

## 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

#11

K

28

T27N

08W

San Juan

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

OGRID NO. 167067

Property Code 022596

API NO. 3004506227

Spacing Unit Lease Types: (check 1 or more)  
Federal ☒ State ☐ (and/or) Fee ☐

	Upper Zone	Intermediate Zone	Lower Zone
1. Zone Name and Pool Code	S. Blanco Pictured Cliff 72439		Blanco Mesaverde 72319
2. Top and Bottom of Pay Section (Perforations)	2222' - 2238'		4498' - 4652'
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) 227 psia (calc) b. (Original) 820 psia (calc)	a. <b>OIL CON. DIV. DIST. 3</b> b.	a. 441 psia (calc) b. 1121 psia (calc)
6. Oil Gravity ( <sup>o</sup> API) or Gas BTU Content)	1155 btu		1338 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 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: 02/10/99 Rates: 21 mcfpd 0 bwpd 0 bopd	Date: Rates: Date: Rates:	Date: Rates: Date: 02/10/99 Rates: 65 mcfpd 0 bwpd 0 bopd
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 35 %	Oil: % Gas: %	Oil: 100 % Gas: 65 %

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?  
If not, have all working, overriding, and royalty interests been notified by certified mail?  
Have all offset operators been given written notice of the proposed downhole commingling?☒ Yes ☐ No  
☐ Yes ☐ No  
☒ Yes ☐ No11. 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 ☐ No13. 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 Jeffrey W. Patton TITLE \_\_\_\_\_ DATE 2/19/99TYPE OR PRINT NAME JEFFERY W. PATTON TELEPHONE NO. ( 505 ) 324-1090

## Well Location and Acreage Dedication Plat

Section A.

Date JANUARY 22, 1958

Operator EL PASO NATURAL GAS COMPANY Lease BOLACK SF 079232  
 Well No. 11-C (PM) Unit Letter K Section 28 Township 27-N Range 8-W NMPM  
 Located 1800 Feet From SOUTH Line, 1550 Feet From WEST Line  
 County SAN JUAN G. L. Elevation 6195 Dedicated Acreage 320 & 160 Acres  
 Name of Producing Formation MESA VERDE & PICTURED CLIFF Pool BLANCO MV & SOUTH BLANCO FC

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?

Yes ☒ No ☐2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes ☐ No ☐ If answer is "yes", Type of Consolidation.

3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

Section B.

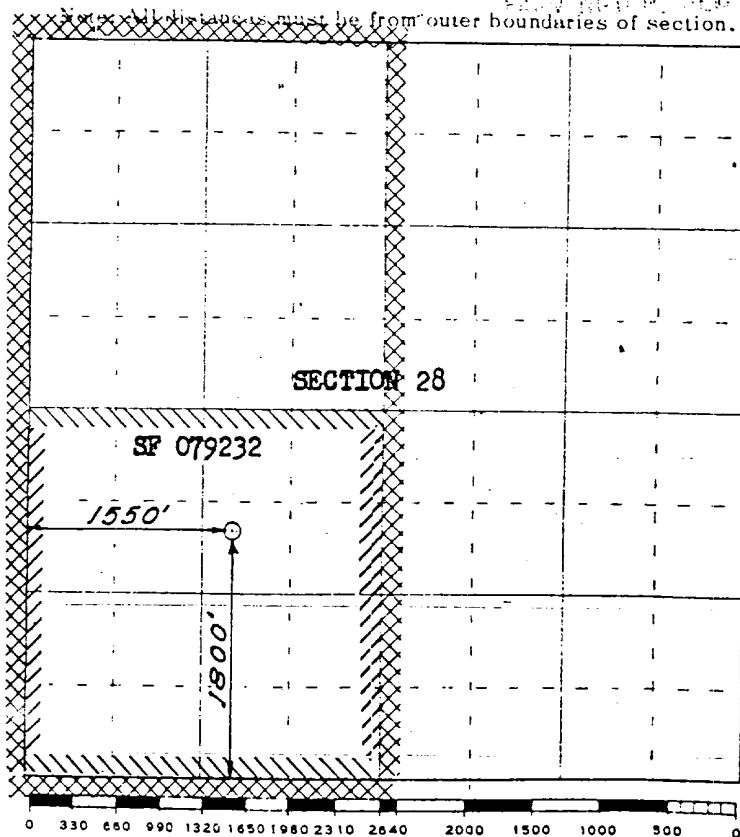
This is to certify that the information  
 in Section A above is true and complete  
 to the best of my knowledge and belief.

