

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

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

990' FNL & 450' FWL

At proposed prod. zone

990' FNL & 450' 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 drlg. unit line, if any)

450'

18. DISTANCE FROM PROPOSED LOCATION*

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

1328

16. NO. OF ACRES IN LEASE

160

19. PROPOSED DEPTH

9000'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3747.1' GR

22. APPROX. DATE WORK WILL START*

August 15, 1990

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	750'	835 sx - circulate
11"	8-5/8"	24 & 32	2450'	1350 sx - circulate
7-7/8"	5-1/2"	15.5 & 17	9000'	1500 sx

Propose to drill to a TD of 9000'.

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.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHEDPost ID-1
8-18-90
New Loc & APIRECEIVED
JUL 13 9 47 AM '90
CARLSBAD RESOURCE AREA

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

7/11/90

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

AREA MANAGER

CARLSBAD RESOURCE AREA

DATE

8-1-90

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

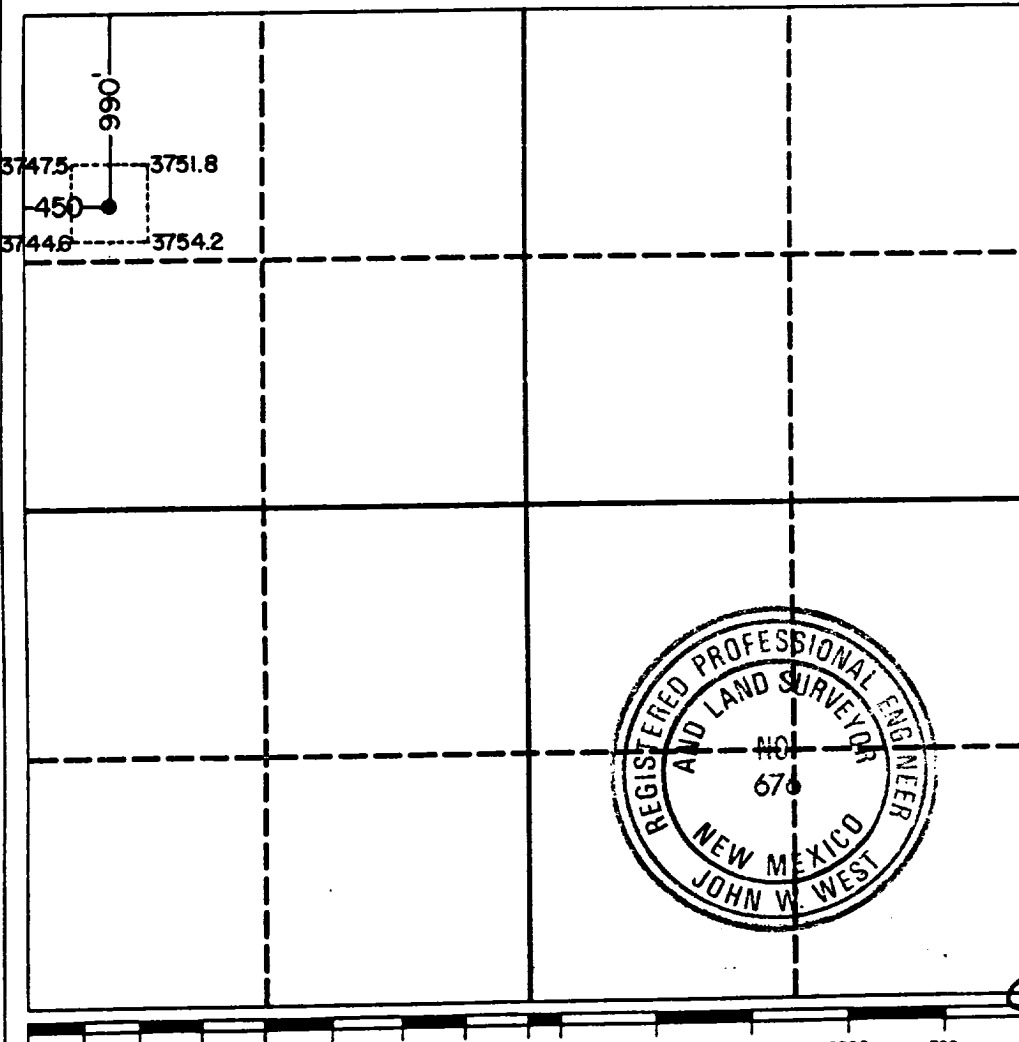

DISTRICT I
P.O. Box 1900, Hobbs, NM 88240

DISTRICT 11
P.O. Drawer DD, Artesia, NM 88210

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator MARATHON OIL COMPANY			Lease Johnson "B" Federal		Well No. 10
Unit Letter D	Section 11	Township 18 South	Range 31 East	County Eddy	
Actual Footage Location of Well: 990 feet from the North line and 450 feet from the West line					
Ground level Elev. 3747.1	Producing Formation Bone Spring Carbonate		Pool Tamano Bone Spring		Dedicated Acreage: 40 Acres
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 _____ 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 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: <i>[Signature]</i> Printed Name: S. L. Atnipp Position: Drilling Superintendent Company: Marathon Oil Company Date: 7/11/90		
			SURVEYOR CERTIFICATION 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: July 5, 1990 Signature & Seal of Professional Surveyor: <i>[Signature]</i> Certificate No. JOHN W. WEST, 676 RONALD J. EIDSON, 3231		

