

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

Cross Timbers Operating Company

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

1,975' FNL & 660' FEL

At proposed prod. zone

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

This well is located approx 4 miles East of the Flora Vista, NM Post Office.

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

317.1 Dak/316.7 MV

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

317.1(Dak / 316.7 MV

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT. 685'

19. PROPOSED DEPTH

7,175' -

20. ROTARY OR CABLE TOOLS

0-7,100' Rotary Tools

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

5,833' Ground Level

22. APPROX. DATE WORK WILL START\*

Summer 2001

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	36 #/ft	+ - 350'	+ - 185 sx cl B cmt
7-7/8"	4-1/2", J-55	10.5 #/ft	+ - 7100' 7/75	+ - 735 sx cmt

Cross Timbers plans to drill the above mentioned well as described in the enclosed Surface Use Program.

procedural review pursuant to 43 CFR 3165.3  
and appeal pursuant to 43 CFR 3165.4.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED  
EXCEPT WHERE SHOWN OTHERWISE ARE  
SUBJECT TO COMPLIANCE WITH ATTACHED  
"GENERAL REQUIREMENTS"

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

TITLE Drilling Engineer

DATE 7/16/01

(This space for Federal or State office use)

8/21/01

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:

AUG 21

APPROVED BY

/s/ Joel Farrell

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  
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II  
P.O. Drawer DD, Artesia, N.M. 88211-0719

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

DISTRICT IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

# OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, NM 87504-2088

Form C-1C2  
Revised February 21, 1994  
Instructions on back  
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 <b>30-045-30754</b>	<sup>2</sup> Pool Code <b>71599</b>	<sup>3</sup> Pool Name <b>BASIN DAKOTA</b>
<sup>4</sup> Property Code <b>28816</b>	<sup>5</sup> Property Name <b>LITTLE STINKER</b>	<sup>6</sup> Well Number <b>1M</b>
<sup>7</sup> GRID No. <b>167067</b>	<sup>8</sup> Operator Name <b>CROSS TIMBERS OPERATING CO.</b>	<sup>9</sup> Elevation <b>5833'</b>

### <sup>10</sup> Surface Location

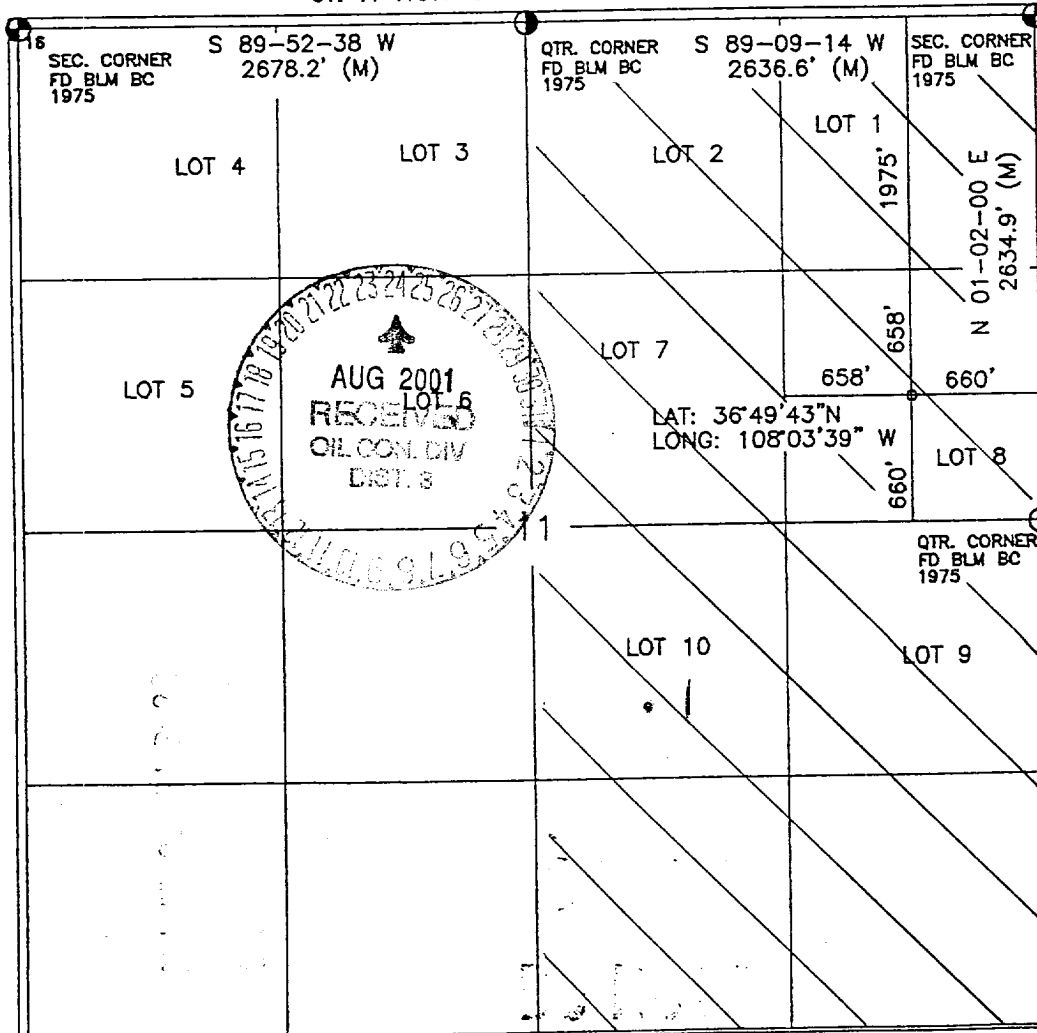
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	11	30-N	12-W		1975'	NORTH	660'	EAST	SAN JUAN

