

5/29/98	6/18/98	DC	KV	DHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION  
- Engineering Bureau -

1981

ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS

Application Acronyms:

[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location]  
[DD-Directional Drilling] [SD-Simultaneous Dedication]  
[DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
[PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
[WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
[SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

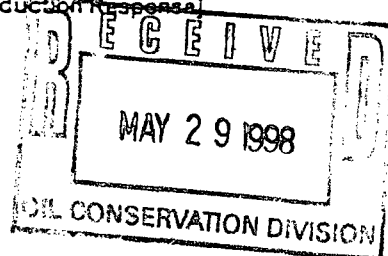
[1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Directional Drilling  
☐ NSL ☐ NSP ☐ DD ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ CLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR



[2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ Does Not Apply

- [A] ☒ Working, Royalty or Overriding Royalty Interest Owners  
[B] ☒ Offset Operators, Leaseholders or Surface Owner  
[C] ☐ Application is One Which Requires Published Legal Notice  
[D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or,  
[F] ☐ Waivers are Attached

[3] INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

Note: Statement must be completed by an individual with supervisory capacity

RICHARD CORCORAN  
Print or Type Name

Richard Corcoran  
Signature

DISTRICT LANDMAN  
Title

5-27-98  
Date



**TAURUS EXPLORATION, INC.**  
2198 Bloomfield Highway  
Farmington, New Mexico 87401  
Telephone (505) 325-6800

May 27, 1998

Lori Wrotenbery, Director  
New Mexico Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

RE: Administrative Approval to Downhole Commingle  
San Juan 32-5 Unit # 17M Well  
627' FSL, 1517' FEL, Sec. 26, T32N, R6W  
Rio Arriba County, New Mexico

Dear Ms. Wrotenbery:

Taurus Exploration U.S.A., Inc. hereby requests administrative approval to downhole commingle the Blanco Mesaverde and Basin Dakota pools in the captioned well.

The subject well is being proposed as a commingled well to economically recover gas from both zones of the underlying proration unit. As this is to be a newly drilled well, we propose the attached allocation method. Field rules and the San Juan 32-5 Unit Operating Agreement, to which this well is dedicated provide for 320 acre spacing units for both the Blanco Mesaverde and Basin Dakota formations.

To comply with New Mexico Oil Conservation Rules, Taurus Exploration U.S.A., Inc. is submitting the following data for your approval of the proposed commingling:

1. C107A - Application for Downhole Commingling
2. C102 - Location plat showing each spacing unit and dedicated acreage
3. Economics and production curves for Mesaverde and Dakota
4. Offset Operator Plat
5. Well location plat
6. Proposed Allocation Method

In accordance to New Mexico Oil Conservation Division Rule 303C, all offset operators are being notified of this application by certified mail.

If there should be any questions concerning this matter, please contact me.

Sincerely,

Richard P. Corcoran  
District Landman

RPC/df

cc: NMOCD-Aztec, BLM-Farmington, Offset Operators, Interest Owners  
F:\LAND\COMMINGL\32517MOC.WPD

**TAURUS**

**TAURUS EXPLORATION, INC.**  
2198 Bloomfield Highway  
Farmington, New Mexico 87401  
Telephone (505) 325-6800

May 27, 1998

To: Interest Owners and Offset Operator  
San Juan 32-5 Unit #17M Well  
627' FSL, 1517' FEL, Sec. 26 T32N, R6W  
Rio Arriba County, New Mexico

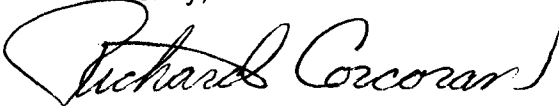
Dear Interest Owner:

Attached is a copy of our application to the NMOCD requesting administrative approval to downhole commingle the Blanco Mesaverde and Basin Dakota formations of the captioned well.

As an interest owner if you have objections to this proposal you should notify the NMOCD at 2040 South Pacheco, Santa Fe, New Mexico 87505 within 20 days of the date of this letter, with a copy to our letterhead address. If you do not have an objection, no response is necessary.

If there should be any questions, please let me know.