MULTIPOINT SURFACE USE AND OPERATIONS PLAN

Marathon Oil Company

JOHNSON "B" FEDERAL #10
990' FNL & 450' 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 #10 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.

- 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

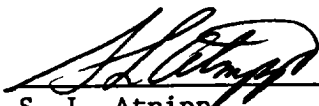
The proposed wellsite is on land owned by the Federal Government.


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 #10
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	810'	Delaware	4710'
Base of Salt	2120'	Bone Spring	5890'
Yates	2280'	1st Sand	7580'
Seven Rivers	2650'	2nd Carb	7890'
Queen	3335'	2nd Sand	8190'
Grayburg	3900'	3rd Carb	8840'
San Andres	4430'		

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

Yates (water)	2280'	Bone Spring	5890'
Seven Rivers (water)	2650'	1st Sand (water & oil)	7580'
Queen (water & oil)	3335'	2nd Carb (water & oil)	7890'
Grayburg (water & oil)	3900'	2nd Sand (water & oil)	8190'
San Andres (water & oil)	4430'	3rd Carb (water & oil)	8840'
Delaware (water & oil)	4710'		

4. Casing and Cementing Program

13-3/8" Surface to 750':	Cement to surface with 835 sxs Class "C" with 2% CaCl_2
8-5/8" Intermediate to 2450':	Cement to surface with 1100 sxs Modified Lite followed by 250 sxs Class "C" with 2% CaCl_2
5-1/2" Production to 9000':	Cement to 2200' with 1500 sxs Class "H" PozMix. Stage tool @ \pm 7400'

5. Pressure Control Equipment (Exhibit E)

13-3/8" Surface:	13-5/8" 3000 psi working pressure annular preventer tested to 2000 psi
	13-5/8" 3000 psi working pressure pipe and blind rams tested to 3000 psi

Additional Information

Page 2

8-5/8" Intermediate:

11" 3000 psi working pressure
annular preventer tested to 2000 psi

11" 3000 psi working pressure pipe
rams and blind rams tested to 3000 psi
Choke manifold tested to 3000 psi

6. Proposed Mud Program

0 - 750	Native; Mud Wt: 8.3 - 9.2, Viscosity 28-34 Sec
750 - 2,700	Brine Water; Mud Wt: 9.0 - 10.0, Viscosity 28-32 Sec
2,700 - 7,000	Fresh Water; Mud Wt: 8.6 - 8.8, Viscosity 28-32 Sec
7,000 - 9,000	Fresh Water; Mud Wt: 8.8 - 9.2, Viscosity 32-44 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.

8. Testing, Logging, and Coring Programs

A. Coring Program:

None anticipated.

