

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE\*  
(Other instructions on  
reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL  
WELL ☐

GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒

MULTIPLE  
ZONE ☐

2. NAME OF OPERATOR

XT0 Energy Inc.

3. ADDRESS AND TELEPHONE NO.

2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

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

2,350' FSL & 1,105' FEL in Sec 20, T27N, R08W  
At proposed prod. zone

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

24 air miles from the Blanco NM Post Office

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any) 1,105'

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

750'

16. NO. OF ACRES IN LEASE

320 MV / 160 CH

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

1/4 320 MV / 160 CH SE/4

19. PROPOSED DEPTH

5,550'

20. ROTARY OR CABLE TOOLS

Rotary rig to TD

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

6,761' Ground Level

22. APPROX. DATE WORK WILL START\*

Summer, 2002

23. PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | GRADE SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT        |
|--------------|----------------------|-----------------|---------------|---------------------------|
| 12-1/4"      | 8-5/8", J-55         | 24.0#/ft        | 320           | 200 sx Type III Cement    |
| 7-7/8"       | 4-1/2", J-55         | 10.5#/ft        | 5,550'        | 780 sx Lite Weight Cement |

XT0 Energy Inc. proposes to drill the above mentioned well as defined by the attached Surface Use Program and Drilling Proposal.

XT0 Energy also proposes to Surface Commingle the production from the above mentioned well as defined by the attached map and as indicated in the Surface Use Program.

DRILLING OPERATIONS AUTHORIZED ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS".

This action is subject to technical and  
procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

*JW Patton*

TITLE Drilling Engineer

DATE 4/24/02

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY:

*David J. Markiewicz*

HOLD C104 FOR NSL in Chacra

APPROVED BY

TITLE

DATE

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

DISTRICT II  
811 South First, Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|   |   |   |
|---|---|---|
| <sup>1</sup> API Number<br>30-045-31082 | <sup>2</sup> Pool Code<br>72319               | <sup>3</sup> Pool Name<br>BLANCO MESA SURDE |
| <sup>4</sup> Property Code<br>29105     | <sup>5</sup> Property Name<br>FLORANCE D      | <sup>6</sup> Well Number<br>4B              |
| <sup>7</sup> OGRD No.<br>167067         | <sup>8</sup> Operator Name<br>XTO ENERGY INC. | <sup>9</sup> Elevation<br>6761'             |

<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| I             | 20      | 27-N     | 8-W   |         | 2350'         | SOUTH            | 1105'         | EAST           | SAN JUAN |

<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no.                        | Section                                | Township                         | Range                   | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|--------------------------------------|--|----------------------------------|-------------------------|---------|---------------|------------------|---------------|----------------|--------|
|                                      |  |                                  |                         |         |               |                  |               |                |        |
| <sup>12</sup> Dedicated Acres<br>320 | <sup>13</sup> Joint or Infill<br>E / Z | <sup>14</sup> Consolidation Code | <sup>15</sup> Order No. |         |               |                  |               |                |        |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|  |  |
|--|--|
| <p>16</p>  | <p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p>Signature <u>Jeffrey W Patton</u></p> <p>Printed Name <u>JEFFREY W PATTON</u></p> <p>Title <u>DRILLING ENGINEER</u></p> <p>Date <u>4-24-02</u></p> |
| <p>18 SURVEYOR CERTIFICATION</p> <p>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 belief.</p> <p>Date of Survey <u>9-18-01</u></p> <p>Signature and Seal of Professional Surveyor: <u>[Signature]</u></p> <p>Certificate Number <u>8894</u></p> |  |

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1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

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WELL LOCATION AND ACREAGE DEDICATION PLAT

|   |  |   |  |  |                                 |
|---|--|---|--|--|---------------------------------|
| <sup>1</sup> API Number<br>30-045-31082 |  | <sup>2</sup> Pool Code<br>82329               |  | <sup>3</sup> Pool Name<br>OTERO CHACRA |                                 |
| <sup>4</sup> Property Code<br>29105     |  | <sup>5</sup> Property Name<br>FLORANCE D      |  |  | <sup>6</sup> Well Number<br>4B  |
| <sup>7</sup> OGRID No.<br>167067        |  | <sup>8</sup> Operator Name<br>XTO ENERGY INC. |  |  | <sup>9</sup> Elevation<br>6761' |

