

N.M. OIL & GAS

BOX 1

UNITED STATES

OPER. OGRID NO. 5381

PROPERTY NO. 3355

DEPARTMENT OF POOL CODE 43329

BUREAU OF LAND EFF. DATE 3/28/96

APPLICATION FOR PERM API NO. 30-025-33353

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

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.

P. O. Box 52070, Midland, Texas 79710-2070 (915)682-8873

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface
1040' FSL, 420' FEL, Sec 30, T17S, R33E, NMPM

Subject to
Like Approval
By State

At proposed prod. zone

UNORTHODOX LOCATION:

Same

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

6 miles southeast of Maljamar, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 420'

16. NO. OF ACRES IN LEASE

120

17. NO. OF ACRES ASSIGNED TO THIS WELL

20

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 450'

19. PROPOSED DEPTH

4,400'

20. ROTARY OR CABLE TOOLS

Rotary

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

4,037' GL

Roswell Controlled Water Basin

22. APPROX. DATE WORK WILL START*

1/1/96

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# Adp	400' 350'	250sx
7-7/8"	5-1/2" J-55	15.5#	4,400'	975sx

CIRCULATE

1. Drill 12-1/4" hole & set 8-5/8" surface csg. Circ cmt to surface.

2. NU BOP. Log BOP checks in IADC report & drill 7-7/8" hole to 4,400'.

3. Set 5-1/2" csg at TD. Circ cmt to surface.

4. Run cased hole log. Perforate & stimulate as needed.

EXHIBITS ATTACHED:

Exhibit "A" - Location & Elevation Plat

Exhibit "B" - Ten-Point Compliance Program

Exhibit "C" - Pressure Control Equipment

Exhibit "D" - Surface Use Plan

Exhibit "E" - Existing & Planned Access Roads

Exhibit "F" - Location of Existing Wells

Exhibit "G" - Proposed Well Site Layout

Exhibit "H", "H1" & "H2" - Drill Pad Layout w/Elevations (Cut & fill diagrams)

Exhibit "I" - Surface Owner Damage Agreement

Approved Under the
General Requirements and
Special Stipulations
Attached

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

George E. Ramsey, Jr.

TITLE Drilling Engineer

DATE 11/8/95

(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

TITLE

DATE

*See Instructions On Reverse Side

DISTRICT I
P.O. Box 1280, Hobbs, NM 88240

REC'D. / MIDLAND

State of New Mexico

Form C-102

Revised February 10, 1994

Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

JUL 3 1 1995

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

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

DISTRICT IV
PO BOX 2088, SANTA FE, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-33353	Pool Code 43329	Pool Name Maljamar (G - SA)
Property Code 3355	Property Name SMGSAU	Well Number 106
OCRID No. 5380	Operator Name CROSS TIMBERS OPERATING CO.	Elevation 4034

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	30	17 S	33 E		1040	SOUTH	420	EAST	LEA

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
Dedicated Acres 40	Joint or Infill	Consolidation Code	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

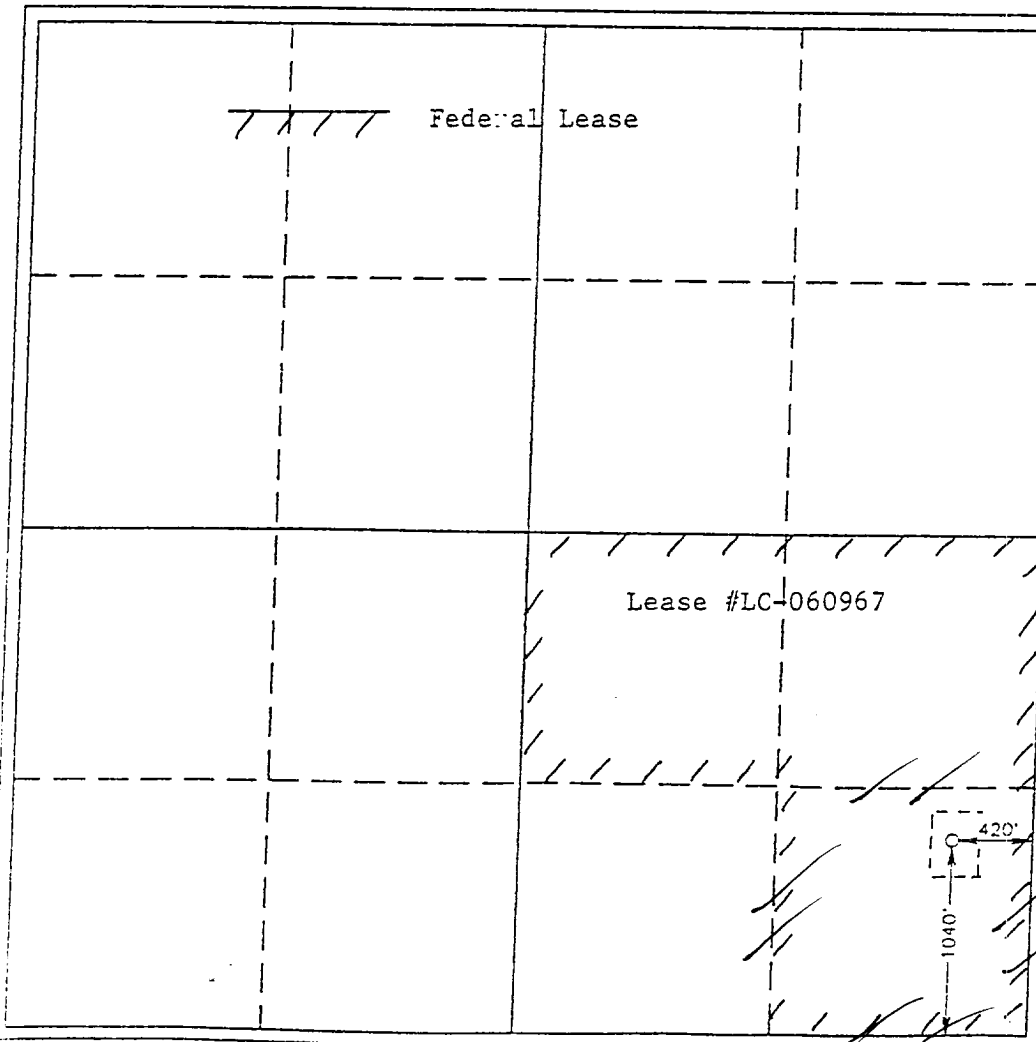
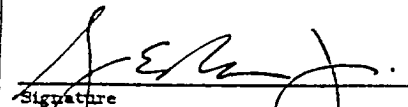
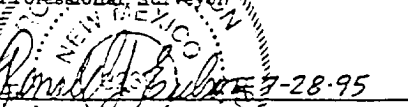
	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Signature George E. Ramsey Jr. Printed Name Drilling Engineer Title 9/27/95 Date
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat 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. JULY 24, 1995 Date Surveyed  Signature Professional Surveyor 7-28-95 Date 95-1125 Certificate No.
	WEST J. EIDSON EIDSON 676 3239 12641

EXHIBIT "A" - LOCATION AND ELEVATION PLAT

EXHIBIT "B"
APPLICATION FOR PERMIT TO DRILL
TEN-POINT COMPLIANCE PROGRAM
CROSS TIMBERS OPERATING COMPANY
SEMGS AU #106
1040' FSL, 420' FEL
SEC 30 - T17S - R33E NMPM
LEA COUNTY, NEW MEXICO

In conjunction with Form 3160-3, Application for Permit to Drill, Cross Timbers Operating Company submits the following items of pertinent information in accordance with Onshore Oil and Gas Order No's 1 and 2, and with all other applicable Federal and State regulations.

1. The geologic surface formation is Quaternary Alluvium.
2. The estimated geologic markers are as follows:

Top of Salt	- 1355'	Queen	- 3542'
Base of Salt	- 2430'	Grayburg	- 3708'
Yates	- 2550'	Premier SS	- 4200'
Seven Rivers	- 2932'	San Andres	- 4262'

3. The estimated depths at which water, oil and/or gas are expected to be encountered:

Fresh Water:	None in the area.
Oil and /or Gas:	Grayburg - 3708' to 4200'
	Premier SS - 4200' to 4262'
	San Andres - 4262' to 4400'

4. Proposed Casing Program:

Hole Size	Setting Depth	Size (OD)	Weight, Grade and Joint	New or Used
12 1/4"	350' 400'	8 5/8"	24#, J55, STC	Used *
7 7/8"	4400'	5 1/2"	15.5#, J55, STC	Used *

Cement Program:

Surface Casing:	250 sx Premium Plus cement with 2% CaCl and 1/4 #/sx Flocele.
Production Casing:	Lead with 775 sx Premium Plus cement with 3% Econlite and 1/4 #/sx Flocele, Tail in with 200 sx Premium Plus cement with 0.2% Halad-322 and 0.4% Halad-9.

* USED CASING SHALL MEET OR EXCEED NEW CASING'S SPECIFICATIONS.

AK

5. Pressure Control Equipment:

The BOPE will be a Shaffer type double gate preventer Series 900 - 3000# W.P. Exhibit "C" is a schematic diagram of the minimum blowout preventer stack that will be used. The BOP's will be hydraulically tested to half the working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24 hour period, as will the blind rams each time pipe is pulled out of the hole. Such checks will be noted on the daily tour reports.

Accessories to the BOPE will include an upper kelly cock, floor safety valve, and choke manifold with pressure rating equivalent to the BOP stack.

6. Mud Program:

Surface: Fresh water native spud mud.

Production: Brine Envirodrill-NS.

	<u>Depth</u>	<u>Mud Weight</u>	<u>Viscosity</u>	<u>API Filtrate</u>
<i>Adm</i>	0' - 300' 400'	8.4 - 8.8 ppg	32 - 36 sec	No Control
400'	300' - 4400'	10.0 - 10.1 ppg	28 - 30 sec	No Control

7. Auxiliary Equipment:

- An upper kelly cock valve will be used in the kelly.
- A safety valve will be on the floor at all times, to be stabbed into the drill string when the kelly is not in the string.
- H2S compliance package will be installed prior to drilling the Grayburg formation to monitor the system for H2S.

8. Testing, Logging, and Coring Program:

- No drill stem tests are anticipated.
- No open hole logs will be run, a cased hole CNL/Spectral GR will be run prior to completion.
- No coring is anticipated.

9. Anticipated Abnormal Pressure, Temperatures, or Other Hazards:

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area to the anticipated depth of this well.

Anticipated Bottom Hole Pressure (BHP) = 1930 psi.

Hydrogen Sulfide is known to exist in formations at the depths the wellbore will penetrate, a H₂S compliance package will be rigged up prior to drilling those formations.

10. Anticipated Starting Date and Duration of Operations:

The anticipated starting date will be as soon as possible after examination and approval of drilling requirements. Drilling operations should be completed within 10 days after spudding the well and drilling to TD.

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

