

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. DEC 2001)

1,595' FNL & 1,510' FWL
At proposed prod. zone

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

This well is located approx 23 southeast of the Bloomfield NM post office

15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line if any) 1,510'

16. NO. OF ACRES IN LEASE
320

17. NO. OF ACRES ASSIGNED
TO THIS WELL 320 w/h

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 100'

19. PROPOSED DEPTH
6925'

20. ROTARY OR CABLE TOOLS
0-6925' Rotary Tools

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

5978' Ground Level

22. APPROX. DATE WORK WILL START*
Oct. 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"	8-5/8" J-55	24 #/ft	+350'	+245 sx c1 B cmt
7-7/8"	4-1/2" J-55	10.5 #/ft	+6925'	+715 sx cmt

1. This well is to be drilled and cased in accordance with the requirements of 43 CFR 3100.4-1 and 43 CFR 3100.4-2.

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

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 7/17/01

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

12/17/01

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

D. Monticinos

TITLE

AFM

DATE

12/17/01

*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 00, 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

REG'D - SAN JUAN

APR 6 2001

Form C-102

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

¹ API Number 30045-30736	² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 22703	⁵ Property Name FEDERAL GAS COM	⁶ Well Number 2E
⁷ OGRIID No. 167067	⁸ Operator Name CROSS TIMBERS OPERATING CO.	⁹ Elevation 5978'

¹⁰ 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	27	28-N	10-W		1595'	NORTH	1510'	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

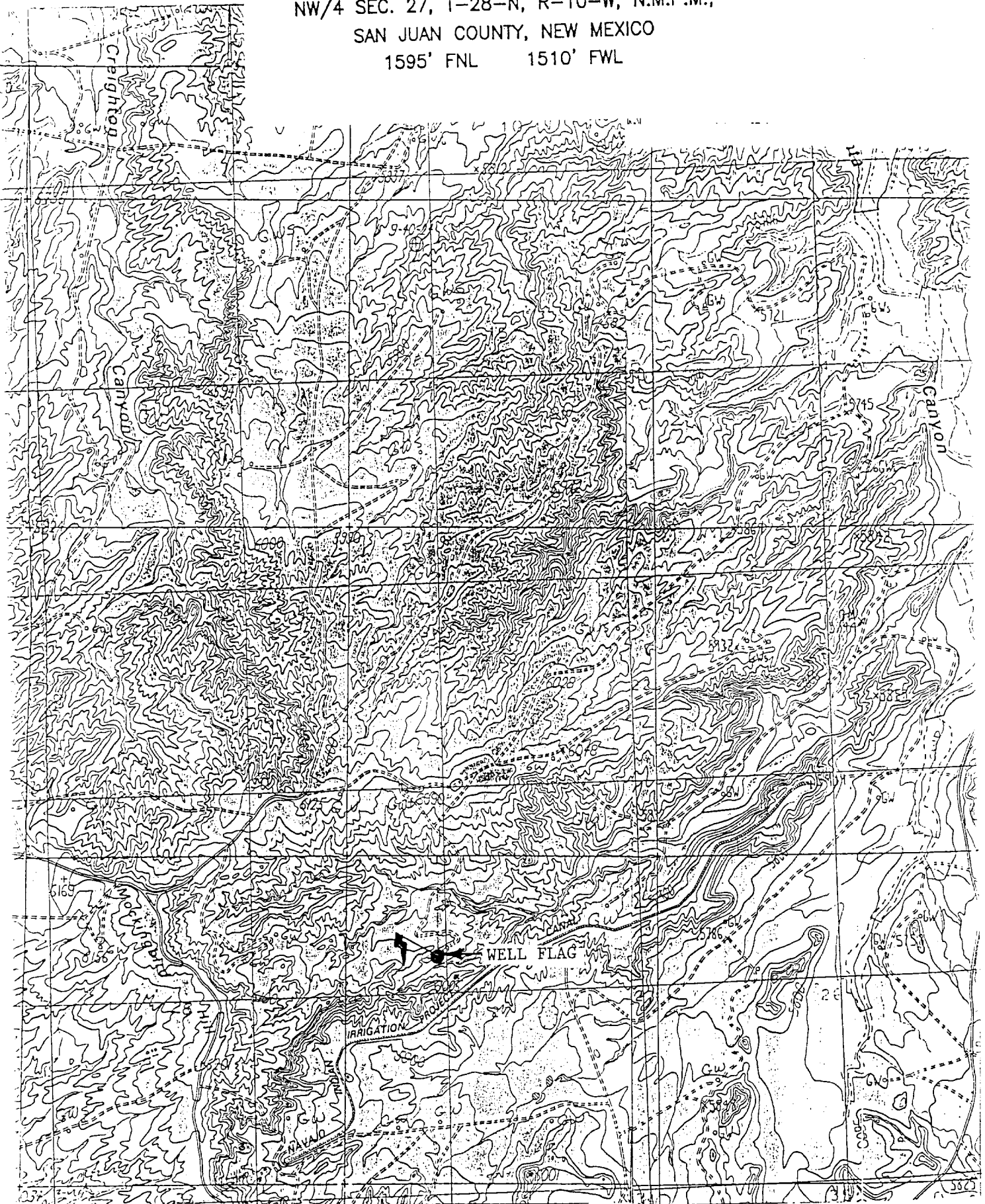
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320	¹³ Joint or Infill W / 2	¹⁴ Consolidation Code I	¹⁵ Order No.						

