

**Cross Timbers Operating Company**

August 17, 2000

Ms. Lori Wrotenbery, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, New Mexico 87505

AUG 23 2000

**Application for Exception to Rule 303-C – Downhole Commingling
Florance #68
Unit O, Section 20, T-27-N, R-8-W
WC 27N8W20O Gallup (96992) and Basin Dakota (71599) Pools
San Juan County, New Mexico**

2814

Dear Ms. Wrotenbery,

Cross Timbers Operating Company hereby request administrative approval to downhole commingle the above mentioned pools in the Florance #68. The well was originally completed as a Basin Dakota well in 1966. Cross Timbers Operating Company took over operations in 1998. In January, 2000 Cross Timbers Operating Company recompleted this well as a wildcat Gallup.

To comply with New Mexico Conservation Rules, Cross Timbers Operating Company is submitting the following data for your approval of the proposed commingling:

1. C-107A Application for Downhole Commingling.
2. C-102 Well Location & Acreage Dedication Plats.
3. Production data for both the Gallup and Dakota pools.
4. List of offset operators notified via certified mail.

By copy of this application by certified mail, return receipt requested, CTOC is notifying all offset operators. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or interest owner if, in their opinion, waste will not result by this action. As an offset operator, if you do not have any objections to this application, you do not have to respond to this notification.

Should there be any questions concerning this matter, please contact me at (505) 324-1090.

Sincerely,

Darrin L. Steed
Operations Engineer

Attachments

Cc: NMOCN – Aztec
BLM – Farmington
Offset Operators
Well File

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 S. First St., Artesia, NM 88210-2835
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-107-A
New 3-12-96

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 875054-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Cross Timbers Operating Company 2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401
Operator Address

Florance 68 0 20 27N 8W San Juan
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 167067 Property Code 022608 API NO. 30-045-11782
Spacing Unit Lease Types: (check 1 or more)
Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling.	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	WC 27N8W200 96992		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	6,408' - 6,596'		7,212' - 7,390'
3. Type of production (Oil or Gas)	Oil		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 300 psig (est) b. (Original) 2,438 psig (est)	a. b.	a. 250 psig (est) b. 2,620 psig (est)
6. Oil Gravity (^o API) or Gas BTU Content)	1354 BTU		1353 BTU
7. Producing or Shut-In?	Producing		Shut-In
Production Marginal? (yes or no)	Yes		Yes
* If Shut-In, give date and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: Rates:	Date: Rates:	Date: 9/99 - 1/00 Rates: 0.3 BO, 17.0 MCF, 0.2 BW
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 2/00 - 6/00 Rates: 0.7 BO, 18.6 MCF, 0.6 BW	Date: Rates:	Date: Rates:
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 70 % Gas: 52 %	Oil: % Gas: %	Oil: 30 % Gas: 48 %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☒ Yes ☐ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No

11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S) _____

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE Darrin Steed TITLE Operations Engineer DATE 8/17/00

TYPE OR PRINT NAME Darrin Steed TELEPHONE NO(505) 324-1090

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102

Revised October 18, 1991

Instructions on back

Submit to Appropriate District Clerk

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 S. 1st Street, Artesia, NM 88210-2834
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-11782		² Pool Code		³ Pool Name Undesignated Gallup	
⁴ Property Code 022608		⁵ Property Name Florance			⁶ Well Number #68
⁷ OGRID No. 167067		⁸ Operator Name Cross Timbers Operating Company			⁹ Elevation 6,744'

¹⁰ Surface Location

UL or lot no. 0	Section 20	Township 27N	Range 08W	Lot. Idn	Feet from the 1,190'	North/South Line South	Feet from the 2,510'	East/West line East	County San Juan
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¹¹ 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
¹² Dedicated Acres 40 Acres		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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

				<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Jeffrey W. Patton</i></p> <p>Signature Jeffrey W. Patton</p> <p>Printed Name Production Engineer</p> <p>Title December 21, 1999</p> <p>Date</p>	
				<p>¹⁸ SURVEYOR CERTIFICATION</p> <p>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.</p> <p>June 7, 1966</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyer:</p> <p>ORIGINAL ON FILE</p> <p>ROBERT N. FARST #2463</p> <p>Certificate Number</p>	

NEW MEXICO OIL CONSERVATION COMMISSION
AMENDED WELL LOCATION AND ACERAGE DEDICATION PLAT TO CORRECT DEDICATED
ACREAGE ONLY

All distances must be from the outer boundaries of the Section

Operator TENNECO OIL COMPANY			Lease FLORANCE		Well No. 68
Unit Letter 0.	Section 20	Township 27 North	Range 8 West	County San Juan	

Actual Footage Location of Well:
1190 feet from the **South** line and **2510** feet from the **East** line

Ground Level Elev. 6744' ungraded	Producing Formation Basin Dakota	Pool Basin Dakota	Dedicated Acreage: 320 1/2 5/2 Acres
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1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communization, unitization, force-pooling, etc?

