

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

OIL CONSERVATION DIVISION

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

APPLICATION FOR DOWNHOLE COMMINGLING

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

APPROVAL PROCESS:

Administrative ☐ Hearing ☐

EXISTING WELLBORE

☒ YES ☐ NO

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

Block "C" LS #14A I 30 27N 08W San Juan
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 167067 Property Code 022596 API NO. 3004526553
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		Blanco Mesaverde 72319
2. Top and Bottom of Pay Section (Perforations)	3074'-3083' (perf'd)		4131'-4701' (perf'd)
3. Type of production (Oil or Gas)	Gas		Gas
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) 295 psia (calc) b. (Original) 935 psia (calc)	a. b.	a. 554 psia (calc) b. 820 psia (calc)
6. Oil Gravity (^o API) or Gas BTU Content)	1147 btu		1342 btu / 46.4 API
7. Producing or Shut-In?	Producing		Production
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 * If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: Date: 02/09/99 Rates: 53 mcfpd 0 bwpd 0 bopd	Date: Rates: Date: Rates:	Date: Rates: Date: 02/09/99 Rates: 62 mcfpd 0 bwpd 1 bopd
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 47 %	Oil: % Gas: %	Oil: 100 % Gas: 53 %

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. 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 Jeffery W. Patton TITLE DATE 2/19/99

TYPE OR PRINT NAME JEFFERY W. PATTON TELEPHONE NO. (505) 324-1090

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION AT

Supersedes C-128
Effective 1-1-65

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

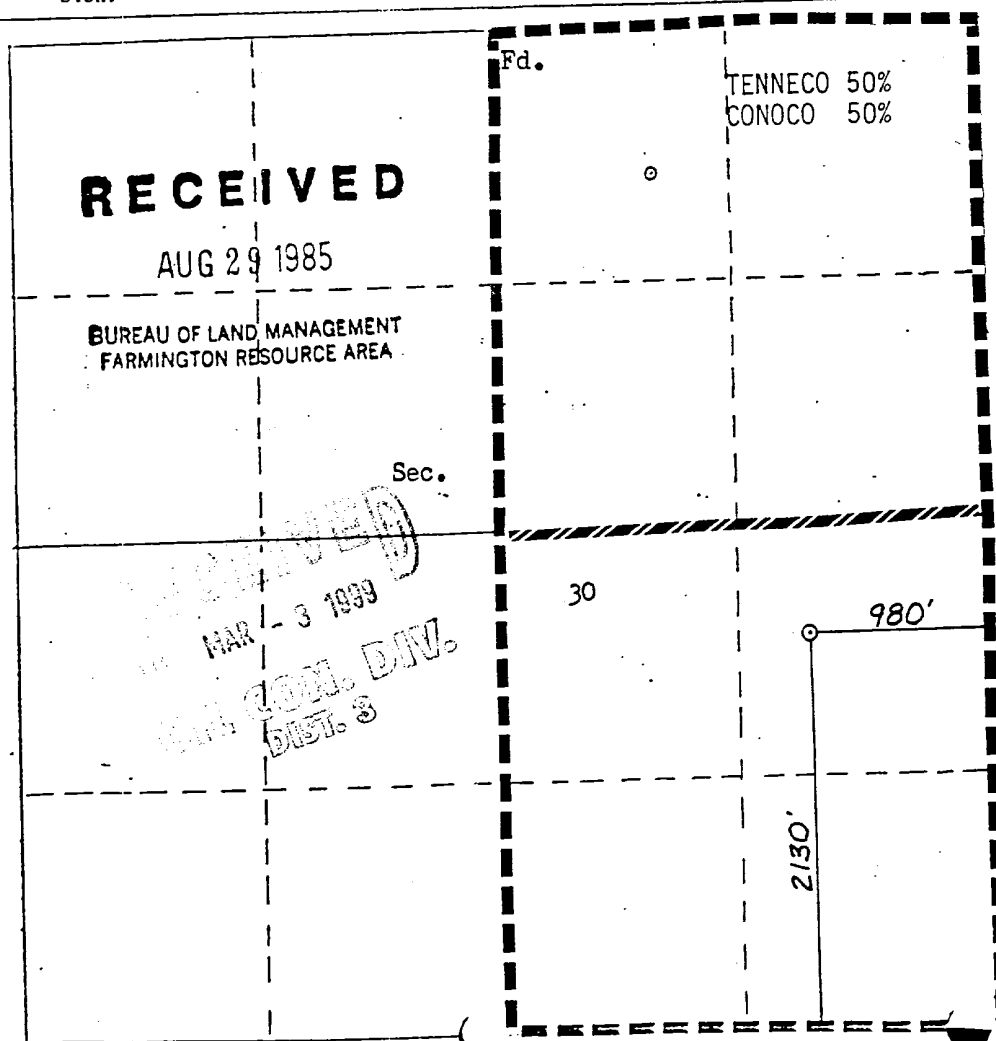
Operator TENNECO OIL COMPANY		Lease BOLACK C LS		Well No. 11A
Unit Letter I	Section 30	Township 27N	Range 8W	County San Juan
Actual Footage Location of Well: 2130 feet from the South line and 980 feet from the East line				
Ground Level Elev: 6127	Producing Formation Chacra/Mesaverde	Pool Undes. CH/Blanco MV	Dedicated Acreage: 160/320 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 _____