Sincerely,



Richard P. Corcoran  
District Landman

RPC/df  
Enclosure

## 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

Taurus Exploration U.S.A., Inc. 2198 Bloomfield Highway, Farmington, New Mexico 87401

Operator Address

San Juan 32-5 17M N Sec. 26 T32N R6W Rio Arriba

Lease Well No. Unit Ltr. - Sec - Twp - Rge County

OGRID NO. 16928 Property Code API NO. 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	Blanco Mesa Verde 72319		Basin Dakota 71599
2. Top and Bottom of Pay Section (Perforations)	4421-5823		7864-8013
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	Not drilled yet		Not drilled yet
Gas & Oil - Flowing: Measured Current	b. (Original)	b.	b.
All Gas Zones: Estimated Or Measured Original	1100		1400
6. Oil Gravity ( <sup>o</sup> API) or Gas BTU Content)	1000		974
7. Producing or Shut-In?	Not yet complete		Not yet complete
Production Marginal? (yes or no)	Yes (dual uneconomical)		Yes (dual uneconomical)
* If Shut-In, give date and oil/gas/water rates of last production	Date: n/a Rates:	Date: Rates:	Date: n/a 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: n/a Rates:	Date: Rates:	Date: n/a Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

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. 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 Richard P. Corcoran TITLE District Landman DATE 4/29/98TYPE OR PRINT NAME Richard P. Corcoran TELEPHONE NO. ( 505 ) 325-6800

District I  
171 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> APT Number	<sup>1</sup> Pool Code 72319/71599	<sup>1</sup> Pool Name Blanco Mesa Verde/Basin Dakota
<sup>4</sup> Property Code	<sup>3</sup> Property Name SAN JUAN 32-5 UNIT	<sup>6</sup> Well Number 17M
<sup>7</sup> OGRID No.	<sup>5</sup> Operator Name TAURUS EXPLORATION U.S.A, Inc.	<sup>8</sup> Elevation 6377'

<sup>10</sup> Surface Location

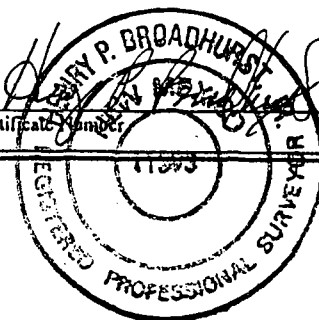
UL, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	26	32N	6W		627	SOUTH	1517	WEST	RIO ARRIBA

<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 320	<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

16	N 89-44 W 5464.14'	N 00-55 E 2648.58'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Gary W. Brink Printed Name Production Superintendent Title  Date
SEC 26		N 00-26 E 2601.06'	18 SURVEYOR CERTIFICATION 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.  3/25/98 Date of Survey Signature and Seal of Professional Surveyor:  Certificate Number 11593
1517'			
627'	S 89-20 W 2632.74'	N 89-25 W 2657.82'	

