

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPE ☐

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

1,060' FSL & 1,805' FEL
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) 1,060'

16. NO. OF ACRES IN LEASE

320

17. NO. OF ACRES ASSIGNED

TO THIS WELL

320.89

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

400

19. PROPOSED DEPTH

6850'

20. ROTARY OR CABLE TOOLS

0-6850' Rotary Tools

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

6065' Ground Level

22. APPROX. DATE WORK WILL START*

Oct. 2000

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	+6850'	+ 780 sx cmt

This is to be subject to technical and
for mineral interest pursuant to 43 CFR 3165.3,
and subject pursuant to 43 CFR 3165.4.

EDMONT BUREAU OF LAND MANAGEMENT AUTHORIZED ARE
SURFACE USE OF LAND WITH ATTACHED
"WELL" AND "WELL" PROGRAM

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 [Signature] TITLE Drilling Engineer DATE 8/25/00

(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:

NMOC

JAN 17 2001

APPROVED BY /s/ Jim Lovato

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.

Form C-102
Revised February 21, 1994
Instructions on back
Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

District IV
PO Box 2058, Santa Fe, NM 87504-2088

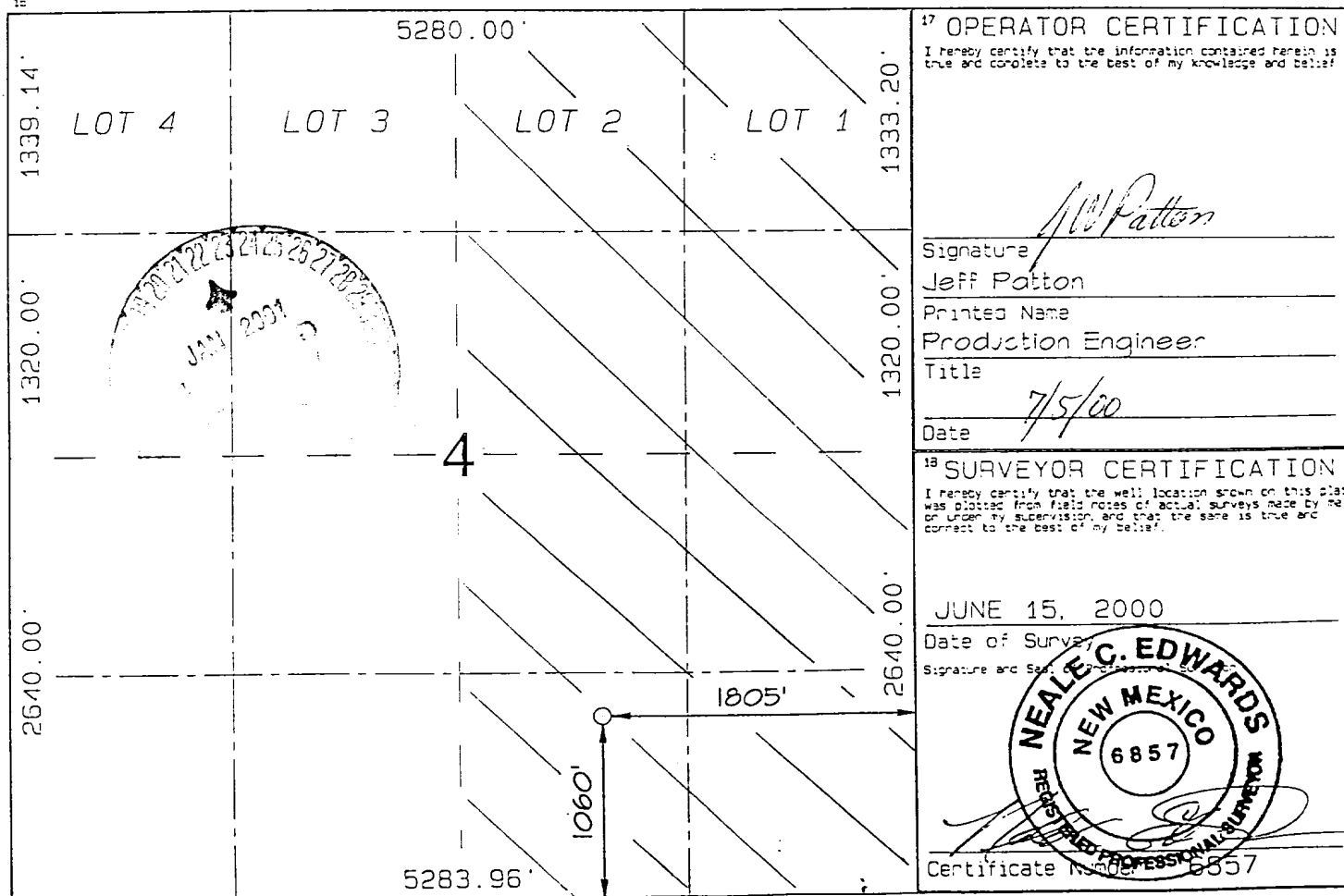
☐ AMENDED REPORT

'API Number 30-045-3032	'Pool Code 71599	'Pool Name BASIN DAKOTA
'Property Code 22701	'Property Name FEDERAL F	'Well Number 2E
'CGRID No. 167067	'Operator Name CROSS TIMBERS OPERATING COMPANY	'Elevation 6065'

UL or lot no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
0	4	27N	10W		1060	SOUTH	1805	EAST	SAN JUAN

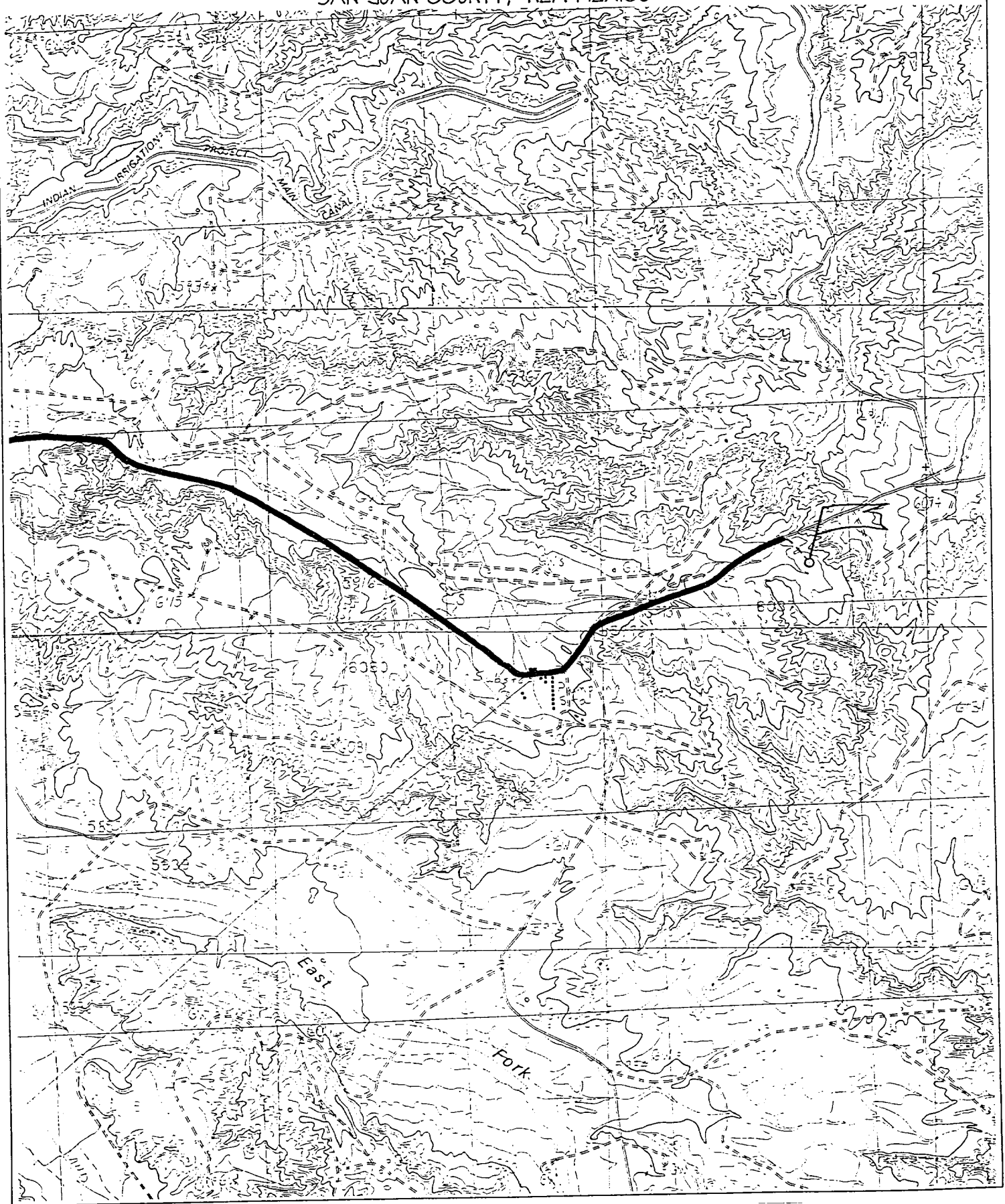
LL or lot no.	Section	Township	Range	Lot 1st	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320.89 E/2		¹³ Joint or Infill I	¹⁴ Consolidation Code		¹⁵ Order No.				