### <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 <b>317.20</b>	<sup>13</sup> Joint or Infill <b>E/2</b>	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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 *Jeffrey W. Patton*  
Printed Name JEFFREY W. PATTON  
Title DRILLING ENGINEER  
Date 7-17-01

### 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 knowledge and belief

Date of Survey 7-17-01  
Signature and Seal of Professional Surveyor *[Signature]*  
Certificate Number 8894

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OIL CONSERVATION DIVISION

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-045-30754</b>	<sup>2</sup> Pool Code <b>72319</b>	<sup>3</sup> Pool Name <b>BLANCO MESAVERDE</b>
<sup>4</sup> Property Code <b>28816</b>	<sup>5</sup> Property Name <b>LITTLE STINKER</b>	<sup>6</sup> Well Number <b>1M</b>
<sup>7</sup> OGRID No. <b>167067</b>	<sup>8</sup> Operator Name <b>CROSS TIMBERS OPERATING CO.</b>	<sup>9</sup> Elevation <b>5833'</b>

<sup>10</sup> Surface Location

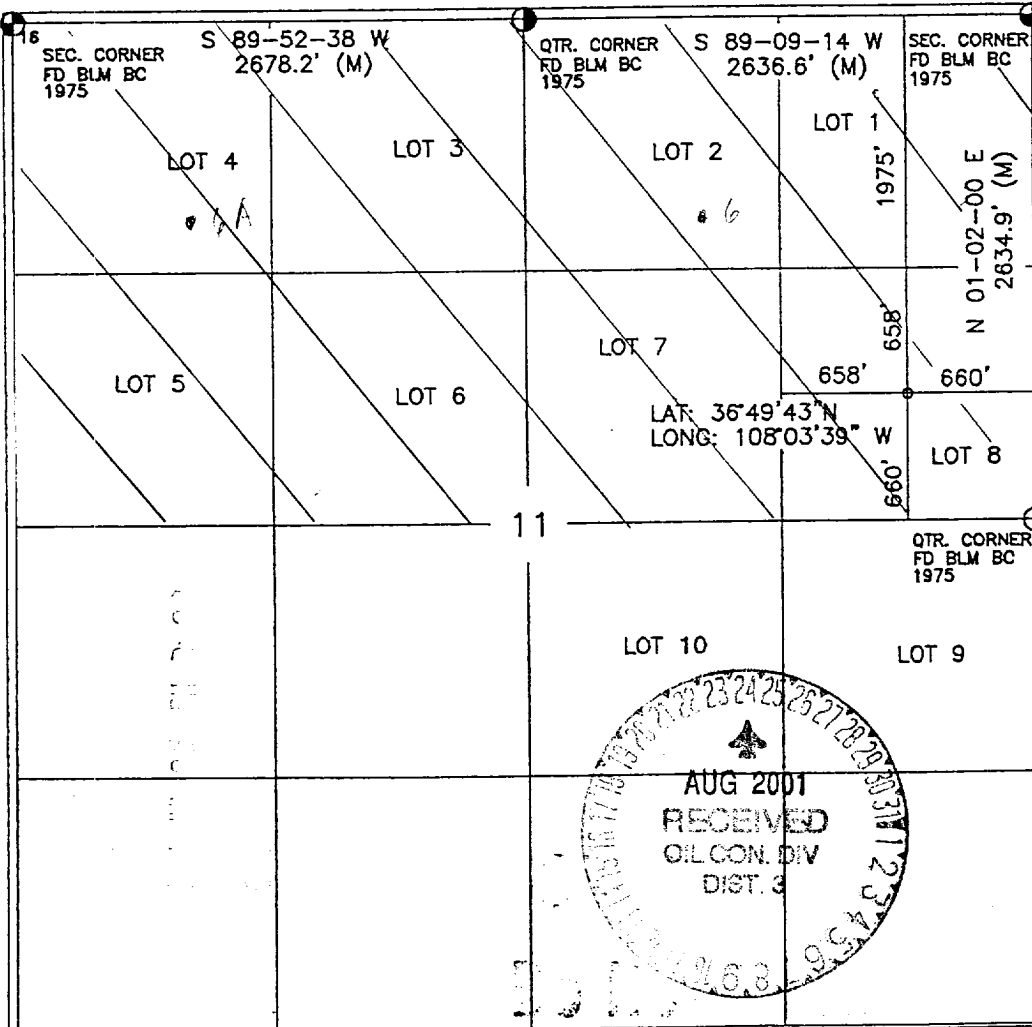
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the 1975'	North/South line	Feet from the	East/West line	County
H	11	30-N	12-W			NORTH	660'	EAST	SAN JUAN