() Yes () No If answer is "yes," type of consolidation

If answer is "no," list the owners and tract descriptions which have actually consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communization, unitization, forced-pooling, or otherwise) or until a non standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

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

Original Signed By
HAROLD C. NICHOLS

Name **Harold C. Nichols**

Position

Senior Production Clerk

Company

Tenneco Oil Company

Date

June 7, 1966

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 knowledge and belief.

4 June 1966

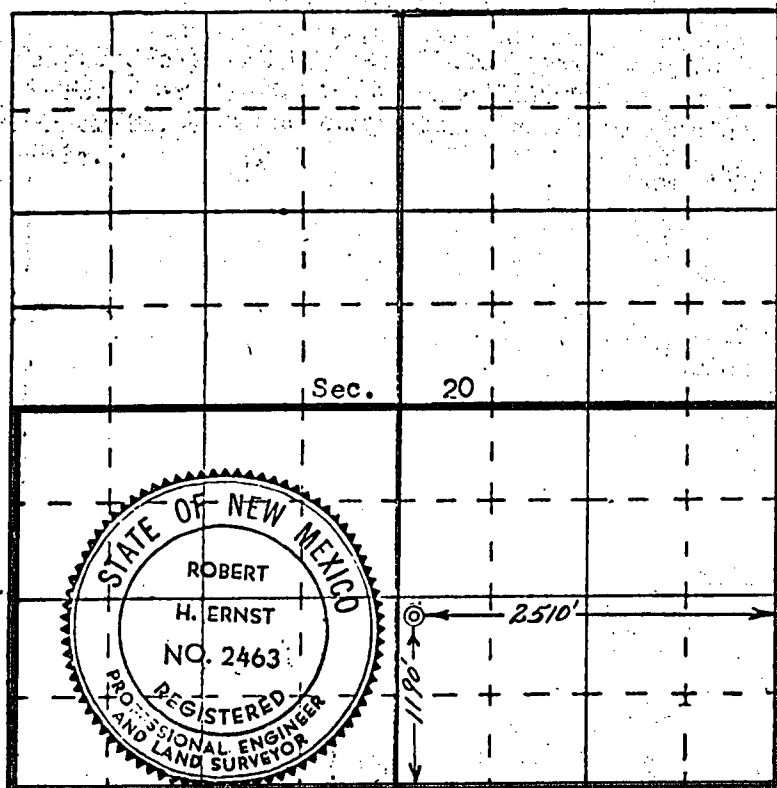
Date Surveyed

Robert H. Ernst
 Registered Professional Engineer
 and/or Land Surveyor

Robert H. Ernst

N. Mex. PE & LS 2463

Certificate No.