El Paso Natural Gas Company  
 (Operator)

Original Signed F. H. WOOD  
 (Representative)

Box 997  
 (Address)

Farmington, New Mexico



This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Date Surveyed JANUARY 17, 1958

Farmington, New Mexico

David O. Kilmer  
 Registered Professional Engineer and/or Land Surveyor

# Cross Timbers Oil Company

BOLACK C 11  
CROSS TIMBERS  
BLANCO S (PICTURED CLIFFS)  
SAN JUAN, NEW MEXICO  
28K 27N 08W  
BGV  
SAN JUAN  
70085

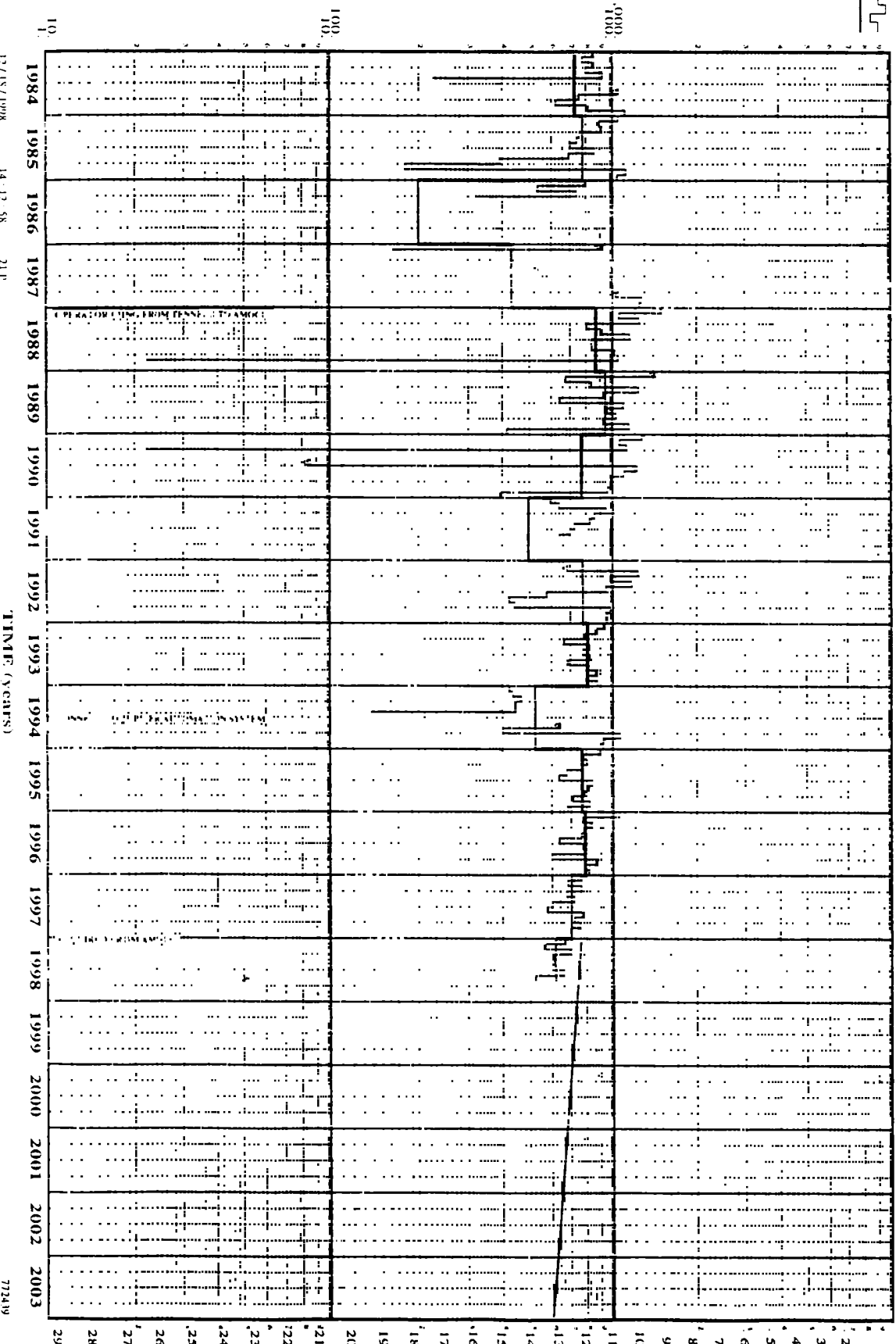
CO  
772439

M & L - 1/98 FORECAST

JWP DLM CP-K-LDR

Run Date: 03/19/98  
Run Time: 10:40:55

GAS (mcf/mo)  $\nabla$   
OIL (bbl/mo)  $\Delta$



# Cross Timbers Oil Company

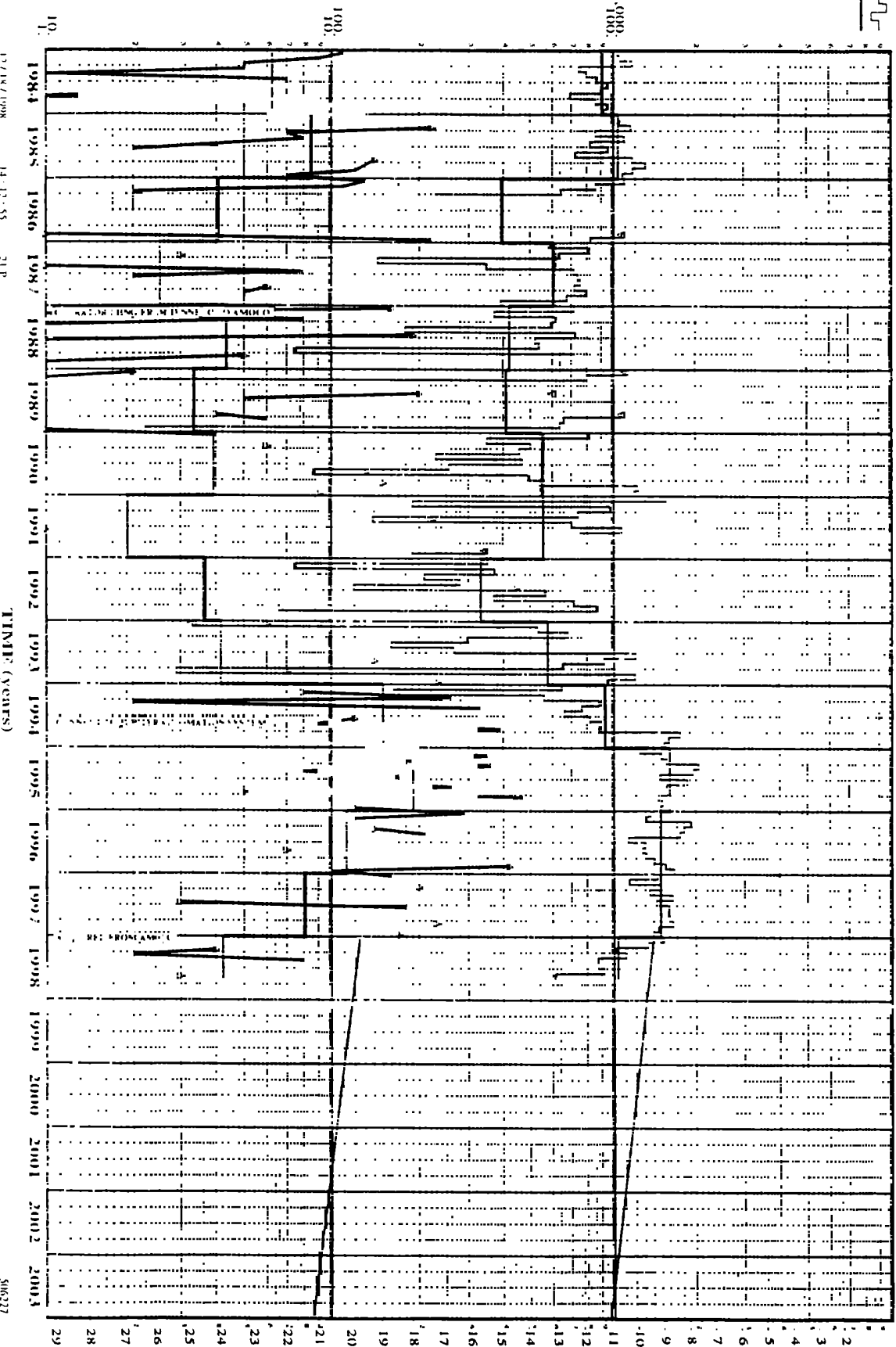
BOLACK C 11

CROSS TIMBERS  
BLANCO ( MESAVERDE )  
SAN JUAN, NEW MEXICO  
28K 27N 08W  
BGV  
CO  
506227  
SAN JUAN  
70084

M & L - 1/98 FORECAST JWP DLM CP-K-LDR

Run Date : 03/19/98  
Run Time : 10:40:44

GAS (mcf/m) V  
OIL (bbl/m) A



1/7/18/1998 14-17-55 21P

TIME (YEARS)

506227



**Cross Timbers Operating Company**

Re: Administrative Approval to Downhole Commingle  
Cross Timbers Operating Co.  
Bolack "C" LS #11  
1,800' FSL & 1,550' FWL Sec. 28, T27N, R08W  
San Juan County, New Mexico

Dear Offset Operator,

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

As an offset operator, 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.

<b><i>Burlington Resources Oil &amp; Gas</i></b>	Signature:
<b><i>Conoco Incorporated</i></b>	Signature:
<b><i>Western Oil &amp; Minerals Ltd.</i></b>	Signature:
<b><i>M &amp; G Drilling Co.</i></b>	Signature:
<b><i>Bledsoe Petro Corp.</i></b>	Signature:
<b><i>Breck Operating</i></b>	Signature:

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

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

2. Name of Operator  
Cross Timbers Operating Company

3a. Address 3b. Phone No. (include area code)  
2700 Farmington Ave., Bldg. K. Ste 1 Farmington, NM 87401

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
1,800' FSL & 1,550' FWL Sec 28, T27N, R08W

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 #11

9. API Well No.

3004506227

10. Field and Pool, or Exploratory Area  
S Blanco Pictured Cliffs  
Blanco Mesaverde

11. County or Parish, State

Sna Juan NM

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)

*JW Patton*

Title

Production Engineer

Date 2/19/99

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by */s/ Duane W. Spencer*

Team Lead, Petroleum Management

MAR - 1 1999

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.

Office

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**

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

2/28/07  
STATE OF NEW MEXICO  
OIL & GAS DIVISION

Re: Administrative Approval to Downhole Commingle  
Cross Timbers Operating Co.  
***Bolack "C" LS #11***  
1,800' FSL & 1,550' FWL Sec. 28, 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 South Blanco Pictured Cliffs 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 Pictured Cliffs being produced up the casing. Currently both the Mesaverde and Pictured Cliffs 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 & Pictured Cliffs 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.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

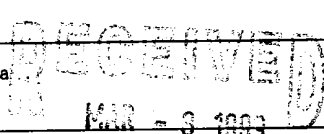
EXISTING WELLBORE

X YES NO

