

NM OIL CONS. COMMISSION  
Drainage District  
ARTIFICIAL STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)Form approved.  
Budget Bureau No. 42-R1425.

30-005-61143

5. LEASE DESIGNATION AND SERIAL NO.

NM-14749

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal 25

9. WELL NO.

Well No. 1

10. FIELD AND POOL, OR WILDCAT

Wildcat

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

Sec. 25-T7S-R24E

12. COUNTY OR PARISH 13. STATE

Chaves

New Mexico

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

Beard Oil Company

3. ADDRESS OF OPERATOR

Suite 200, 2000 Classen Building  
2000 Classen Blvd. Oklahoma City, OK 73106

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

At surface

1980' FWL &amp; 1980' FSL

At proposed prod. zone

Same

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

23 miles northeast of Roswell, New Mexico

15. DISTANCE FROM PROPOSED\*

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

1980'

16. NO. OF ACRES IN LEASE

160

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

18. DISTANCE FROM PROPOSED LOCATION\*

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

None

19. PROPOSED DEPTH

4,100'

20. ROTARY OR CABLE TOOLS

Rotary

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

3793 CR

22. APPROX. DATE WORK WILL START\*

Dec. 1, 1981

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"	54.5#	450'	450 Sx Circulated
12 1/4"	8 5/8"	24.0	1400'	400 Sx Circulated
7 7/8"	4 1/2"	10.5	4100'	300 Sx

## Mud Program:

See Exhibit "F" Mud Program Proposal from Marrs Mud, Inc.

BOP Program: At 1400', install and test to 3000#, pipe rams, blind rams (middle) bag-type preventer and choke manifold. BOP accumulator volume will be sufficient to operate the bag preventer and blind rams with a snap-action through the close, open close sequence.

Gas sales are 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.

Agent for:

SIGNED

TITLE

Beard Oil Company

DATE

Sept. 21, 1981

(This space for Federal or State Office use)

APPROVED

(Orig. Sgd.) GEORGE H. STEWART

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL FOR:

OCT 5 1981

JAMES A. GILLHAM  
DISTRICT SUPERVISOR

\*See Instructions On Reverse Side

All distances must be from the outer boundaries of the Section.

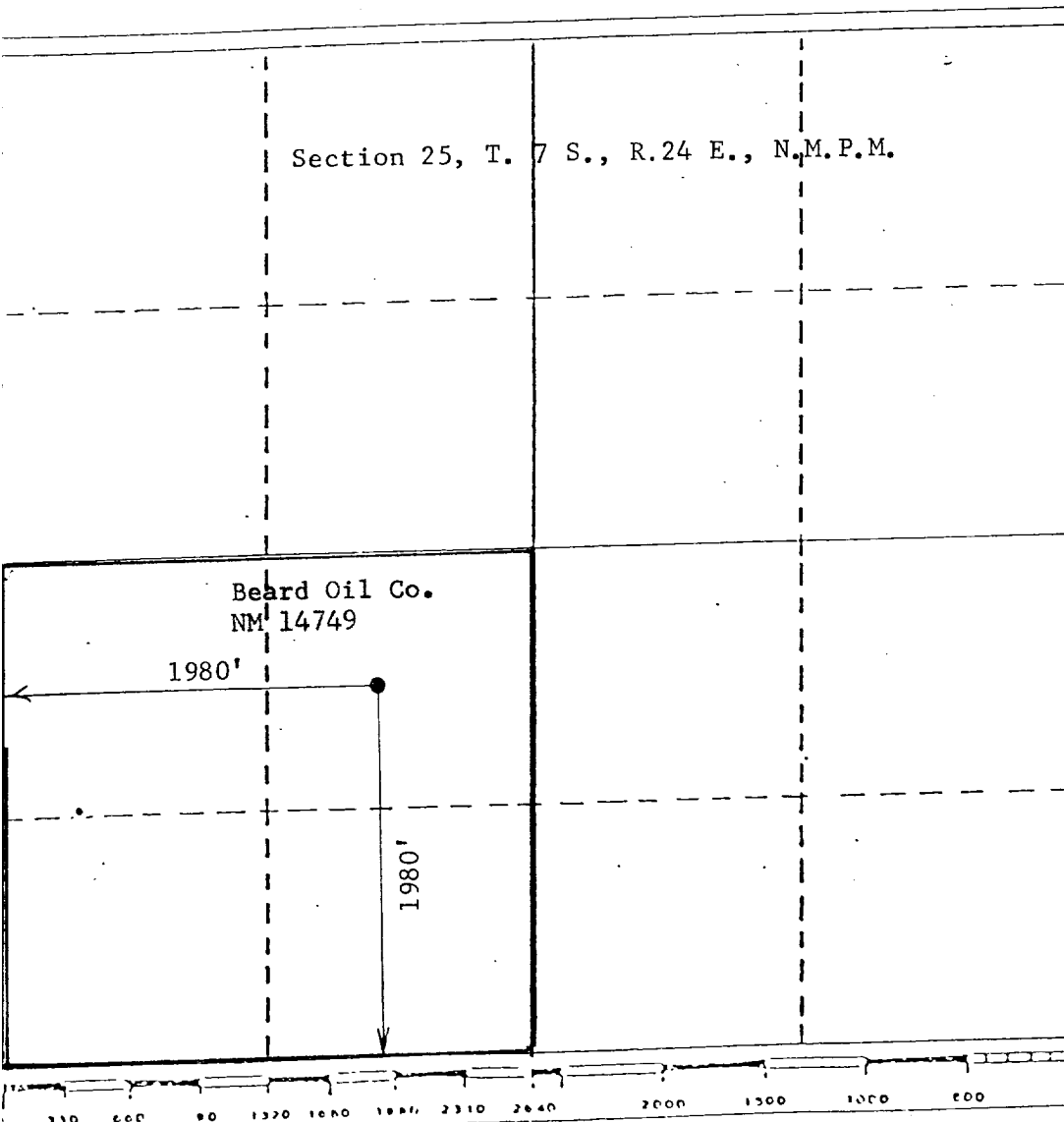
Operator <b>Beard Oil Company</b>		Lease <b>Federal 25</b>		Well No. <b>#1</b>
Section <b>25</b>	Township <b>7 South</b>	Range <b>24 East</b>	County <b>Chaves</b>	
Actual Footage Location of Well: <b>1980</b> feet from the <b>South</b> line and <b>1980</b> feet from the <b>West</b> line				
Ground Level Elev. <b>3793</b>	Producing Formation <b>Abo</b>	Pool <b>Undesignated</b>	Dedicated Acreage: <b>160</b> 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 Division.



