

DHC-2340

**Cross Timbers Operating Company**

Re: Administrative Approval to Downhole Commingle
Cross Timbers Operating Co.
State Gas Com "BZ" #1
1,850' FSL & 1,080' FEL Sec. 32, T29N, R10W
San Juan County, New Mexico

MAY 10 1999

Dear Operating Interest Owner / Offset Operator,

As an interest owner or offset operator in the above mentioned well, you are hereby notified that Cross Timbers Operating Co is filing for downhole commingle approval.

You have the right to file an objection to the commingling of the above mentioned well within twenty (20) days starting upon receipt of this letter. If you do not have any objections to the above well being commingled, you can either sign this letter waiving your rights to an objection or let the twenty days, upon receipt of this letter, expire.

Please return this letter or a letter of objection to Mr. David Catanach at the address listed.

Mr. David Catanach
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Cross Timbers Oil Co sincerely appreciate your prompt response concerning this approval.

Signature: <i>D. M. Snow</i>	Date: <i>5-4-99</i>
Title: <i>Team Leader</i>	
Organization: <i>Four Star Oil & Gas</i>	

DHC 5/17/99



Cross Timbers Operating Company

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

2340
APR 26 1999

Re: Administrative Approval to Downhole Commingle
Cross Timbers Operating Co.
State Gas Com "BZ" #1
1,850' FSL & 1,080' FEL Sec. 32, T29N, R10W
San Juan County, New Mexico

Dear Ms. Wrotenbery,

Cross Timbers Operating Company hereby request administrative approval to downhole commingle the Armenta Gallup and Otero Chacra pools in the above mentioned well. The well was originally completed as a dual completion with the Gallup being produced under a packer and up the tubing and the Chacra being produced up the casing. Currently both the Gallup and Chacra are producing as originally completed. Through internal analysis it appears that both zones have been under produced. The Gallup side of this well suffers from paraffin problems. Given the current configuration of the wellbore, it is impossible to began a paraffin chemical treatment. Therefore to improve the recovery of liquids and paraffin and to improve the ultimate recovery of production, Cross Timbers Operating Company is certain that if both zone are approved for downhole commingle then the above objectives can be obtained.

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 Commingle
2. C-102 Well Location & Acreage Dedication Plat
3. Production curves for both the Mesaverde & Chacra Formation
4. Offset Operators Plat
5. Well Location Plat

In accordance to New Mexico Oil Conservation Division Rule 303C, all interest owners and offset operators are being notified of this application. As an owner or offset operator, if you do not have any objections to this application, you do not have to respond to this notification.

If additional information is needed, please feel free to contact Cross Timbers Operating Co.

Sincerely,

Jeffery W. Patton
Production Engineer

CC: NMOCD -Aztec, Offset Operators, Public Lands.

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

State Gas Com "BZ" #1 I 32 29N 10W San Juan, NM
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 167067 Property Code 022827 API NO. 3004525510 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	Otero Chacra 82329		Armenta Gallup 02290
2. Top and Bottom of Pay Section (Perforations)	2,881' - 3,006' (perf'd)		5,385' - 5,861' (open hole)
3. Type of production (Oil or Gas)	Gas		Oil / Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	195 psi (meas)		716 psi (meas)
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	878 psia (cal)		1,200 psia (cal)
6. Oil Gravity (^o API) or Gas BTU Content)	1178 btu		39.3 deg / 1224 btu
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	Date:	Date:	Date:
	Rates:	Rates:	Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data			
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 3-4-99	Date:	Date: 3-4-99
	Rates:	Rates:	Rates:
	0 bopd, 0 bwpd, 82 mcfpd		1 bopd, 0 bwpd, 28 mcfpd
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 75 %	Oil: % Gas: %	Oil: 100 % Gas: 25 %

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 in 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 Jeffery W. Patton TITLE Production Engineer DATE 4-16-99

TYPE OR PRINT NAME Jeffery W. Patton TELEPHONE NO. (505) 324-1090

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

Form C-107
Revised 10-1-77

STATE OF NEW MEXICO
OIL AND MINERALS DEPARTMENT

All distances must be from the outer boundaries of the Section.

