

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

660' FSL & 660' FEL Sec 21, T30N, R11W
At proposed prod. zone

Same

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

See enclosed surface use program

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

320

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 850'

19. PROPOSED DEPTH

4,950'

20. NO. OF ACRES ASSIGNED
TO THIS WELL

317.88

20. ROTARY OR CABLE TOOLS

0'-4,950' w/Rotary Tools

21. ELEVATIONS (Show whether D.F., RT., GR., etc.)

5,825' GL

22. APPROX. DATE WORK WILL START*

Fall of 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#	400'	275 sx c1 "B"
7-7/8"	4-1/2", J-55	10.5#	4,950' -	Lead: 475 sx c1 "B" w/2% Extender Tail: 475 sx c1 "B" w/2% Extender

This option is subject to technical and
procedural review pursuant to 43 CFR 3105.3
and appeal pursuant to 43 CFR 3105.4.

Surface: 8-5/8", 24#, J-55, STC csg set @ 400'. Will cmt w/275 sx c1 "B" cmt w/2% CC & 1/4#/sx
celloflake (15.6 ppg, 1.19 cuft/sx). Circ cmt to surface.

Production: 4-1/2", 10.5#, J-55, STC csg set @ 5,100'. Will cmt w/(lead) 475 sx c1 "B" w/2%
extender, 1/4#/sx celloflake & 2% CC (11.4 ppg, 2.87 cuft/sx) followed by (tail) 475 sx c1 "B" w/2%
extender, 1/4#/sx celloflake & 2% CC (13.5 ppg, 1.71 cuft/sx).

Final cmt volumes will be obtained fr/caliper logs + 40%.

A standard BOP (w/pipe & blind rams) & choke manifold arrangement will be used.

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 7/20/00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

9/5/00

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

TITLE

DATE

9/5/00

*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
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer 00, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

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

State of New Mexico
Energy, Minerals & Natural Resources Department

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

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

*API Number 30-045-30313	*Pool Code 72319	*Pool Name BLANCO MESAVERDE
*Property Code 22597	*Property Name BRUINGTON GAS COM C	*Well Number 1A
*OGRID No. 167067	*Operator Name CROSS TIMBERS OPERATING COMPANY	*Elevation 5825'