#### CERTIFICATION

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

Name

**George R. Smith**

Position  
Agent for

Company

**Beard Oil Co.**

Date

**Sept. 21, 1981**

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

**Sept. 1981**

Registered Professional Engineer and/or Land Surveyor

**John D. Jaquess, P.E. & L.S.**  
Certificate No. **6290**

# APPLICATION FOR DRILLING

BEARD OIL COMPANY  
Federal 25, Well No. 1  
1980' FWL & 1980' FSL, Sec. 25-T7S-R24E  
Chaves County, New Mexico  
Lease No.: NM-14749  
(Exploratory Well)

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Beard Oil Company submits the following items of pertinent information in accordance with USGS requirements:

1. The geologic surface formation is Permian with quaternary alluvium and other surficial deposits.
2. The estimated tops of geologic markers are as follows:

San Andres	350'	Abo	3375'
Glorieta	1350'	Hueco	4075'
Tubb	2750'	T. D.	4100'
3. The estimated depth at which anticipated water, oil, or gas formations are expected to be encountered:

Water: Approximately at 350-450' and possibly 1250-1350'.

Oil: None expected.

Gas: Abo between 3400' and 4000'.
4. Proposed Casing Program: See Form 9-331C.
5. Pressure Control Equipment: Blowout Preventer is a Shaffer Type E 10" series 900. See Exhibit "E".
6. Mud Program: See Exhibit "F", Proposed Mud Program from Marrs Mud, Inc. dated September 4, 1981.
7. Auxiliary Equipment: Blowout prventer, gas detector, kelly cock, pit level monitor, flow sensors and stabbing valve.
8. Testing, Logging and Coring Program:

Logging: Gamma Ray	Surface to T. D.
FDC/CNL	Inter. Csg. to T. D.
DLL	Inter. Csg. to T. D.

Drill Stem Tests: None planned.

Coring: None planned.
9. No abnormal pressures or temperatures are anticipated. In the event abnormal pressures are encountered the proposed mud program will be modified to increase the mud weight.
10. Anticipated starting date: December 1, 1981.  
Anticipated completion of drilling operations: Two weeks.

BEARD OIL COMPANY  
Federal 25 Well No. 1  
1980' FWL & 1980' FSL, Sec. 25-T7S-R24E  
Chaves County, New Mexico  
Lease No.: NM-14749  
(Exploratory Well)

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

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a New Mexico State Highway Department map showing the location of the well as staked. Exhibit "B" is a section of a USGS Topo map also showing the well location as staked. The well site is approximately 22 miles northeast of the U. S. Highway 285/70 "Y" north of Roswell, New Mexico. There will be approximately 7.6 miles of H. S. Highway 285 north, and 11.1 miles of county maintained dirt ranch road plus 3.3 miles of El Paso Natural Gas Co. pipeline ROW road.
- B. Directions: Travel north on U. S. Highway 185 for approximately 7.6 miles from the U. S. Highway 285/70 "Y". Upon reaching an electric power station on the left side of the highway, turn right (east) onto the county/ranch dirt road. There is a Red Bluff Ranch sign at this turnoff. Continue on this road for approximately 11.1 miles until El Paso Natural Gas Co. pipeline crosses the road. Turn left on the pipeline ROW road traveling northwest for .3 mile passing through the first gate. The second gate is 2.3 miles past the first, and is on the east side of section 25. The start of the new 1200 foot access road is approximately .5 mile past the second gate. The new access road and drillsite location are staked and flagged.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new access road will be 12 feet wide (20' ROW) and approximately 1200 feet long.
- B. Construction: The new road will be constructed by grading, watering and compacting the existing surface material. Caliche will be used in those spots that might require it. The existing pipeline road will not require any work at this time unless El Paso Natural Gas Co. requires it. The surface will be properly drained.
- C. Turnouts: There will be at least two turnouts, which will increase the road to 20 feet for passing.
- D. Culverts: None will be required.
- E. Cuts and Fills: None will be required.
- F. Gates and Cattleguards: None will be required on the the new access road, but two may be placed at the gates on the pipeline ROW road if needed or required.

