



## Cross Timbers Operating Company

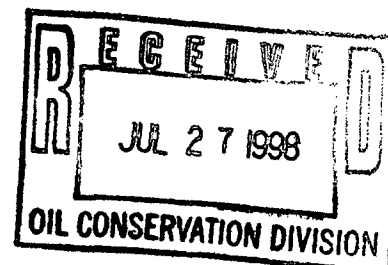
DHC

8/17/98

July 1, 1998

Mr. William LeMay  
New Mexico Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505

*2002*



RE: Administrative Approval to Downhole Commingle  
Cross Timbers Operating Company  
Abrams J #1  
1615' FSL, 1115' FEL Sec. 29, T 29 N, R 10 W NMPM  
San Juan County, New Mexico

Dear Mr. LeMay:

Cross Timbers Operating Company requests administrative approval to downhole commingle the Otero Chacra and the Armenta Gallup pools in the subject well. The well is currently producing as a Chacra/Gallup dual completion. The Gallup zone experiences liquid loading and paraffin problems. It is felt downhole commingling will eliminate excessive expenditures and downtime to keep the zone unloaded and producing.

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

1. C 107A - Application for Downhole Commingling
2. C-102 Location plat showing each spacing unit and dedicated acreage
3. Production curves for both the Chacra and Gallup zones
4. Offset operator plat
5. Well location plat.

In accordance to New Mexico Oil Conservation Division Rule 303C, all offset operators are being notified of this application by certified mail. As an offset operator, if you no objection to this application, you do not have to respond to this notification.

If additional information is needed, please contact me.

Sincerely,

*Loren W. Fothergill*  
Loren W. Fothergill  
Production Engineer

CC: NMOCD- Aztec, Offset operators.

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980  
DISTRICT II  
811 South 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  
OIL CONSERVATION DIVISION  
2040 S. Pacheco  
Santa Fe, New Mexico 87505-6429

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

APPROVAL PROCESS:  
☒ Administrative ☐ Hearing  
EXISTING WELLBORE  
☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

