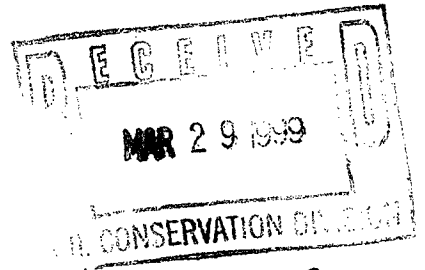




Cross Timbers Operating Company

DHC 4/19/99



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 #9
1,650' FNL & 990' FEL Sec. 31, 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 (original C-128)
3. Production curves for both the Mesaverde & Dakota 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 875054-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

Cross Timbers Operating Company

Operator

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

Address

Bolack "C" LS

Lease

#9

Well No.

H

Unit Ltr. - Sec - Twp - Rge

Sec 31

T27N

R08W

County

OGRID NO. 167067

Property Code 022596

API NO. 3004506152

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	S Blanco Pictured Cliffs 71439		Blanco Mesaverde 72319
2. Top and Bottom of Pay Section (Perforations)	2,018'-2,070' (perf'd)		4,330'-4,420' (perf'd)
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	flowing		flowing
5. Bottomhole Pressure	a. (Current)	a.	a.
Oil Zones - Artificial Lift: Estimated Current	189 psia (calc)		336 psia (calc)
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	693 psia (calc)		1,078 psia (calc)
6. Oil Gravity (^o API) or Gas BTU Content)	1105 btu		1271 btu / 48.1 gravity
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:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Rates:	Rates:	Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: 3-20-99	Date: 3-20-99	Date: 3-20-99
	Rates: 5 mcfpd, 0 bopd, 0 bwpd	Rates:	Rates: 101 mcfpd, 1 bopd, 0 bwpd
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 0% Gas: 8%	Oil: % Gas: %	Oil: 100% Gas: 92%

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 ☐ 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 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

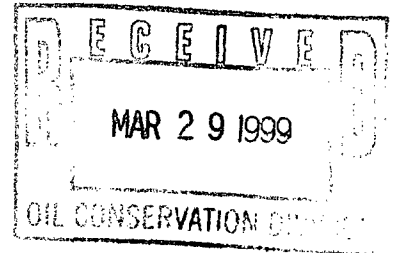


TITLE Production Engineer

DATE 3-22-99

TYPE OR PRINT NAME Jeffery W Patton

TELEPHONE NO. (505) 324-1090

**Cross Timbers Operating Company**

Re: Administrative Approval to Downhole Commingle
Cross Timbers Operating Co.
Bolack "C" LS #9
1,650' FNL & 990' FEL Sec. 31, T27N, R08W
San Juan County, New Mexico

Dear Offset Operator,

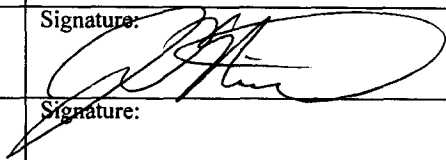
As an offset operator to the above mentioned well, you are hereby notified that Cross Timbers Operating Co is filing for downhole commingle approval.

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 appreciates your prompt response concerning this approval.

Burlington Resources Oil & Gas	Signature:
Energen Resources	Signature: 
Greystone Energy Inc.	Signature:
Roddy Productions	Signature:



Cross Timbers Operating Company

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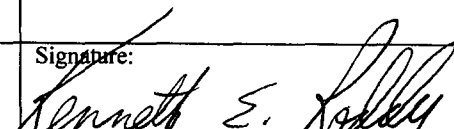
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Energen Resources	Signature:
Greystone Energy Inc.	Signature:
Roddy Productions	Signature: 