3. LOCATION OF EXISTING WELLS:

A. Existing wells within a two mile radius are shown on Exhibit "C".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. There are no production facilities on this lease at the present time.

B. If the well proves to be commercial, the necessary production facilities, gas separation-process equipment and tank battery will be installed on the drilling pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. It is planned to drill the proposed well with fresh and brine water. The water will be obtained from private or commercial sources and will be transported over the existing and proposed access roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. The existing surface material will be used for surfacing the new access road and the drill site pad because of a shortage of caliche in the area. However, if caliche is required in any of the construction, it will be obtained from a Federal mineral/surface pit located in the SE $\frac{1}{4}$  of Sec. 1-T8S-R24E. Top soil from the location will be stockpiled near the location for future rehabilitation use. No surface materials will be disturbed except for those necessary for actual grading and leveling of the drill site and access road.

7. METHODS OF HANDLING WASTE DISPOSAL:

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

B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.

C. All pits will be fenced with normal fencing materials to prevent livestock from entering the area.

D. Water produced during operations will be collected in tanks until hauled to an approved disposal system, or separate disposal application will be submitted to the USGS for approval.

E. Oil produced during operations will be collected in tanks until sold.

F. Current laws and regulations pertaining to the disposal of human waste will be complied with.

G. Trash, waste paper, garbage and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

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

8. ANCILIARY FACILITIES:

- A. None required.

9. WELLSITE LAYOUT:

- A. Exhibit "D" shows the relative location and dimensions of the well pad, reserve pits, and major rig components. The pad and pit area has been staked and flagged.
- B. Mat Size: 250' X 185'.
- C. Cut and Fill: The location is sloping very slightly to the south east 10' in 1000' which probably will not require any cutting. There area is very flat and will not require any fill unless a slight fill is needed for proper drainage.
- D. The surface will be topped and compacted with the existing surface and pit materials. The reserve pit will be plastic lined.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations all equipment and other material not used for operations will removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until filled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION:

- A. Topography: The land surface in the vicinity of the wellsite is sloping very slightly, 10' in 1000' to the southeast. The drillsite and new access road will be on good level ground.
- B. Soil: The topsoil at the wellsite is a sandy loam with some caliche and gypsum rock. The gypsum rock outcrops to the north of the wellsite.
- C. Flora and Fauna: The vegetative cover consists mesquite (mostly dead from treatment) Yucca, cactus, sunflowers, and other miscellaneous flowers and weeds. The grass cover in the area of the drillsite was quite heavy with a mixture of tobosa, grama, fluffgrass, bristlegrass and bush muhly and other miscellaneous types. No wildlife was observed but it is likely that typical semi-arid desert wildlife inhabit the area, which is used for cattle grazing.
- D. Ponds and Streams: There are no streams or natural or manmade ponds in the area.

11. OTHER INFORMATION: cont.....

- E. Residences and other Structures: There are no residences or other structures within a mile of the well site. There is a windmill 1 - 2 miles southeast of the site.
- F. Land Use: Cattle grazing.
- G. Surface Ownership: The proposed location and access road is on Federal surface and minerals.
- H. There is no evidence of any archaeological, historical or cultural sites in the area. An archaeological survey has been conducted by New Mexico Archaeological Services, Inc., P. O. Box 1341, Carlsbad, New Mexico 88220, and their report has been submitted to the appropriate government agencies.

12. OPERATOR'S REPRESENTATIVE:

- A. The field representative responsible for assuring compliance with the approved surface use and operations plan is as follows:

James W. Vater, Jr., Vice President  
Beard Oil Company  
Suite 200, 2000 Classen Building  
2000 Classen Boulevard  
Oklahoma City, Oklahoma 73106  
Telephone: 405-528-2323 (office)  
405-751-4738 (home)

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

September 21, 1981

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George R. Smith  
Agent for:  
Beard Oil Company

