Form 3160-5 (November 1994)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	Bureau No.	
 Expires	November	30, 2000

٥.	Lease	OCI 181	141
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SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re∹enter angleabandoned well. Use Form 3160–3 (APD) for such professionals
abandoned well. Use Form 3160-3 (APD) for such prospension

6. If Indian, Allottee or Tribe Name

FORM APPROVED

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SUBMIT IN TRIPLICATE	- Other instructions o	or reverse side		7. If Unit or 0	CA/Agreement, Name and/or No
1. Type of Well Well X Gas Well Other  2. Name of Operator Cross Timbers Operating Company  3a. Address 2700 Farmington Ave., Bldg. K. Ste	1 Farmington. N	PIECEIVI OIL COM DIST. 3		9. API Well N 30-045-239	Gas Com H #1E 70.
4. Location of Well (Footage, Sec., T., R., M., or Survey Descr.	iption)	133		10. Field and	Pool, or Exploratory Area
790' FNL & 1,520' FWL, Sec 22, T28	N, R10W		i	Utero Chac	cra / Basin Dakota
				11. County or	Parish, State
		<del></del>		San Juan	NM
12. CHECK APPROPR	ATE BOX(ES) TO INC	DICATE NATURE OF I	NOTICE, REPORT,	OR OTHER DA	ATA
TYPE OF SUBMISSION			YPE OF ACTION		
X Notice of Intent	Acidize	Deepen		(Start/Resume)	Water Shut-Off
Subsequent Report	Alter Casing  Casing Repair	Fracture Treat  New Construction	Reclamation Recomplete		Well Integrity  Other
Final Abandonment Notice	Change Plans Convert to Injection	Plug and Abandon Plug Back	Temporarily Water Disp	1	Downhole Commingle
3. Describe Proposed or Commpleted Operation (clear	ly state all pertinent details	including estimated star	ting data of		CH & DK

If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has

Cross Timbers Operating Co. plans to downhole commingle the Otero Chacra and Basin Dakota Pools. These two Pools are on the NMOCD's pre-approved Pools for downhole commingling list in the San Juan Basin per Division Order R-11363 . Attached is a copy of the Form C-103 Sundry Notice of intent requesting permission to downhole commingle these Pools that was filed with the NMOCD Aztec District Office.

- 1. MIRU pulling unit. Install BOP. TOH with production tubing.
- 2. TIH with bit. Drill out CIBP @ 3,500'.
- 3. TIH & cleanout to 6,680' PBTD. TOH with bit.
- 4. TIH with prod tbg. Land tbg at approx 6,550'. Remove BOP. Swab in as needed. RDMO pulling unit.
- 5. Return well to production with CH perfs 3,050'-3,168' and DK perfs 6,458'-6,636'. PBTD 6,680'.

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<ol> <li>I hereby certify that the foregoing is true and correct Name (Printed/Typed)</li> </ol>	Title	
Ray Martin	Operations Engi	neer
Lay Larter	Date 08/09/01	
THIS SPACE FOR FEDE	RAL OR STATE OFFICE USE	
Approved by /s/ Jim Lovato	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not war certify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.	Tant or Office ct lease	LAUC_3 C
The state of the s	<del></del>	

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.

Submit 3 Copies To Appropriate District State of New Mexico Form C-103 Office Energy, Minerals and Natural Resources District I Revised March 25, 1999 1625 N. French Dr., Hobbs, NM 87240 WELL API NO. District II OIL CONSERVATION DIVISION 30-045-23992 811 South First, Artesia, NM 87210 5. Indicate Type of Lease District III 2040 South Pacheco 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, NM 87505 STATE [ FEE 🔽 District IV 2040 South Pacheco, Santa Fe, NM 87505 6. State Oil & Gas Lease No. SUNDRY NOTICES AND REPORTS ON WELLS 7. Lease Name or Unit Agreement Name: (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.) Davidson Gas Com H 1. Type of Well: Oil Well Gas Well x Other 2. Name of Operator 8. Well No. Cross Timbers Operating Company 112 3. Address of Operator 9. Pool name or Wildcat 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401 Otero Chacra / Basin Dakota 4. Well Location Unit Letter 790 feet from the\_ North line and 1,520 feet from the line Section Township 28N Range 10W **NMPM** County San Juan 10. Elevation (Show whether DR, RKB, RT, GR, etc.) 5,983' GR 5,997' RKB 11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: PERFORM REMEDIAL WORK PLUG AND ABANDON REMEDIAL WORK **ALTERING CASING TEMPORARILY ABANDON CHANGE PLANS** COMMENCE DRILLING OPNS. PLUG AND **ABANDONMENT** PULL OR ALTER CASING **MULTIPLE** CASING TEST AND COMPLETION CEMENT JOB OTHER: Downhole Commingle  $\mathbf{x}$ OTHER: 12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompilation. Cross Timbers Operatin Company requests an exception to Rule 303A to downhole commingle production from the Basin Dakota Pool (71599) and the Otero Chacra Pool (82329). These pools are included in the NMOCD pre-approved pool combinations for downhole commingling in the San Juan Basin per Division Order R-11363. Attachments 1 and 2 summarize the conditions and information required per Rules 303C(1) and 303C(3)(b). Well Location and Acreage Dedication Plats (Form C-102) for both pools have previously been filed. 1. MIRU pulling unit. Install BOP. TOH with production tubing. 2. TIH with bit. Drill out CIBP @ 3,500'. 3. TIH & cleanout to 6,680' PBTD. TOH with bit. 4. TIH & land production tubing @ approx 6,550'. Remove BOP. Swab in as needed. RDMO pulling unit. 5. Return well to production with CH perfs 3,050'-3,168' and DK perfs 6,458'-6,636'. PBTD 6,680'. hereby certify that the information above is true and complete to the best of my knowledge and belief. SIGNATURE. \_\_\_ TITLE Operations Engineer \_DATE\_ 08/09/01 Type or print name Ray Martin Telephone No. (505) 324-1090 This space for State use)