B. Testing Program:

None anticipated.

C. Logging Program:

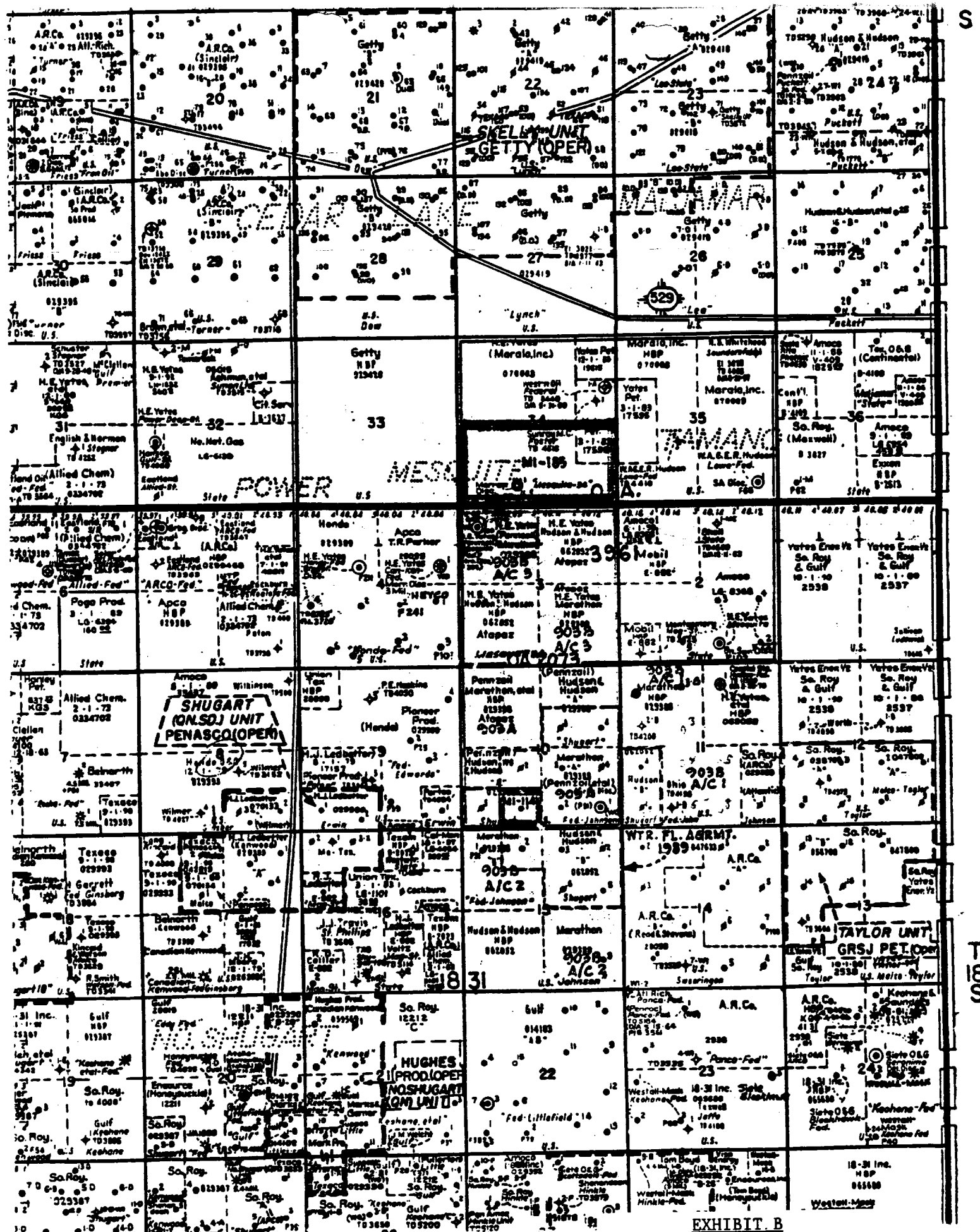
TD-Surface - GR-DIL, GR-LDT-CNL, TD-TOP of Bone Spring, GR-LSS,
NGT, DLL-MSFL.