<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 <b>316.70</b> <i>N/2</i>	<sup>13</sup> Joint or Infill <b>I</b>	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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 *Jeffrey W Patton*  
Printed Name **JEFFREY W PATTON**  
Title **DRILLING ENGINEER**  
Date **7-17-01**

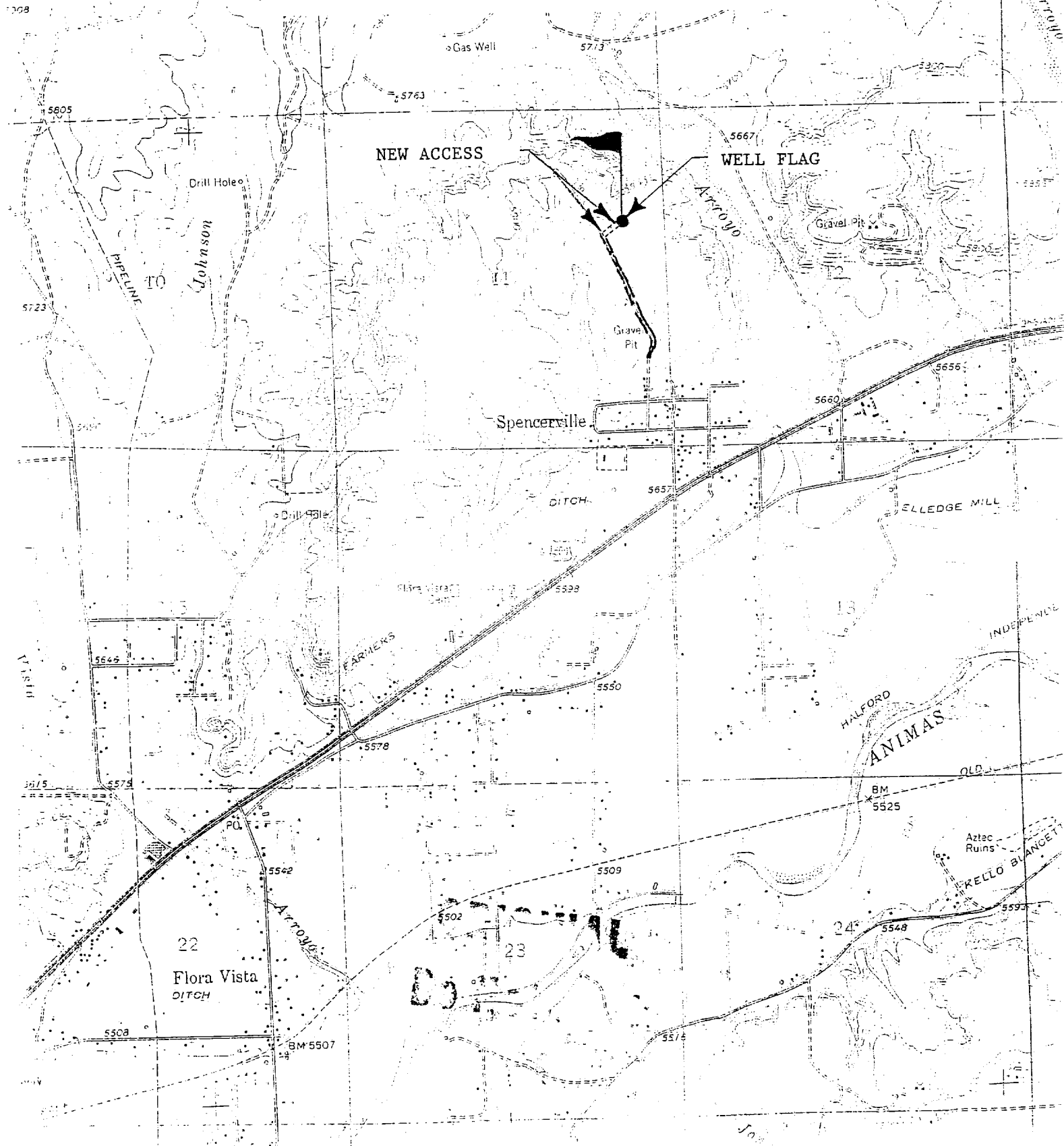
18 SURVEYOR CERTIFICATION

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  
Signature and Seal of Professional Surveyor

8894  
Certificate Number

NE/4 SEC. 11, T-30-N, R-12-W, N.M.P.M.,  
SAN JUAN COUNTY, NEW MEXICO  
1975' FNL 660' FEL



# CROSS TIMBERS OPERATING COMPANY

*Little Stinker #1M*

APD Data

July 19, 2001

Location: Sec 11, T30N, R12W

County: San Juan

State: New Mexico

GREATEST PROJECTED TD: 7,175'  
APPROX GR ELEV: 5,833'

OBJECTIVE: Basin Dakota / Blanco Mesaverde  
Est KB ELEV: 5,845' (12' AGL)

## 1. MUD PROGRAM:

INTERVAL	0' to 350'	350' to 4,500'	4,500' to TD
HOLE SIZE	12-1/4"	7-7/8"	7-7/8"
MUD TYPE	FW/Spud Mud	FW/Polymer	PolyPlus
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. Pump high viscosity sweeps as needed for hole cleaning. Raise viscosity at TD for logging. Reduce viscosity after logging for cementing purposes.

