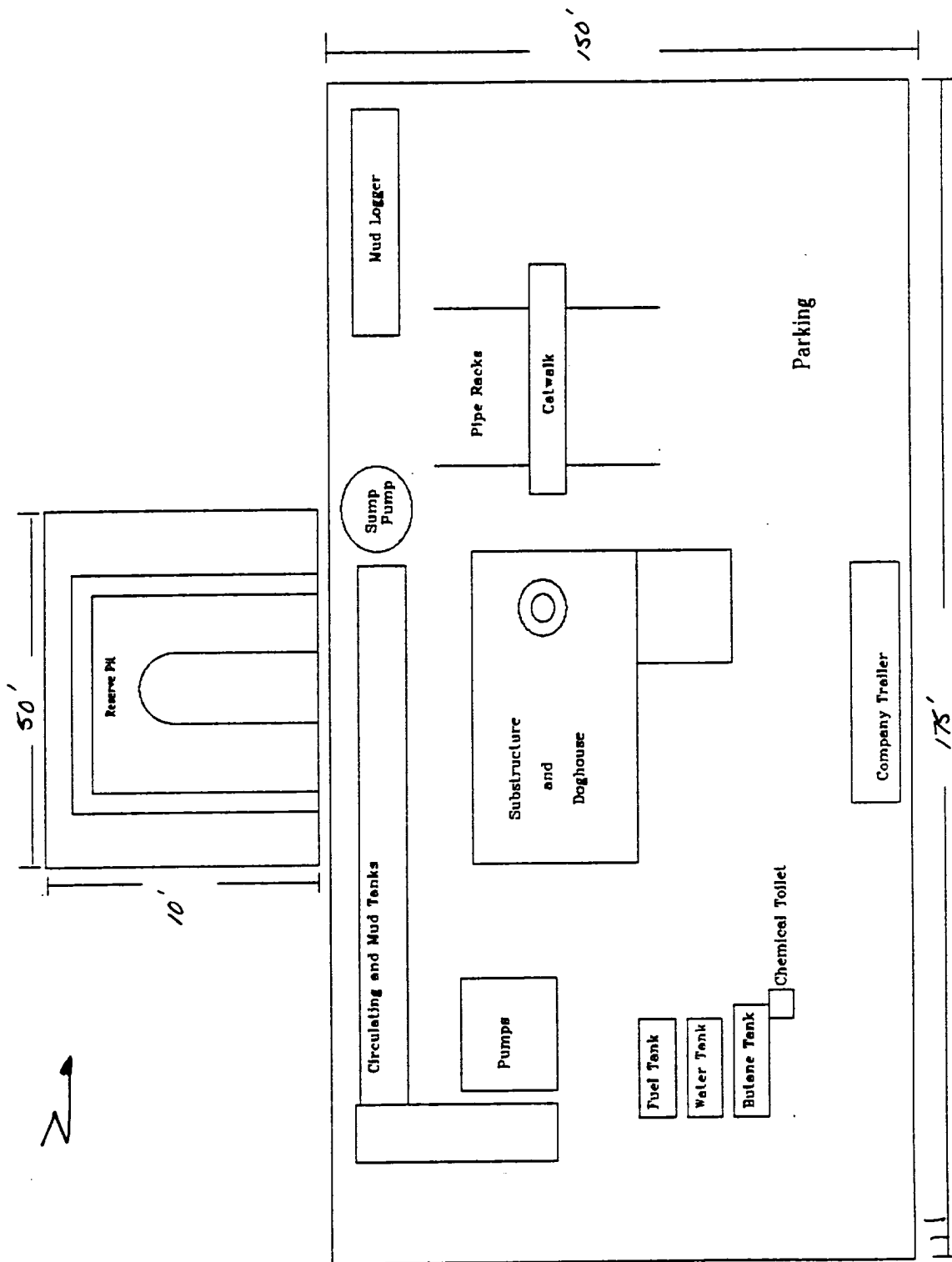


EXHIBIT D

Relative location of rig components & reserve pit