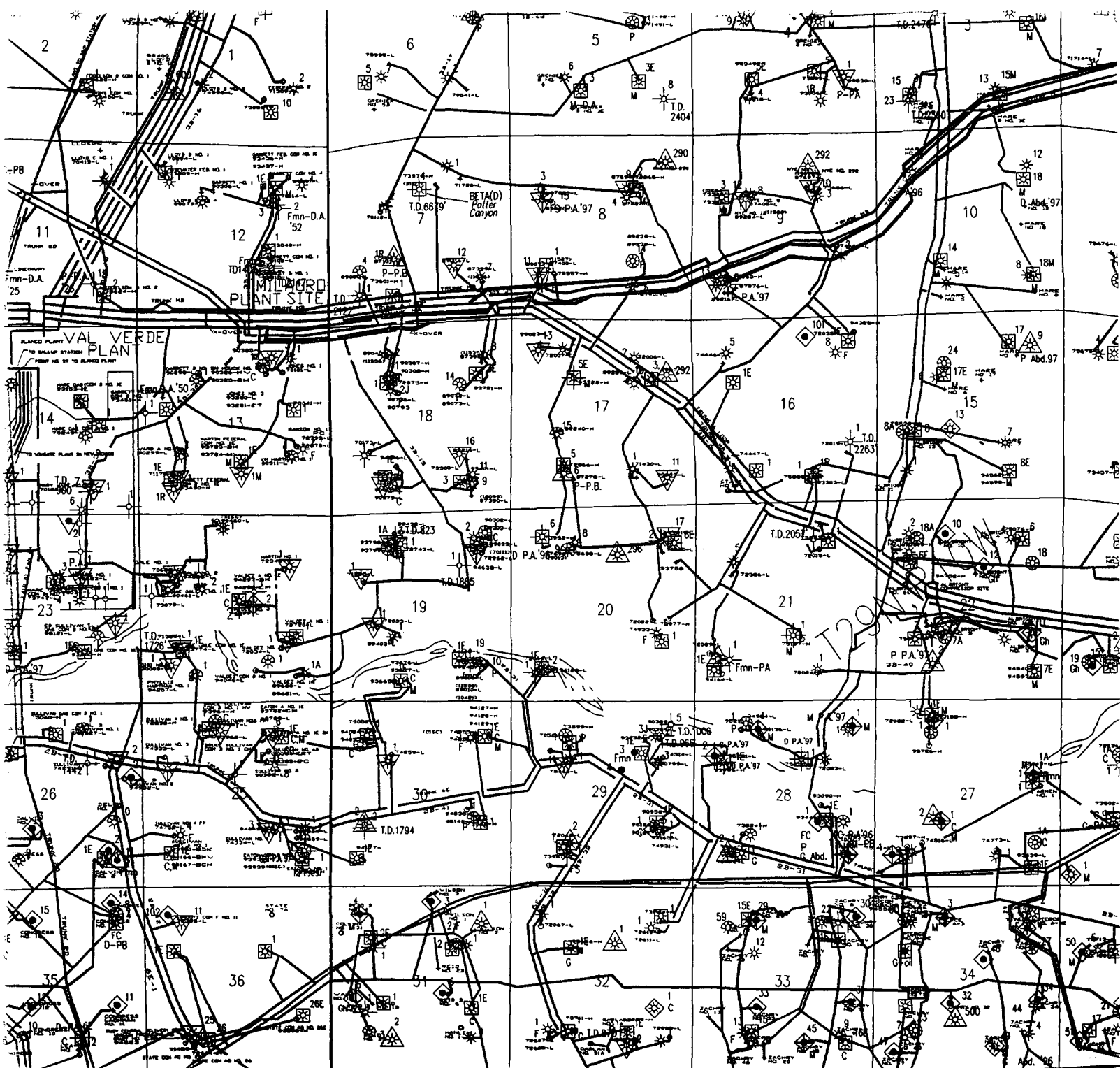
Cross Timbers Operating Company, 6001 Hwy 64, Farmington, NM 87401  
Operator Address  
Abrams JJ #1 I/Sec. 29-T29N-R10W San Juan County  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County  
Spacing Unit Lease Types: (check 1 or more)  
OGRID NO. 167067 Property Code 0226511 API NO. 300452552100 Federal State (and/or) Fee X

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	82329 Otero - Chacra		02290 Armenta - Gallup
2. Top and Bottom of Pay Section (Perforations)	2786 - 2910		5314 - 5690
3. Type of production (Oil or Gas)	Gas		Oil
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) Cal 295 psia b. (Original) Cal 946 psia	a. b.	a. Cal 799 psia b. Cal 1288 psia
6. Oil Gravity (°API) or Gas BTU Content	1143		44 API
7. Producing or Shut-In?	Producing		Producing
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: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 5/16/98 Rates: 0 - 75 - 0	Date: Rates:	Date: 5/16/98 Rates: 1 - 6 - 0
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 94 %	Oil: % Gas: %	Oil: 100 % Gas: 6 %

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. NMOCD 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.