NEW MEXICO
OIL CONSERVATION COMMISSION

10-10-123

WELL LOCATION AND/OR GAS PRORATION PLAT

DATE APRIL 8, 1957

OPERATOR EL PASO NATURAL GAS COMPANY LEASE BOLACK "C" SF 079232

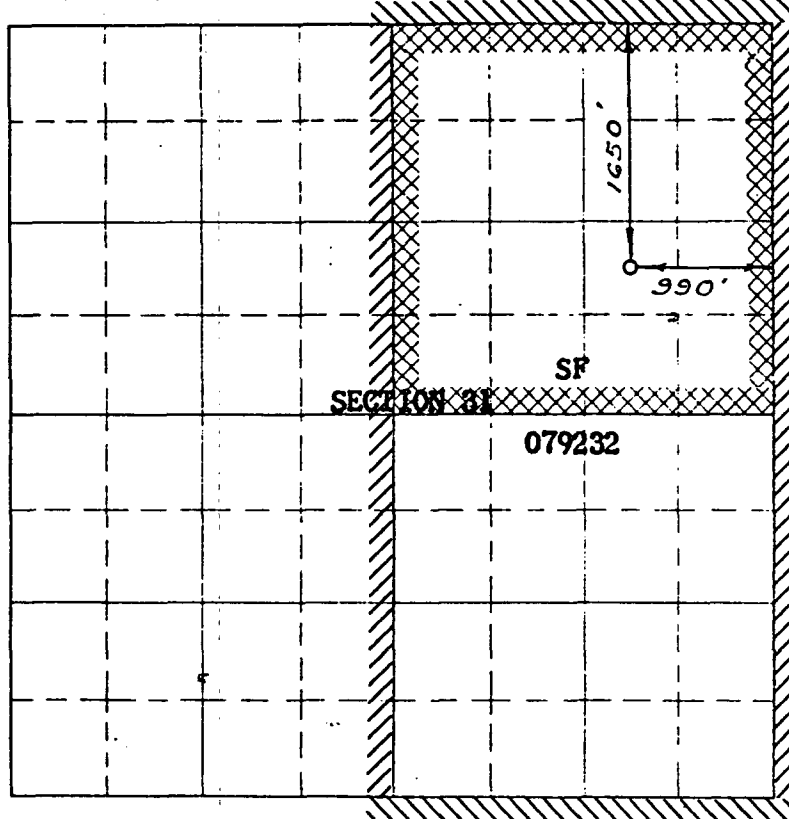
WELL NO. 9 (PM) SECTION 31 TOWNSHIP 27 N RANGE 8 W NEPM

LOCATED 1650 FEET FROM NORTH LINE 990 FEET FROM EAST LINE

SAN JUAN COUNTY, NEW MEXICO 6116 ELEVATION

NAME OF PROPRRIETOR P.C. & M.V. BALLARD EXT. PC 160 AC. PC
BLANCO MV 320 AC. MV
(1882 PLAT)

Note: All distances must be from outer boundary of section.



Scale 1 inch equals 1 mile

NOTE

This section of form is to be used for gas wells only

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.

Date Surveyed FEBRUARY 12, 1957

E. O. Walker
Registered Professional Engineer and/or Land Surveyor



1. Is this well a Dual Comp.

Yes X No

2. If the answer to Question 1 is yes, are there any other dually completed wells within the dedicated acreage.

Yes No X

Name OR G NAL SIGNED E. S. OBERLY

Position Petroleum Engineer

Representing El Paso Natural Gas

Address Box 997, Farmington, N.M.