\_ TITLE

APPROVED BY

Conditions of approval, if any:

## Attachment 1 Davidson Gas Com H #1E Request to DHC Basin Dakota & Otero Chacra Pools

### Required conditions per Rule 303C(1):

- (a) The fluids from both pools are compatible. These pools have been commingled together in other wells without fluid compatibility or formation damage problems and the two pools have been pre-approved for downhole commingling..
- (b) No secondary recovery operations are planned for this well.
- (c) The 11 day shut-in surface pressure reported in July 1980 on the initial potential test for the Dakota was 909 psig. Using a gas/liquid gradient of 0.04 psig per foot of depth, the calculated shut-in bottomhole pressure at top Dakota perforation was 1,170 psig. The well produced 20 years from the Dakota. Current Dakota bottomhole pressure would be much lower than the initial bottomhole pressure. The shut-in surface pressure in the Chacra after recompletion was 740 psig. Using a gas/liquid gradient of 0.04 psig per foot of depth, the calculated shut-in bottomhole pressure at top Chacra perforation is 860 psig. The well has produced 13 months from the Chacra. Current Chacra bottomhole pressure would be lower than the initial bottomhole pressure. Using the NMOCD fracture parting pressure gradient of 0.65 psig per foot of depth, the calculated bottomhole pressure to frac the Chacra is 1,983 psig and to frac the Dakota is 4,198 psig. Thus, neither zone's current pressures will exceed the frac parting pressure of either zone.
- (d) The well will be produced until both zones are at economic depletion, thus no permanent loss of reserves will occur due to cross-flow in the wellbore.
- (e) Both zones produce condensate and water. Neither zone is sensitive to produced fluids from the other zone. These pools are commonly downhole commingled.
- (f) Cross Timbers Operating Company will maintain the prorated production below top allowable or other rate restriction set by the NMOCD for each Pool.
- (g) Downhole commingling will not reduce the value of the total remaining production. Increased ultimate recovery is expected due to a lower economic production limit for each pool resulting lower operating cost per zone due to the combined production. Also, the reserves will be recovered in less time by downhole commingling.
- (h) Correlative rights will not be violated by downhole commingling. The well's production casing is cemented to surface and the only open zones will be the Dakota and Chacra. The production will be allocated between the Dakota and Chacra per the allocation formula on Attachment #2.

# Attachment 2 Davidson Gas Com H #1E Request to DHC Basin Dakota & Otero Chacra Pools

### Additional information per Rule 303C(3)(b):

- Division Order R-11363 established pre-approved pool combinations for downhole commingling.
- (ii) Basin Dakota Pool (71599) Otera Chacra Pool (82329)
- (iii) Otero Chacra perforations: 3,050'-3,168'
  Basin Dakota perforations: 6,458'-6,636'
- (iv) The proposed production allocation formula is based on a ratio of the two Pools production. Proposed Allocation Formula

	ВО	BW	MCF
Basin Dakota	86%	50%	25.5%
Otero Chacra	14%	50%	74.5%

Basin Dakota Pool (last 3 full months production prior to recompletion to CH)

Mo.	ВО	BW	MCF (15.03 psig w/lse use)
Feb. '00	8	0	1,468
Mar. '00	5	0	1 171
Apr. '00	0	0	1.701
3 Mo. Ave.	4.3 (86%)	0	1,447 (25.5%)

#### Otero Chacra Pool

Mo.	ВО	BW	MCE (@15.02 poig w/los was)
Feb. '01	2	0	MCF (@15.03 psig w/lse use) 4,270
Mar. '01	0	0	4,166
Apr. '01	0	0	4,766
3 Mo. Ave.	0.7 (14%)	0	
3 Mo. Ave.	0.7 (14%)	0	4,229 (74.5

- (v) Downhole commingling will not reduce the value of the total remaining production. Increased ultimate recovery is expected due to a lower economic production limit for each pool resulting lower operating cost per zone due to the combined production. Also, the reserves will be recovered in less time by downhole commingling.
- (vi) Cross Timbers Operating Company has sent notice of intent to downhole commingle to all working and overriding royalty interest owners by certified mail (return receipt). No objections were received within 20 days after sending notices.
- (vii) I have filed a Sundry Notice Form 3160-5 with the BLM with a copy of this C-102 attached.