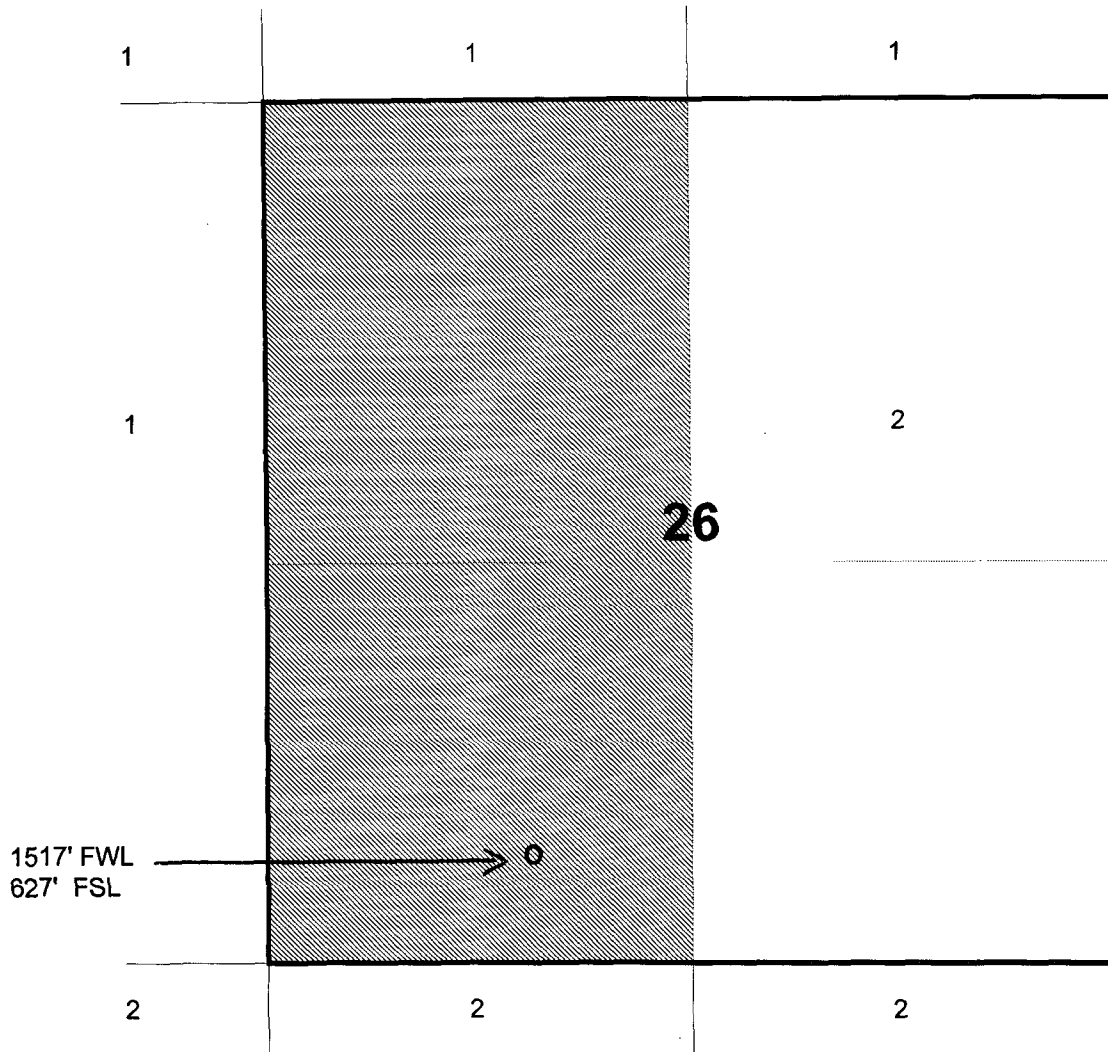


# Taurus Exploration U. S. A., Inc.

San Juan 32-5 Unit 17M  
OFFSET OPERATOR \ OWNER PLAT

Commingle Dakota \ Mesa Verde Formations

Township 32 North - Range 6 West



1. Taurus Exploration U S A, Inc.
2. Williams Production Company

**TAURUS EXPLORATION**  
**SAN JUAN 32-5 UNIT #17M**  
SE/4 SW/4 SEC. 26, T. 32 N., R. 6 W., N.M.P.M.,  
RIO ARriba COUNTY, NEW MEXICO.