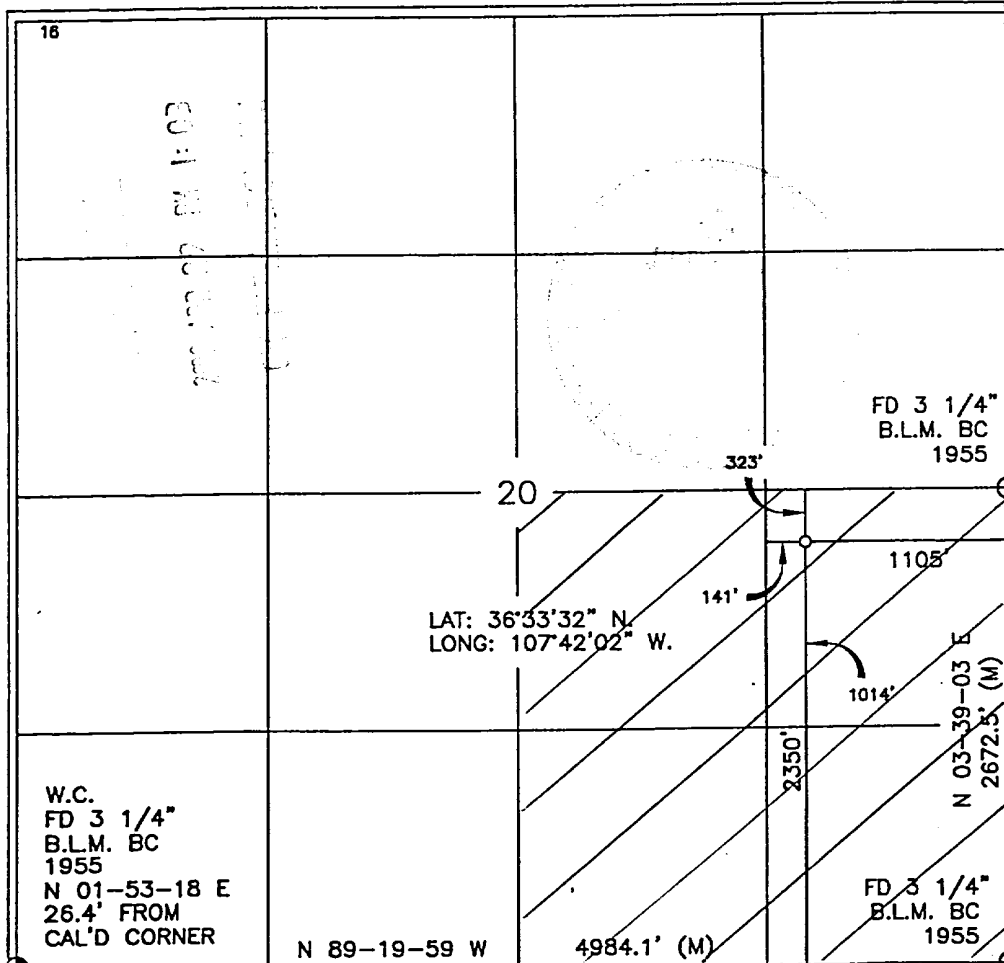
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|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| 1             | 20      | 27-N     | 8-W   |         | 2350'         | SOUTH            | 1105'         | EAST           | SAN JUAN |

<sup>11</sup> Bottom Hole Location If Different From Surface

| UL or lot no.                             | Section | Township | Range                         | Lot Idn | Feet from the                    | North/South line | Feet from the           | East/West line | County |
|---|---------|----------|-------------------------------|---------|----------------------------------|------------------|-------------------------|----------------|--------|
|   |         |          |                               |         |                                  |                  |                         |                |        |
| <sup>12</sup> Dedicated Acres<br>160 SE/4 |         |          | <sup>13</sup> Joint or Infill |         | <sup>14</sup> Consolidation Code |                  | <sup>15</sup> Order No. |                |        |

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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



17 OPERATOR CERTIFICATION

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

Signature Jeffrey W. Patton  
Printed Name JEFFREY W. PATTON  
Title DRILLING ENGINEER  
Date 4-24-02