Cross Timbers Operating Company

Bolack "C" LS #9

Offset Operator / Ownership Plat

Blanco Mesaverde / South Blanco Pictured Cliffs

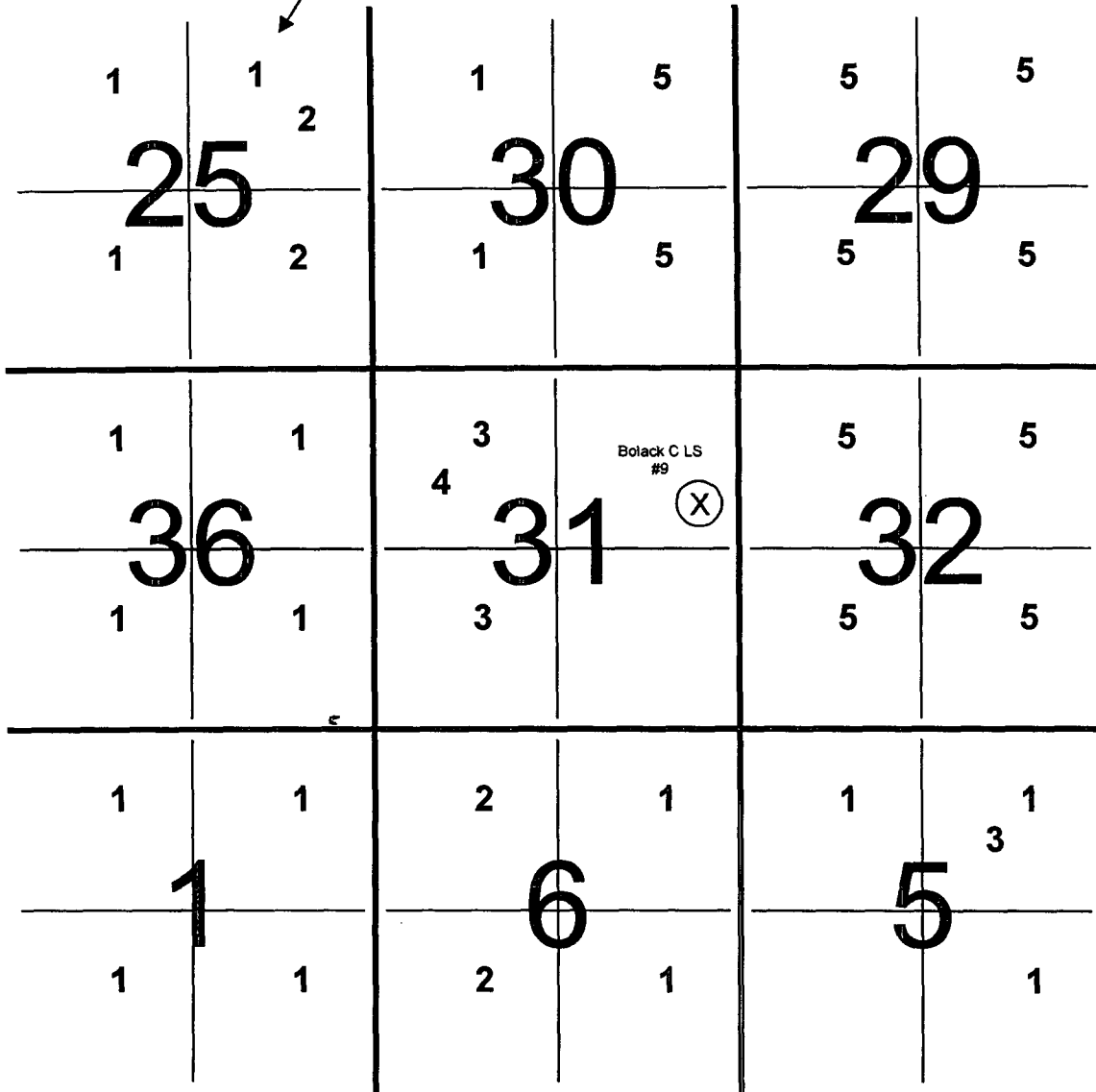
Downhole Commingle

1. Burlington Resources Oil & Gas Company
3535 E. 30th St.
Farmington, NM 87402
2. Energen Resources
2198 Bloomfield Hwy
Farmington, NM 87401
3. Greystone Energy
5802 Hwy 64
Farmington, NM. 87401
4. Roddy Production
P.O. Box 2221
Farmington, NM 87499
5. Cross Timbers Operating Co.
6001 E. Hwy 64
Farmington, NM 87401



Cross Timbers Operating Company

OFFSET OPERATOR AS
INDICATED ON THE
PREVIOUS PAGE



T27N, R09W	T27N, R08W
T26N, R09W	T26N, R08W



Cross Timbers Operating Company

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2040 South Pacheco Street
Santa Fe, New Mexico 87505

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Burlington Resources Oil & Gas	Signature:
Energen Resources	Signature:
Greystone Energy Inc.	Signature:
Roddy Productions	Signature:

Cross Timbers Oil Company

BOLACKC 9

CROSS TIMBERS
BLANCO (MESAVERDE)
SAN JUAN, NEW MEXICO



SAN JUAN
70103

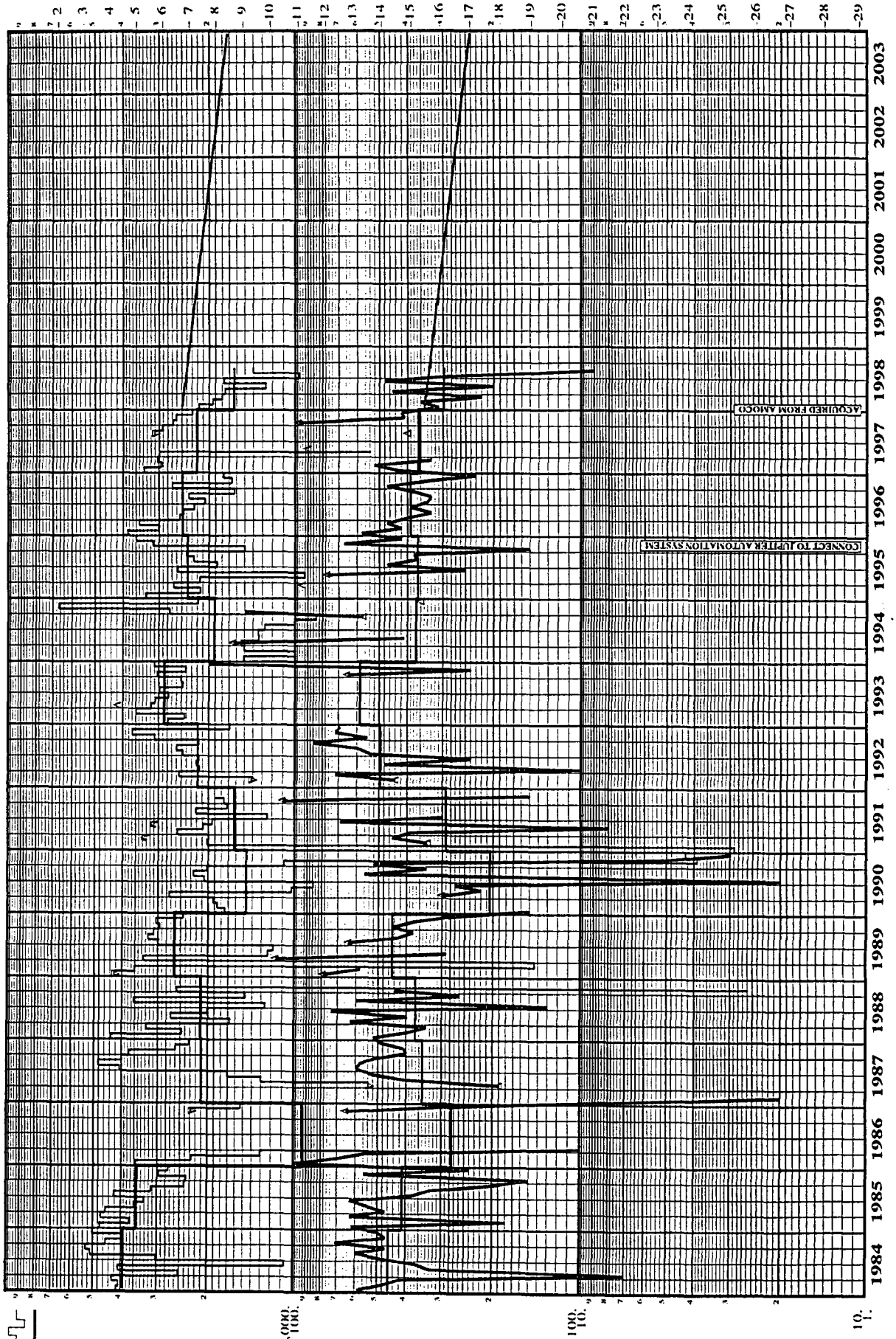
31H 27N 08W
BGV

CO
506152

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

Run Date : 03/19/98
Run Time : 10:44:27

GAS (mcf/mmo) 
OIL (bbl/mmo) 