9. Abnormal Pressures, Temperatures or Potential Hazards

None anticipated

10. Anticipated Starting Date

As soon as possible



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

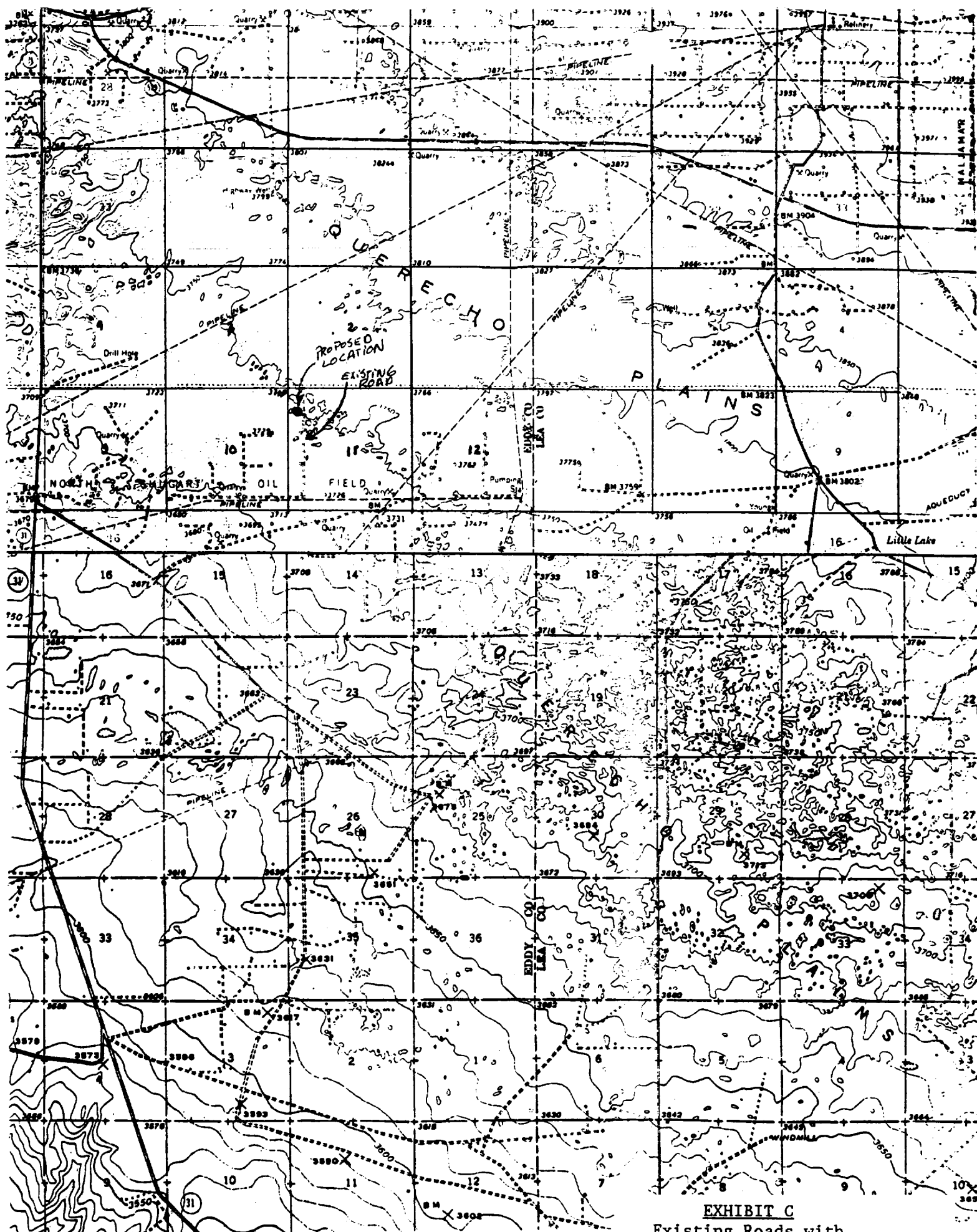
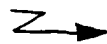