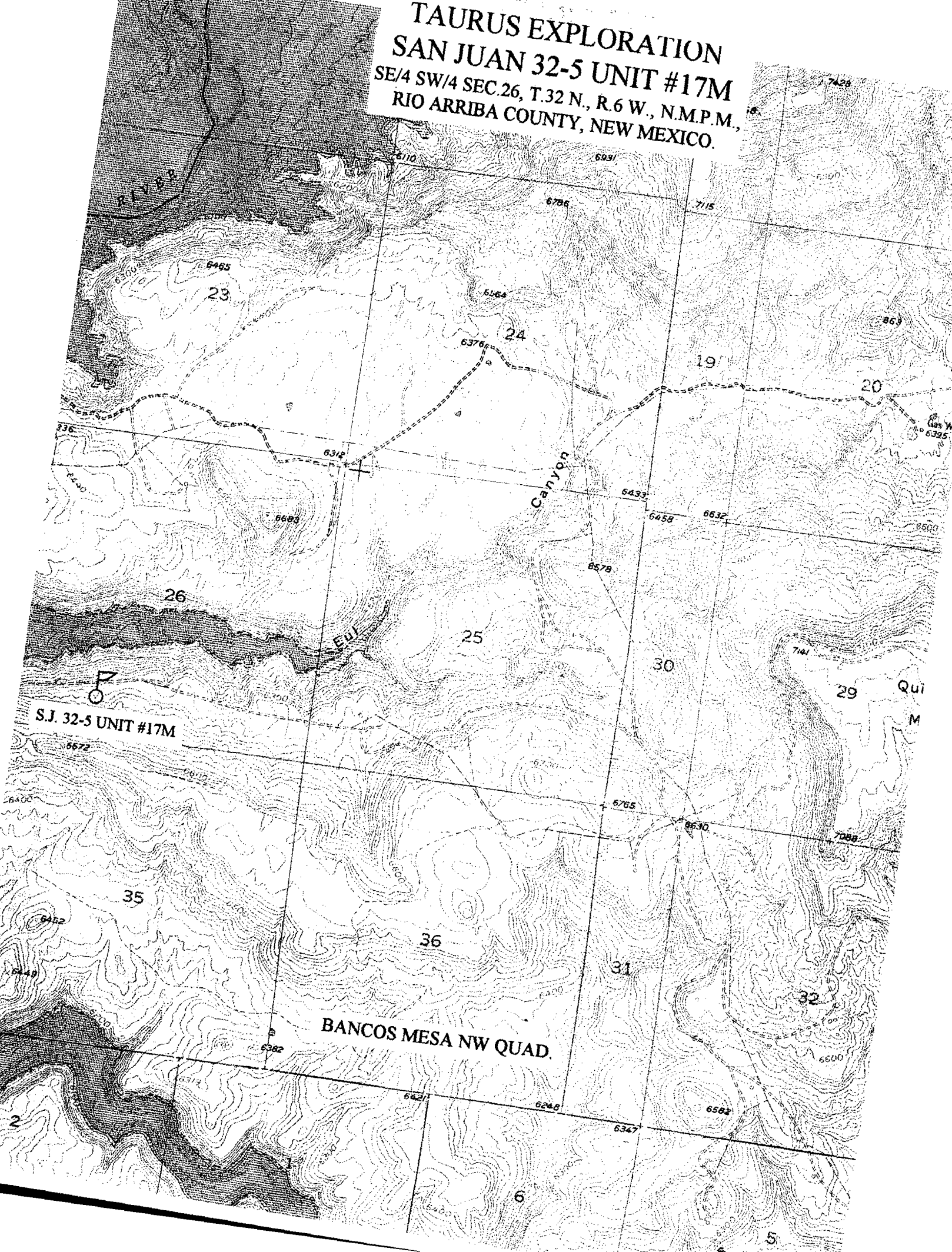


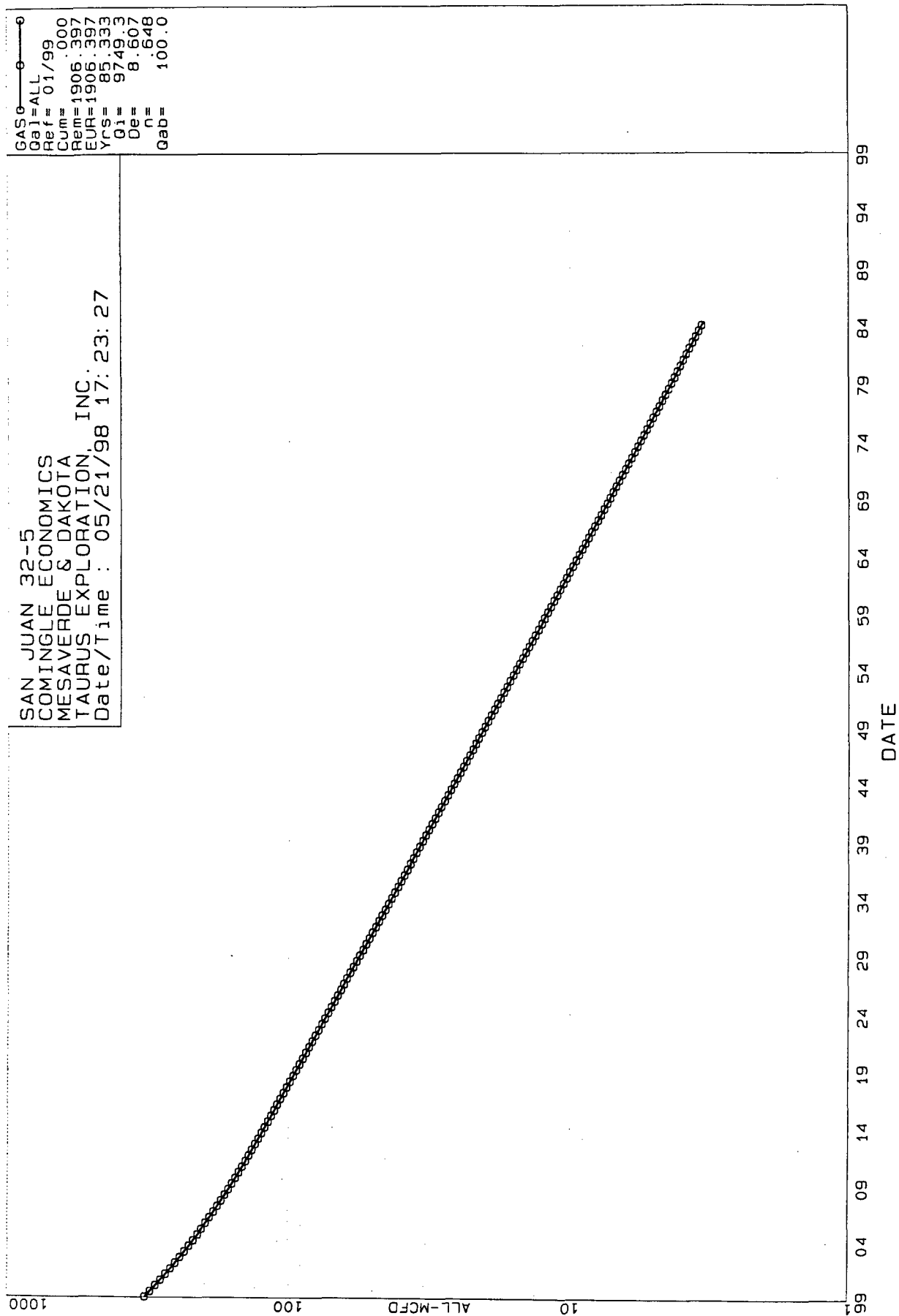
Figure # 1

## SAN JUAN 32-5 UNIT ECONOMICS

ASSUMPTIONS	COMMINGLE	DUAL
INITIAL WELL COSTS	\$ 685,000	\$ 795,000
INITIAL RATE	350 MCFD	320 MCFD
DECLINE RATE	6 %	6 %
OPERATING COST	\$ 800 /MO	\$ 800 /MO
WORKING INTEREST	0.98	0.98
NET REVENUE	0.76	0.76
BTU VALUE	1100	1100
GAS PRICE	\$ 2.00 / MCF	\$ 2.00 / MCF
PRICE DIFFERENTIAL	-\$ 0.30/ MCF	-\$ 0.30/ MCF
PROCESSING PLANT	IGNACIO	IGNACIO
LIQUID YIELD	1.53 GAL / MCF	1.53 GAL / MCF
LIQUID PRICE	\$ 0.18 / GAL	\$ 0.18 / GAL
RECOVERABLE RESERVES	1.9 BCF	1.7 BCF
PROJECT IRR	20.6 %	14.8 %