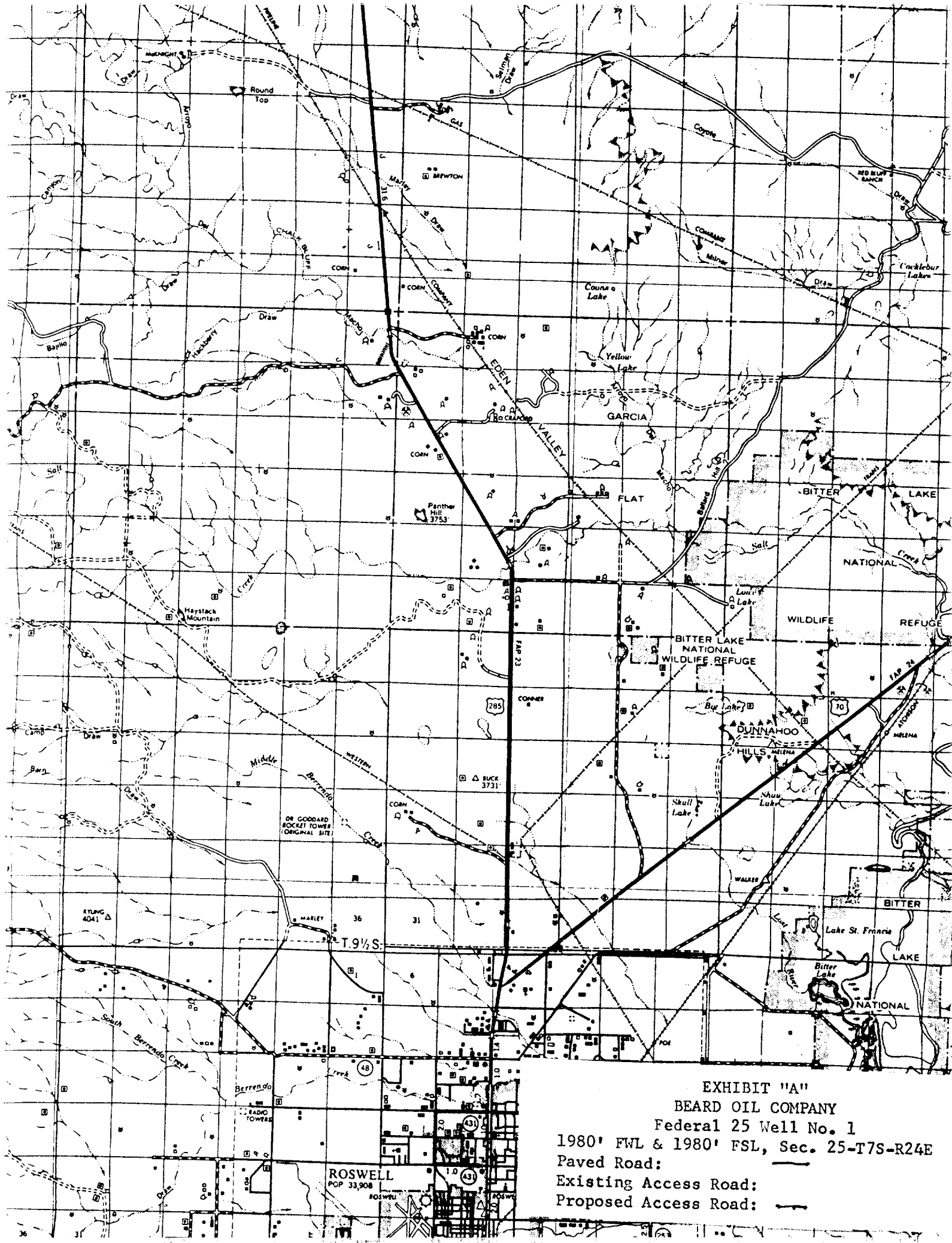


EXHIBIT "A"  
BEARD OIL COMPANY  
Federal 25 Well No. 1  
1980' FWL & 1980' FSL, Sec. 25-T7S-R24E  
Paved Road: ———  
Existing Access Road: ———  
Proposed Access Road: ———