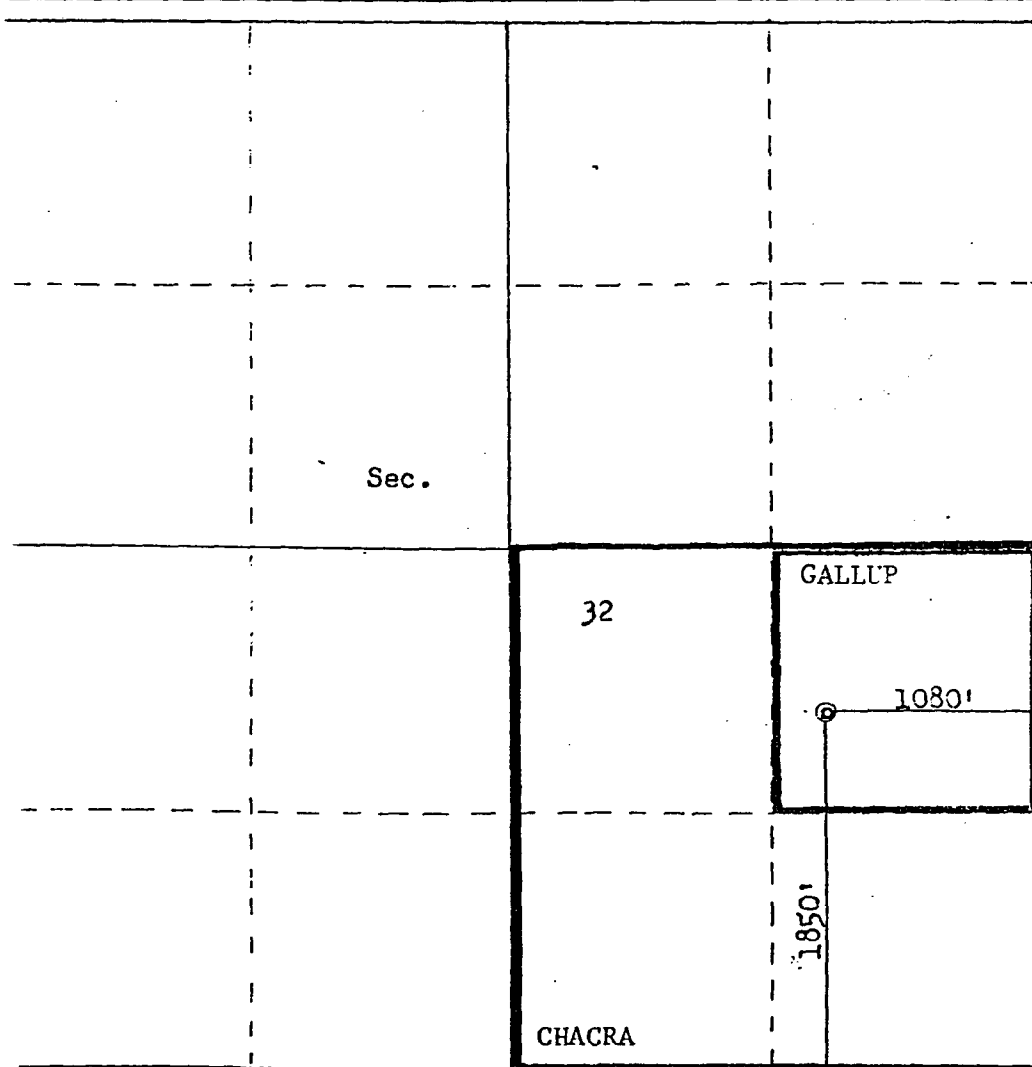
Operator AMOCO PRODUCTION COMPANY			Lease STATE GAS COM BZ		Well No. 1
Unit Letter I	Section 32	Township 29N	Range 10W	County San Juan	
Actual Footage Location of Well:					
1850 feet from the South line and		1080 feet from the East line			
Ground Level Elev: 5678	Producing Formation Chacra / Gallup	Pool Bloomfield Chacra/Armenta Gallup	Exh 160/40	Dedicated Acreage: 160/40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Communitization

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

No allowable will be assigned to the well until all interests have been consolidated (by communitization, 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.

D. H. Shoemaker
Name

D. H. SHOEMAKER

Position

DISTRICT ENGINEER

Company

AMOCO PRODUCTION COMPANY

Date

NOVEMBER 11, 1982

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.

