

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 ☐

## 5. LEASE DESIGNATION AND SERIAL NO.

NM-2359

## 6. IF INDIAN, ALLOTTEE OR TRIBE NAME

## UNIT AGREEMENT NAME

## 8. FARM OR LEASE NAME

Sorenson "IB" Federal

## 9. WELL NO.

4

## 10. FIELD AND POOL, OR WILDCAT

Pecos Slope Abo

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

Sec. 6-T7S-R26E

## 12. COUNTY OR PARISH

Chaves

## 13. STATE

NM

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☐MULTI  
ZONE ☐

## 2. NAME OF OPERATOR

Yates Petroleum Corporation ✓

## 3. ADDRESS OF OPERATOR

207 S. 4th, Artesia, New Mexico 88210

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

At surface  
2248' FSL & 1989' FEL

At proposed prod. zone

same

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

Approximately 28 miles NE of Roswell, NM.

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660

## 16. NO. OF ACRES IN LEASE

600

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

## 19. PROPOSED DEPTH

4225'

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

3651.4'

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 14 3/4"      | 10 3/4"        | 40.5# J-55      | 925'          | 750 sx circulated  |
| 7 7/8"       | 4 1/2"         | 9.5# J-55       | TD            | 350 sx             |

We propose to drill and test the Abo and intermediate formations. Approximately 925' of surface casing will be set and cement circulated to shut off gravel and caving. If needed (lost circulation) 8 5/8" intermediate casing will be run to 1500' and cemented with enough cement calculated to tie back into the surface casing. If commercial, production casing will be run and cemented with adequate cover, perforated and stimulated as needed for production.

MUD PROGRAM: FW gel/LCM to 925', Brine to 3500', Brine/KCL water to TD.

BOP PROGRAM: BOP's will be installed at the offset and tested daily.

GAS 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.

SIGNED

TITLE

Regulatory Agent

DATE

6/8/83

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

6/23/83

CONDITIONS OF APPROVAL, IF ANY:

Plugged & Perforated  
4225' - 1500' F  
7-1-83

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

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

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

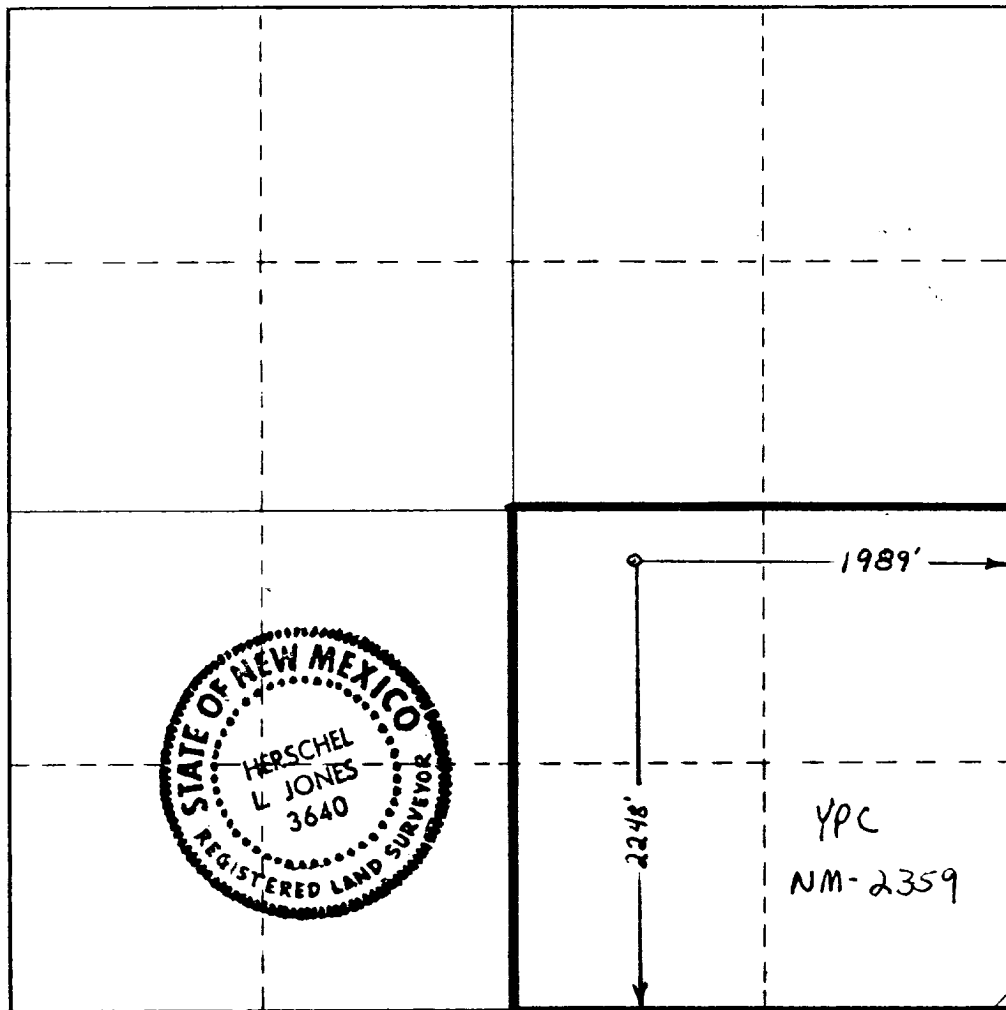
|  |                                   |                            |                                       |  |                                |
|--|-----------------------------------|----------------------------|---------------------------------------|--|--------------------------------|
| Operator<br><b>YATES PETROLEUM CORPORATION</b> |                                   |                            | Lease<br><b>Sorenson "IB" Federal</b> |  | Well No.<br><b>4</b>           |
| Tract Letter<br><b>J</b>                       | Section<br><b>6</b>               | Township<br><b>7 South</b> | Range<br><b>26 East</b>               | County<br><b>Chaves</b>                |                                |
| Actual Footage Location of Well:               |                                   |                            |                                       |  |                                |
| <b>2248</b>                                    | feet from the                     | <b>South</b>               | line and                              | <b>1989</b>                            | feet from the <b>East</b> line |
| Ground Level Elev.<br><b>3651.4' GL</b>        | Producing Formation<br><b>Abo</b> |                            | Pool<br><b>Pecos Slope Abo</b>        | Dedicated Acreage:<br><b>160</b> Acres |                                |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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.*

