

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF - 079319	
2. NAME OF OPERATOR Cross Timbers Operating Company <i>XTO Energy</i>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
3. ADDRESS AND TELEPHONE NO. 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 2385' FNL & 2580' FWL Sec 6, T27N, R08W At proposed prod. zone 1905' FNL & 1964' FWL Sec 6, T27N, R08W		8. FARM OR LEASE NAME, WELL NO. Schwerdtfeger "A" #3F	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx 24 air miles south down Largo Canyon from the Blanco NM Post Office		9. API WELL NO. 30 045 31051	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 84'		10. FIELD AND POOL, OR WILDCAT Blanco Mesaverde Basin Dakota	
16. NO. OF ACRES IN LEASE 320.68		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA F Sec 6, T27N, R08W	
17. NO. OF ACRES ASSIGNED TO THIS WELL 320.68 w/2		12. COUNTY OR PARISH San Juan	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1,000'		13. STATE NM	
19. PROPOSED DEPTH 7,700' MD		20. ROTARY OR CABLE TOOLS 0' - 7,700' w/Rotary Tools	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6,757' GL		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"	9-5/8", H-40	32.3#	265'	140 sx Class "B"
8-3/4"	7", J-55	20.0#	3,150' MD	275 sx Lightweight cement
6-1/4"	4-1/2", J-55	10.5#	7,700' MD	375 sx C1 "H"

XTO Energy Inc. plans to drill the above mentioned well as described in the proposed Surface Use Program.

The pipeline ROW is also enclosed with this APD.

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

APD/ROW

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

NOTE: THE "NOTICE OF STAKING" FOR THIS WELL WAS ORIGINALLY FILED AND ON-SITED AS THE SCHWERTDFEGER "A" #12B (MESAVERDE). XTO ENERGY HAS ELECTED TO ADD AN INFILL DAKOTA TO THE WELLBORE.

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 *W. Patton* TITLE Drilling Engineer DATE 4/02/02

(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

APPROVED BY *V.A. Balderaz* TITLE HOLD C104 FOR Directional Survey DATE MAY 28

\*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

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised August 15, 2000

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 30-045-31051	<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name BLANCO MESADERDE
<sup>4</sup> Property Code 22634	<sup>5</sup> Property Name SCHWERTFEGER "A"	<sup>6</sup> Well Number 3F
<sup>7</sup> GRID No. 167067	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6757'

<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
F	6	27-N	8-W		2385'	NORTH	2580'	WEST	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
F	6	27 N	8 W		1905'	NORTH	1964'	WEST	SAN JUAN

<sup>12</sup> Dedicated Acres 320.68 w/2	<sup>13</sup> Joint or Infill I	<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><sup>16</sup> CALC'D CORNER S 89-30-07 E 2664.3' (M)</p> <p>LOT 4</p> <p>LOT 3</p> <p>LOT 2</p> <p>LOT 1</p> <p>LOT 5 1964'</p> <p>LOT 6</p> <p>LOT 7</p> <p>LAT: 36°36'17" N. LONG: 107°43'20" W.</p> <p>700' BTH</p> <p>1248'</p> <p>700'</p> <p>2580'</p> <p>2385'</p> <p>1905'</p> <p>1082'</p> <p>84'</p> <p>220'</p> <p>6 SURF</p> <p>MAY 2002</p>	<p><sup>17</sup> 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>JW Patton</u></p> <p>Printed Name <u>JEFFREY L W PATTON</u></p> <p>Title <u>DRILLING ENGINEER</u></p> <p>Date <u>3-28-02</u></p> <p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from the notes of previous surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief</p> <p>Date of Survey <u>3-28-02</u></p> <p>Signature and Seal of Professional Surveyor: <u>[Signature]</u></p> <p>Certificate Number <u>8894</u></p>
---	--

DISTRICT I  
1825 N. Franch Dr., Hobbs, N.M. 88240

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-1C2  
Revised August 15, 2000

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

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

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

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-065-31051	<sup>2</sup> Pool Code 71599	<sup>3</sup> Pool Name BASIN DAKOTA
<sup>4</sup> Property Code 22634	<sup>5</sup> Property Name SCHWERTFEGER "A"	<sup>6</sup> Well Number 3F
<sup>7</sup> GRID No. 167067	<sup>8</sup> Operator Name XTO ENERGY INC.	<sup>9</sup> Elevation 6757'