Date Surveyed

November 10, 1982

Registered Professional Engineer
and Land Surveyor

Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No. **10001**

Scale: 1"=1000'



Cross Timbers Operating Company

State Gas Com "BZ" #1
Offset Operator / Ownership Plat
Armenta Gallup / Otero Chacra
Downhole Commingle

Township 29N, Range 10 W / Township 28 N, Range 10 W

1. Burlington Resources Oil & Gas Company
3535 E. 30th St.
Farmington, NM 87402
2. Four Star Oil & Gas Company
c/o Texaco E & P Inc.
3300 N Butler Ave.
Farmington, NM 87401
3. Energen Resources.
2198 Bloomfield Hwy
Farmington, NM 87401
4. Amoco Production Co.
200 Amoco Court
Farmington, NM 87401
5. Cross Timber Operating Co.
2700 Farmington Ave. Bldg K Suite 1
Farmington, NM 87401

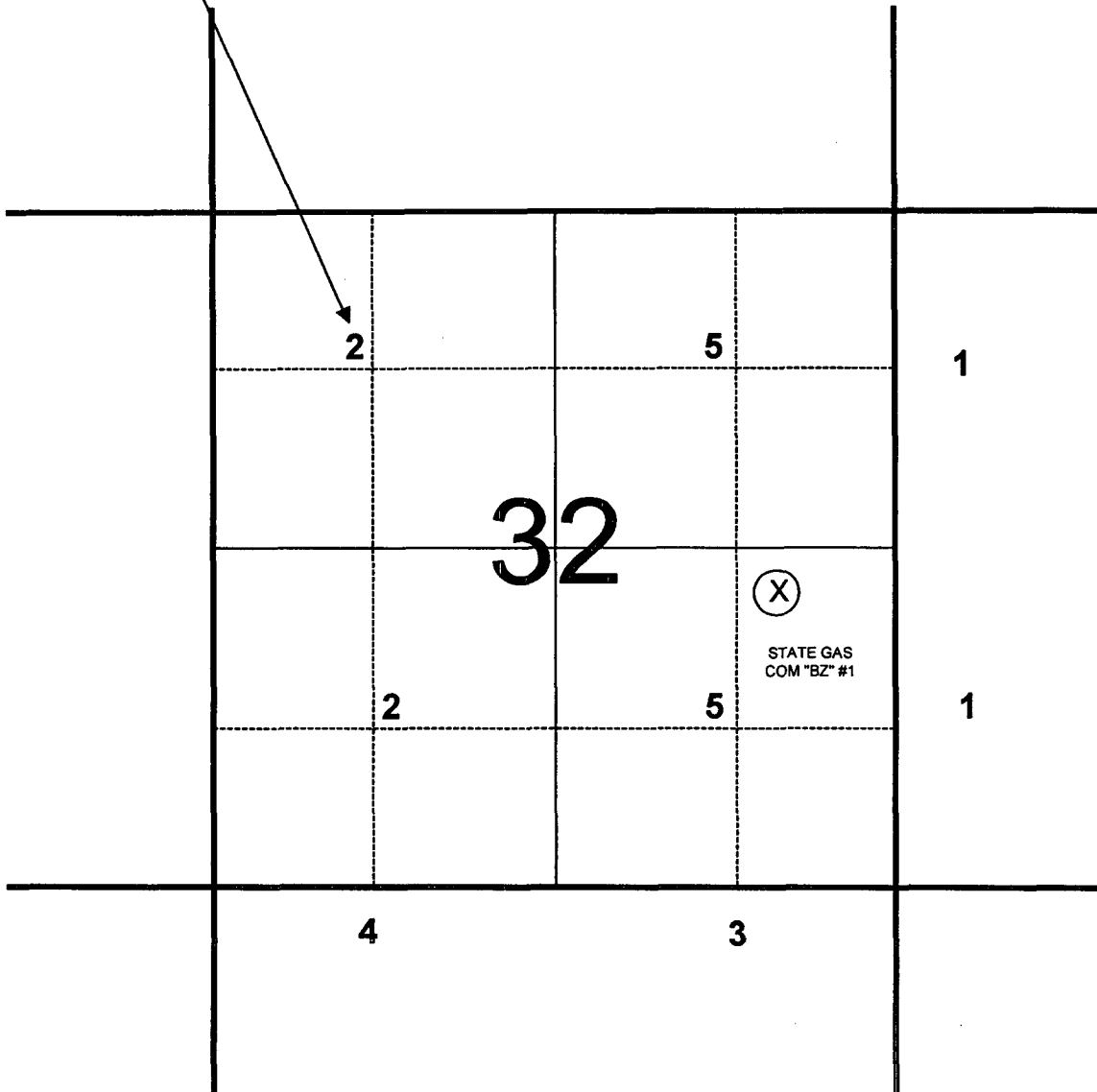
Overriding Interest Owners

1. Sara Dawn Smith
C/o New Mexico Educators Federal CU
Acct #25660-9
PO Box 8530
Albuquerque, NM 87198-8530
2. Duane Beck
3605 Paseo Del Campo
Palos Verdes Estates, CA 90274
3. Hugh J & Raimonda Mitchell
Hugh J Mitchell, Trustee
PO Box 1109
Farmington, NM 87499



Cross Timbers Operating Company

Offset Operator as indicated on previous page



Township 29N, Range 10W



Cross Timbers Operating Company

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New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Cross Timbers Oil Co sincerely appreciate your prompt response concerning this approval.