FIGURE 2



SAN JUAN 32-5  
 COMINGLE ECONOMICS  
 DAKOTA  
 TAURUS EXPLORATION, INC.  
 Date/Time : 05/21/98 17:21:05

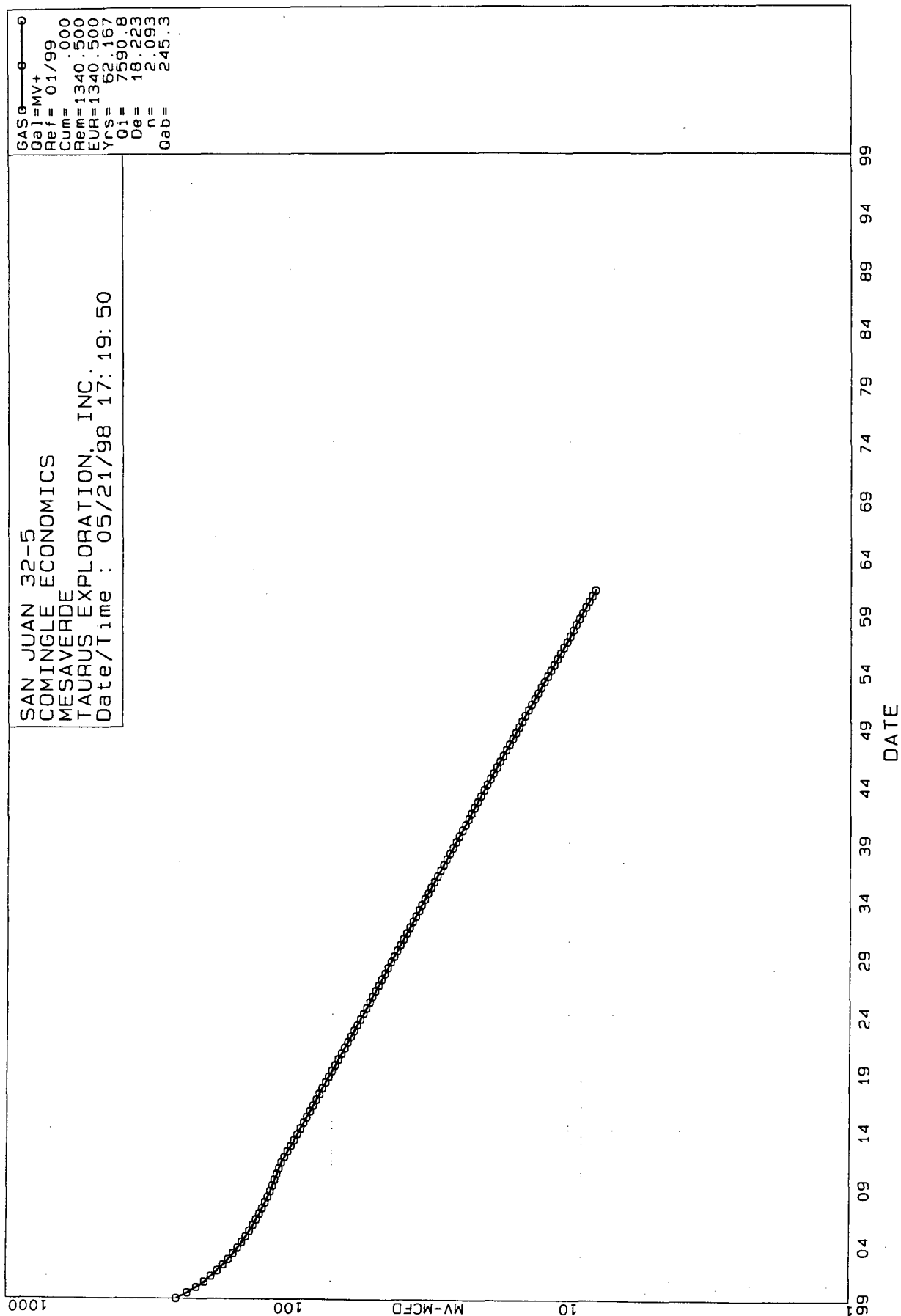
GAS 0  
 Gal=DK  
 Ref= 01/99  
 Cum= .000  
 Rem= 593.418  
 EUR= 593.418  
 Yrs= 80.750  
 G1= 3044.0  
 De= 20.000  
 n= 4.000  
 Gab= 40.6

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99 04 09 14 19 24 29 34 39 44 49 54 59 64 69 74 79 84 89 94 99  
 DATE

GAS
Qal=DK
Ref=01/99
Cum=.000
Rem=593.418
EUR=593.418
YRS=80.750
Qi=3044.0
De=20.000
n=4.000
Qab=40.6

FIGURE 4



## **RECOMMENDED ALLOCATION METHOD**

1. Complete both Mesa Verde and Dakota intervals.
2. Clean out well to total depth with air and test combined flowstream.
3. Run RBP and set above Dakota interval. flow test Mesa Verde Zone.
4. Remove RBP and finalize completion.
5. Report flow test data to NMOCD Aztec district office.
6. Allocate Production as follows:

$$MV = MV \text{ test rate} / \text{Total combined rate}$$

$$Dk = \text{Total combined rate} - MV \text{ test rate} / \text{Total combined rate}$$