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

¹⁶ FD 3 1/2" BC G.L.O. 1913 5278.60' (M) N 00-00-29 E CALC'D CORNER FROM W.C. FD. S 00-00-29 W 13.2'	S 89-53-06 E 1595' 191' 275' 1128' LAT: 36°38'10" N. LONG: 107°53'12" W. 1044' 27	5276.30' (M) FD 3 1/2" BC G.L.O. 1913	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 3-28-2001 Signature and Seal of Professional Surveyor R. A. RUSH 8894 Certificate Number			

CROSS TIMBERS OPERATING COMPANY
FEDERAL GAS COM #2E

NW/4 SEC. 27, T-28-N, R-10-W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
1595' FNL 1510' FWL



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 $\pm 350'$.

245 sx of Class "B" cement containing 2% CaCl_2 , 1/4 pps celloflake, mixed at 15.6 ppg, 1.18 ft^3/sk , & 5.20 gal wtr/sk.

Total slurry volume is 289 ft^3 , 100% excess of calculated annular volume to 350'.

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at $\pm 6,925'$.

515 sx of Lite-Crete cement (proprietary blend) containing 1/4 pps celloflake mixed at 9.5 ppg, 2.52 ft^3/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 1,575 ft^3 (no excess).

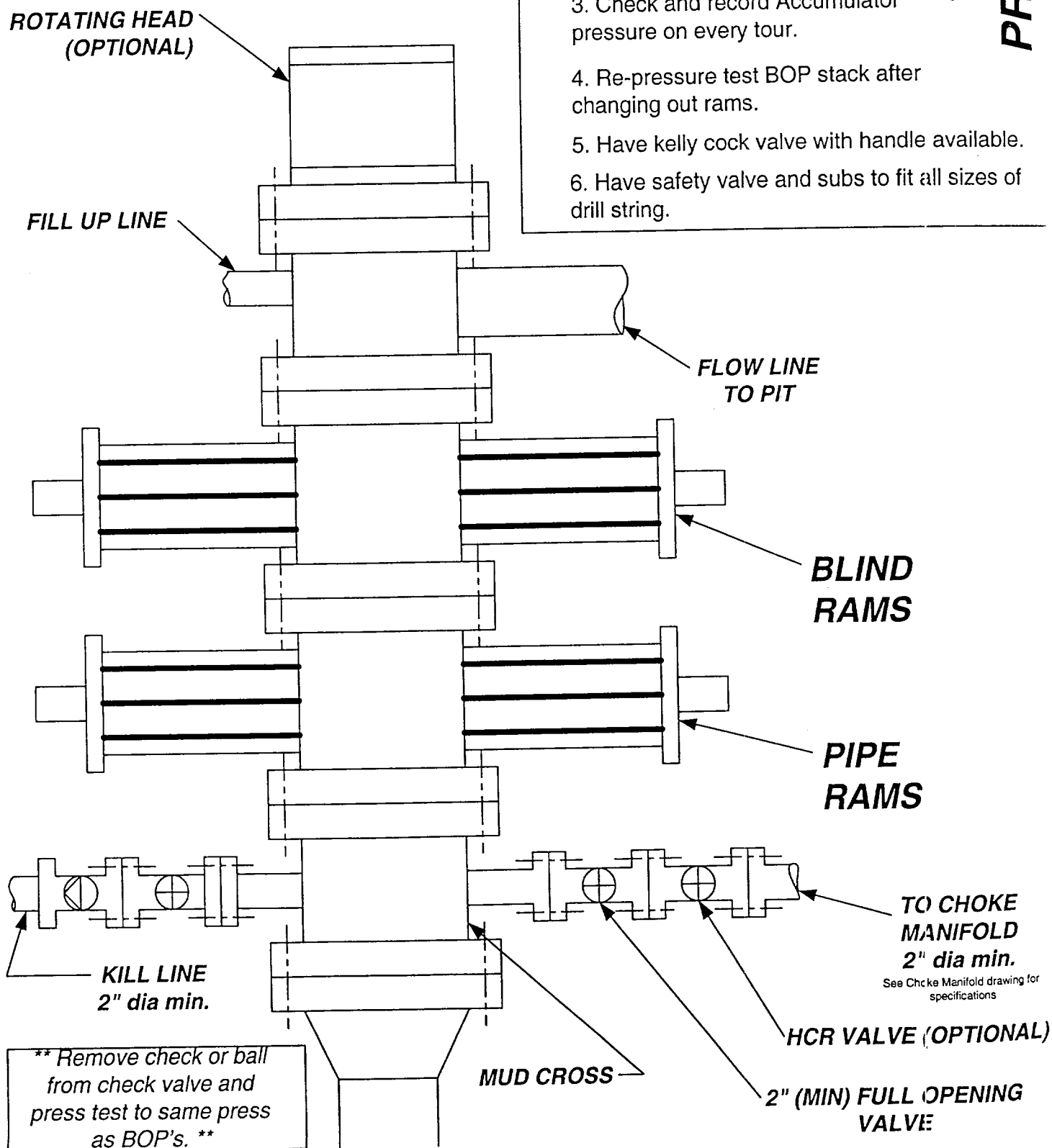
Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined from the caliper logs plus 30%. It will be attempted to circulate cement to the surface.

5. LOGGING PROGRAM:

A. Mud Logger: The mud logger will come on at 3,500' and will remain on the hole until TD. The mud will be logged in 10' intervals.

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 5,000'.

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