

5/29/98	6/18/98	DC	MV	ΔHC
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ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1982

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

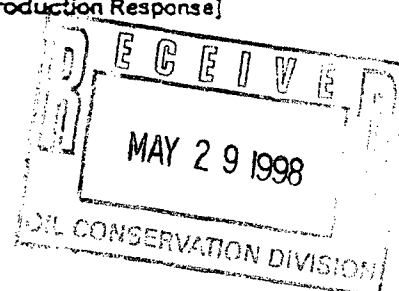
Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement

☒ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ 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 Engineer 5-27-98

Title

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 # 19 Well
1169' FNL, 1173' FWL, Sec. 25, 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\32519OCD.WPD



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 #19 Well
1169' FNL, 1173' FWL, Sec. 25 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,

A handwritten signature in black ink, reading "Richard P. Corcoran". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

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

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

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

Lease San Juan 32-5 Unit Well No. 19 Unit Ltr. - Sec - Twp - Rge D Sec. 25 T32N R6W County Rio Arriba

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)	4327-5729		7770-7919
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) Not drilled yet b. (Original) 1100 psi	a. b.	a. Not drilled yet b. 1200 psi
6. Oil Gravity (^o API) or Gas BTU Content)	1000		974
7. Producing or Shut-In?	Not yet completed		Not yet completed
Production Marginal? (yes or no)	Yes (dual uneconomical)		Yes (dual uneconomical)
* 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	Date: n/a Rates:	Date: Rates:	Date: n/a Rates:
* 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 ☐ 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 Richard P. Corcoran TITLE District Landman DATE 4/29/98

TYPE OR PRINT NAME Richard P. Corcoran TELEPHONE NO. (505) 325-6800

District I
 PO 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

1. API Number		2. Pool Code 72319/71599		3. Pool Name Blanco Mesa Verde/Basin Dakota	
4. Property Code		5. Property Name SAN JUAN 32-5 UNIT			6. Well Number 19
7. OGRID No.		8. Operator Name TAURUS EXPLORATION U.S.A., Inc.			9. Elevation 6283

10. Surface Location

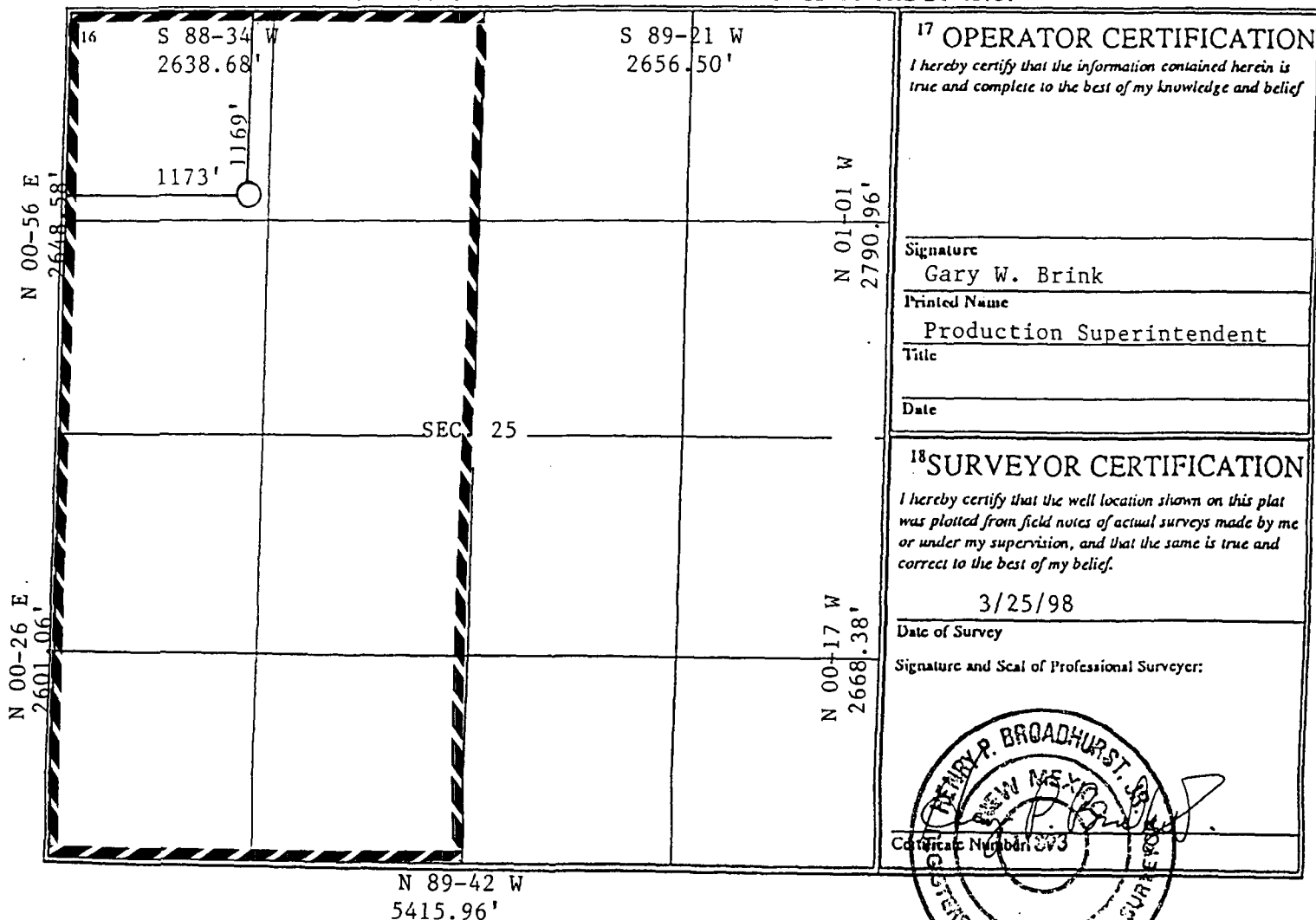
UL, or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	25	32N	6W		1169	NORTH	1173	WEST	RIO ARriba