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



CROSS TIMBERS OPERATING COMPANY FEDERAL F #2E

1060' FSL & 1805' FEL, SECTION 4, T27N, R10W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO



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 $\pm 350'$.

Lead: 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 $\pm 7,025'$. DV Tool set @ $\pm 4,500'$.

1st Stage

Lead: 270 sx of Premium Lite HS (65% Type III, 355 poz & 6% gel), 1/4 pps celloflake, 10#/sx CSE, 6.25#/sx gilsonite and 1.3% FL-52/CD-32 mixed at 12.3 ppg, 2.14 ft^3/sk , 10.80 gal wtr/sx.

2nd Stage

Lead: 415 sx of Premium Lite HS (65% Type III, 355 poz & 6% gel), 1/4 pps celloflake, 10#/sx CSE, 6.25#/sx gilsonite and 1.3% FL-52/CD-32 mixed at 12.3 ppg, 2.14 ft^3/sk , 10.80 gal wtr/sx.

Tail: 100 sx of Type III cement containing 2% CaCl_2 & 1/4 pps D-29 (celloflake) mixed at 14.6 ppg, 1.39 ft^3/sk , 6.67 gal wtr/sx..

Total estimated slurry volume for the 4-1/2" production casing is 1,605 ft^3 (no excess).

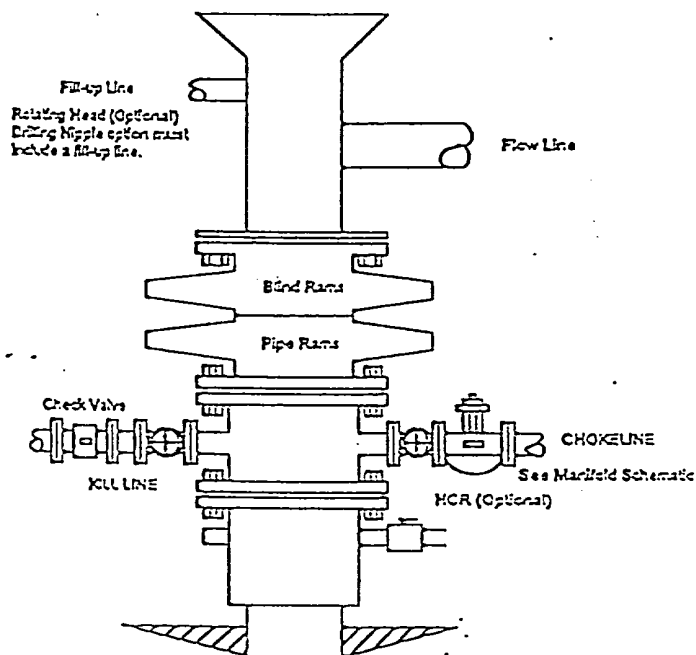
Note: The slurry design may change slightly based upon actual conditions. Final cement volumes will be determined for the caliper logs plus 40%. It will be attempted to circ cement to the DV Tool and to the surface.

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 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'. Formation Micro Imager (FMI) will be run on most wells from TD to $\pm 6,000'$.

BOPE SCHEMATIC FOR DRILLING OPERATIONS
 CLASS 1 - NORMAL PRESSURE
 CROSS TIMBERS OPERATING COMPANY STANDARD



CHOKE MANIFOLD SCHEMATIC FOR DRILLING OPERATIONS
 2M SERVICE
 CROSS TIMBERS OPERATING COMPANY STANDARD

