

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

RECEIVED

## 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

660' FWL &amp; 470' FSL

At proposed prod. zone

660' FWL &amp; 470' FSL

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

10 miles ESE from Loco Hills, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 660' &amp; 470'

## 16. NO. OF ACRES IN LEASE

960/26

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

1333.6'

## 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.)

3718.4' GL

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

As soon as possible

## 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'	825 sx - Circulate
11"	8 5/8"	24.32	2700'	1350 sx - Circulate
7 7/8"	5 1/2"	15.5	9000'	1500 sx

Propose to drill no deeper than 9000'.

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

Blowout Preventers will be applied as outlined in Additional Information -

(see Exhibits).

POST 10-1  
NL & API  
7-29-88

RECEIVED

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 District Drilling Supt.

DATE 6/27/88

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE 7-19-88

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-85

All distances must be from the outer boundaries of the Section

Lessor Marathon Oil Company			Lease Marathon Shugart "B"			Well No. 1
Tract Letter M	Section 11	Township 18 South	Range 31 East	County Eddy		
Actual Footage Location of Well: 470 feet from the south line and 660 feet from the west line						
Ground Level Elev. 3718.4	Producing Formation Bone Spring		Pool TAMANO BONE SPRING	Dedicated Acreage: 40 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?

☐ 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.

CERTIFICATION

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

Name

Stanley L. Atnipp

Position

District Drilling Supt.

Company

Marathon Oil Company

Date

6/24/88

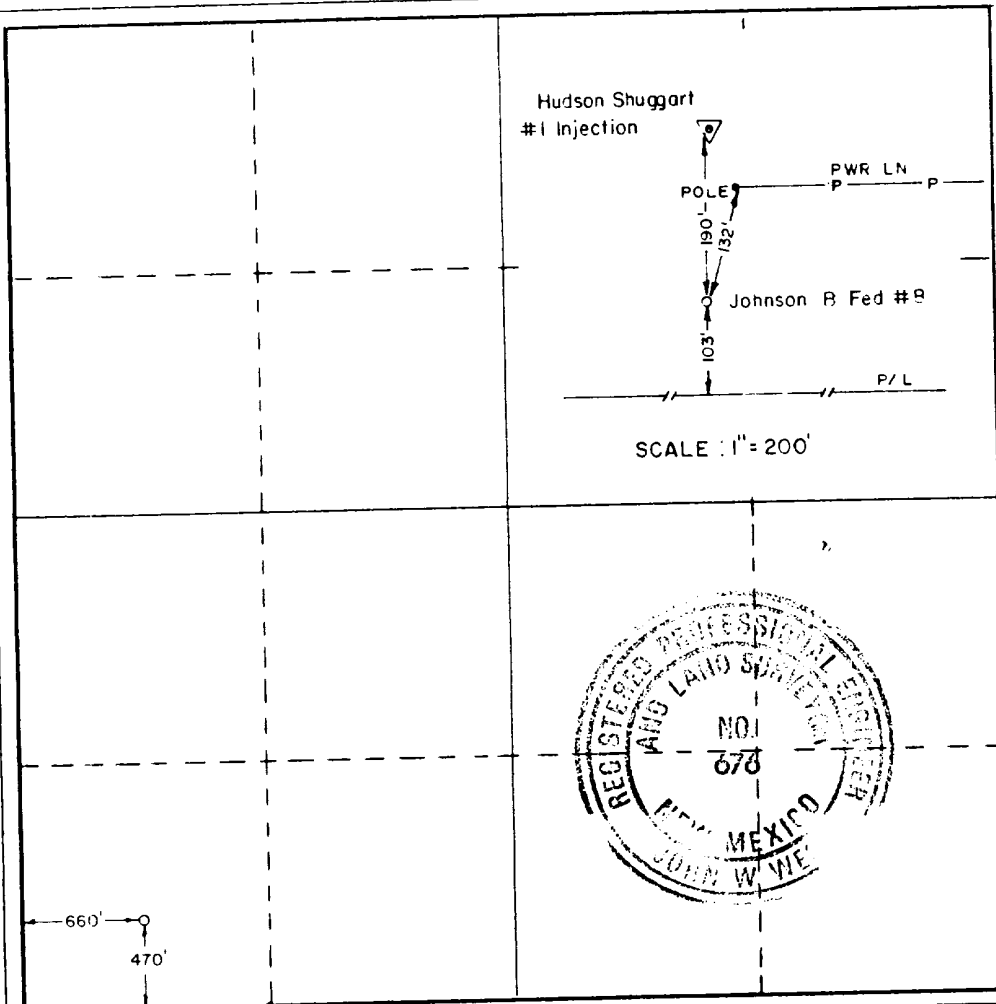
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

June 20, 1988

Registered Professional Engineer and of Land Surveyor

Certificate No. JOHN W. WEST, 676  
RONALD J. EIDSON, 3239



96560

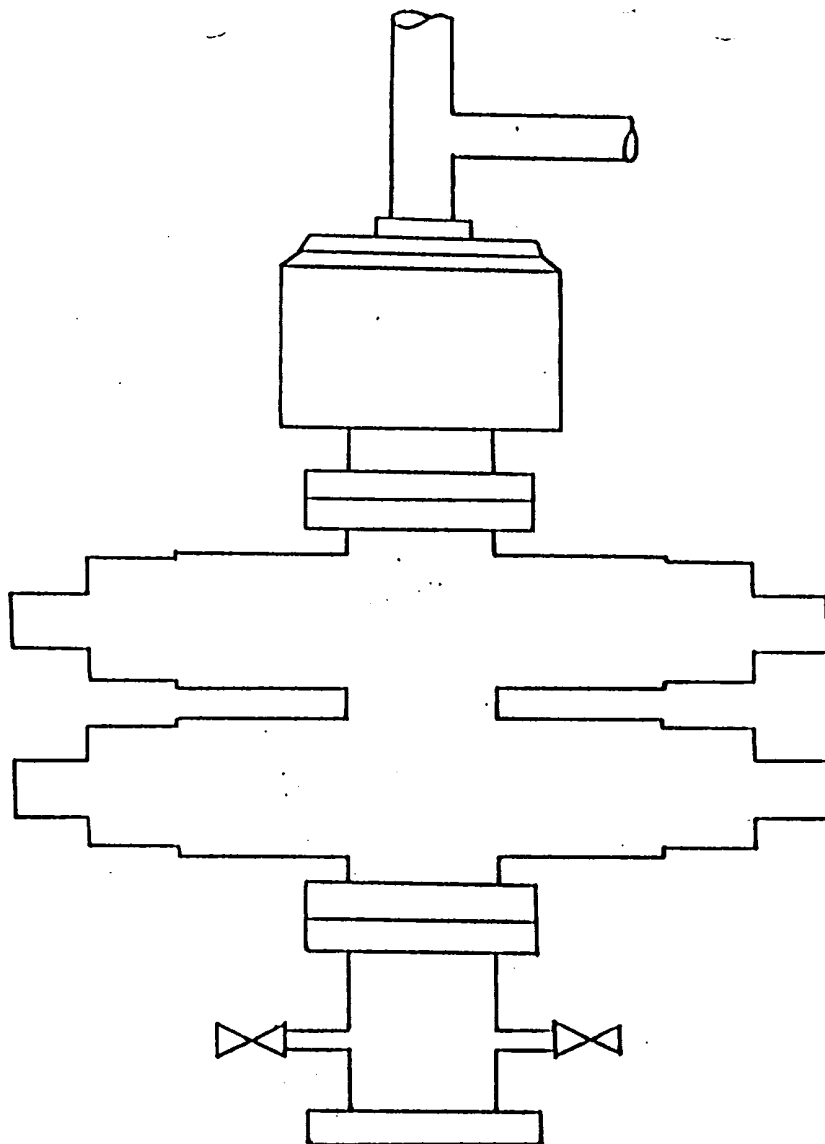


EXHIBIT "A"  
Johnson "B" Federal #8  
BOP Stack Arrangement  
13 3/8" Surface Casing

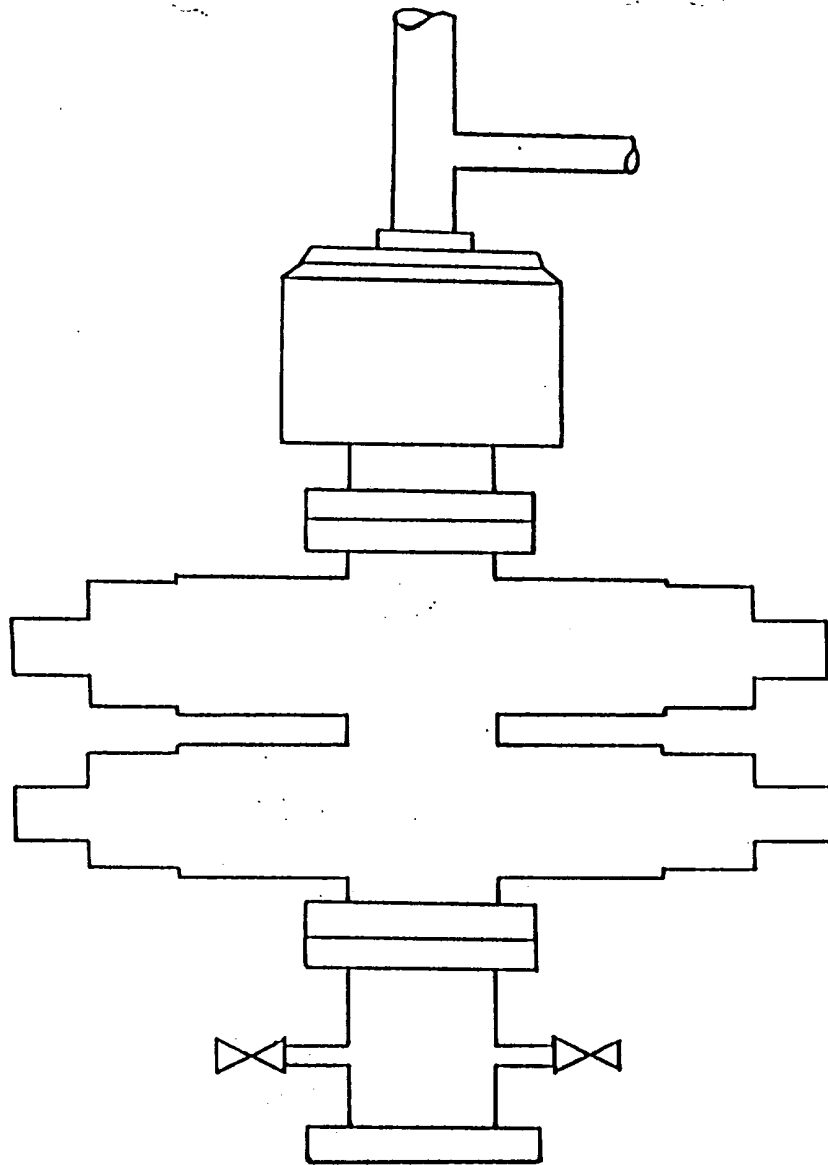


EXHIBIT "B"  
Johnson "B" Federal #8  
BOP Stack Arrangement  
8 5/8" Intermediate Casing

MARATHON OIL COMPANY

JOHNSON "B" FEDERAL #8  
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 <sub>2</sub>
8 5/8" Intermediate to 2700':	Cement to surface with 1100 sxs Modified Lite followed by 250 sxs Class "C" with 2% CaCl <sub>2</sub>
5 1/2" Production to 9000':	Cement to 2200' with 1500 sxs Class "H" PozMix

5. Pressure Control Equipment (Exhibits A & B)

13 3/8" 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
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

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	Cut Brine; Mud Wt: 8.6 - 8.8, Viscosity 28 - 32 Sec
7,000 - 9,000	Cut Brine; Mud Wt: 8.8 - 9.2, Viscosity 32 - 44

7. Auxiliary Equipment

A stabbing valve will be kept on the floor to be used when the kelly is not in the string.

8. Testing, Logging, and Coring Programs

A. Coring Program:

None Anticipated

B. Testing Program:

None Anticipated

C. Logging Program:

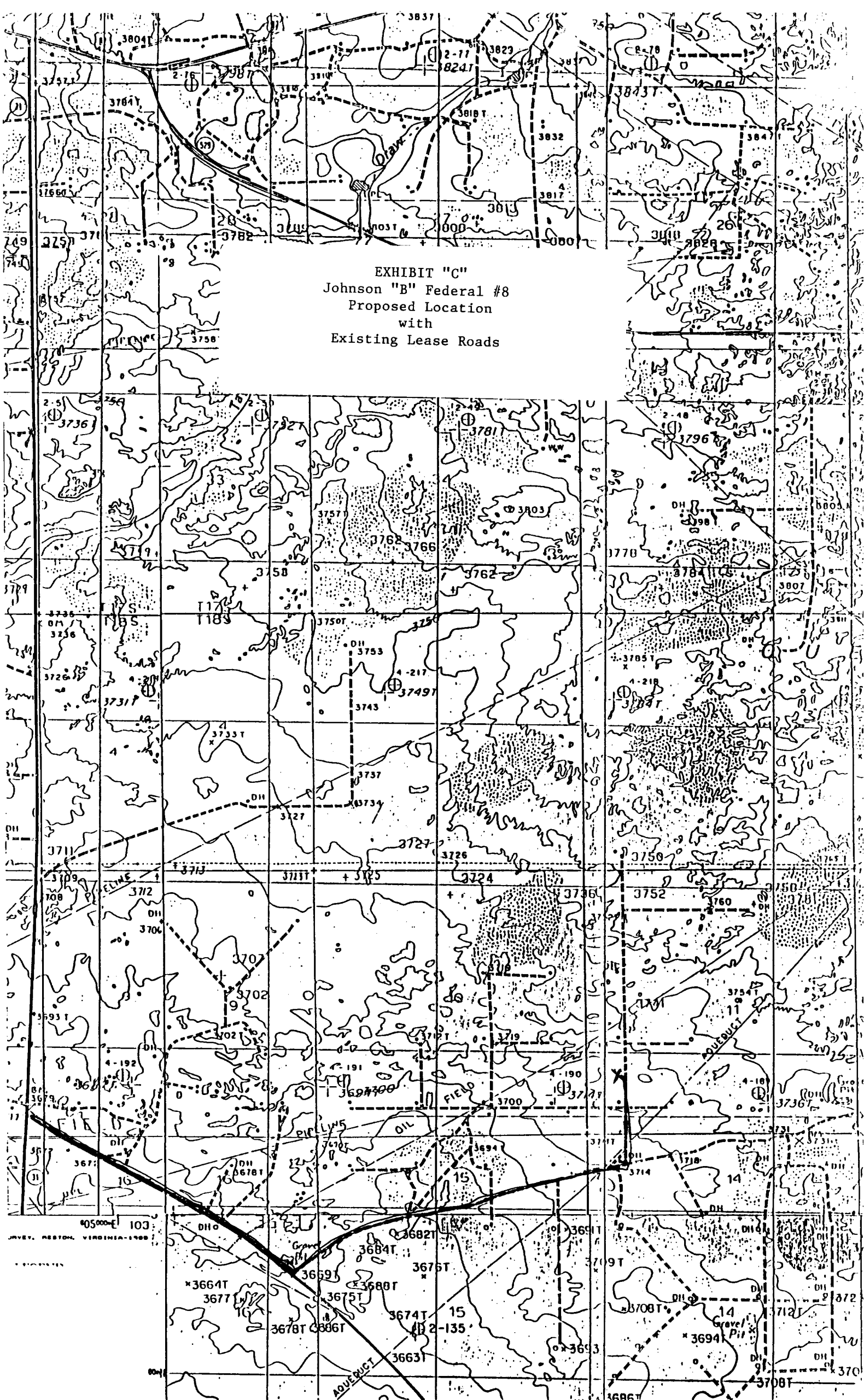
TD to intermediate casing - LDT-CNL, DLL

9. Abnormal Pressures, Temperatures or Potential Hazards

None Anticipated

10. Anticipated Starting Date

As soon as possible



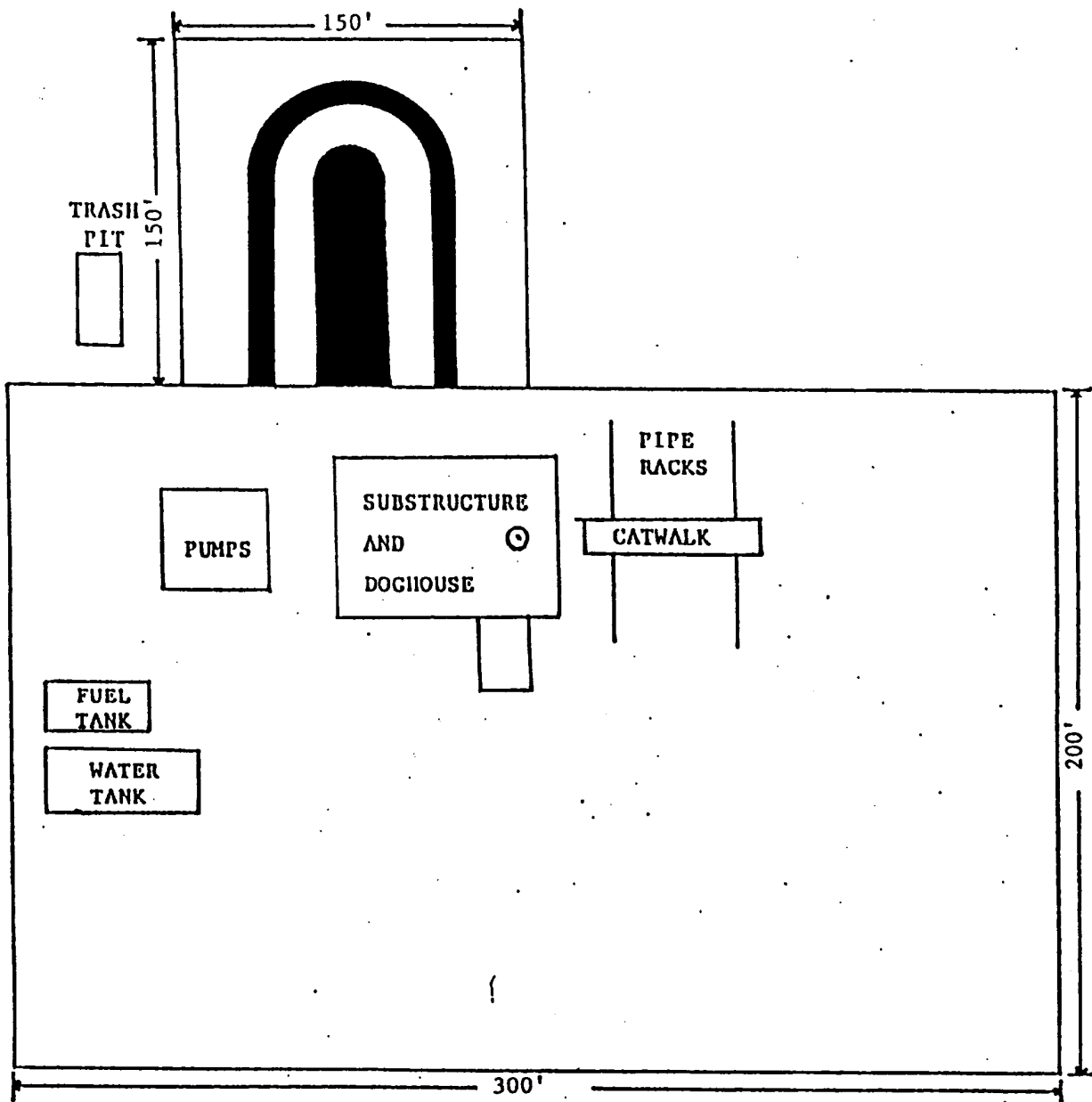


EXHIBIT "E"  
 Johnson "B" Federal #8  
 Relative Location  
 of  
 Rig Components