<sup>10</sup> Surface Location

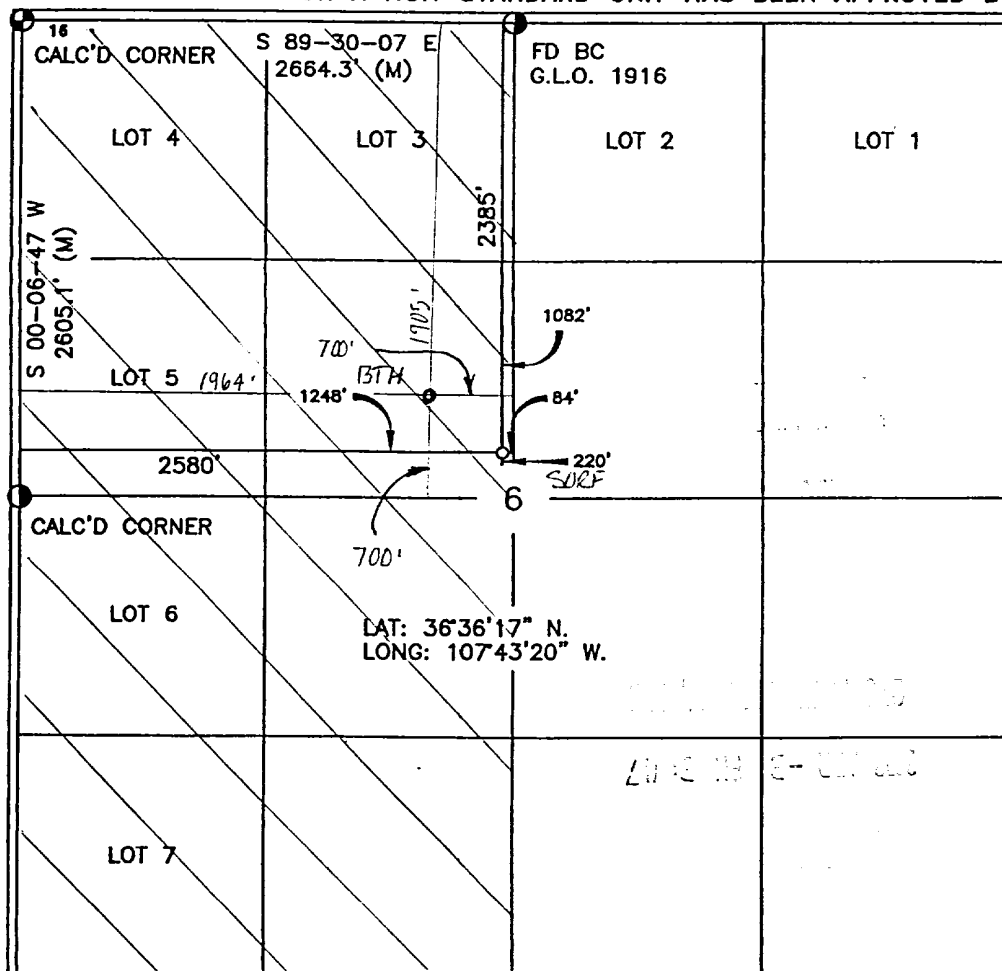
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	6	27-N	8-W		2385'	NORTH	2580'	WEST	SAN JUAN

<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
F	6	27N	8W		1905	NORTH	1964	WEST	SAN JUAN

<sup>12</sup> Dedicated Acres 320.68 W/2	<sup>13</sup> Joint or Infill I	<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



17 OPERATOR CERTIFICATION

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

Signature JW Patton  
Printed Name JEFFREY W PATTON  
Title DRILLING ENGINEER  
Date 3-28-02

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from the notes of previous 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 of Survey  
Signature and Seal of Professional Surveyor