11. 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

12. Dedicated Acres 320	13. Joint or Infill	14. Consolidation Code	15. Order No.
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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



17. OPERATOR CERTIFICATION

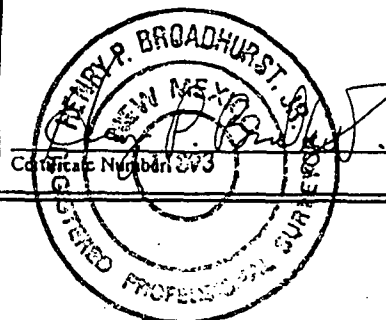
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature
 Gary W. Brink
 Printed Name
 Production Superintendent
 Title
 Date

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:

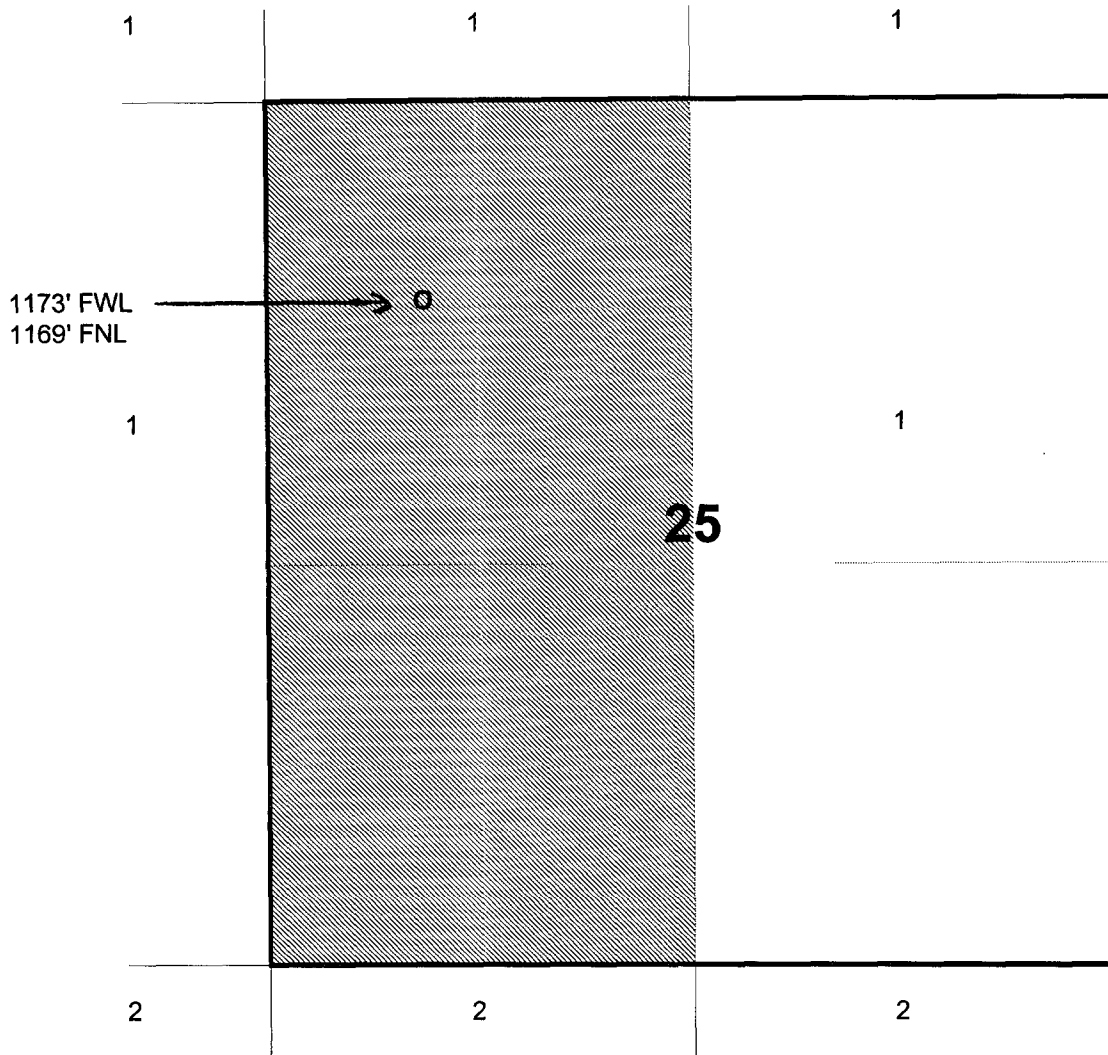


Taurus Exploration U. S. A., Inc.

San Juan 32-5 Unit 19
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

NW NW/4 SEC.25, SW/4 SW/4 SEC.24, T.32 N., R.6 W., N.M.P.M.,
RIO ARriba COUNTY, NEW MEXICO.