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

Block "C" LS #11 K 28 T27N 08W San Juan  
Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 167067 Property Code 022596 API NO. 3004506227  
Spacing Unit Lease Types: (check 1 or more)  
Federal X State (and/or) Fee

1. Pool Name and Pool Code	Upper Zone	Intermediate Zone	Lower Zone
S. Blanco Pictured Cliff 72439			blanco Mesaverue 72319
2. Top and Bottom of Pay Section (Perforations)	2222' - 2238'		4498' - 4652'
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) 227 psia (calc) b. (Original) 820 psia (calc)	a.  b. 1121 psia (calc)	a. 441 psia (calc) b. 1121 psia (calc)
6. Oil Gravity (°API) or Gas BTU Content)	1155 btu		1338 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 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: 02/10/99 Rates: 21 mcfpd 0 bwpd 0 bopd	Date: Rates: Date: Rates:	Date: Rates: Date: 02/10/99 Rates: 65 mcfpd 0 bwpd 0 bopd
8. Fixed Percentage Allocation Formula - % for each zone	Oil: 0 % Gas: 35 %	Oil: % Gas: %	Oil: 100 % Gas: 65 %

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? X Yes NO  
If not, have all working, overriding, and royalty interests been notified by certified mail? X Yes NO  
Have all offset operators been given written notice of the proposed downhole commingling? X Yes NO

11. Will cross-flow occur? Yes X 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? X Yes NO

13. Will the value of production be decreased by commingling? Yes X 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. X 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 TITLE DATE 2/19/99

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



## Well Location and Acreage Dedication Plat

Section A.