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.



Scale: 1"=1000'

CERTIFICATION

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

Scott McKinney

Name
Scott McKinney

Position
Sr. Regulatory Analyst

Company
Tenneco Oil Co.

Date
July 2, 1985

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
5-21-85
Registered Professional Engineer and Land Surveyor
WILLIAM E. MAHNKE

Certificate No.
8466

Cross Timbers Oil Company

BOLACK C 14A

CROSS TIMBERS
OTERO (CHACRA)
SAN JUAN, NEW MEXICO
301 27N 08W
BGV

SAN JUAN
70096

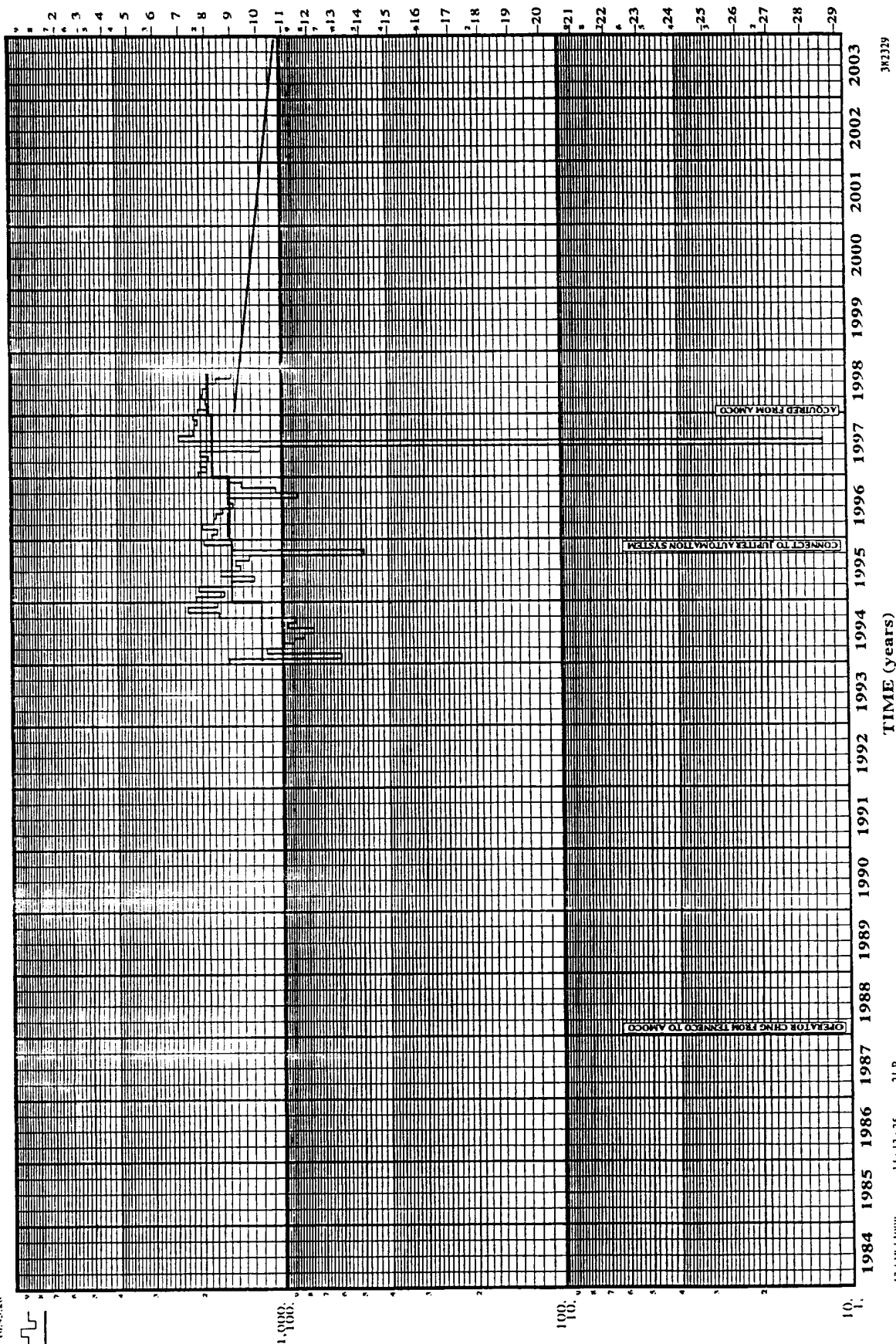
CO
382329

JWP DLM CP-K-LDR

M & L - 1/98 FORECAST

Run Date: 03/19/98
Run Time: 10:43:28

GAS (mcf/mo) ▽
OIL (bbls/mo) Δ



TIME (years)

17 / 1X / 1998 14 : 13 : 25 21 P

3K2329

Cross Timbers Oil Company

BOLACKC 14A :