## 2. CASING PROGRAM:

Surface Casing: 9-5/8" casing to be set at  $\pm$  350' 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'-350'	350'	36#	H-40	STC	1740	2560	294	8.921	8.765	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	7,175'	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 9-5/8" 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: 9-5/8", 36#, H-40, STC casing to be set at  $\pm 350'$ . *Circulate*

Lead: 185 sx of Class "B" cement (or equivalent) containing 2%  $\text{CaCl}_2$ , 1/4 pps celloflake, mixed at 15.6 ppg, 1.18 ft<sup>3</sup>/sk, & 5.20 gal wtr/sk.

*Total slurry volume is 220 ft<sup>3</sup>, 100% excess of calculated annular volume to 350'.*

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at  $\pm 7,175'$ .

530 sx of Lite-Crete cement (proprietary blend) containing 1/4 pps celloflake mixed at 9.5 ppg, 2.52 ft<sup>3</sup>/sk, 11.50 gal wtr/sx followed by 200 sx 50/50 class "G" with poz, 6 % gel, 1/4#/sx celloflake, 0.2% dispersant & 0.2% fluid loss additive mixed at 13.0 ppg, 1.42 cuft/sx, 9.85 gal/sx.

*Total estimated slurry volume for the 4-1/2" production casing is 1,617 ft<sup>3</sup> (no excess).*

*Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 20%. It will be attempted to circulate cement to the surface.*

**5. LOGGING PROGRAM:**

A. Mud Logger: The mud logger will log from 3,300' to TD (6,850').

B. Open Hole Logs as follows: Run Array Induction/SFL/GR/SP fr/TD to the bottom of the surface csg. Run Neutron/Lithodensity/Pe/GR/Cal from TD to 2,800'. Formation Micro Imager (FMI) will be run on most wells from TD to  $\pm 6,300'$ .