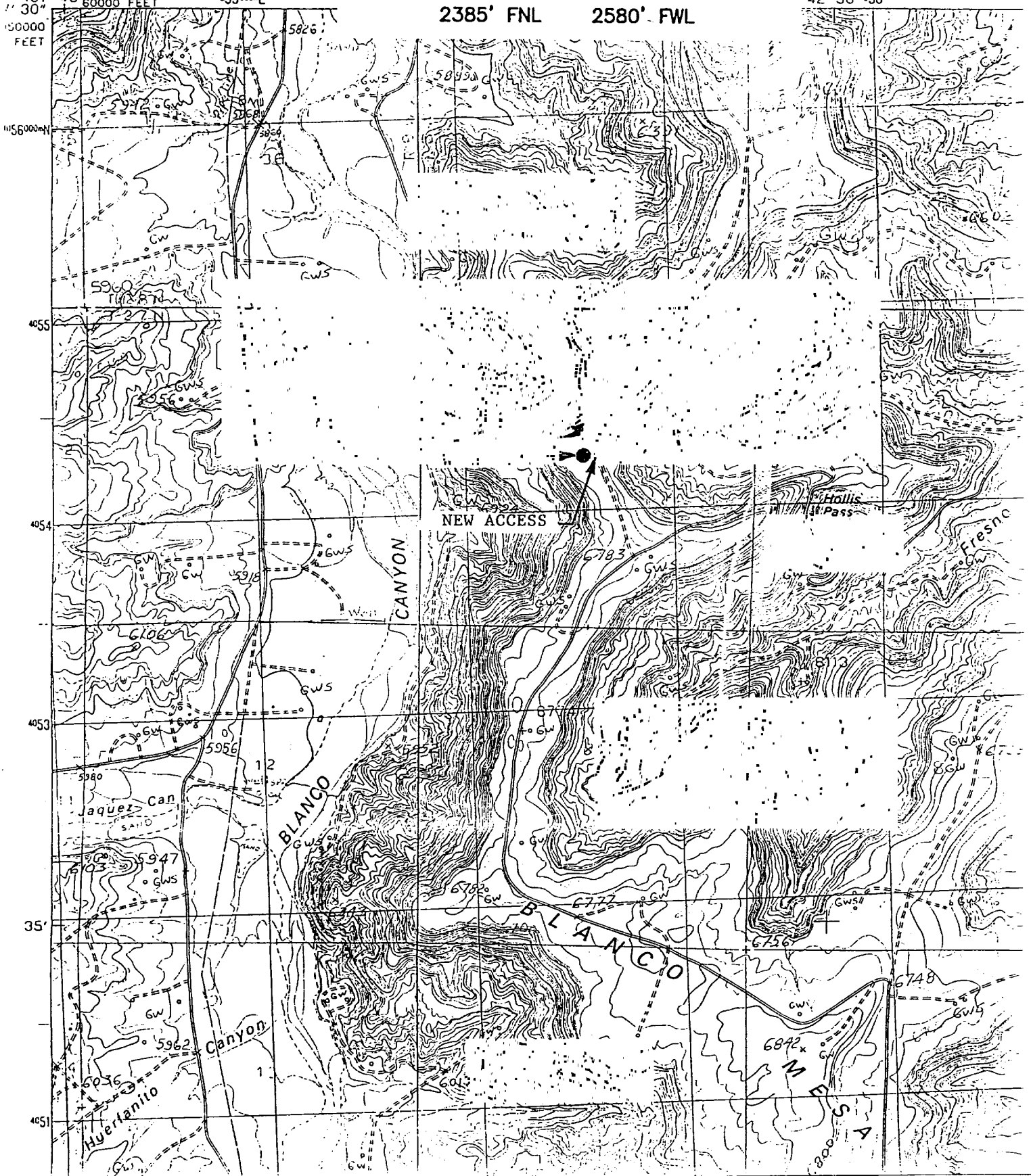
8894  
Certificate Number

SCHWERTFEGER "A" No. 3F

NW/4 SEC. 6, T-27-N, R-8-W, N.M.P.M.,

2385' FNL      2580' FWL

Topographic map of the study area. The map shows contour lines, a river, and a road. The map includes coordinates 107° 45' 30" and 255000-E, and a scale bar indicating 60000 FEET.