¹⁰ Surface Location

U. or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
P	21	30N	11W		660	SOUTH	660	EAST	SAN JUAN

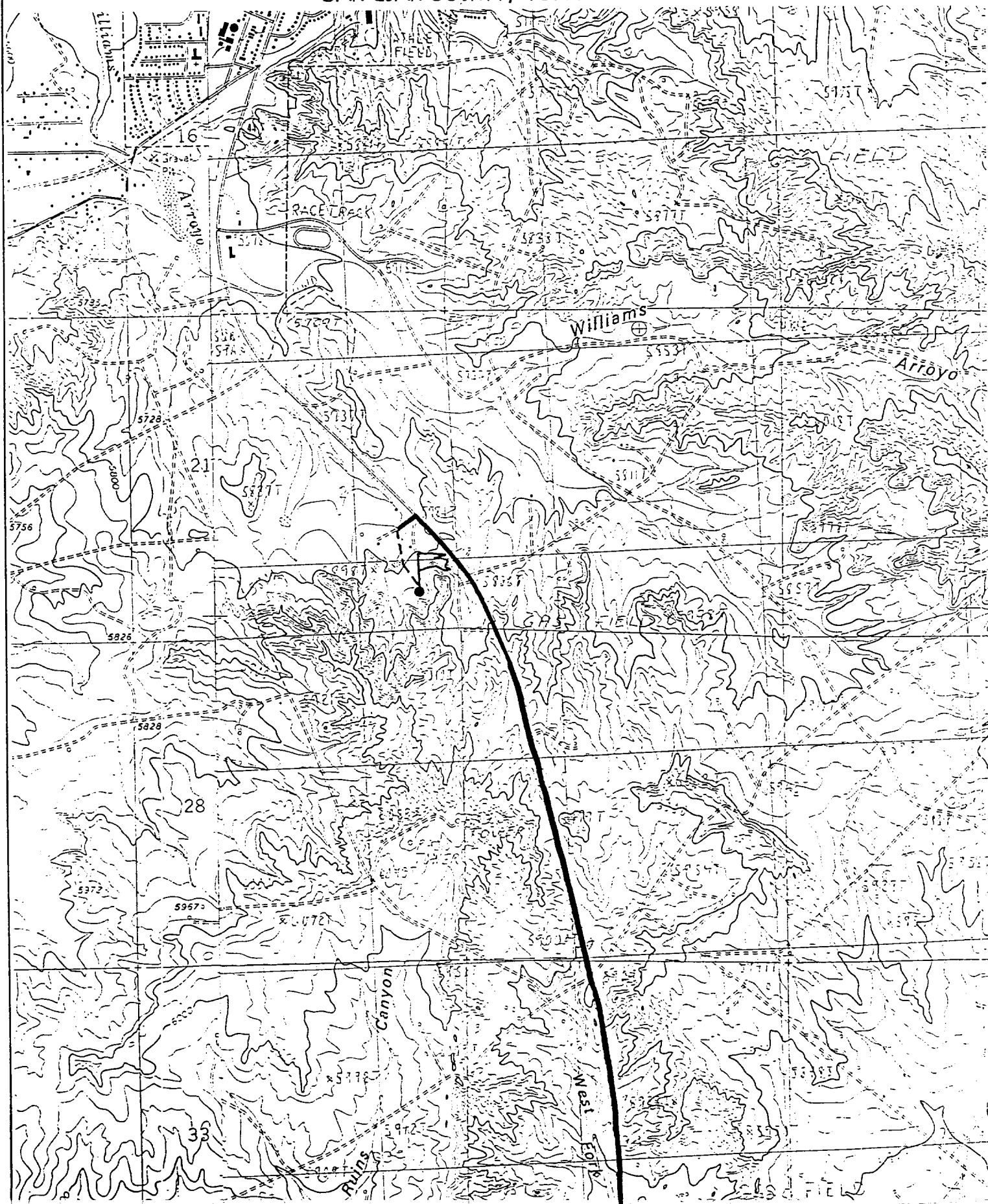
¹¹ Bottom Hole Location If Different From Surface

U. or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 317.88 $\frac{1}{2}$		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

 5297.16' 5051.64' 21 LOT 1 LOT 2 5195.52'	 660'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.
		Signature Jeff Patton Printed Name Production Engineer Title 6/6/00 Date
		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.
		JUNE 2, 2000 Date of Survey Signature and Seal of Professional Surveyor Certificate Number 6857

CROSS TIMBERS OPERATING COMPANY BRUINGTON GAS COM C #1A
660' FSL & 660' FEL, SECTION 21, T30N, R11W, 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 $\pm 400'$.

Lead: 275 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 325 ft^3 , 100% excess of calculated annular volume to 400'.

B. Production: 4-1/2", 10.5#, J-55, STC casing to be set at $\pm 4,950'$.

Lead: 475 sx of Class "B" cement containing 2% D-79 (extender), 1/4 pps D-29 (celloflake) and 2% S-1 (CaCl_2) mixed at 11.4 ppg. 2.87 ft^3/sk , 17.63 gal wtr/sx.

Tail: 475 sx of Class "B" cement containing 2% D-79 (extender), 1/4 pps D-29 (celloflake) and 2% S-1 (CaCl_2) mixed at 13.5 ppg. 1.71 ft^3/sk , 8.93 gal wtr/sx..

Total estimated slurry volume for the 4-1/2" production casing is 2,175 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.

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 to the bottom of the surface cs. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to 2,000'.

6. FORMATION TOPS:

Formation	Subsea Depth	Well Depth
Ojo Alamo SS	+4985'	1087'
Kirtland Shale	+4878'	1194'
Fruitland Formation	+3973'	2099'
Lower Fruitland Coal	+3755'	2317'
Pictured Cliffs SS	+3729'	2343'
Lewis Shale	+3495'	2577'
Cliffhouse SS	+2163'	3909'
Menefee	+1964'	4108'
Point Lookout SS	+1455'	4617'
Mancos Shale	+1150'	4907'
Projected TD	+1107'	4950'