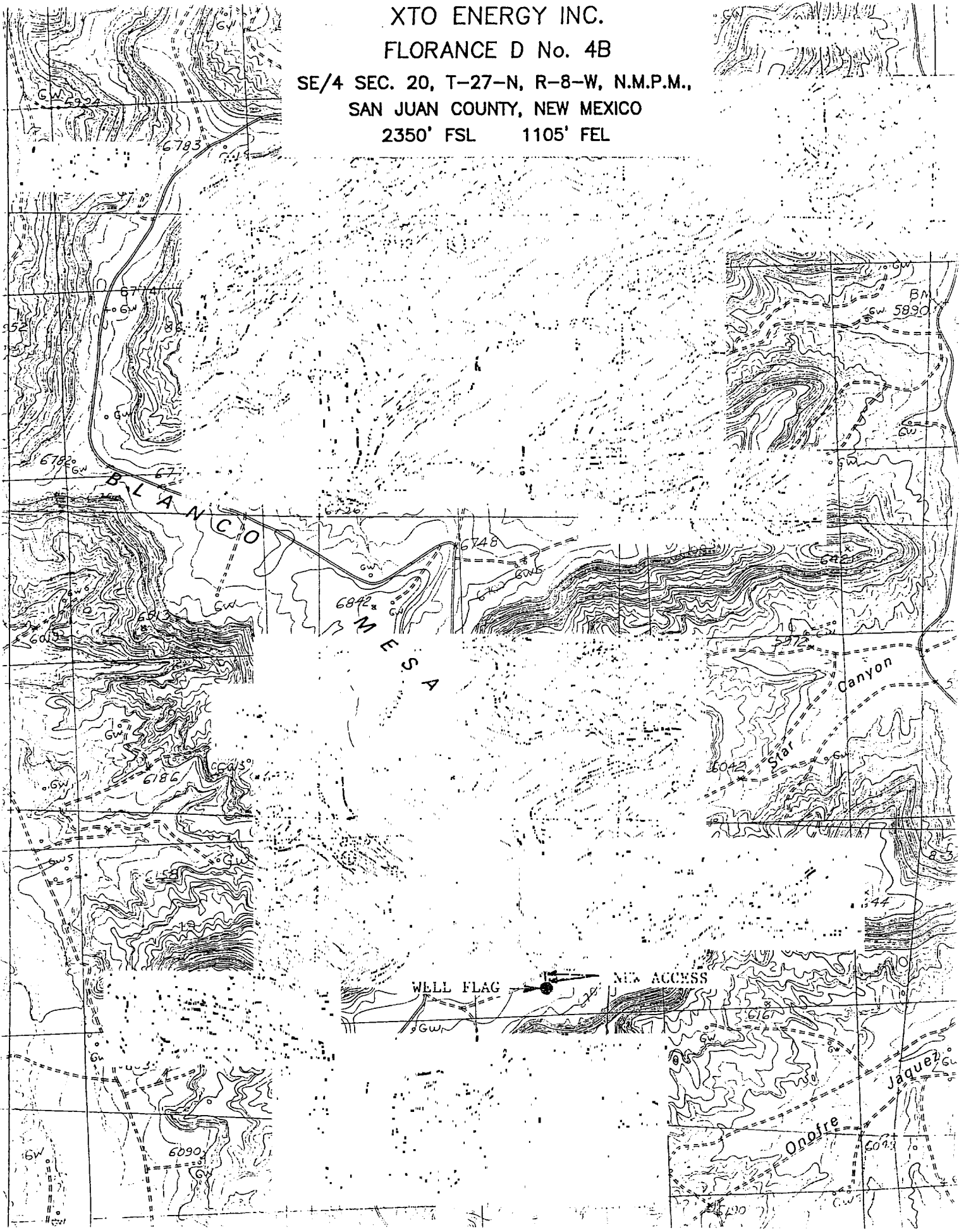
18 SURVEYOR CERTIFICATION

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 belief

Date of Survey 9-18-01  
Signature and Seal of Professional Surveyor [Signature]  
Certificate Number 8894

XTO ENERGY INC.  
FLORANCE D No. 4B

SE/4 SEC. 20, T-27-N, R-8-W, N.M.P.M.,  
SAN JUAN COUNTY, NEW MEXICO  
2350' FSL 1105' FEL



# XTO ENERGY INC.

Florance "D" #4B

APD Data

April 24, 2002

Location: 2350' FSL & 1105' FEL, Sec 20, T27N, R08W

County: San Juan

State: New Mexico

PROJECTED TOTAL DEPTH: ±5,550'

OBJECTIVE: Mesaverde

GR ELEV: 6,761'

Est KB ELEV: 6,773' (12' AGL)

## 1. MUD PROGRAM:

| INTERVAL   | 0' to 270'  | 270' to 3,500' | 3,500' to TD |
|------------|-------------|----------------|--------------|
| HOLE SIZE  | 12-1/4"     | 7-7/8"         | 7-7/8"       |
| MUD TYPE   | FW/Spud Mud | FW/Polymer     | LSND         |
| WEIGHT     | 8.6-9.0     | 8.4-8.8        | 8.6-9.0      |
| VISCOSITY  | 28-32       | 28-32          | 45-60        |
| WATER LOSS | NC          | NC             | 8-10         |

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pre-treat with 20% LCM @ 3,500'. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity (>85 sec) at TD for logging. Reduce viscosity after logging for cementing purposes.