# XTO ENERGY INC.

Schwerdtfeger "A" #3F

APD Data

March 28, 2002

Surface Location: 2,385' FNL & 2,580' FWL, Sec 6, T27N, R08W County: San Juan State: New Mexico

Bottomhole location : 1905' FNL & 1,964' FWL, Sec 6, T27N, R08W

PROJECTED TOTAL DEPTH: ±7,668' (TVD) ±7,700 (MD)

GR ELEV: 6,757'

OBJECTIVE: Dakota/Mesaverde

Est KB ELEV: 6,760' (13' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 265'	265' to 3,150'	3,150' to TD
HOLE SIZE	12-1/4"	8-3/4"	6-1/4"
MUD TYPE	FW/Native Mud	FW/Polymer	Air/Foam
WEIGHT	8.6-8.8	8.6-9.0	
VISCOSITY	28-32	29-34	
WATER LOSS	NC	NC	

Remarks: Use fibrous materials as needed to control seepage and lost circulation. Pump high viscosity sweeps as needed for hole cleaning. RU air compressors after setting the intermediate csg. Drill with air or foam to TD.

## 2. CASING PROGRAM:

Surface Casing: 9-5/8" casing to be set at ± 265' in 8.6 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'-265'	265'	32.3#	H-40	STC	1370	2270	254	9.001	8.972	5.98	5.68	15.73

Intermediate Casing: 7" casing to be set at ±3,150' (MD) 3,150' (TVD) 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'-3,150' (MD)	3,150'	20.0#	J-55	STC	2257	3740	234	6.456	6.331	1.15	1.31	2.57

Production Casing: 4-1/2" casing to be set at 7,700' (MD) 7,668' (TVD) in air.

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'-7,700' (MD)	7,700'	10.5#	J-55	STC	4010	4790	132	4.052	3.927	1.33	1.20	1.90

3. WELLHEAD:

- A. Bradenhead: 9-5/8" x 7" 2,000 psig WP (4,000 psig test).  
Casinghead: 7" x 4-1/2" 3,000 psig WP (6,000 psig test).

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

- A. Surface: 9-5/8", 32.3#, H-40, STC casing to be set at  $\pm 265'$ .

Lead: 140 sx of Class "B" (Standard) cement containing 2%  $\text{CaCl}_2$ , 1/4 pps celloflake, mixed at 15.6 ppg, 1.18  $\text{ft}^3/\text{sk}$ , & 5.20 gal wtr/sk.

*Total slurry volume is 166  $\text{ft}^3$ , 100% excess of calculated annular volume to 265'.*

- B. Intermediate: 7", 20.0#, J-55, STC casing to be set at  $\pm 3,095'$  (TVD)  $\pm 3,150'$  (MD).

Lead: 225 sx of Class "B" (Standard) cement containing  $\pm 3\%$  extender, 1/4 pps celloflake and 2%  $\text{CaCl}_2$  mixed at 11.4 ppg, 2.88  $\text{ft}^3/\text{sk}$ , 17.89 gal wtr/sx.

Tail: 50 sx of Class "B" (Standard) cement containing 1/4 pps celloflake and 2%  $\text{CaCl}_2$  mixed at 15.6 ppg, 1.18  $\text{ft}^3/\text{sk}$ , 5.20 gal wtr/sx.

*Total slurry volume is 707  $\text{ft}^3$ , circulated to surface. This value is 50% (excess) over gage hole volume.*

- C. Production: 4-1/2", 10.5#, J-55, STC casing to be set at  $\pm 7,668'$  (TVD) 7,700' (MD).

Lead: 225 sx of Class "H" Premium Lite High Strength (65/35/6), 1/4 pps celloflake, 2% KCl, 0.5% fluidloss, 0.2% dispersant & 2% Phenoseal mixed at 12.5 ppg, 2.01  $\text{ft}^3/\text{sk}$ , 10.12 gal wtr/sx.

Tail: 150 sx of Class "H" Premium cement containing 4% gel (extender), 1/4 pps celloflake, 0.5% fluidloss, 0.2% dispersant and 2% Phenoseal mixed at 14.7 ppg, 1.38  $\text{ft}^3/\text{sk}$ , 6.70 gal wtr/sx..

*Total estimated slurry volume for the 4-1/2" production casing is 657  $\text{ft}^3$  for 4,750' of fill. Est. TOC should be @ 2,950'. 35% (excess) over gage hole volume has been added to the number of sacks indicated..*

*Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 35%..*

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/MSFL/GR/CAL/SP/CNL/LDT (lithodensity) from TD to the bottom of the intermediate csg (@  $\pm 3,150'$  MD). Run cased hole GR/CCL from TD to surface.

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

## 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.

## TESTING PROCEDURE

