SUBMIT IN TRIPLICATE\*

FORM APPROVED

Form 3160-3	UNITED STATES (Other instructions on reverse side)						OMB NO. 1004-0136 Expires: February 28, 1995		
(July 1992)	uly 1992)  UNITED STATES  reverse side)  DEPARTMENT OF THE INTERIOR						5. LEASE DESIGNATION AND SERIAL NO.		
BUREAU OF LAND MANAGEMENT						SF - 079232			
APPLICATION FOR PERMIT TO DRILL OR DEEPEN APR -6 1						EINDIAN, ALLOTTEE C	R TRIBE NAME		
APPLIC	CATION FOR PER	RMII TO D	KILL	OR DEEREN	7.	. UNIT AGREEMENT NAM	ΛE		
1a. TYPE OF WORK  DRII	LL X	DEEPEN [							
b. TYPE OF WELL	b. TYPE OF WELL CONCLE V MILITIPLE								
WELL Y	GAS X OTHER		7	ZONE ZONE		Bolack "C"	#11B  8096		
2. NAME OF OPERATOR  Cross Timbers Oper	rating Company	4706	1		9	30-045			
3 ADDRESS AND TELEPHONE	Cross Timbers Operating Company 4 (06)  3. ADDRESS AND TELEPHONE NO.								
2700 Farmington Av	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				,		and an all on my	<del> </del>		
1,775' FNL & 1,8 At proposed prod. zone	340' FEL Sec 28,	12/N, RU8W	j			L SEC., T., R., M., OR BLK. AND SURVEY OR AREA			
same						Sec 28, T27N,	R08W		
THE PARTY OF THE PER AND I	DIRECTION FROM NEAREST TOW	VN OR POST OFFICE*	. Dlan	on NM Post Office	L -	12. COUNTY OR PARISH  San Juan	NM		
Approx 24 miles s  15. DISTANCE FROM PROPOSE	outh down Largo Car	iyon troll the	16. NO.	OF ACRES IN LEASE	17. NO. OF A	CRES ASSIGNED			
LOCATION TO NEAREST			320		TOTHISW	TO THIS WELL 320			
(Also to nearest drlg. uni	PROPERTY OR LEASE LINE, FT.  (Also to nearest drlg. unit line, if any) 1,775'  18. DISTANCE FROM PROPOSED LOCATION'			POSED DEPTH	20. ROTARY OR CABLE TOOLS				
18. DISTANCE FROM PROPOSED DOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 550'			4,9	75'	0'-4,	Tools			
	21. ELEVATIONS (Show whether DF,RT, GR, etc.)					22. APPROX. DATE WORK WILL START*  July, 2001			
6,191' GL						July , 2003			
23.	F	PROPOSED CASIN	G AND C	EMENTING PROGRAM					
SIZE OF HOLE	SIZE OF HOLE GRADE SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH						SX C1 "B"		
12-1/4"	8-5/8", J-55	24#		365'	260 sx Lead:	276 sx cl "B"	w/2% Extender		
<u>7-7/8"</u>	4-1/2", J-55	10.5#		4,975'	Tail:	463 sx cl "B"			
and appear pu proceduratines trick in the con-	ew purcent to so Officeuant to 43 OFR 6160	h 2165.3 .4 <sub>2</sub>			1 '4'''				
Cross Timbers	s plans to drill th	e above ment	ioned	well as described	in the e	enclosed Surfac	e Use		
Program.		ķ	KE 5	750 <sub>00</sub>			Charached		
			11/1	<i>2001</i>		du utivez en e	If proposalis to drill 0		
IN ABOVE SPACE DESCR deepen directionally, give p	IBE PROPOSED PROGRAM: pertinent data on subsurface los	If proposalis tod cations and measur	eepen,giv	e dataon presentproductivezo ue vertical depths. Give blowd	one and propo out preventer	program, if any.	. Il proposalis to dilli o		
SIGNED -	Matto		TITLE D	rilling Engineer		DATE 3/28	3/01		
(This space for Federa	or State office use)				,-	/30/01			
PERMIT NO.				APPROVAL DATE					
Application approval do	bes not warrant or certify that the ap	pplicant holds legal or	equitable ti	itle to those rights in the subject le	ase which woul	d entitle the applicant to co	onduct operations thereon		

/s/ Lee Otteni - DATE -- TITLE -\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person kentrically and willfully to make to any department agency of the United States any false, fictitious or fraudulent statements or representations as to any make within its jurisdiction.