ERNST ENGINEERING CO.
DURANGO, COLORADO

Cross Timbers Oil Company

FLORANCE 68

CROSS TIMBERS
BASIN (DAKOTA)
SAN JUAN, NEW MEXICO
20 27N 8W O
BCV

BASE
511782

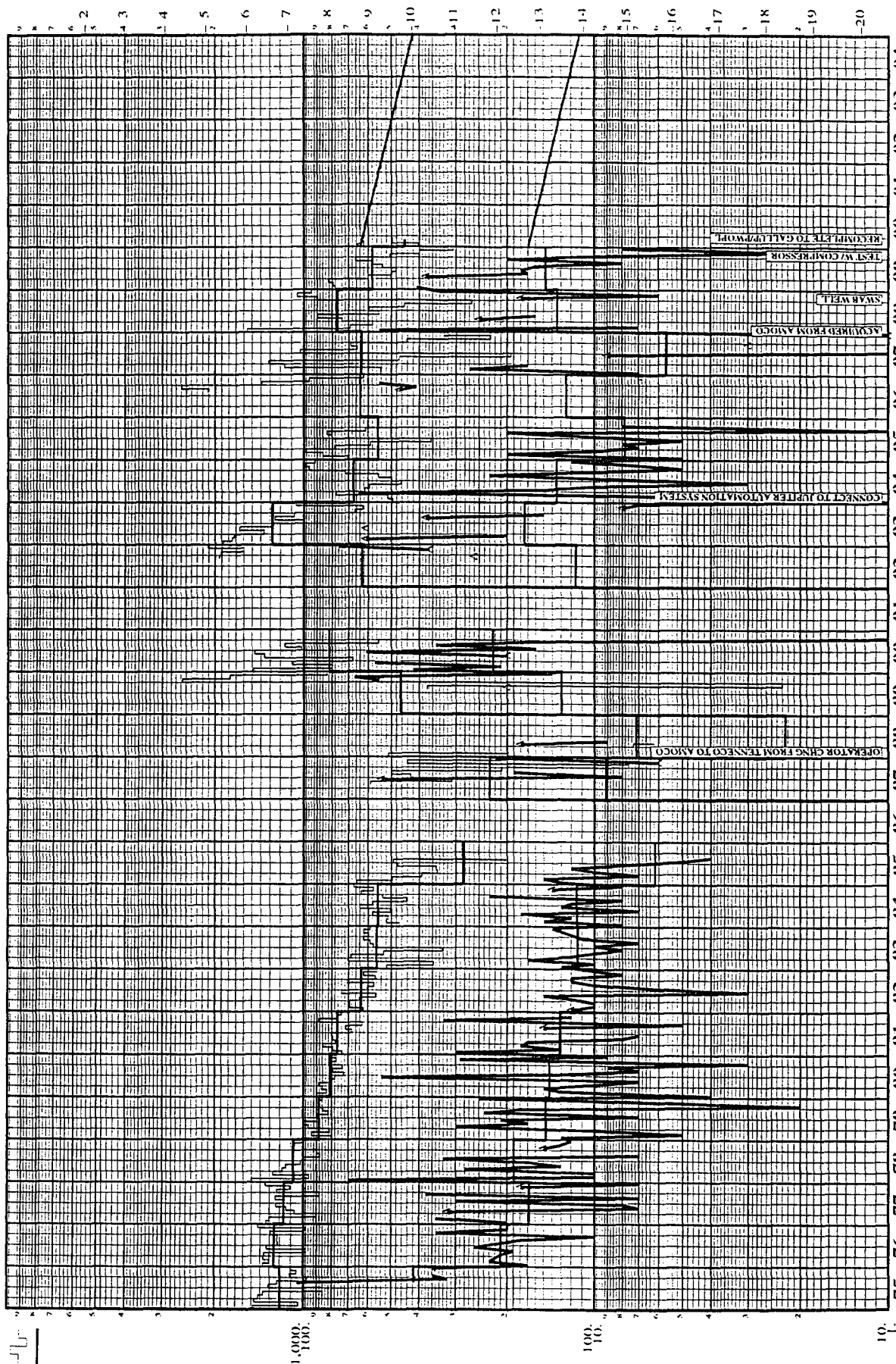
SAN JUAN
70288

DLS DLM TDT

M & L - 1/00 FORECAST

Run Date: 03/09/00
Run Time: 15:04:39

GAS (mc/mo) ∇ Δ
OIL (bbls/mo) ∇ Δ



TIME (years)

06/107/2000 14:29:37 21 Pb

01/000

Florance #68 Gallup Production History

	BOPM	BOPD	BWPM	BWPD	MCFPM	MCFPD	No. Days
Feb-00	0	0.0	69	2.8	506	20.2	25
Mar-00	21	0.7	11	0.4	555	17.9	31
Apr-00	41	1.4	0	0.0	637	21.2	30
May-00	0	0.0	0	0.0	505	16.3	31
Jun-00	36	1.4	0	0.0	457	17.6	26
Average		0.7		0.6		18.6	

Florance #68 Dakota Production History

	BOPM	BOPD	BWPM	BWPD	MCFPM	MCFPD	No. Days
Sep-99	20	0.7	22	0.7	677	22.6	30
Oct-99	9	0.3	7	0.2	516	16.6	31
Nov-99	2	0.1	4	0.1	408	13.6	30
Dec-99	8	0.3	0	0.0	312	11.1	28
Jan-00	0	0.0	0	0.0	419	21.0	20
Average		0.3		0.2		17.0	

Proposed Dakota/Gallup Allocation Analysis

	BOPD	%	BWPD	%	MCFPD	%
Dakota	0.3	30%	0.2	25%	17.0	48%
Gallup	0.7	70%	0.6	75%	18.6	52%
Total	1.0	100%	0.8	100%	35.6	100%

Offset Operators

Robert Bayless
P. O. Box 168
Farmington, New Mexico 87499

Burlington Resources
P. O. Box 4289
Farmington, New Mexico 87499