

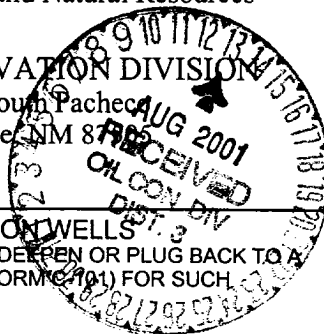
Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
811 South First, Artesia, NM 87210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
Revised March 25, 1999

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505



WELL API NO. <b>30-045-23992</b>
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name:  <b>Davidson Gas Com H</b>
8. Well No. <b>1E</b>
9. Pool name or Wildcat <b>Otero Chacra / Basin Dakota</b>

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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.)	
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other	
2. Name of Operator <b>Cross Timbers Operating Company</b>	
3. Address of Operator <b>2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401</b>	
4. Well Location Unit Letter <b>C</b> : <b>790</b> feet from the <b>North</b> line and <b>1,520</b> feet from the <b>West</b> line Section <b>22</b> Township <b>28N</b> Range <b>10W</b> NMPM County <b>San Juan</b>	
10. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>5,983' GR 5,997' RKB</b>	

11. Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: **Downhole Commingle** ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐

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 recompletion.

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 NMOC 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. TTH with bit. Drill out CIBP @ 3,500'.
3. TTH & cleanout to 6,680' PBTD. TOH with bit.
4. TTH & 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'.

**DHC 5-10 AZ**

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE **Ray Martin** TITLE **Operations Engineer** DATE **08/09/01**

Type or print name **Ray Martin**

Telephone No. (505) 324-1090

(This space for State use)

APPROVED BY **Original Signed by STEVEN N. HAYDEN** TITLE **DEPUTY OIL & GAS INSPECTOR, DIST. 3** DATE **AUG 13 2001**  
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):

- (i) 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

	BO	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.	BO	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
<b>3 Mo. Ave.</b>	<b>4.3 (86%)</b>	<b>0</b>	<b>1,447 (25.5%)</b>

Otero Chacra Pool

Mo.	BO	BW	MCF (@15.03 psig w/lse use)
Feb. '01	2	0	4,270
Mar. '01	0	0	4,166
Apr. '01	0	0	4,252
<b>3 Mo. Ave.</b>	<b>0.7 (14%)</b>	<b>0</b>	<b>4,229 (74.5%)</b>

- (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.