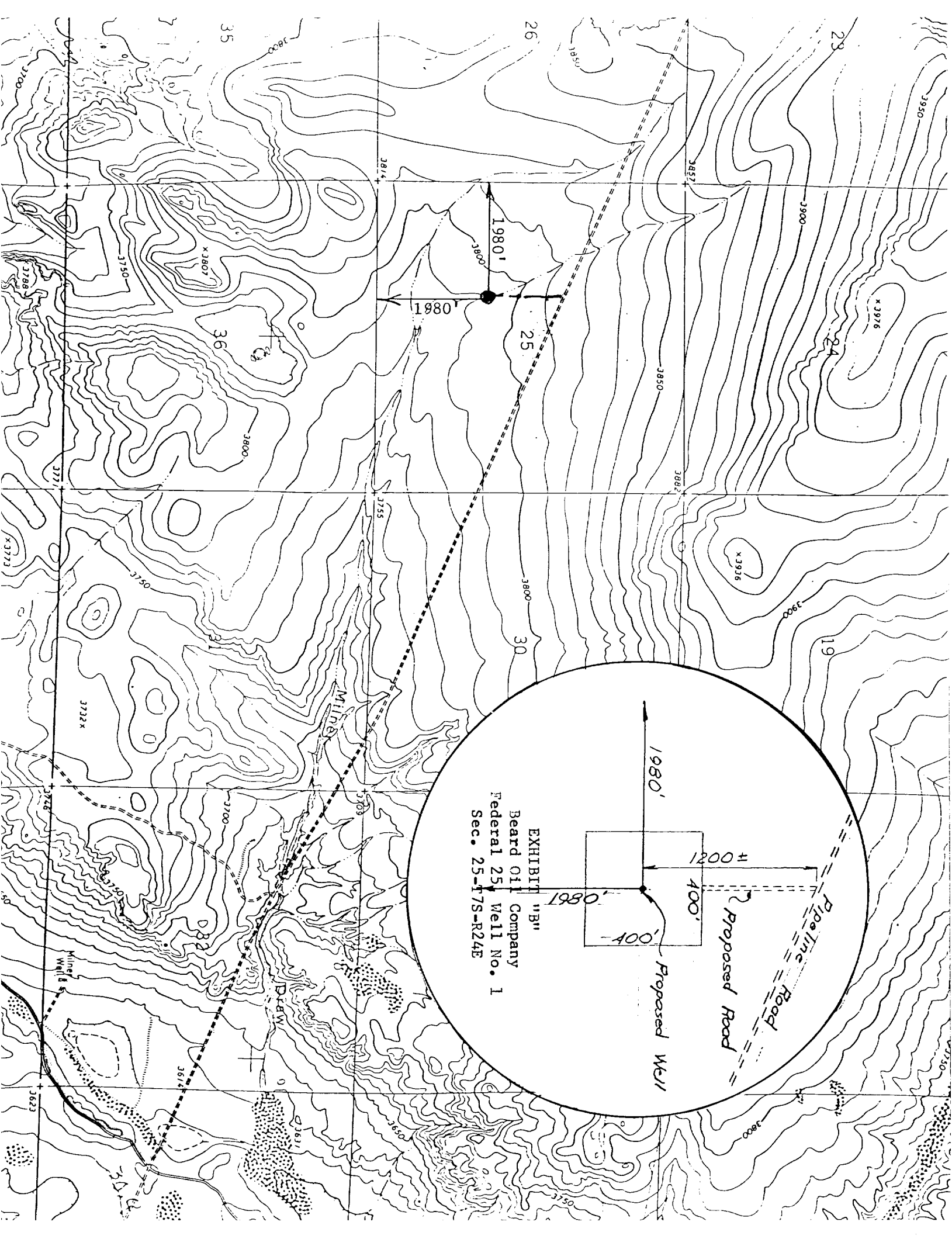
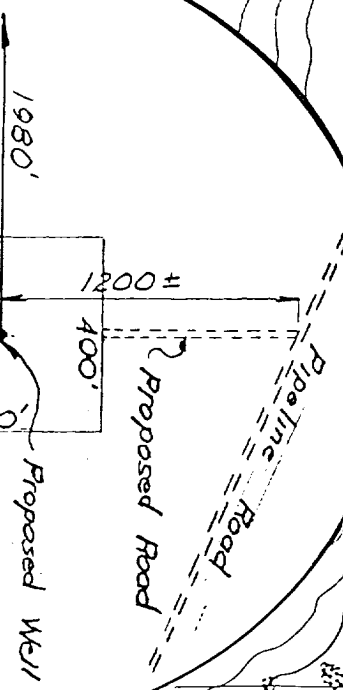