CROSS TIMBERS
BLANCO (MESAVERDE)
SAN JUAN, NEW MEXICO
301 27N 08W
BGV

SAN JUAN
70095

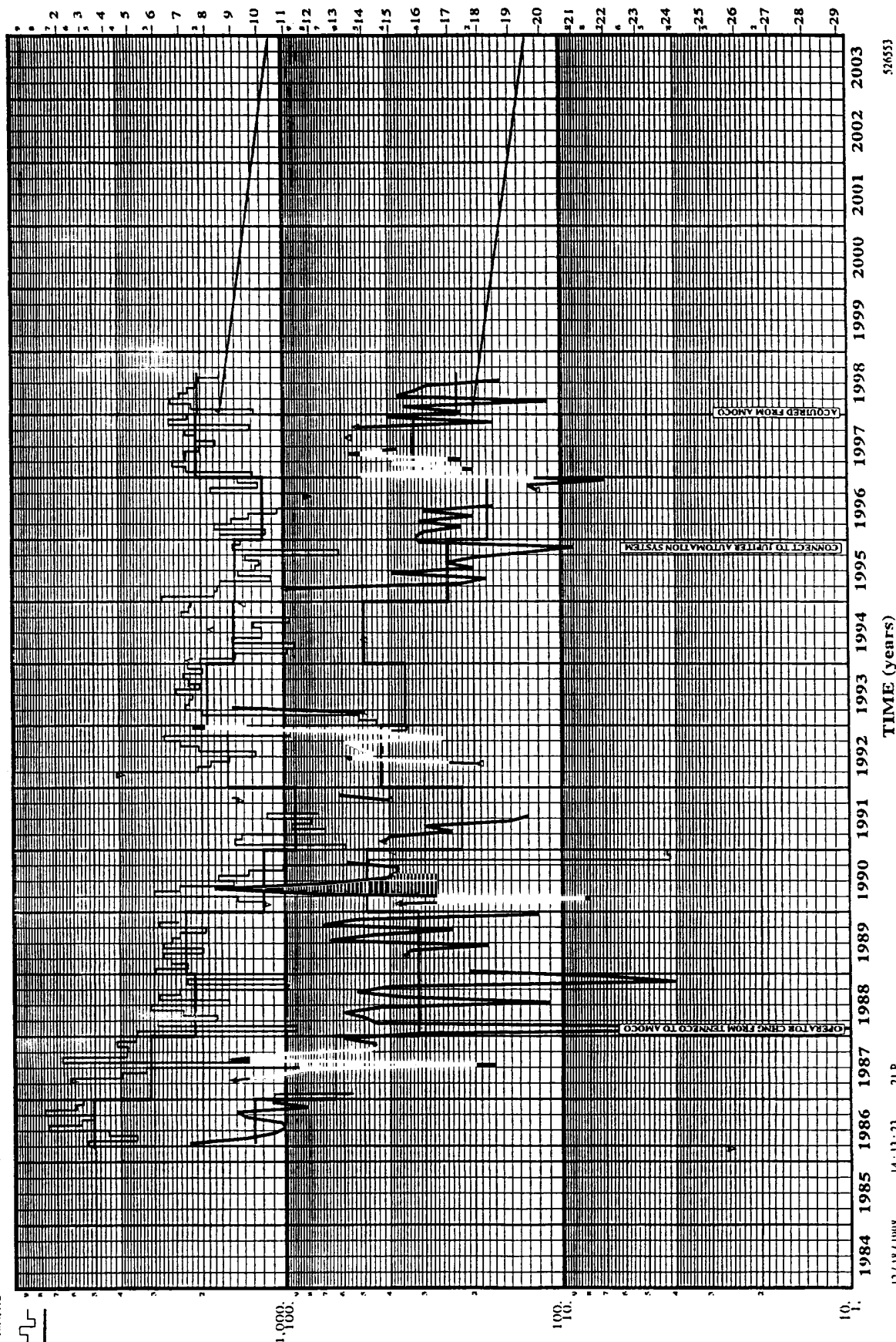
CO
526553

JWP DLM CP-K-LDR

M & L - 1/98 FORECAST

Run Date : 03/19/98
Run Time : 10:43:12

GAS (mc/mm) ▽
OIL (bbl/mm) Δ



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

FORM APPROVED
Budget Bureau No. 1004-0135
Expires November 30, 2000

5. Lease Serial No.

SF 079232

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Black C LS #14A

9. API Well No.

3004526553

10. Field and Pool, or Exploratory Area

Otero Chacra
Blanco Mesaverde

11. County or Parish, State

Sna Juan NM

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Cross Timbers Operating Company

3a. Address

2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

2,130' FSL & 980' FEL Sec 30, T27N, R08W

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent
☐ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
| <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input checked="" type="checkbox"/> Other DHC |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat 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 following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the final site is ready for final inspection.)

Cross Timber Operating Co. has applied to the NMOCd for downhole commingle approval on the above mentioned well. Enclosed is a copy of the application (C-107A) that Cross Timbers has submitted.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

[Signature]

Title

Production Engineer

Date 2/19/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

/s/ Duane W. Spencer

Title

MAR - 1 1999

Office

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Title 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.

(Instructions on reverse)

NMOCd



Cross Timbers Operating Company

RECEIVED
90 FEB 23 PM 12:57
OTC

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

Re: Administrative Approval to Downhole Commingle
Cross Timbers Operating Co.
Bolack "C" LS #14A