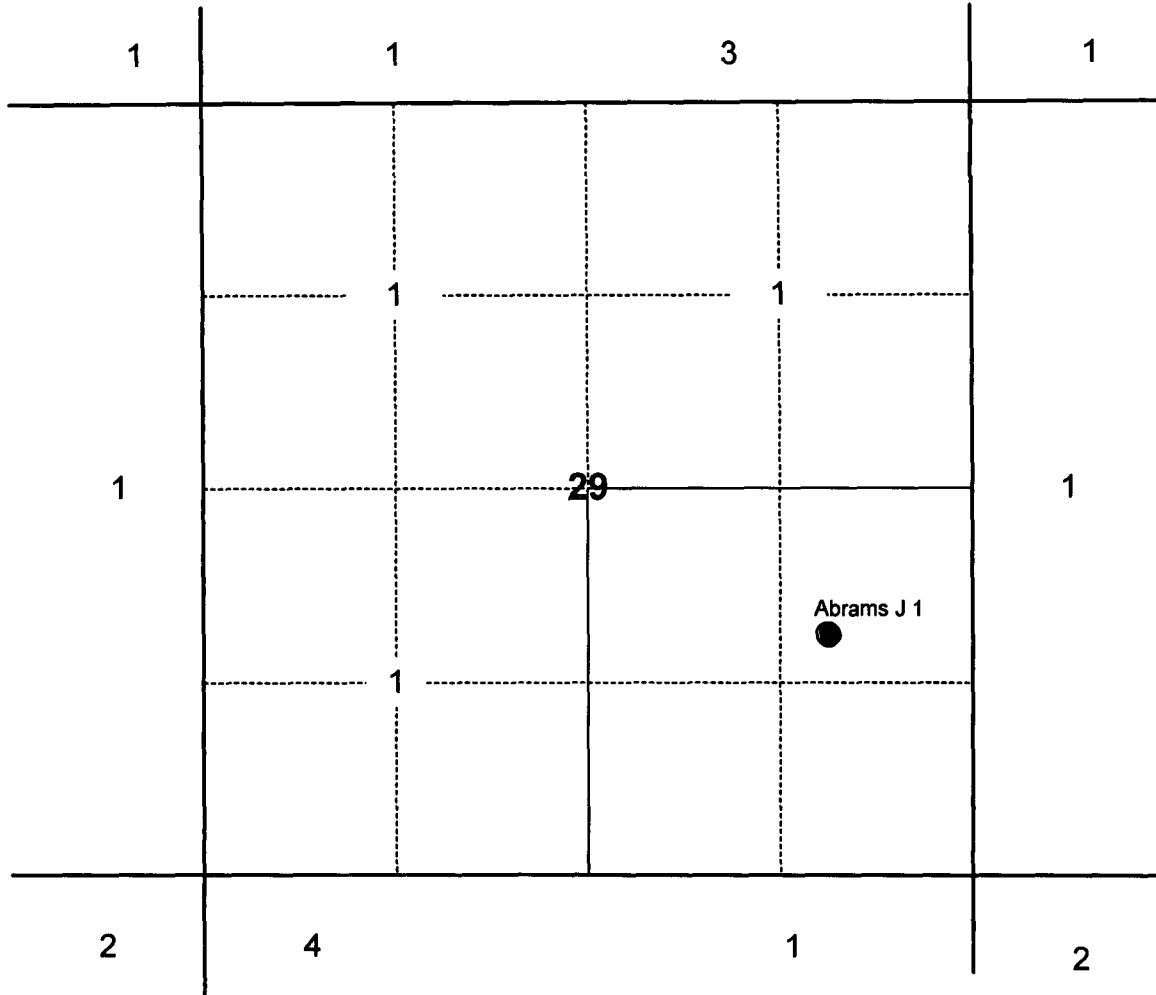
SIGNATURE Loren W. Fothergill TITLE PRODUCTION ENGINEER DATE 07/02/98  
TYPE OR PRINT NAME Loren W. Fothergill TELEPHONE NO. ( 505 ) 632-5200



# Cross Timber Operating Company

**Abrams J #1**  
**Offset Operator / Ownership Plat**  
Otero Chacra / Armenta Gallup  
Downhole Commingling

Township 29 N, Range 10 W



- 1) Cross Timbers Operating Company
- 2) Burlington Resources Oil & Gas Company  
P.O. Box 4289  
Farmington, NM 87499-4289
- 3) Taurus Exploration USA Inc.  
2198 Bloomfield Highway  
Farmington, NM 87401
- 4) Four Star Oil & Gas Company  
P.O. Box 2100  
Denver, Colorado 80202