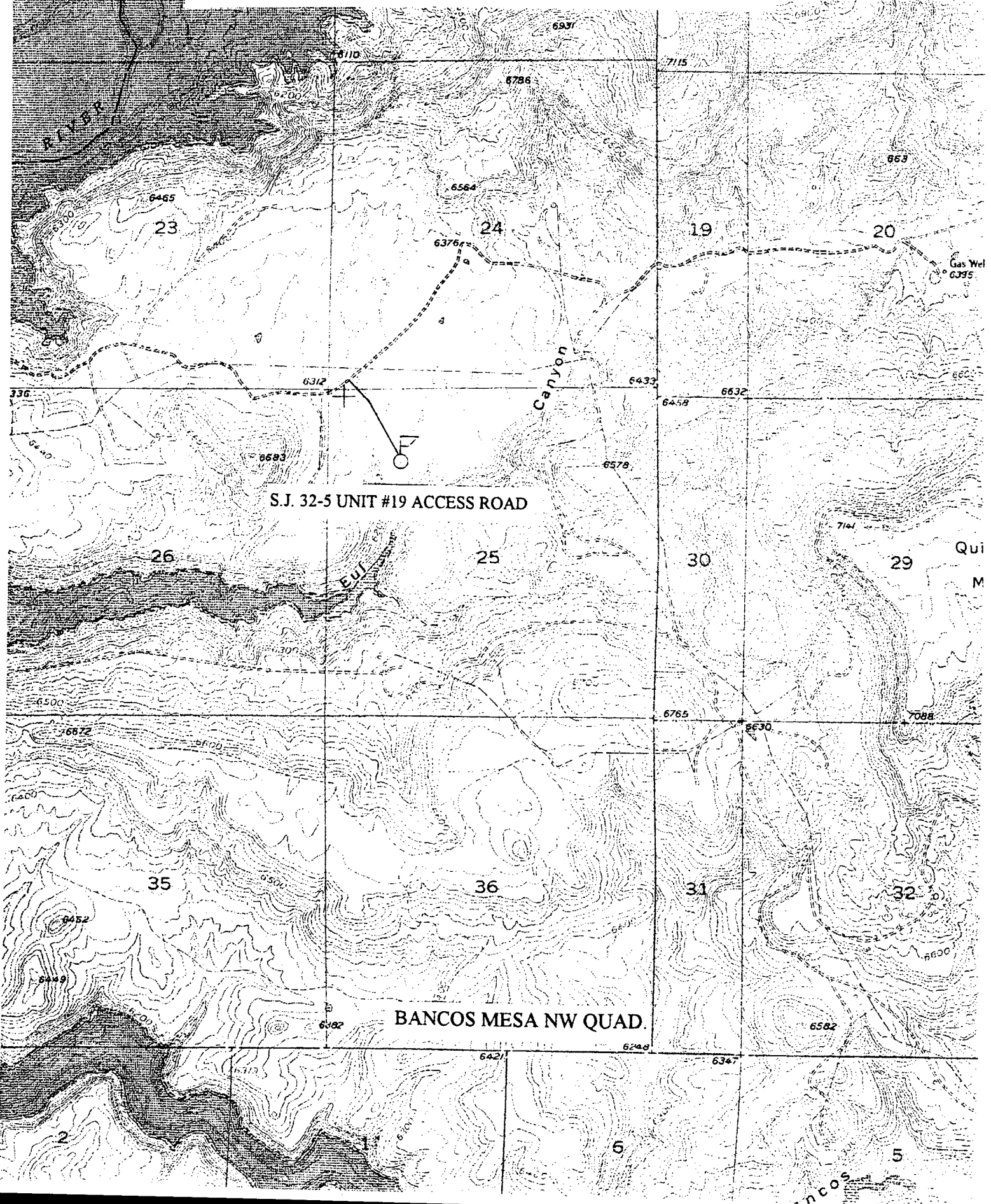