EXHIBIT C
Existing Roads with
proposed access road



EXISTING
RESOURCE
ROAD

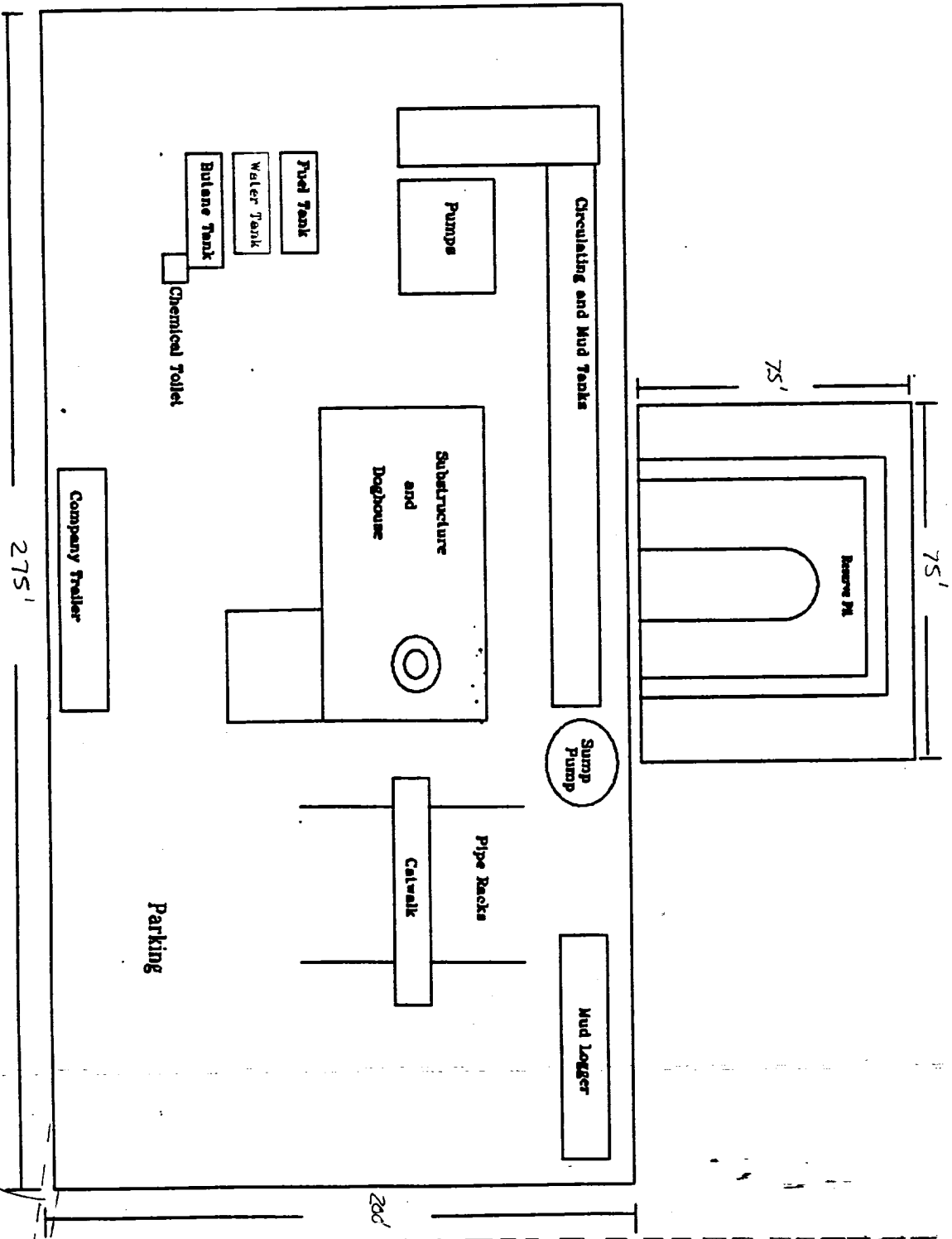


EXHIBIT D
Relative location of rig
components & reserve pit

Access
TO PAD