2,130' FSL & 980' FEL Sec. 30, T27N, R08W
San Juan County, New Mexico

Dear Ms. Wrotenbery,

Cross Timbers Operating Company hereby request administrative approval to downhole commingle the Blanco Mesaverde and Otero Chacra pools in the above mentioned well. The well was originally completed as a dual completion with the Mesaverde being produced under a packer and up the tubing and the Chacra being produced up the casing. Currently both the Mesaverde and Chacra are producing. Through internal analysis it appears that both zones have been under produced. Most wells in this area (primarily Mesaverde wells) are very susceptible to liquid loading problems. Therefore to improve the recovery of liquids 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 offset operators are being notified of this application. As an 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, BLM

DISTRICT I

P. C. 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 DepartmentForm 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

Block "C" LS

#14A

I

30

27N

08W

San Juan

County

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

Spacing Unit Lease Types: (check 1 or more)

Federal ☒ State ☐ (and/or) Fee ☐

OGRID NO. 167067 Property Code 022596 API NO. 3004526553

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		Blanco Mesaverde 72319
2. Top and Bottom of Pay Section (Perforations)	3074' - 3083' (perf'd)		4131' - 4701' (perf'd)
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: Estimated Current All Gas Zones: Measured Current Estimated Or Measured Original	a. (Current) 295 psia (calc) b. (Original) 935 psia (calc)	a. b.	a. 554 psia (calc) b. 820 psia (calc)
6. Oil Gravity (^o API) or Gas BTU Content)	1147 btu		1342 btu / 46.4 API
7. Producing or Shut-In?	Producing		Production
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 * If Producing, give date and oil/gas/water rates of recent test	Date: Rates: Date: 02/09/99 Rates:	Date: Rates: Date: Rates:	Date: Rates: Date: 02/09/99 Rates:

WELL LOCATION AND ACREAGE DEDICATION PLAT

Effective 1-1-65

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

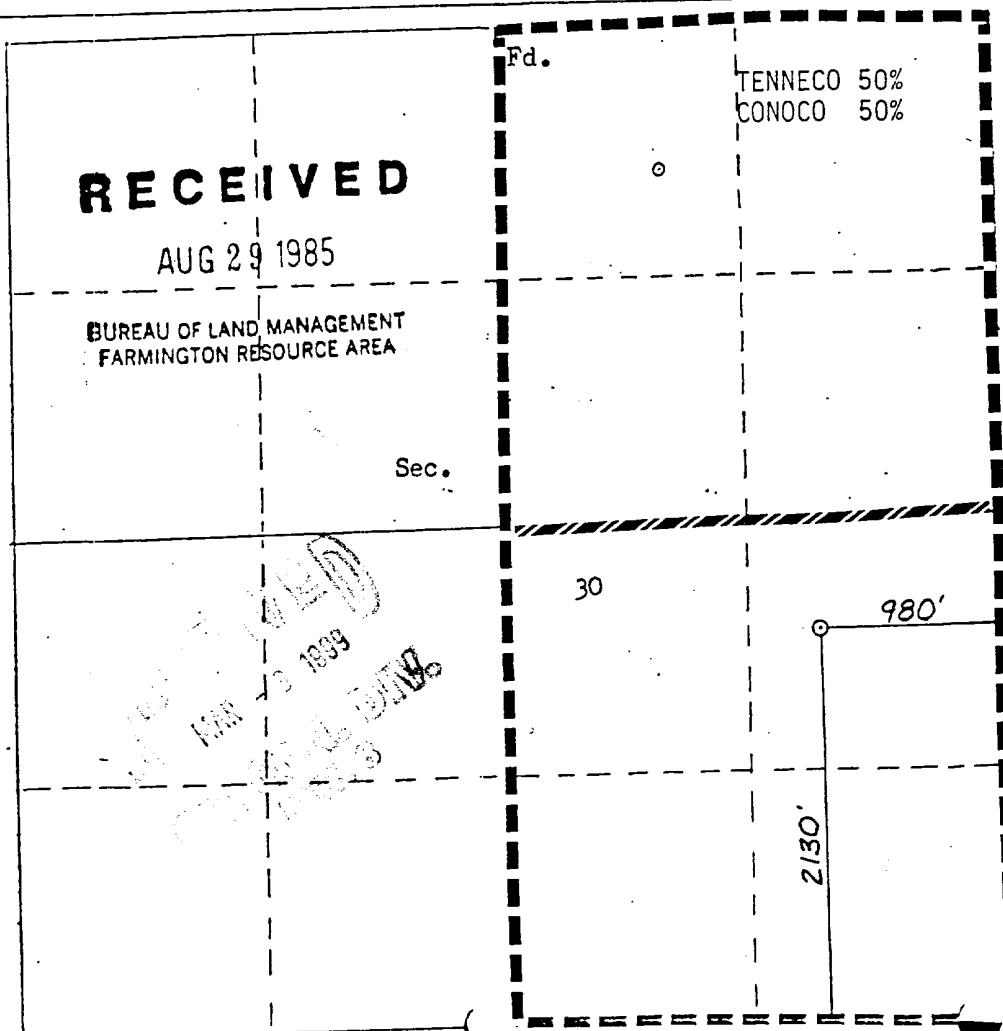
Operator TENNECO OIL COMPANY			Lease BOLACK C LS		Well No. 114
Unit Letter I	Section 30	Township 27N	Range 8W	County San Juan	
Actual Footage Location of Well 2130 feet from the South line and 980 feet from the East line					
Ground Level Elev. 6127	Producing Formation Chacra/Mesaverde	Pool Undes. CH/Blanco MV		Dedicated Acreage: 160/320 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 _____

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.

Name
Scott McKinney

Position
Sr. Regulatory Analyst

Company
Tenneco Oil Co.