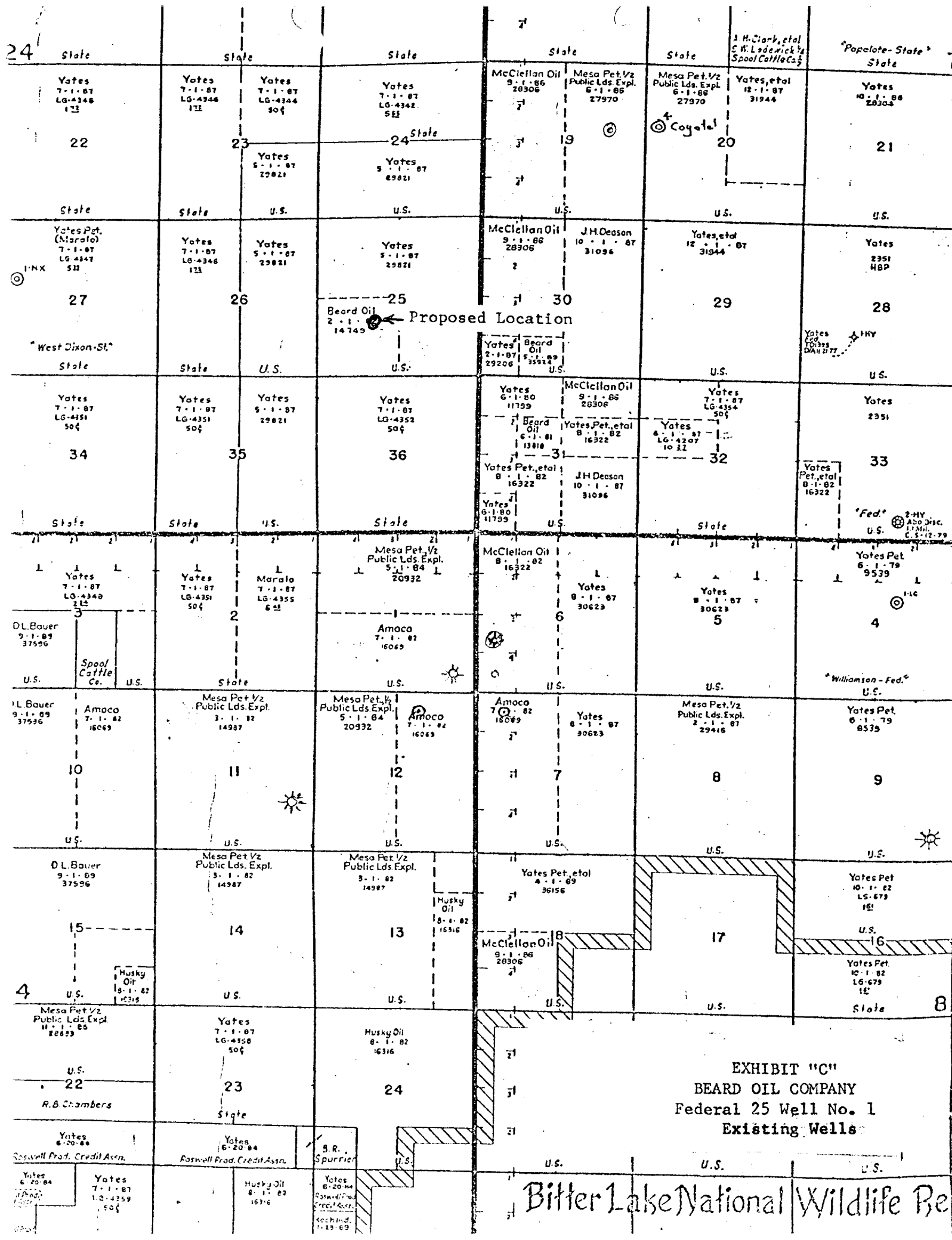
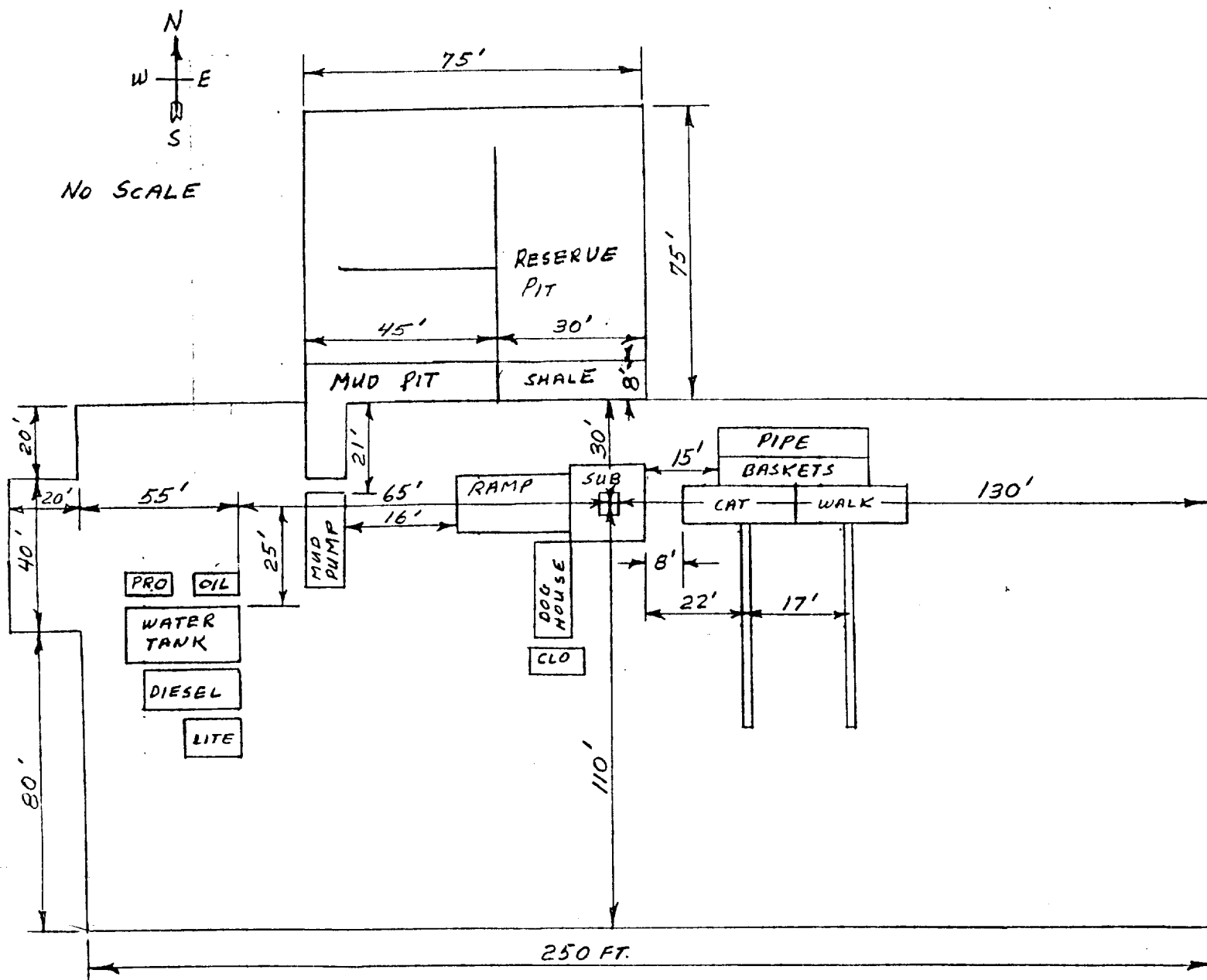