	Oil (bbls/mo)	Gas (mcf/mo)	Oil (bbls)	Gas (mcf)	Res. Cal. Life	PDP 39,500
Q <sub>1</sub>	0	2,792	0	429,341	As-of-Date 1/98	CTSEC98
Q <sub>2</sub>	0	1,640	0	436,655	Setup file	DEFAULT
Decline	0.10 %	7.10 %	0	865,996	Q. Prod	CTOC
			0	371,156	Q. Owner	CTOC
					Q. Other	

W1 - 100.000000 %  
NR1 - 85.000000 %

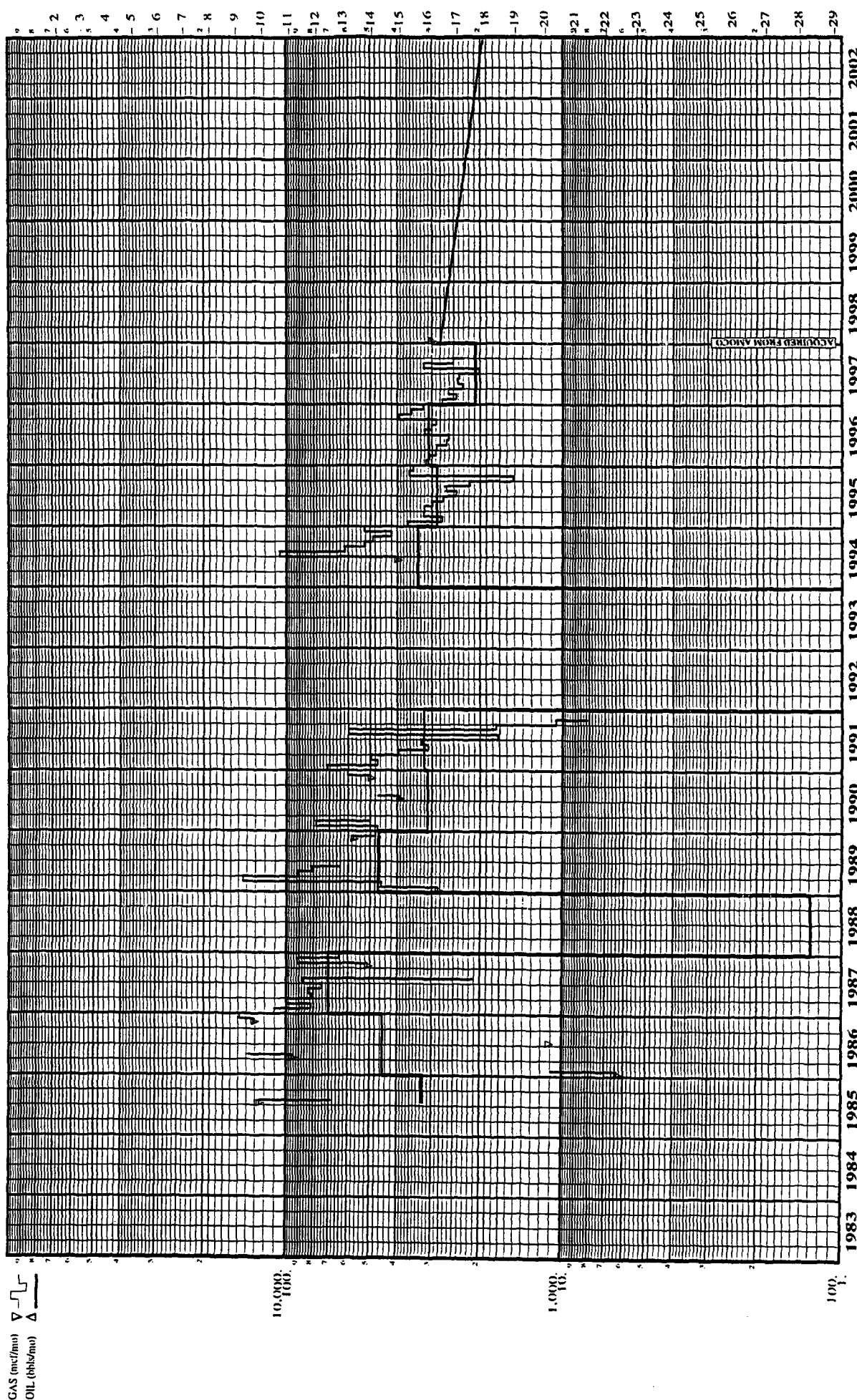
Run Date : 03/19/98  
Run Time: 10:31:58