Date
July 2, 1985

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
7-11-85

Registered Professional Engineer and Land Surveyor
WILLIAM E. MAHNKE II

Certificate No.
8466

Cross Timbers Oil Company

BOLACK C 14A

CROSS TIMBERS
OTERO (CHACRA)
SAN JUAN, NEW MEXICO
301 27N 08W
BGV

SAN JUAN
70096

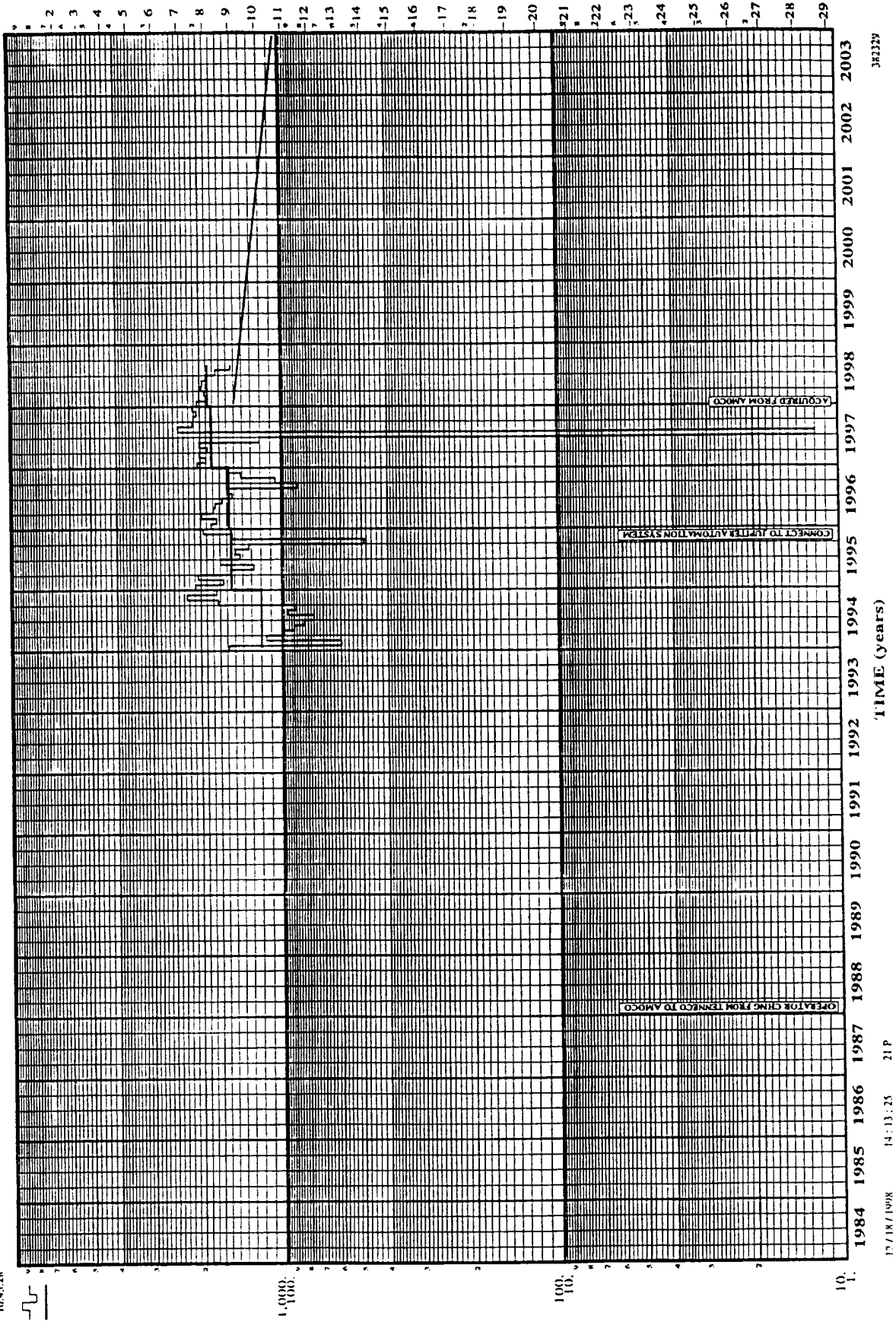
CO
382329

M & L - 1/98 FORECAST

JWP DLM CP-K-LDR

Run Date : 03/19/98
Run Time : 10:43:28

GAS (mcf/mo) ∇
OIL (bbls/mo) Δ



Cross Timbers Oil Company

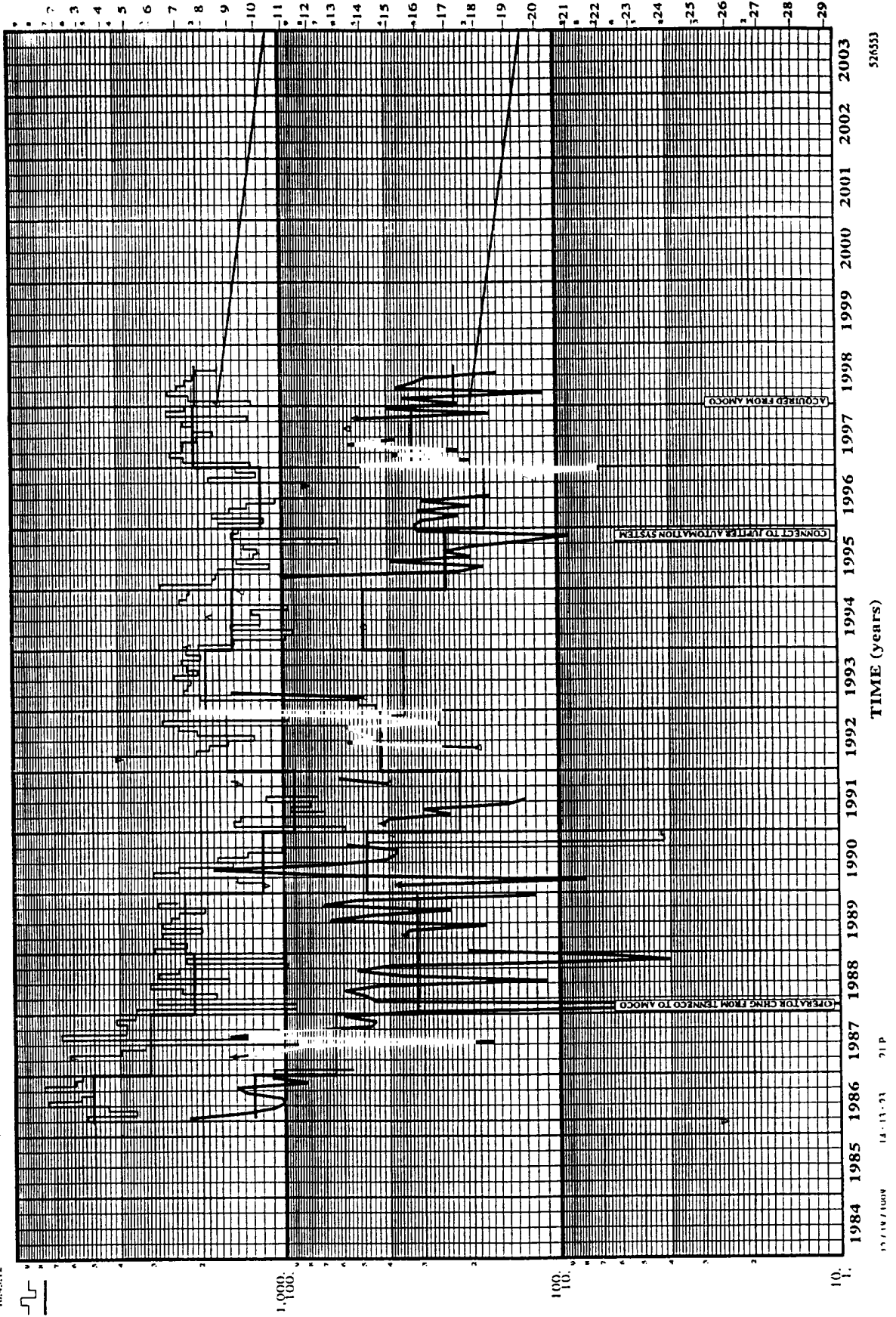
BOLACK C 14A :
 CROSS TIMBERS
 BLANCO (MESAVERDE)
 SAN JUAN, NEW MEXICO
 301 27N 08W
 BGV
 CO
 526553
 SAN JUAN
 70095

M & L - 1/98 FORECAST

JWP DLM CP-K-LDR

Run Date: 03/1998
 Run Time: 10:43:12

GAS (mcf/mo) ▽
 OIL (bbls/mo) △



TIME (years)

15 / 14 / 100W 14-11-91 71 P

526553