## 2. CASING PROGRAM:

Surface Casing: 8-5/8" casing to be set at ± 320' in 8.8 ppg mud

| Interval | Length | Wt  | Gr   | Cplg | Coll Rating (psi) | Burst Rating (psi) | Jt Str (M-lbs) | ID (in) | Drift (in) | SF Coll | SF Burst | SF Ten |
|----------|--------|-----|------|------|-------------------|--------------------|----------------|---------|------------|---------|----------|--------|
| 0'-320'  | 320'   | 24# | J-55 | STC  | 1370              | 2950               | 244            | 8.097   | 7.972      | 7.32    | 7.95     | 29.39  |

Production Casing: 4-1/2" casing to be set at TD in 9.0 ppg mud.

| Interval | Length | Wt    | Gr   | Cplg | Coll Rating (psi) | Burst Rating (psi) | Jt Str (M-lbs) | ID (in) | Drift (in) | SF Coll | SF Burst | SF Ten |
|----------|--------|-------|------|------|-------------------|--------------------|----------------|---------|------------|---------|----------|--------|
| 0'-TD    | 5,550' | 10.5# | J-55 | STC  | 4010              | 4790               | 132            | 4.052   | 3.875      | 1.66    | 1.33     | 2.44   |

## 3. WELLHEAD:

- Casing Head: Larkin Fig 92 (or equivalent), 9" nominal, 2,000 psig WP (4,000 psig test) with 8-5/8" 8rnd thread on bottom and 11-3/4" 8rnd thread on top.
- Tubing Head: Larkin Fig 612 (or equivalent), 6.456" nominal, 2,000 psig WP (4,000 psig test), 4-1/2" 8rnd female thread on bottom, 8-5/8" 8rnd thread on top.

**4. CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):**

A. Surface: 8-5/8", 24#, J-55, STC casing to be set at  $\pm 320'$ .

Lead: 200 sx of "Type III" cement containing 3%  $\text{CaCl}_2$ , 1/4 pps celloflake, mixed at 14.5 ppg, 1.39  $\text{ft}^3/\text{sk}$ , & 6.50 gal wtr/sk.

*Total slurry volume is 278  $\text{ft}^3$ ,  $\pm 100\%$  excess of calculated annular volume to 320'.*

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at  $\pm 5,550'$ . DV Tool to be set @  $\pm 4,000'$ .

**First Stage**

Lead: 80 sx of Premium Lite FM (65/35/6) cement containing 2% KCl, 1/4 pps celloflake, 2-4% Phenoseal mixed at 11.9 ppg, 2.39  $\text{ft}^3/\text{sk}$ , 15.60 gal wtr/sx.

Tail: 150 sx of Premium Lite HS (65/35/6) cement containing 2% KCl, 7#/sx CSE, 1/4 pps celloflake, 0.5% Fluid loss, 0.2% Dispersant mixed at 12.5 ppg, 2.01  $\text{ft}^3/\text{sk}$ , 10.71 gal wtr/sx..

**Second Stage**

Lead: 470 sx of Premium Lite FM (65/35/6) cement containing 2% KCl, 1/4 pps celloflake, 2-4% Phenoseal mixed at 11.9 ppg, 2.39  $\text{ft}^3/\text{sk}$ , 15.60 gal wtr/sx.

Tail: 80 sx of Premium Lite HS (65/35/6) cement containing 2% KCl, 7#/sx CSE, 1/4 pps celloflake, 0.5% Fluid loss, 0.2% Dispersant mixed at 12.5 ppg, 2.01  $\text{ft}^3/\text{sk}$ , 10.71 gal wtr/sx..

*Total estimated slurry volume (including 40% excess) for the 4-1/2" production casing is 1,776  $\text{ft}^3$ .*

*Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 40%. It will be attempted to circ cement to surface on both stages.*

**5. LOGGING PROGRAM:**

A. Mud Logger: There are no plans to use a mud logger at this time.

B. Open Hole Logs as follows: Run Dual Induction/SFL/GR/SP fr/TD ( $\pm 5,550'$ ) to the bottom of the surface csg. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to 3,550'.

# BOP SCHEMATIC FOR DRILLING OPERATIONS CLASS 1 (2M) NORMAL PRESSURE

## TESTING PROCEDURE

1. Test BOP after installation:  
Pressure test BOP to 200-300 psig (low pressure) for 5 min.  
Test BOP to Working Press or to 70% internal yield of surf csg (10 min).
2. Test operation of (both) rams on every trip.
3. Check and record Accumulator pressure on every tour.
4. Re-pressure test BOP stack after changing out rams.
5. Have kelly cock valve with handle available.
6. Have safety valve and subs to fit all sizes of drill string.