## M & L - 1/98 FORECAST

LWF JOD CP-KEL

ABRAMS J  
CROSS TIMBERS  
OTERO ( CHACRA )  
SAN JUAN, NEW MEXICO  
291 29N 10W  
JMS/BCV

CO  
452552

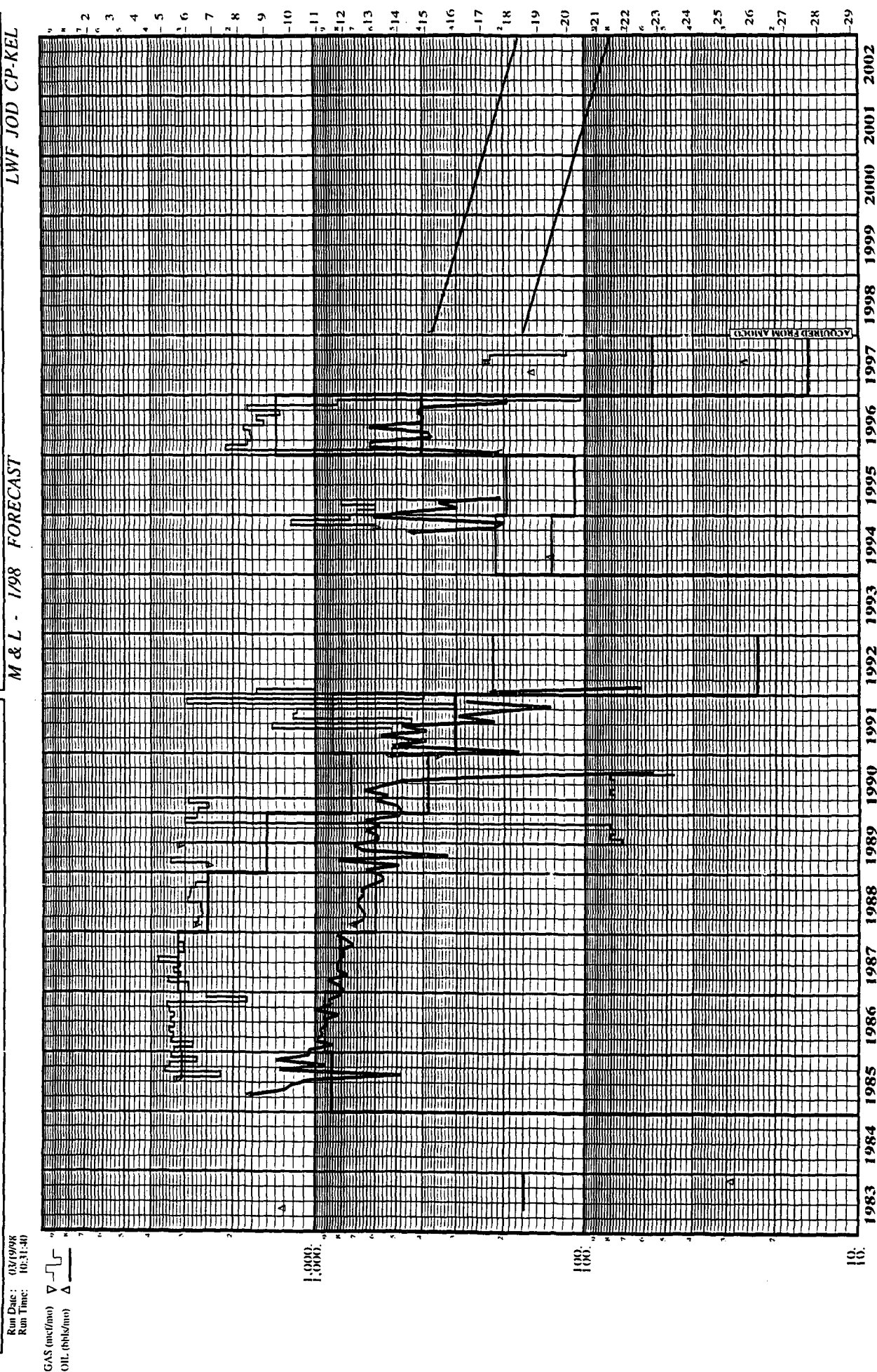


THE UNIVERSITY OF CHICAGO

	Oil (bbls/day)	Gas (mcf/day)	Oil (bbls)	Gas (mcf)	Res. Cat. Life	PDP 10,750 1998
Oil	169	368	63,513	185,937	As of Date	
Gas	34	74	10,853	23,621	Setup file	CTSEC98
Decline	14.8 %	14.0 %	74,366	209,558	Q. Prod	DEFAULT
				9,581	Q. Owner	CTOC
					Q. Other	CTOC

W1 - 100.000000  
NRI - 88.28125 %

ABRAMS J I  
CROSS TIMBERS  
ARMENTA ( GALLUP )  
SAN JUAN, NEW MEXICO  
29I 29N 10W  
JMS/BGV  
CO  
52552I  
SAN JUAN  
70012



District I  
PO Box 1980, Hobbs, NM 88241-1980

District II  
811 South First, Artesia, NM 88210

District III  
1000 Rio Brazos Rd., Aztec, NM 87410

District IV  
2040 South Pacheco, Santa Fe, NM 87505

**State of New Mexico**  
Energy, Minerals & Natural Resources Department

**OIL CONSERVATION DIVISION**  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-102

Revised October 18, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

<sup>1</sup> API Number 3004525521		<sup>2</sup> Pool Code 8239 / 02290		<sup>3</sup> Pool Name OTERO CHACRA / ARMENTA GALLUP	
