		OPER. OGRID NO	$C = \mathcal{L} = L$	ON		
Form 3160-3		PROPERTY NO.	3377	'CATE	FURM APP	
(July 1992)	UNI	I POOL CODE	42200	_ }40 "	OMB NO. 10 Expires: Februa	
	DEPARTMEN	EFF. DATE 12	10014	-	5. LEASE DESIGNATION	•
	BUREAU OF	(11/95		NM 010388	
APPL	ICATION FOR P	APINO. 30-02	5-33220		6. IF INDIAN, ALLOTTER	OR TRIBE NAME
A. TYPE OF WORK D. TYPE OF WELL	ILL 🖄	DEEPEN			7. UNIT AGREEMENT NA	X I
OIL Y	VELL OTHER		NGLE MULTIE		8. FARM OR LEASE NAME WEL	L NO.
NAME OF OPERATOR	O				U.S. Minera	als #3
LOSS IMDERS	Operating Compa	any			9. API WELL NO.	,
		kas 79710-2070			10. FIELD AND POOL, OF	
At surface		in accordance with any S			Maljamar Grayt	
		[17S, R33E, NMPM			AND SURVEY OR AR	EA.
At proposed prod. zo Same	De	Uni	+D		Sec 33, T17S,	R33E, NMPN
		REST TOWN OR POST OFFICE	.•		12. COUNTY OR PARISH	
3. DISTANCE FROM PROP			. OF ACRES IN LEASE		Lea r Acres Assigned	New Mexic
LOCATION TO NEARES PROPERTY OR LEASE (Also to Dearest dr)	LINE, FT. 25	50' 40			40	
S. DISTANCE FROM PROD TO NEAREST WELL, I	POSED LOCATION® BRILLING, COMPLETED.		OPOSED DEPTH		T OE CABLE TOULS	
OR APPLIED FOR, ON TH	ether DF, RT. GR, etc.)	.0' 4,	500'	Rota	22. APPROX. DATE WOR	E WILL START*
4,078' GL		Lea County	Controlled Water	Besin	10/1/95	
-	····	PROPOSED CASING AND	CEMENTING PROGRA	м		
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH		QUANTITY OF CEMEN	r
12-1/4"	8-5/8" J-55	24#	350 400		CINCULATE	r
12-1/4" 7-7/8"	8-5/8" J-55 5-1/2" J-55	24# 15.5#	350' 400 4,500'	975s>	CINCULATE	r
12-1/4" 7-7/8" 1. Drill 12-1 2. NU BOP. Lo 3. Set 5-1/2" 4. Run cased EXHIBITS ATTAC Exhibit "A" - Exhibit "B" - Exhibit "C" - Exhibit "C" - Exhibit "E" - Exhibit "F" - Exhibit "F" - Exhibit "G" - Exhibit "H",	8-5/8" J-55 5-1/2" J-55 /4" hole & set 8 og BOP checks in csg at TD. Cir hole log. Perfo CHED: Location & Elev Ten-Point Compl Pressure Contro Surface Use Pla Existing & Plan Location of Exi Proposed Well S 'H1" & "H2" - Dr	24# 15.5# 3-5/8" surface c IADC report & c cmt to surface orate & stimulate ation Plat iance Program l Equipment n ned Access Road sting Wells	350 4,00 4,500' sg. Circ cmt f drill 7-7/8" ho e. e as needed. s s s s s s s s s s s s s s s s s s s	975s) to surfa ole to 4	C C C C C C C C C C C C C C C C C C C	r
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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 Status any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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Subrit to Appropriate District Office State Lease - 4 copies For Lease - 3 copies

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

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

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

State of New Mexico rgy, Minerals and Natural Resources Deartm

OIL CONSERVATION DIVIS

Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section



EXHIBIT "A" - LOCATION AND ELEVATION PLAT

EXHIBIT "B" APPLICATION FOR PERMIT TO DRILL TEN-POINT COMPLIANCE PROGRAM CROSS TIMBERS OPERATING COMPANY U. S. MINERALS #3 380' FNL, 350' FWL SEC 33 - 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.

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

Top of Salt	- 1491'	Queen	- 3521'
Base of Salt	- 2523'	Grayburg	- 3781'
Yates	- 2621'	Premier SS	- 4271'
Seven Rivers	- 3010'	San Andres	- 4363'

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	- 3781' to 4271'	
	Premier SS	- 4271' to 4363'	
	San Andres	- 4363' to 4500'	

4. Proposed Casing Program:

Hole	Setting	Size	Weight, Grade	New or
Size	<u>Depth</u>	(OD)	and Joint	Used
	400'			
12 1/4"	ر محفر	8 5/8"	24#, J55, STC	Used
7 7/8"	4500'	5 ½"	15.5# , J 55 , S TC	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 #/sxFlocele, Tail in with 200 sx Premium Plus cement with 0.2% Halad-322 and 0.4% Halad-9.

Page 2 Exhibit "B" continued

5. Pressure Control Equipment:

The BOPE will be a Shaffer type double gate preventer Series 900 - 3000# W.P. <u>Exhibit "C"</u> 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 nippling 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.

Depth	Mud Weight	<u>Viscosity</u>	API Filtrate
0'- 300" 400'	8.4 - 8.8 ppg	32 - 36 sec	No Control
400' 300'- 4500'	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.

Page 3 Exhibit "B" continued

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) = 1975 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.



Revised on 9/13/95 as per deficiency letter dated 8/29/95. Revisions are in **bold**.