*Ken Beardemph*  
Name

**Ken Beardemph**  
Position  
**Regulatory Agent**

Company  
**Yates Petroleum Corp.**

Date  
**6/8/83**

*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.*

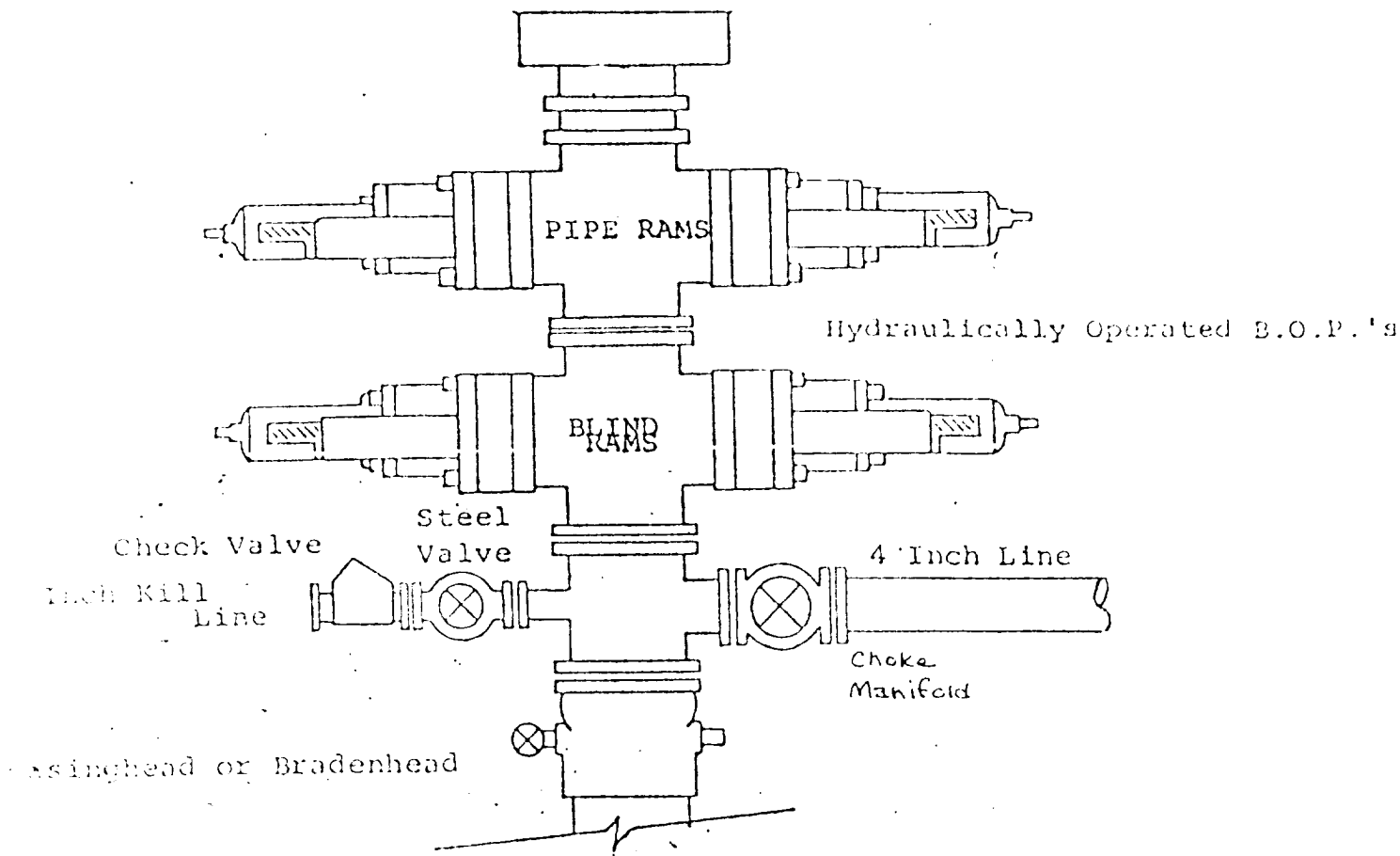
Date Surveyed  
**June 7, 1983**

Registered Professional Engineer and/or Land Surveyor

*Herschel L. Jones*  
Certificate No. **3640**

# EXHIBIT B

## BDP DIAGRAM

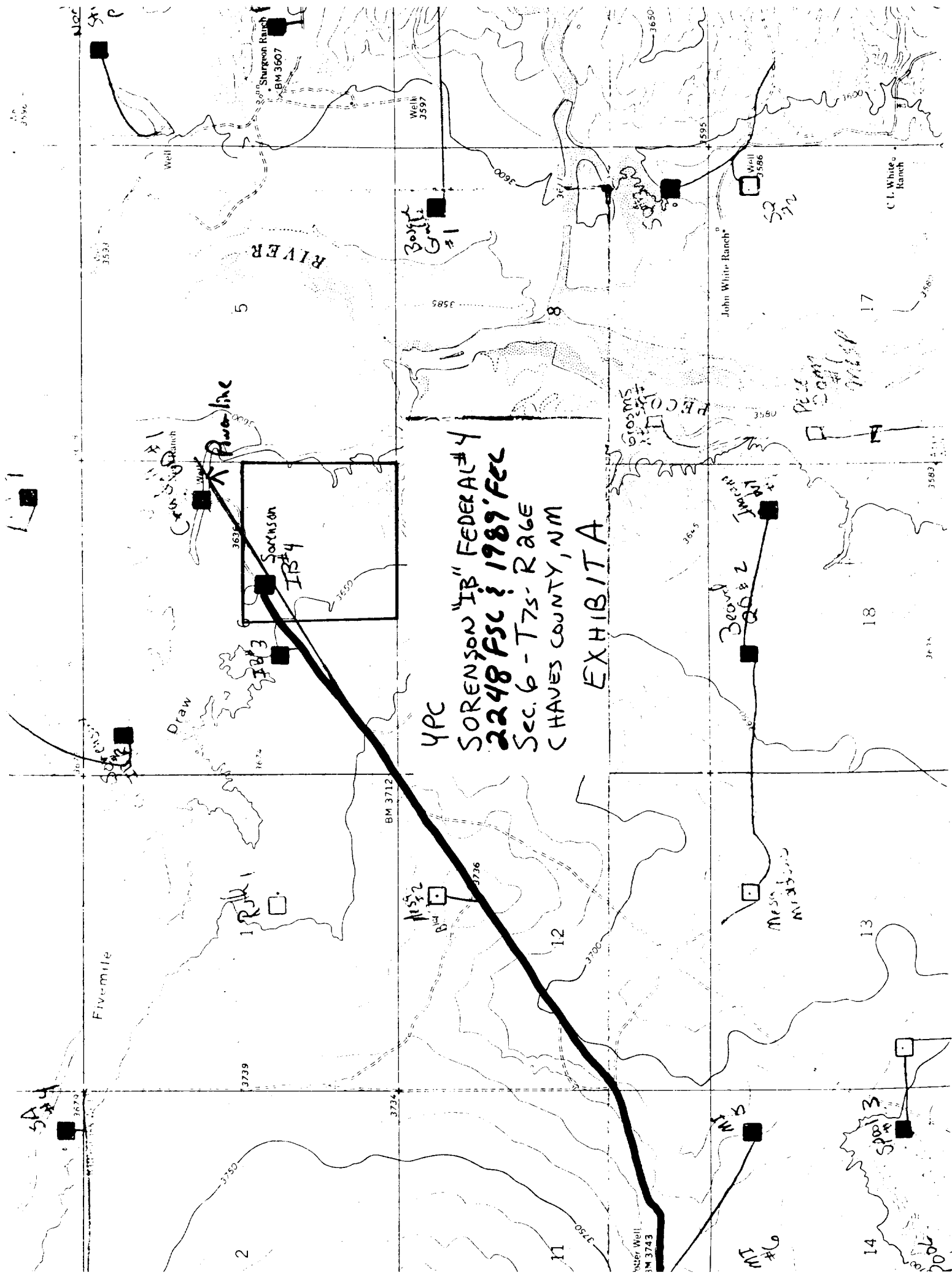


YATES PETROLEUM CORPORATION  
Sorenson "IB" Federal #4  
2248' FSI and 1989' FEL  
Sec. 6-T7S-R26E

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Yates Petroleum Corporation submits the following ten items of pertinent information in accordance with USGS requirements.

1. The geologic surface formation is sandy alluvium.
2. The estimated tops of geologic markers are as follows:

|            |       |
|------------|-------|
| San Andres | 458'  |
| Glorieta   | 1562' |
| Fullerton  | 2974' |
| Abo        | 3607' |
| TD         | 4225' |
3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:  
  
Water: 250'-300'  
  
Oil or Gas: Abo 3647'
4. Proposed Casing Program: See Form 9-331C.
5. Pressure Control Equipment: See Form 9-331C.
6. Mud Program: See Form 9-331C.
7. Auxiliary Equipment: Kelly Cock; pit level indicators and flow sensor equipment sub with full-opening valve on floor, drill pipe connection.
8. Testing, Logging and Coring Program  
  
Samples: Surface casing to TD.  
DST's: As warranted.  
Coring: None  
Logging: CNL-FDC TD to csg w/GR-CNL to surface, DLL from TD to csg.
9. No abnormal pressures or temperatures are anticipated.
10. Anticipated starting date: As soon as possible after approval.



# YATES PETROLEUM CORP.

## Exhibit C