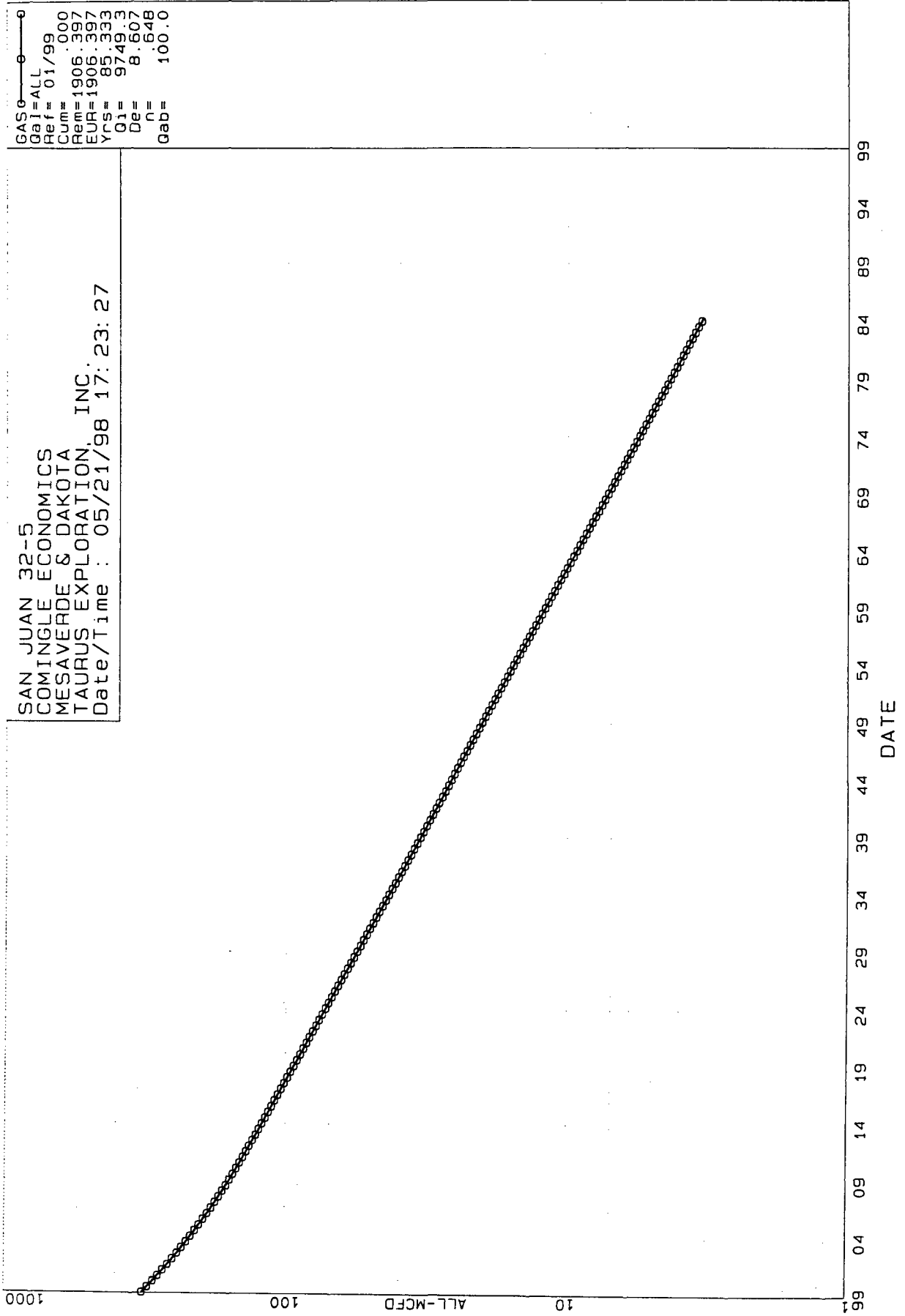