Date JANUARY 22, 1958

Operator EL PASO NATURAL GAS COMPANY Lease BOLACK SF 079232  
 Well No. 11-C (PM) Unit Letter K Section 28 Township 27-N Range 8-W NMPM  
 Located 1800 Feet From SOUTH Line, 1550 Feet From WEST Line  
 County SAN JUAN G. L. Elevation 6195 Dedicated Acreage 320 & 160 Acres  
 Name of Producing Formation MESA VERDE & PICTURED CLIFF Pool BLANCO MV & SOUTH BLANCO FC

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?  
 Yes X No \_\_\_\_\_
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes \_\_\_\_\_ No \_\_\_\_\_. If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

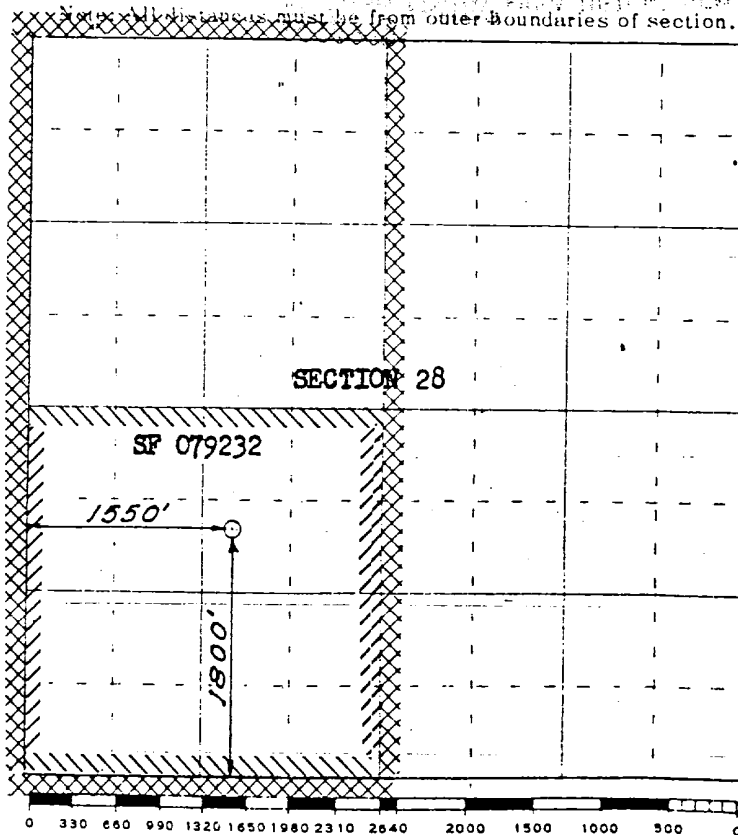
El Paso Natural Gas Company  
 (Operator)

Original Signed F. H. WOOD  
 (Representative)

Box 997  
 (Address)

Farmington, New Mexico

U. S. GEOLOGICAL SURVEY  
 WASHINGTON, D. C. 20540



This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Date Surveyed JANUARY 17, 1958