Cross Timbers Oil Company

BOLACK C 9

**CROSS TIMBERS
BLANCO S (PICTURED CLIFFS)
SAN JUAN, NEW MEXICO**

SAN JUAN
70104

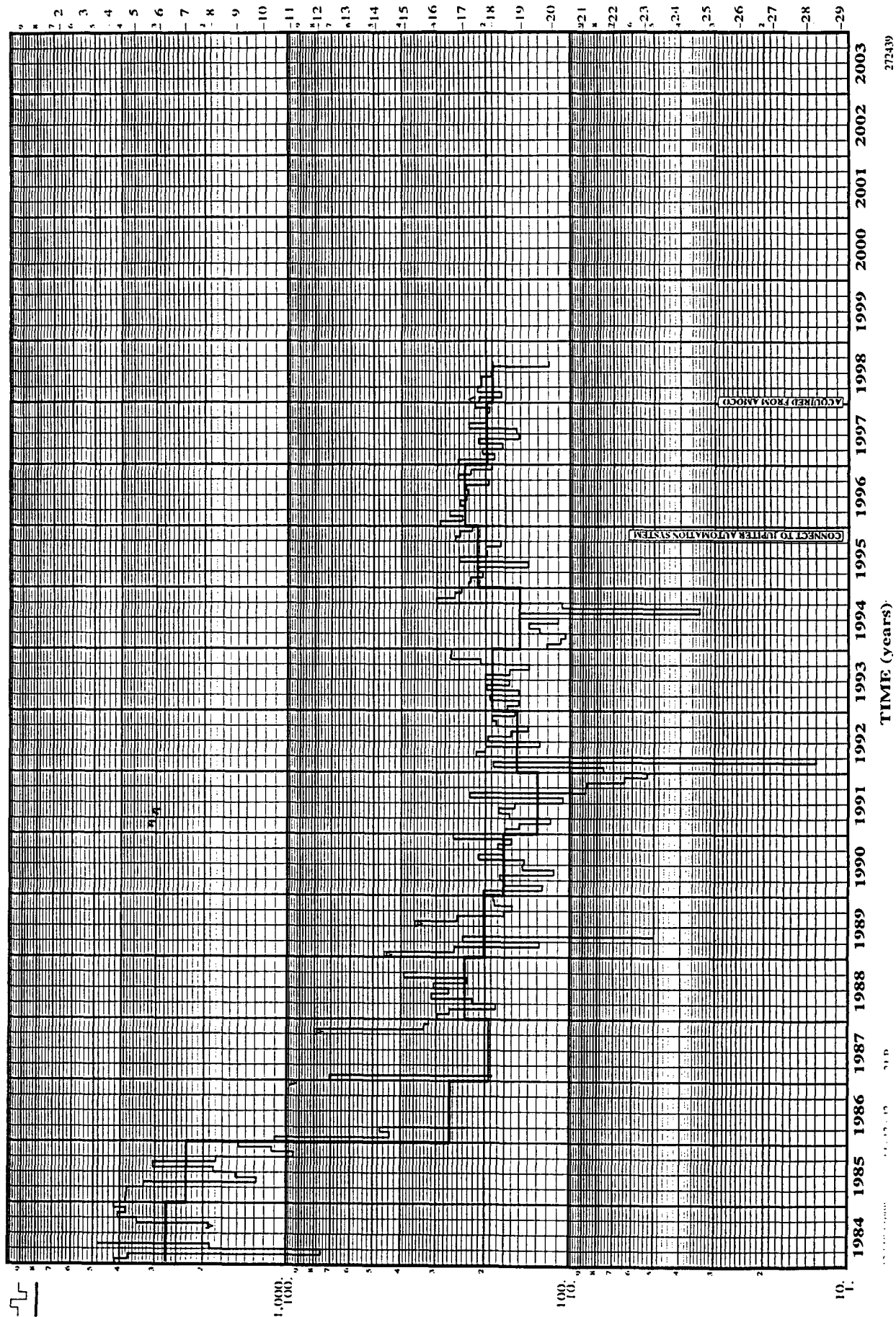
CO
272439

JWP DLM CP-K-LDR

M & L - 1/98 FORECAST

Run Date : 03/19/98
Run Time: 10:44:38

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



TIME (years).

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