CONDITIONS OF APPROVAL, IF ANY:

DISTRICT 1 P.O. Box 1980, Hobbs, N.M. 88241-1980

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised February 21, 1994 Instructions on back Submit to Appropriate District Office

DISTRICT W P.O. Drawer DD, Artesia, N.M. 88211-0719

DISTRICT #

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, NM 87504—2088

State Lease - 4 Copies
Fee Lease - 3 Copies
200 132 - 6 FM 2: 47

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

1000 Rio Brazos Rd., Aztec, N.M. 87410

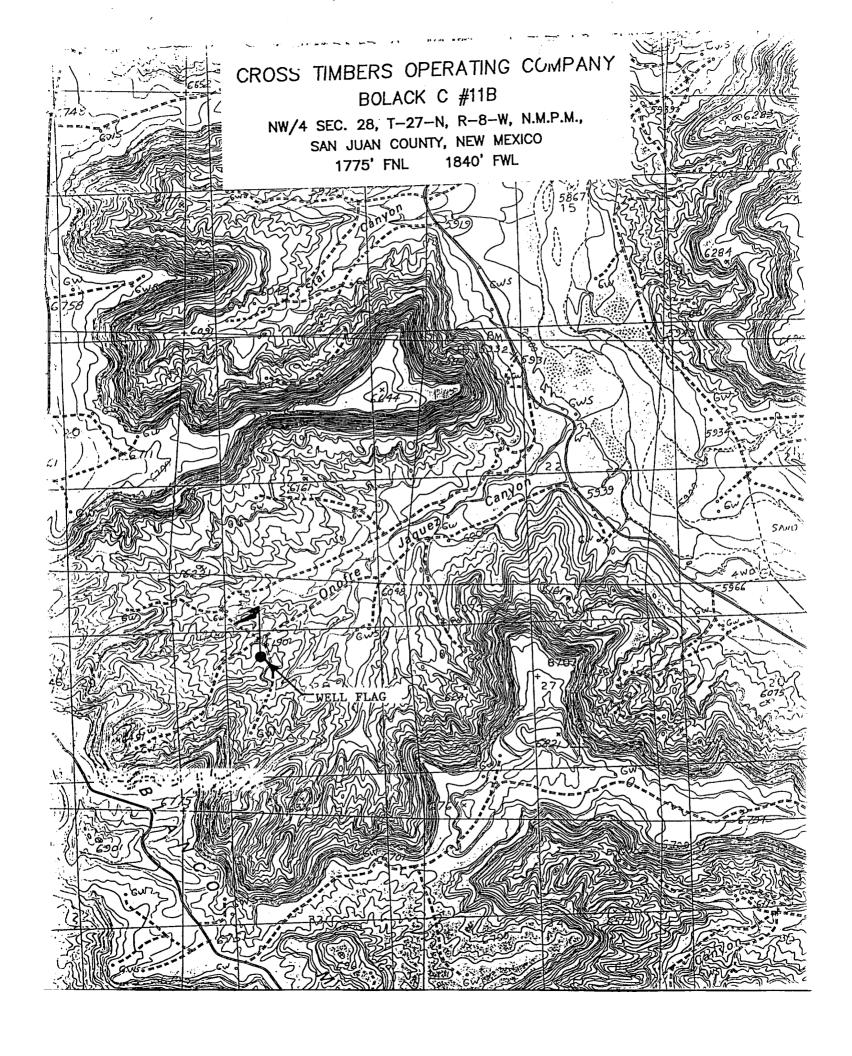
☐ AMENDED REPORT

O Box 2088, Santa Fe, NM 8	7504-2088 W	FIL LO	CATION	N AND ACF	REAGE DEDI	CATION PL	AT	
1 API Number	0678		*Pool Code 7 2 3 1 9			Pool Name NESHUERDE		Well Number
*Property Code 2809k	0220			SProperty No BOLACK Operator N	С			11B PElevation
FOGRID No.			CRO	SS TIMBERS OF	PERATING CO.			6191'
III or let no. Section	Township	Range	Lot Idn	10 Surface Feet from the	North/South line	Feet from the	East/West line WEST	County SAN JUAN

WEST 1840' NORTH 1775 27-N 8-W 28 Location If Different From Surface 11 Bottom Hole East/West line County Feet from the North/South line Feet from the Lot Idn Range Township UL or lot no. Section 15 Order No. 14 Consolidation Code 13 Joint or Infill Dedicated Acres W 320

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

110 /	ALLOWABLE	OR A NON-STAND	ARD UNIT HAS	BEEN APPROVED B	THE DIVISION
16 FD	N 8	6-32-00 W 0.50' (G.L.O.)		CALC'D CORNER	17 OPERATOR CERTIFICATION
S 03-07-42 E	NA A	In the	i2.8° N. 1741.4° W.	2001	Signature  TEFFREY W PHTTON,  Printed Name  DRIMIN'S ENGINEEK  Title
	FD 3 1/2" BC B.L.M. 1955	28			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 supersise, and that the same is true and correct to the best ROTH field:  Date of Survey  Signature and Sal eff (Broffessional Surveyor:
					Signature and St.



## 4. <u>CEMENT PROGRAM (Slurry design may change slightly, but the plan is to circulate cement to surface on both casing strings):</u>

A. Surface:

8-5/8", 24#, J-55, STC casing to be set at  $\pm$  365'.

<u>Lead:</u> 260 sx of Class "B" cement containing 2% CaCl<sub>2</sub>, ¼ pps celloflake, mixed at 15.6 ppg, 1.18 ft<sup>3</sup>/sk, & 5.20 gal wtr/sk.

Total slurry volume is 306 ft<sup>3</sup>, 100% excess of calculated annular volume to 400'.

B. Production:

4-1/2", 10.5#, J-55, STC casing to be set at  $\pm 4,975$ '.

<u>Lead:</u> 276 sx of Class "B" cement containing 2% D-79 (extender), ¼ pps D-29 (celloflake) and 2% S-1 (CaCl2) mixed at 11.4 ppg, 2.87 ft<sup>3</sup>/sk, 17.63 gal wtr/sx.

Tail: 463 sx of Class "B" cement containing 2% D-79 (extender), ¼ pps D-29 (celloflake) and 2% S-1 (CaCl2) mixed at 13.5 ppg, 1.71 ft³/sk, 8.93 gal wtr/sx..

Total estimated slurry volume (including 40% excess) for the 4-1/2" production casing is 1,586 ft<sup>3</sup>.

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 (±4,975') to the bottom of the surface csg. Run CNL/LDT (Lithodensity)/GR/Cal and Pe from TD to 1,500'.

## 6. FORMATION TOPS:

Formation	Subsea Depth	Well Depth		
Ojo Alamo SS	+4804'	1402'		
Kirtland Shale	+4681'	1525'		
Fruitland Formation	+4334'	1872'		
Lower Fruitland Coal	+4032'	2174'		
Pictured Cliffs SS	+3964'	2242'		
Lewis Shale	+3855'	2351'		
Chacra	+3075'	3131'		
Cliffhouse SS	+2399'	3807'		
Menefee*	+2305'	3901'		
Point Lookout SS*	+1710'	4496'		
Mancos Shale	+1325'	4881'		
Projected TD	+1231'	4975',		

\* Target Reservoir. Maximum anticipated reservoir pressure will be  $\pm 1,550$  psig.