Signature:	Date:
Title:	
Organization:	

Cross Timbers Oil Company

STATE GAS COM BZ

CROSS TIMBERS
ARMENTA (GALLUP)
SAN JUAN, NEW MEXICO
32I 29N 10W
JMS

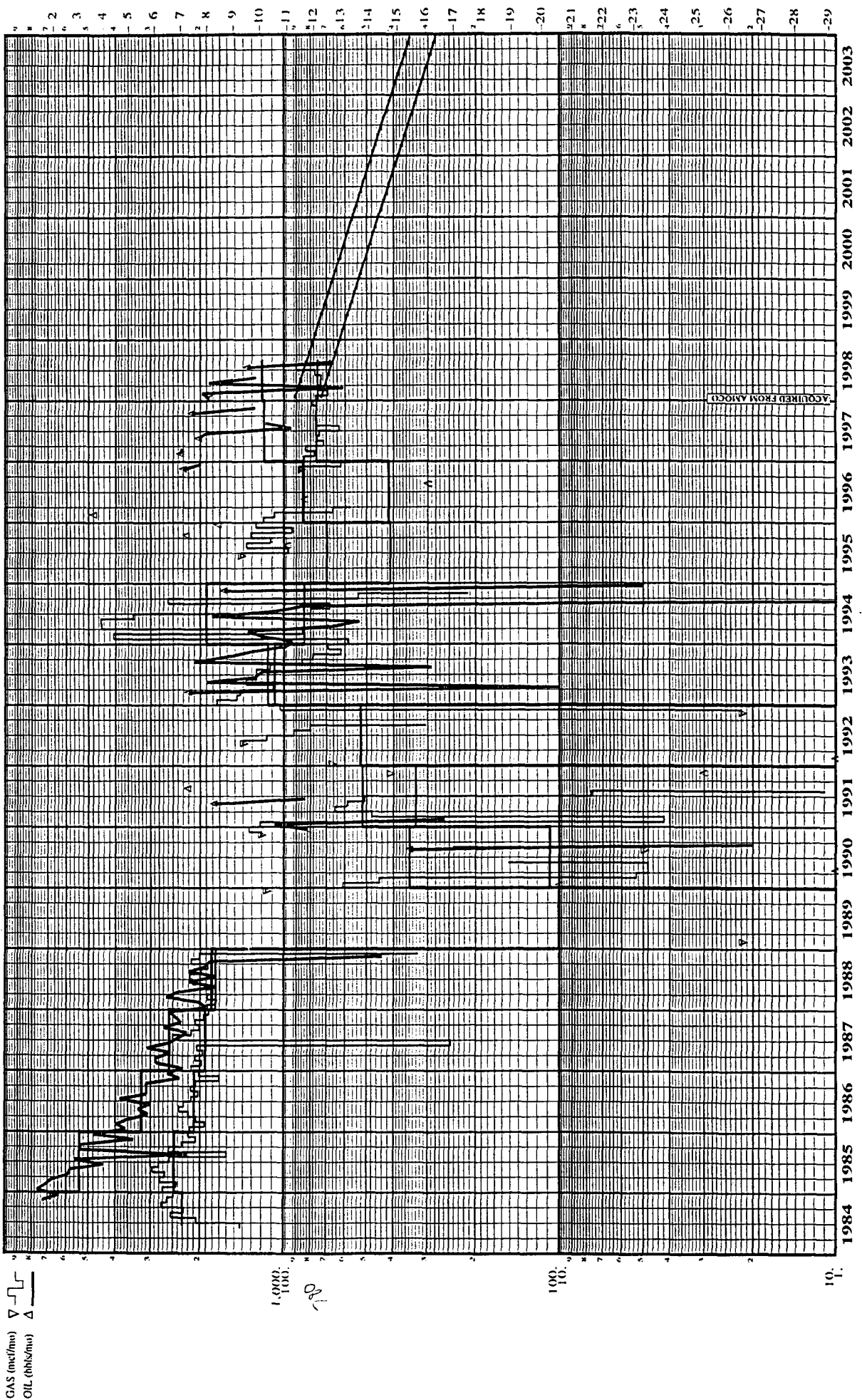
SAN JUAN
71019

CO
525510

JWP DLM CP-K-JRT

M & L - 1/98 FORECAST

Run Date: 01/19/98
Run Time: 12:25:44



Cross Timbers Oil Company

STATE GAS COM BZ

CROSS TIMBERS

OTERO (CHACRA)