EXHIBIT "B"  
Beard Oil Company  
Federal 25 Well No. 1  
Sec. 25-T7S-R24E







CELLAR 5'X5'X5'

THIS RIG EQUIPTED WITH SHAFFER TYPE E 10" SERIES 900 BOP WITH 4" BLIND RAMS, KILL LINE AND CHOKE MANIFOLD KOOMEY HYDRAULIC CONTROLS AND ACCUMULATOR WITH REMOTE CONTROLS.

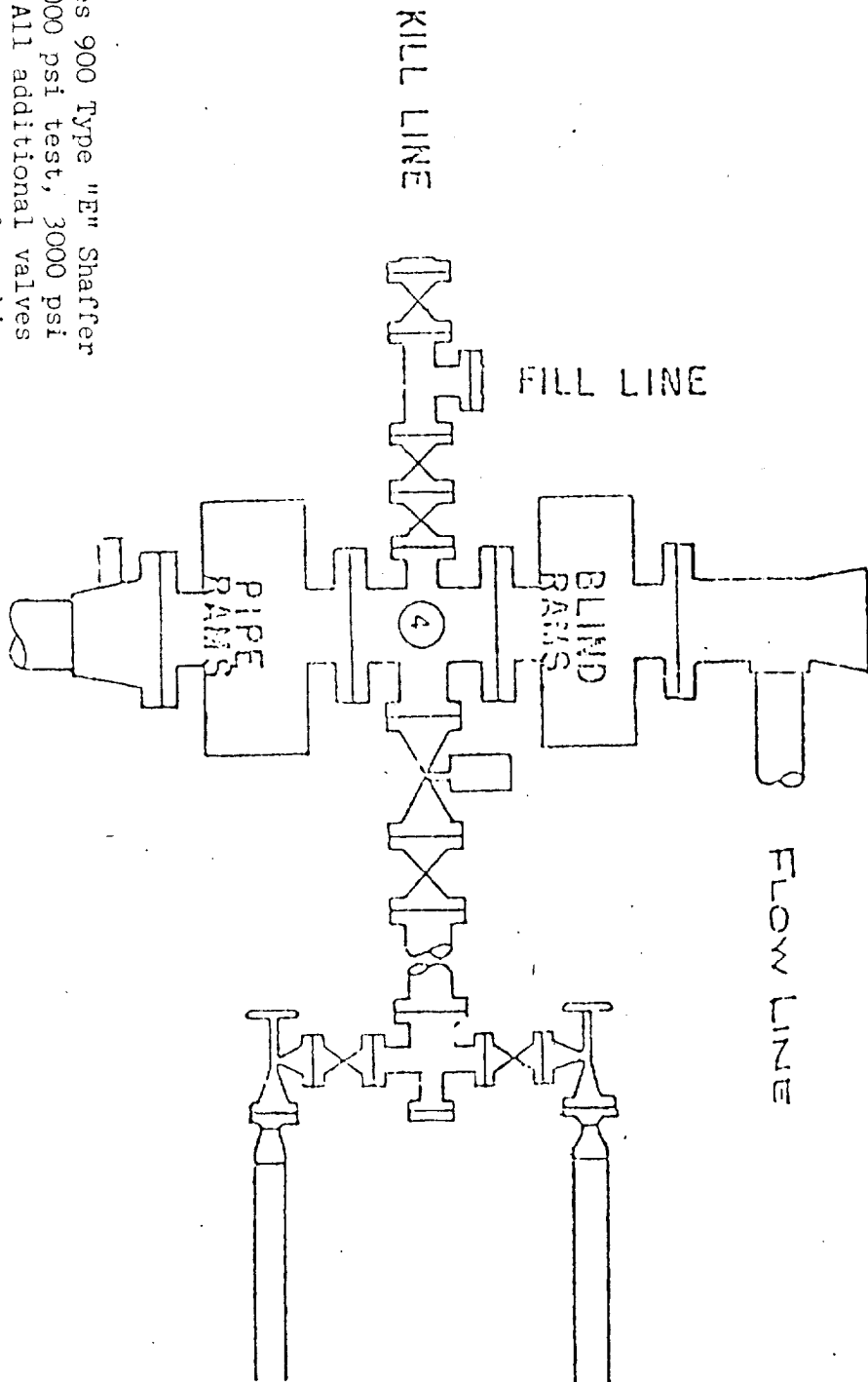
SIX FOOT SPACING BETWEEN OIL TANK, WATER TANK, DIESEL TANK AND LIGHT PLANT

20'X40' STINGER AREA AT WEST END OF LOCATION

EXHIBIT "D"  
BEARD OIL COMPANY  
Federal 25 Well No. 1  
Rig Layout

# BLOWOUT PREVENTER SPECIFICATION

WEK DRILLING CO., INC. - Rig 1 & 3.



BOP's are 10" Series 900 Type "E" Shaffer Double Hydraulic 6000 psi test, 3000 psi working pressure. All additional valves & connections are the same test & working pressures.

AC 505  
623-6862



AC 505  
396-4876

## MARRS MUD

a division of  
Corral, Inc.

1717 West Second St.  
Roswell, New Mexico 88201

Sales Office  
1118 West Aspen  
Lovington, New Mexico 88260

COMPANY BEARD OIL COMPANY

WELL FEDERAL 25#1

FIELD \_\_\_\_\_

LOCATION Section 25, T-7-S, R-24-E,

COUNTY CHAVES STATE NEW MEXICO

PROPOSED DEPTH 4100

### PROPOSED MUD PROGRAM

#### CASING PROGRAM:

13 3/8"	Surface	@	450'
8 5/8"	Intermediate	@	1450'
4 1/2"	Production	@	4100

#### SUGGESTED MUD PROPERTIES

<u>DEPTH</u> <u>(FEET)</u>	<u>MUD WEIGHT</u> <u>(PPG)</u>	<u>VISCOSITY</u> <u>(SEC)</u>	<u>FLUID LOSS</u> <u>(ML)</u>
100	8.6-8.8	32-34	No Control
300	8.8-9.0	32-34	No Control
450	8.8-9.0	32-34	No Control

Set 13 3/8" Surface Casing and drill out with fresh water.

600	8.3-8.4	28	No Control
1000	8.3-8.4	28	No Control
1250	8.3-8.4	28	No Control
1450	8.3-8.4	28	No Control

Set 8 5/8" Intermediate Casing and drill out with fresh water.

2000	8.3-8.4	28	No Control
2500	8.8-9.0	28	No Control
3000	9.2-9.4	28	No Control
3300	9.4-9.6	38-40	10
4100	9.6-9.8	38-40	10

Set 4 1/2" Production Casing.

EXHIBIT "F"  
BEARD OIL COMPANY  
Federal 25 Well No. 1  
Mud Program

AC 505  
623-6862



AC 505  
396-4876

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COMPANY BEARD OIL COMPANY

WELL FEDERAL 25#1

FIELD \_\_\_\_\_

LOCATION Section 25, T-7-S, R-24-E,

COUNTY CHAVES STATE NEW MEXICO

PROPOSED DEPTH 4100

## PROPOSED MUD PROGRAM BY CASING INTERVAL

SURFACE: 0' - 450

Spud with a Gel/lime slurry having a 32-34 Sec/1000cc Viscosity. This fluid should be adequate to drill the surface interval if problems with loss circulation should occur, we suggest mixing 200-300 barrels of 38-40 Sec/1000cc viscosity mud and adding 15-20 pounds per barrel of loss circulation material. If this fails to regain circulation we suggest dry drilling to casing point.

INTERMEDIATE: 450-1450

Drill from below the surface casing with fresh water, circulating the working pit. If loss of circulation isn't encountered, then this fluid should be adequate to drill to casing point and set intermediate casing. If loss of circulation is encountered, then we suggest following the procedure used in the surface casing interval.

PRODUCTION: 1450-4100

Drill out from below the intermediate casing with fresh water, circulating the reserve pit. This fluid should be adequate to drill to 3,300, where we suggest coming back into the working pit and mudding up with a Salt gel/Starch system, having the following properties:

Mud Weight - 9.4 - 9.6 PPG  
Viscosity - 38 - 40 Sec/1000cc  
Water Loss - 10  
Oil Content - 4 - 5%

This fluid, with the exception of raising the viscosity as hole conditions dictates the need, should allow safe drilling, logging, and casing operations to total depth.

## ESTIMATED MUD COST:

Without loss circulation - \$8000 - \$10,000  
With loss circulation - \$14,000 - \$20,000