Farmington, New Mexico

David O. Wilson  
 Registered Professional Engineer and/or Land Surveyor

# Cross Timbers Oil Company

CO  
772439



BOLACKC  
CROSS TIMBERS  
BLANCO S ( PICTURED CLIFFS )  
SAN JUAN, NEW MEXICO  
28K 27N 08W  
BGV

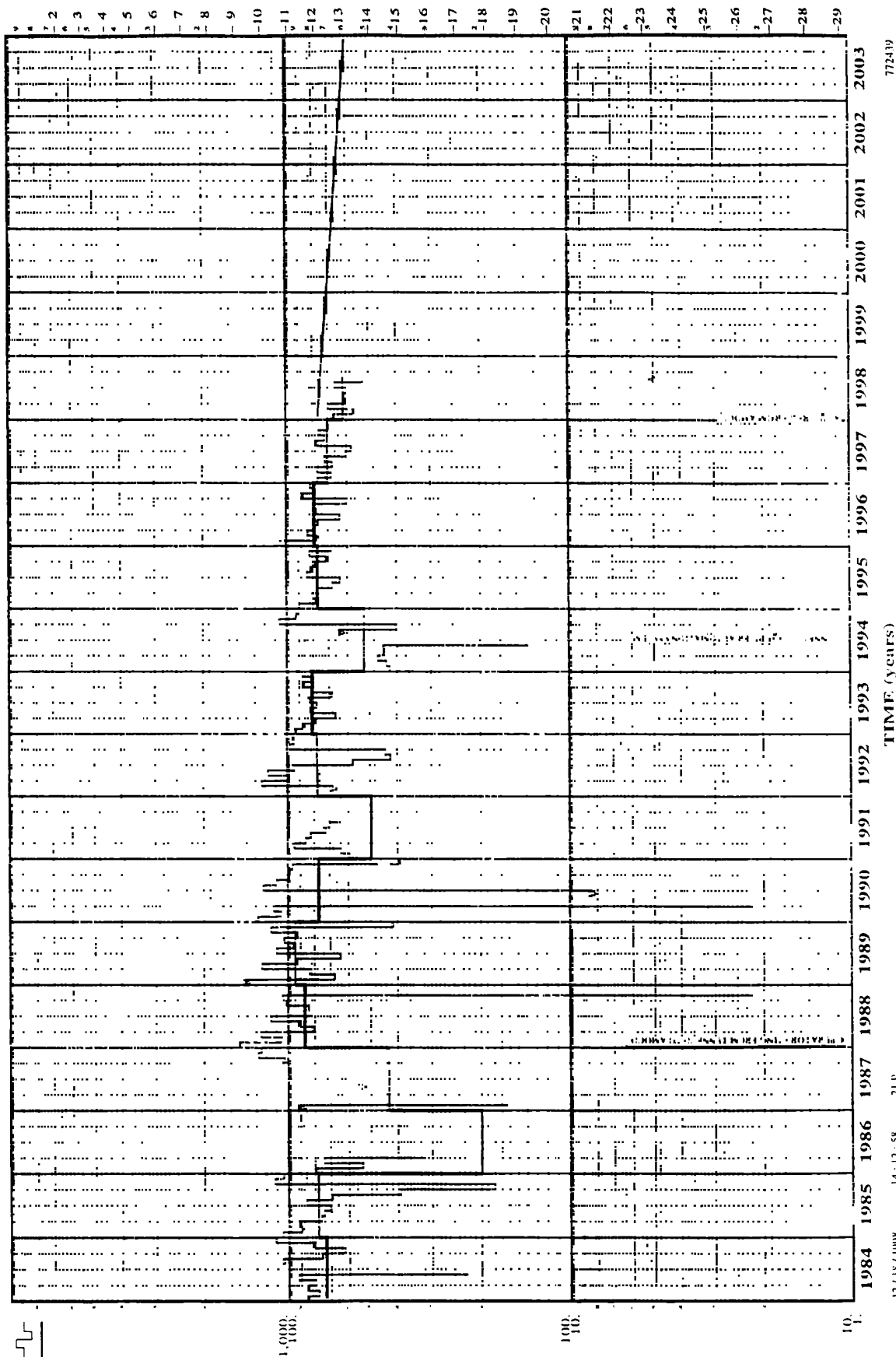
SAN JUAN  
70085

M & L - 1/98 FORECAST

JWP DLM CP-K-LDR

Run Date: 03/19/98  
Run Time: 10:40:55

GAS (mcf/dm)   
OIL (bbl/dm) 



TIME (years)