SAN JUAN, NEW MEXICO

321 29N 10W

JMS

CO

452255



SAN JUAN

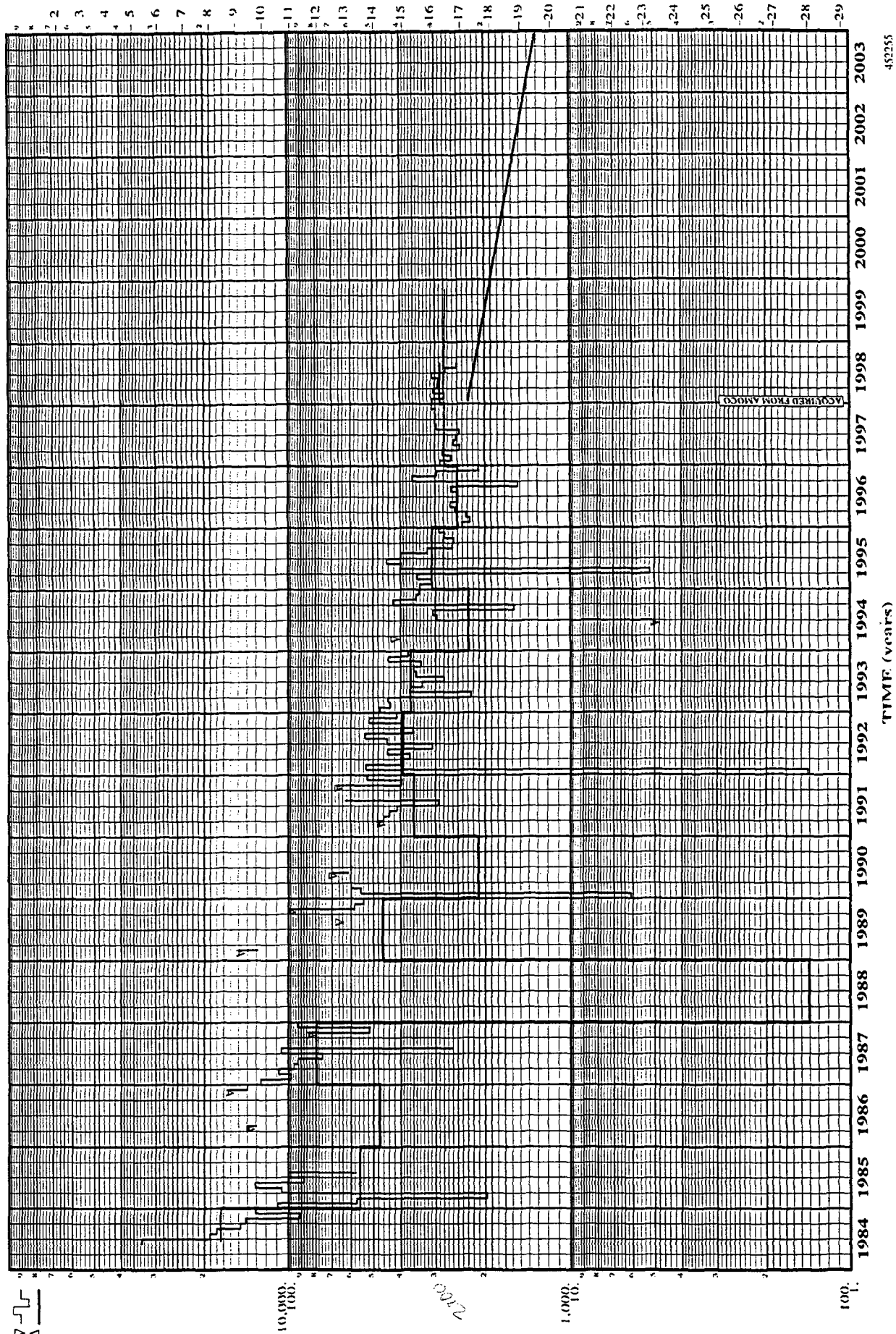
71020

M & L - 198 FORECAST

JWP DLM CP-K-JRT

Run Date: 03/19/98
Run Time: 12:25:51

GAS (mcf/mo) 
OIL (bbls/mo) 



TIME (years)

452255