Figure # 1

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 G=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

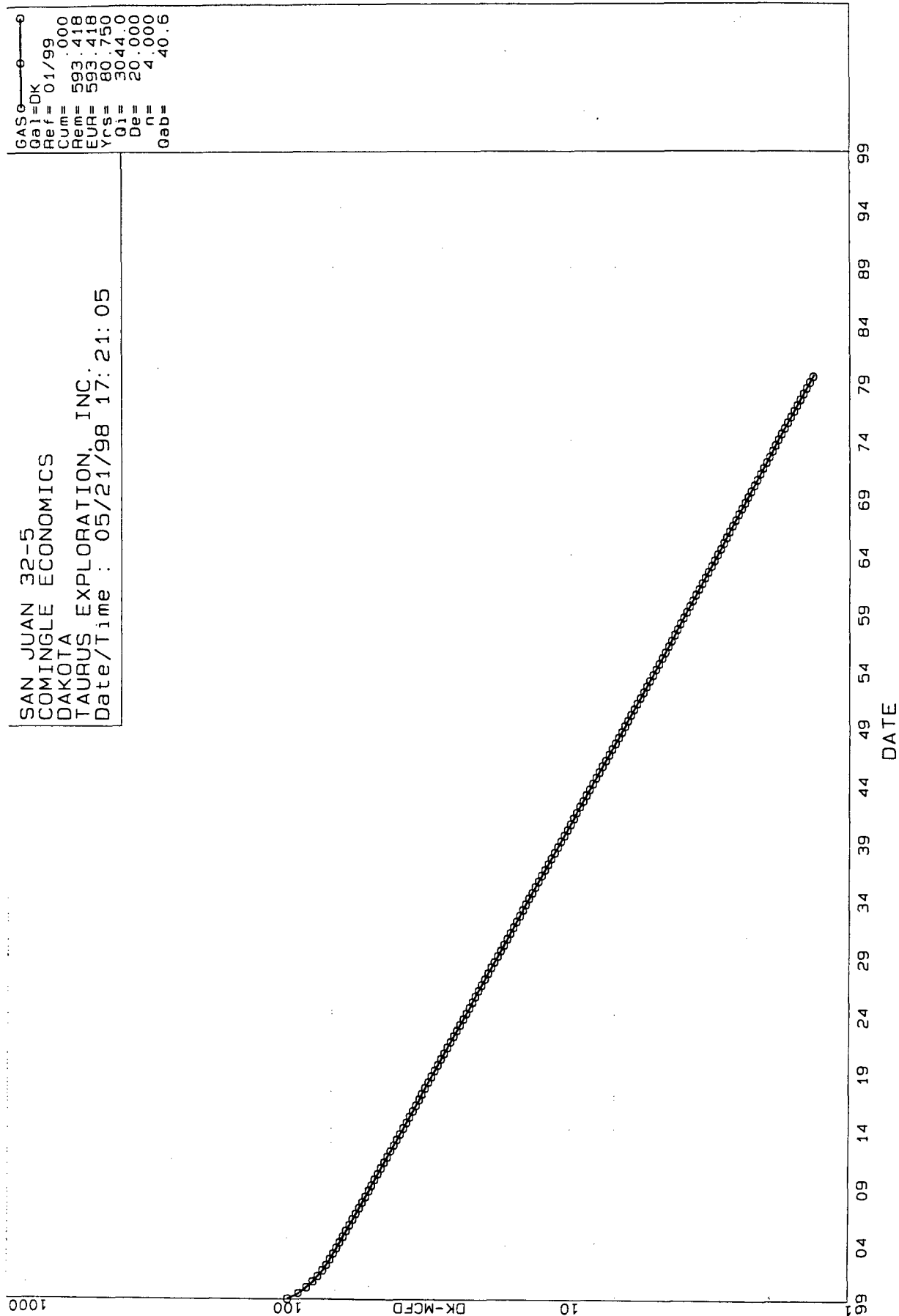
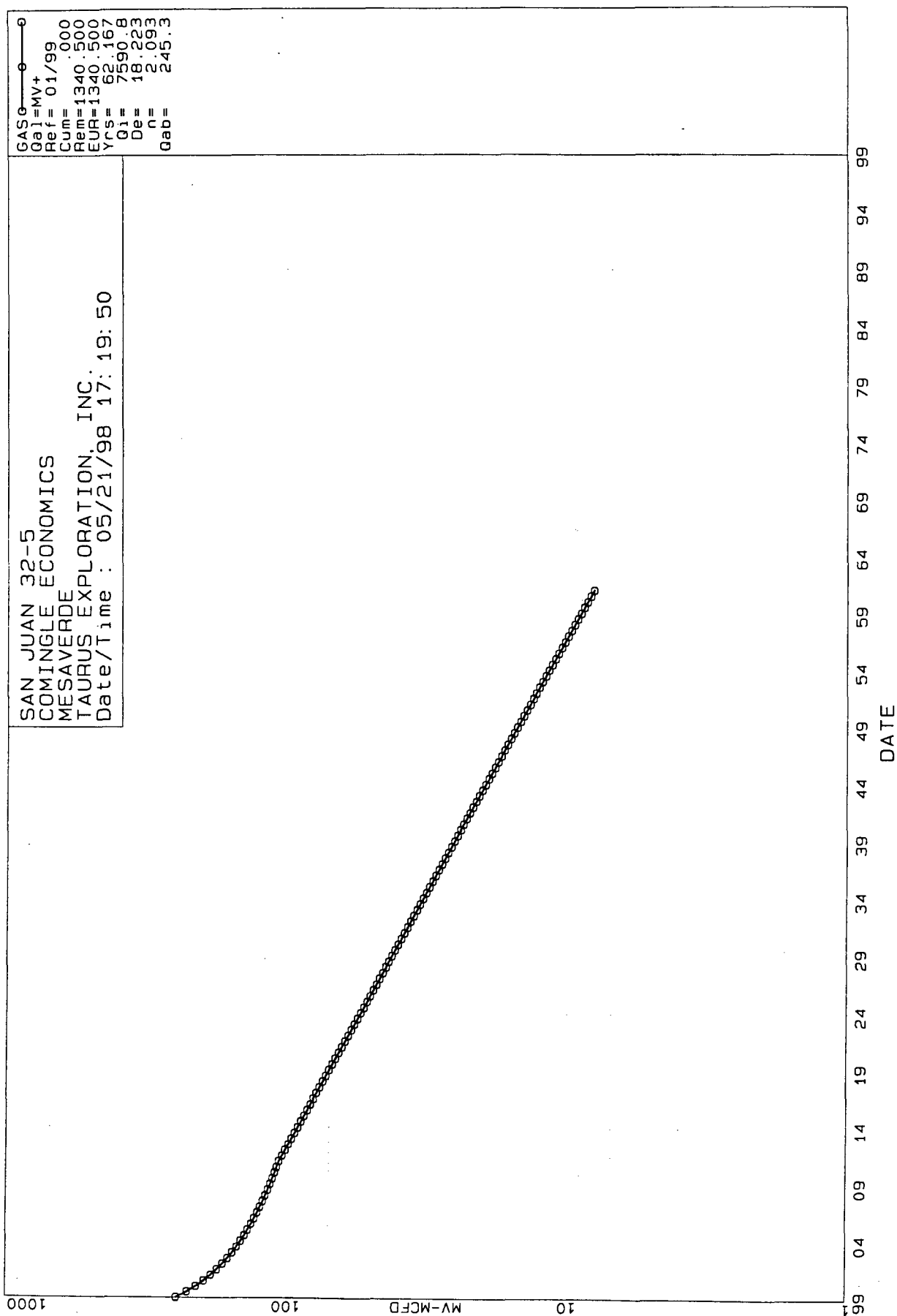


FIGURE 4



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:

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

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