<sup>4</sup> Property Code 022651		<sup>5</sup> Property Name ABRAMS J			<sup>6</sup> Well Number 1
<sup>7</sup> OGRID No. 167067		<sup>8</sup> Operator Name CROSS TIMBERS OPERATING COMPAY			<sup>9</sup> Elevation 5535

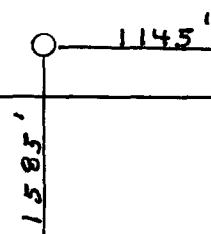
**<sup>10</sup>Surface Location**

UL or lot no. 1	Section 29	Township 29	Range 10	Lot Idn	Feet from the 1585	North/South line SOUTH	Feet from the 1145	East/West Line EAST	County SAN JUAN
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**<sup>11</sup>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
<sup>12</sup> Dedicated Acres 160.00	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code		<sup>15</sup> 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

<sup>16</sup>						<b><sup>17</sup>OPERATOR CERTIFICATION</b> <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i>		
						Signature Loren W Fothergill		
						Printed Name Production Engineer		
						Title 07-01-98 Date		
						<b><sup>18</sup>SURVEYOR CERTIFICATION</b> <i>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.</i>		
						11-11-82 Date of Survey		
						Signature and Seal of Professional Surveyer:		
						Reissue of Survey by Fred B. Kerr Jr. 3950 Certificate Number		