**6. FORMATION TOPS:**

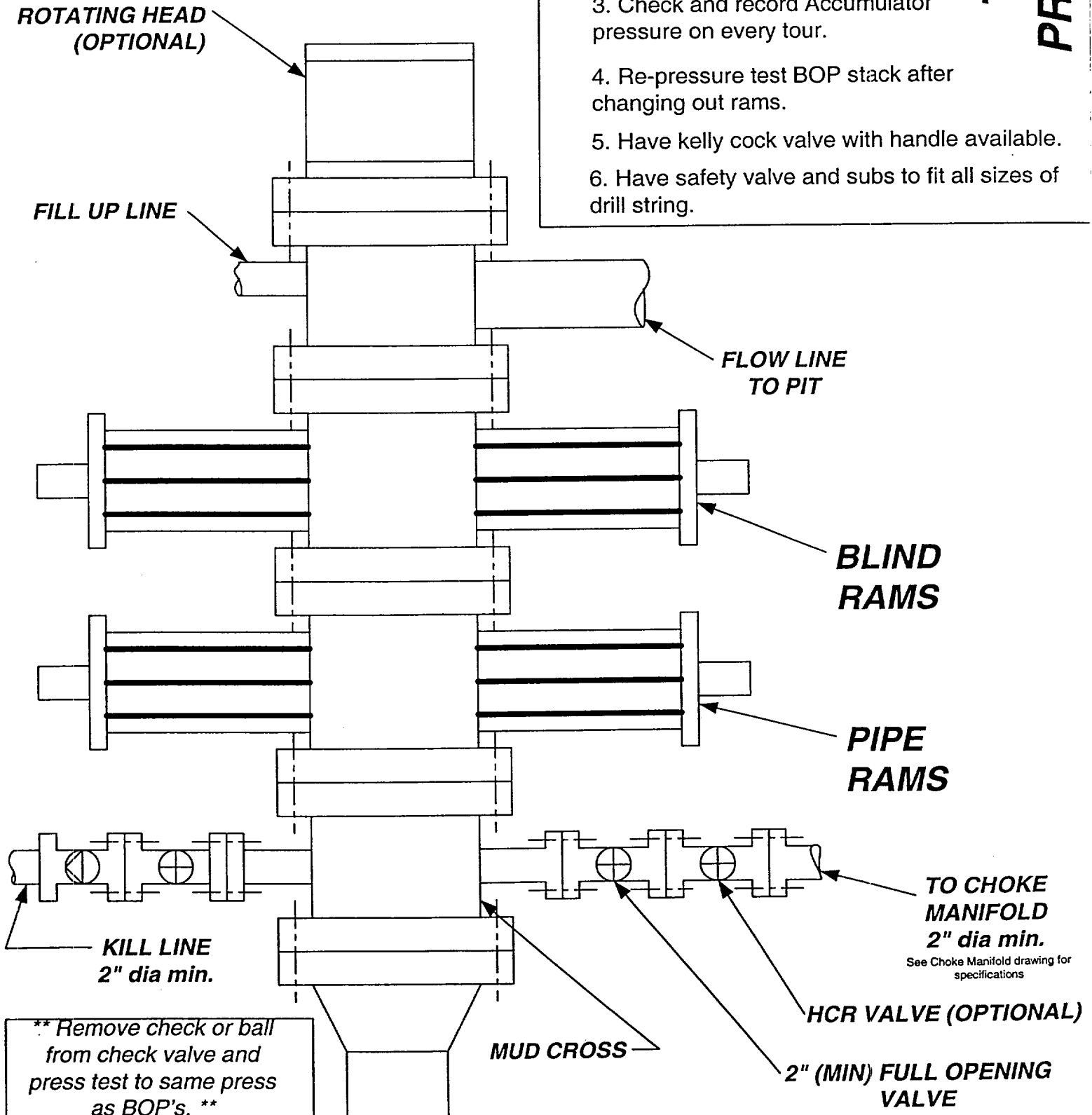
Est. KB Elevation: 5,845'

Formation	Subsea Depth	Well Depth
Farmington Sandstone	+4774'	1071'
Fruitland Formation	+4002'	1843'
Lower Fruitland Coal	+3711'	2134'
Pictured Cliffs SS	+3667'	2178'
Lewis Shale	+3420'	2425'



Cross Timbers Operating Company

## 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**