17 / 15 / 1998 14 : 12 : 58 21P

772439

# Cross Timbers Oil Company

BOLACK C 11

CROSS TIMBERS  
BLANCO ( MESAVERDE )  
SAN JUAN, NEW MEXICO  
28K 27N 08W  
BGV

CO  
506227

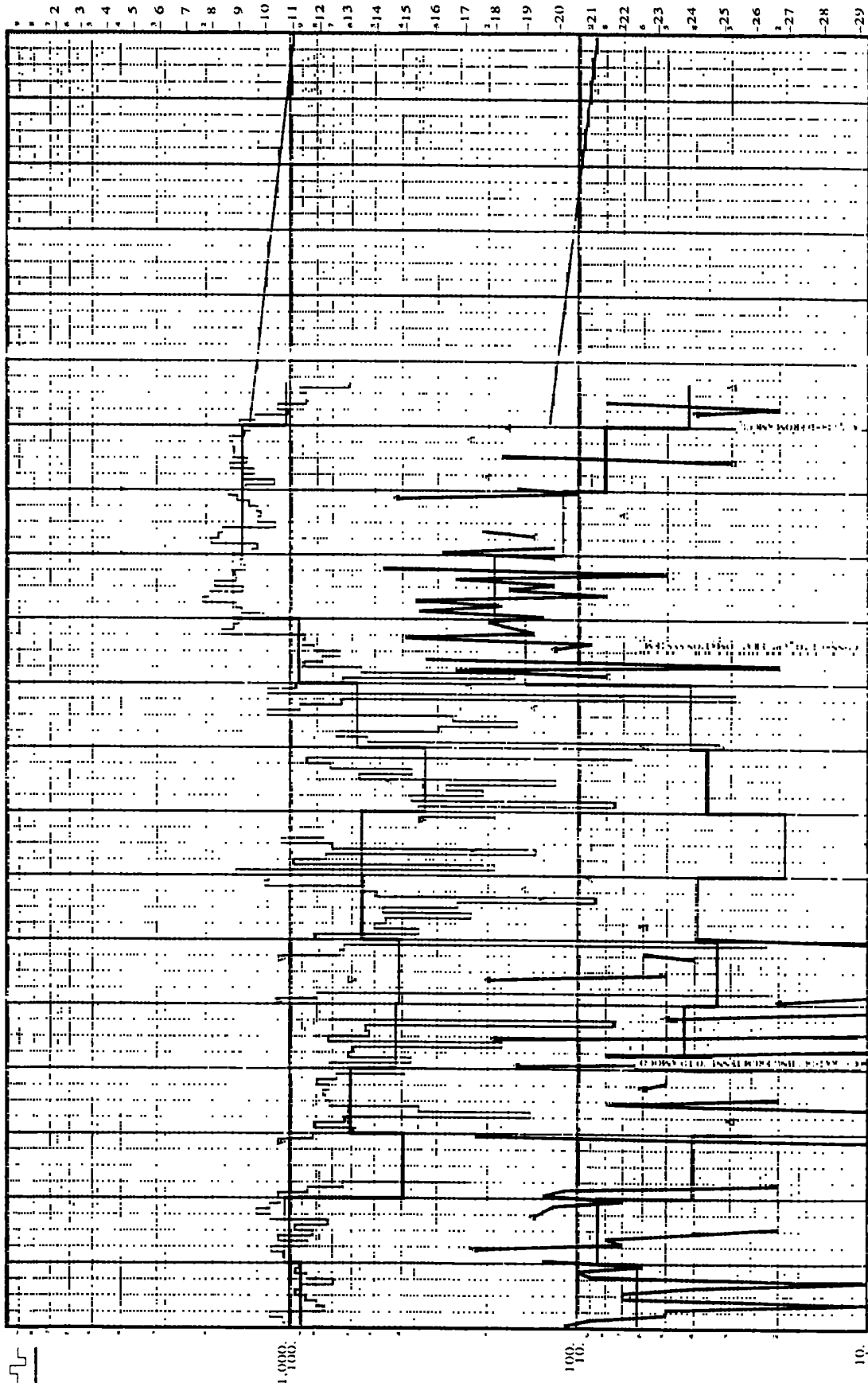
SAN JUAN  
70084

M & L - 1/98 FORECAST

JWP DLM CP-K-LDR

Run Date: 03/19/98  
Run Time: 10:40:44

GAS (mcf/mo) ▽  
OIL (bbl/mo) Δ



TIME (years)

13/1X/100K

14-13-55

21P

506227



## Cross Timbers Operating Company

Re: Administrative Approval to Downhole Commingle  
Cross Timbers Operating Co.  
Bolack "C" LS #11  
1,800' FSL & 1,550' FWL Sec. 28, T27N, R08W  
San Juan County, New Mexico

Dear Offset Operator,

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

As an offset operator, 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.

<b><i>Burlington Resources Oil &amp; Gas</i></b>	Signature:
<b><i>Conoco Incorporated</i></b>	Signature:
<b><i>Western Oil &amp; Minerals Ltd.</i></b>	Signature:
<b><i>M &amp; G Drilling Co.</i></b>	Signature:
<b><i>Bledsoe Petro Corp.</i></b>	Signature:
<b><i>Breck Operating</i></b>	Signature: