

2/12/97 3/4/97 BS KV DHC

ABOVE THIS LINE FOR DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

FLORENCE DLS #14

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

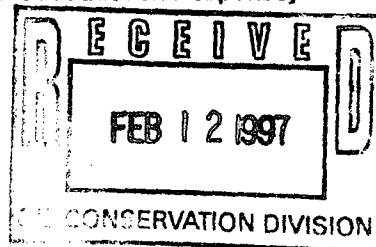
Check One Only for [B] or [C]

[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.

PAMELA W. STALEY
Print or Type Name

Signature

REGULATORY AFFAIRS ENGR.
Title

2/17/97
Date



Amoco Production Company

San Juan Business Unit
Post Office Box 800
Denver, Colorado 80201
303-830-4040

February 7, 1997

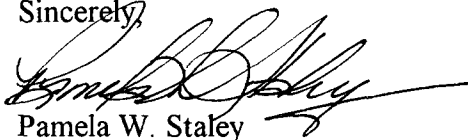
Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
2040 S. Pacheco Street
P. O. Box 6429
Santa Fe, NM 87505

Application for Exception to Rule 303-A- Downhole Commingling
Florance D LS #14 Well
Unit K Section 21-T27N-R8W
Otero Chacra and Blanco Mesaverde Pools
San Juan County, New Mexico

Enclosed please find an administrative application form (C-107-A) and attachments for downhole commingling for the captioned well. By copy of this application by certified mail, return receipt requested, Amoco is notifying all offset operators in the formations captioned above as well as all affected interest owners if the ownership of those formations is not common. The Division Director may approve the proposed downhole commingling in the absence of a valid objection from any offset operator or any interest owner in those instances where ownership is not common in the zones to be commingled within 20 days after the receipt of the application if, in his opinion, waste will not result thereby, and correlative rights will not be violated.

Should there be questions concerning this matter, please contact me at (303) 830-5344.

Sincerely,



Pamela W. Staley

Enclosures

cc: Mark Rothenberg
Pat Archuleta
Wellfile
Proration File

Frank Chavez, Supervisor
NMOCD District III
1000 Rio Brazos Road
Aztec, NM 87410

Duane Spencer
Bureau of Land Management
1235 La Plata Hwy.
Farmington, NM 87401

DISTRICT I
P.O. Box 1980, Hobbs NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

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

DISTRICT II
811 South First St., Artesia, NM 88210-2835

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410-1893

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Amoco Production Company		P.O. Box 800 Denver, CO 80201	
Operator		Address	
Florance D LS	14	K-21-27N-8W	San Juan
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. 000778	Property Code 000529	API NO. 3004506347	Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> (and/or) Fee <input type="checkbox"/>

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)	3294' - 3428'		4606' - 4761'
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	(Current) a. 635 PSI (Original) b. 1050 PSI	a. b.	a. 575 PSI b. 1250 PSI
6. Oil Gravity (° API) or Gas BTU Content	1150 BTU		1200 BTU / 49 DEG API
7. Producing or Shut-In?	NEW		PRODUCING
Production Marginal? (yes or no)	YES		NO
• If Shut-In, give data 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: Rates:	Date: Rates:	Date: Rates:
• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates: ESTIMATED FROM MODEL OF OFFSETS 120 MCFD	Date: Rates:	12/96 131 MCFD 0.5 BCPD 0.5 BCPD

DISTRICT I
P.O. Box 1980, Hobbs NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

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

DISTRICT II
811 South First St., Artesia, NM 88210-2835

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

DISTRICT III
1000 Rio Brazos Rd. Aztec, NM 87410-1693

OIL CONSERVATION DIVISION
APPLICATION FOR DOWNHOLE COMMINGLING

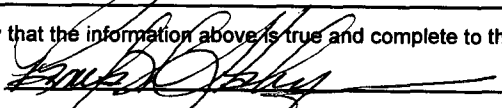
APPROVAL PROCESS:
☒ Administrative ☐ Hearing
EXISTING WELLBORE
☒ YES ☐ NO

Amoco Production Company		P.O. Box 800 Denver, CO 80201	
Operator Florance D LS	14	Address K-21-27N-8W	San Juan
Lease	Well No.	Unit Ltr. - Sec Twp - Rge	County
Spacing Unit Lease Types: (check 1 or more)			
OGRID NO. 000778	Property Code 000529	API NO. 3004506347	Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> (and/or) Fee <input type="checkbox"/>

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• If Producing, give date and oil/gas/water rates of recent test (within 60 days)	ESTIMATED FROM MODEL OF OFFSETS 120 MCFD Date: Rates:	Date: Rates:	12/96 131 MCFD 0.5 BCPD 0.5 BWPD Date: Rates:
8. Fixed Percentage Allocation Formula -% for each zone	Oil: 0 % Gas 48 %	Oil: % Gas %	Oil: 100 % Gas 52 %

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 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 NM-03380
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  TITLE REGULATORY AFFAIRS ENGR DATE 2/6/97

TYPE OR PRINT NAME PAMELA W. STALEY TELEPHONE NO. (303) 830-5344

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

311 South First,, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

2040 South Pacheco, Sante Fe, NM 87505

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87505

Form C-102

Revised October 18, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 3004506347	Pool Code 82329	Pool Name Otero Chacra
Property Code 000529	Property Name Florance D LS	Well Number 14
OGRID No. 000778	Operator Name AMOCO PRODUCTION COMPANY	Elevation 6230

Surface Location

UL or lot no. UNIT K	Section 21	Township 27N	Range 8W	Lot. Idn	Feet from the 1750	North/South Line SOUTH	Feet from the 1750	East/West Line WEST	County San Juan
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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
Dedicated Acreage: 160	Joint or Infill	Consolidation Code	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**

	OPERATOR CERTIFICATION	
	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
	Signature <i>Pat Archuleta</i>	
	Printed Name Pat Archuleta	
	Position Staff Assistant	
	Date 02/07/1997	
	SURVEY 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 knowledge and belief.	
	02/05/1958	
	Date of Survey	
	Signature & Seal of Professional Surveyor	
	Certificate No. NM03380	

MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

Section A.

Date **FEBRUARY 6, 1958**

Operator **EL PASO NATURAL GAS COMPANY** Lease **FLORANCE** NM **03380**
 Well No. **14-D (PM)** Unit Letter **K** Section **21** Township **27-N** Range **8-W** NMPM
 Located **1750** Feet From **SOUTH** Line, **1750** Feet From **WEST** Line
 County **SAN JUAN** G. L. Elevation **6230** Dedicated Acreage **320 & 160** Acres
 Name of Producing Formation **MESA VERDE & PICTURED CLIFF** Pool **MV - BLANCO, SOUTH BLANCO P.C.**

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 communization 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

RECEIVED

FEB 10 1958

U. S. GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

Section B.

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

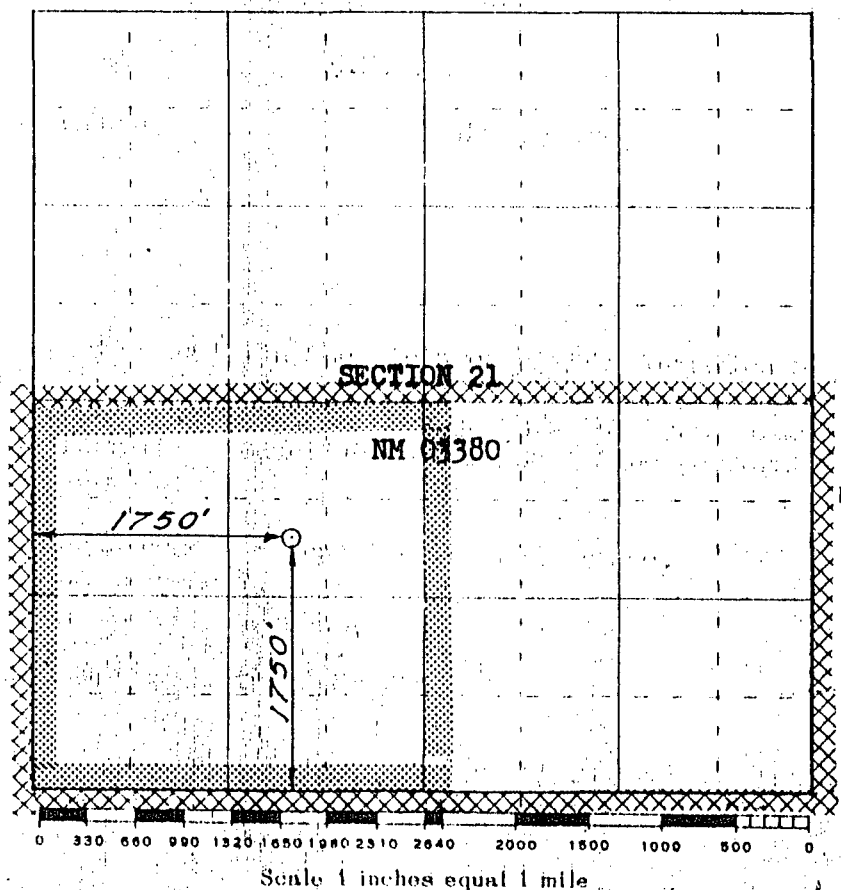
This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company**Original Signed D. C. Johnston**

(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 **FEBRUARY 5, 1958**

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

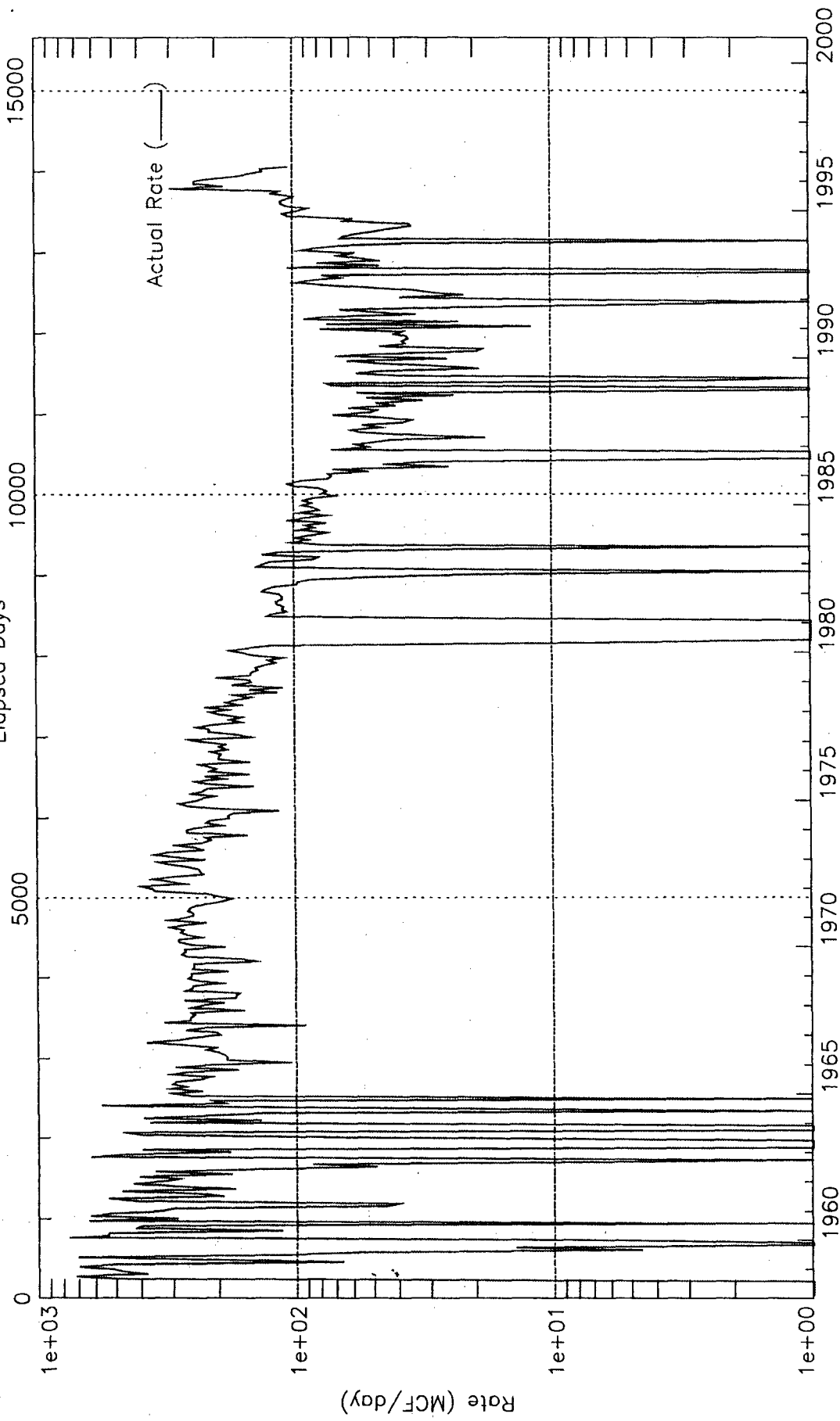
Farmington, New Mexico

User: zmdr16
Owner: 2DMHF

Single Well Gas3D

Elapsed Days

Description 1
Thu Dec 12 07:55:48 1996



Date (Years)

Cum Gas= 2251.56 MMCF

Well ID: 300450634700 604MVRD
Well Name: FLORANCE D 4,9-14 /MV/ 014K21
Operator: AMOCO PRODUCTION COMPANY

User: zmdr16
Owner: 2DMHF

Single Well Gas3D

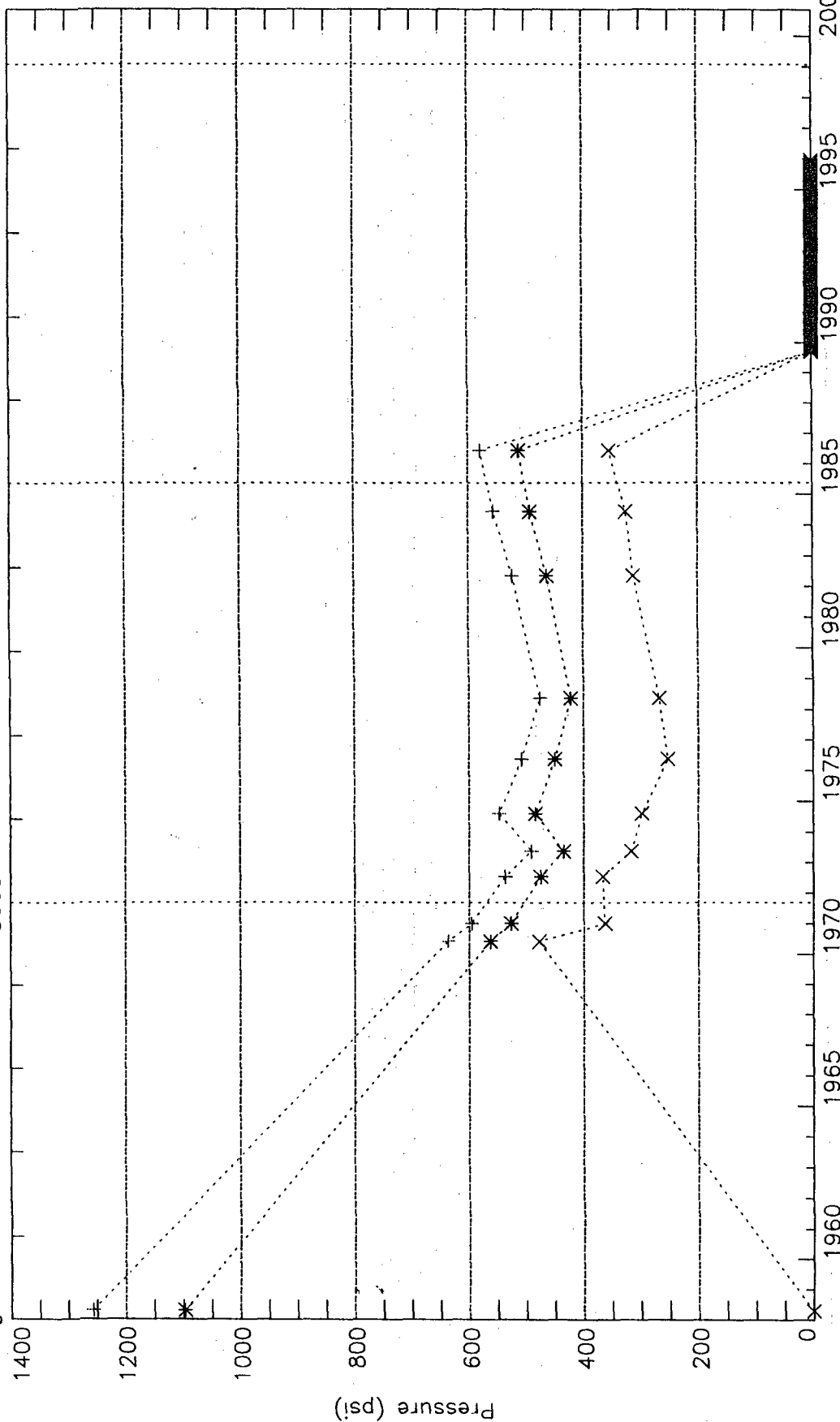
Elapsed Days

15000

10000

5000

0

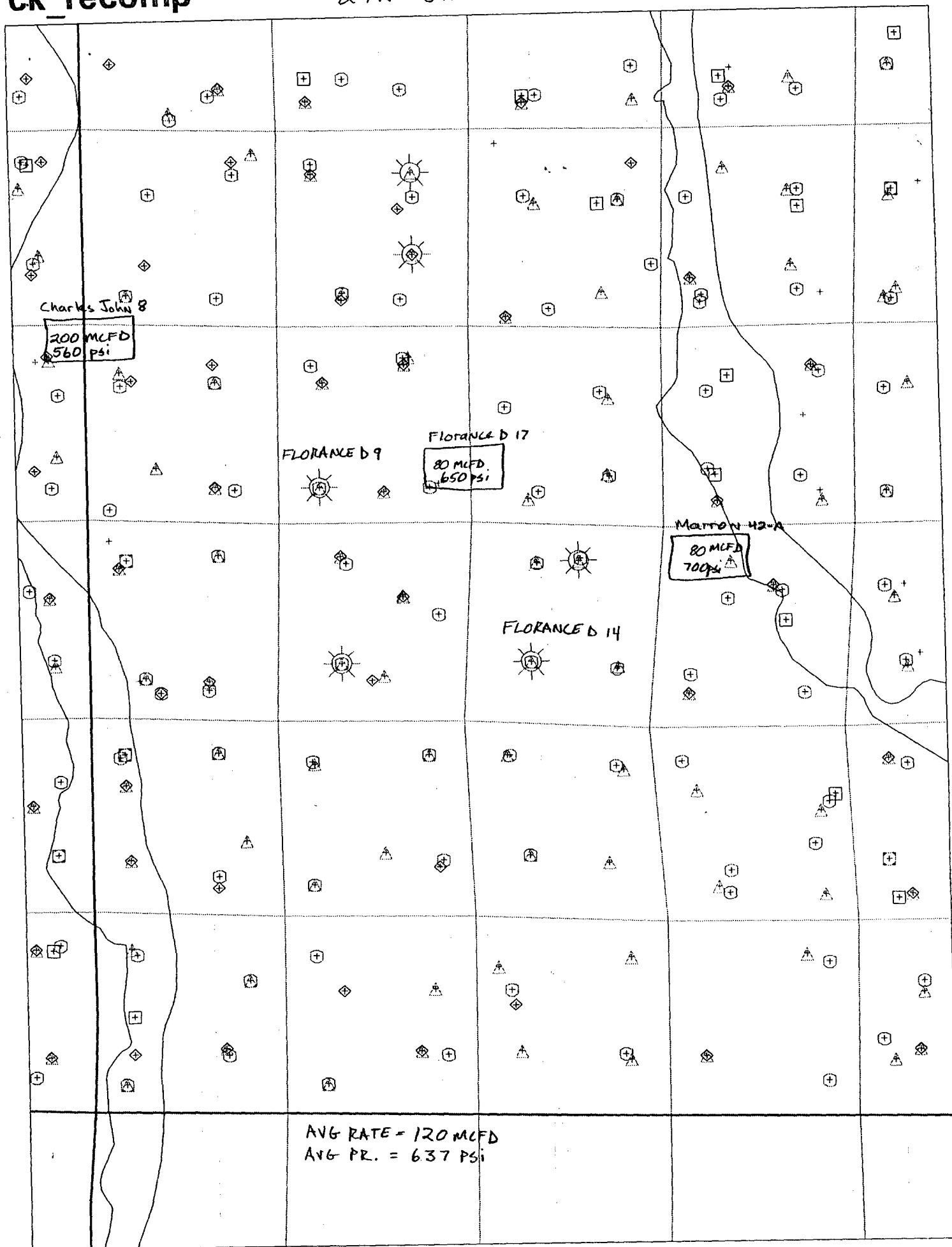


Date (Years)

Well ID: 300450634700 604MVRD
Well Name: FLORANCE D 4,9-14 /MV/ 014K21
Operator: AMOCO PRODUCTION COMPANY

ck_recomp

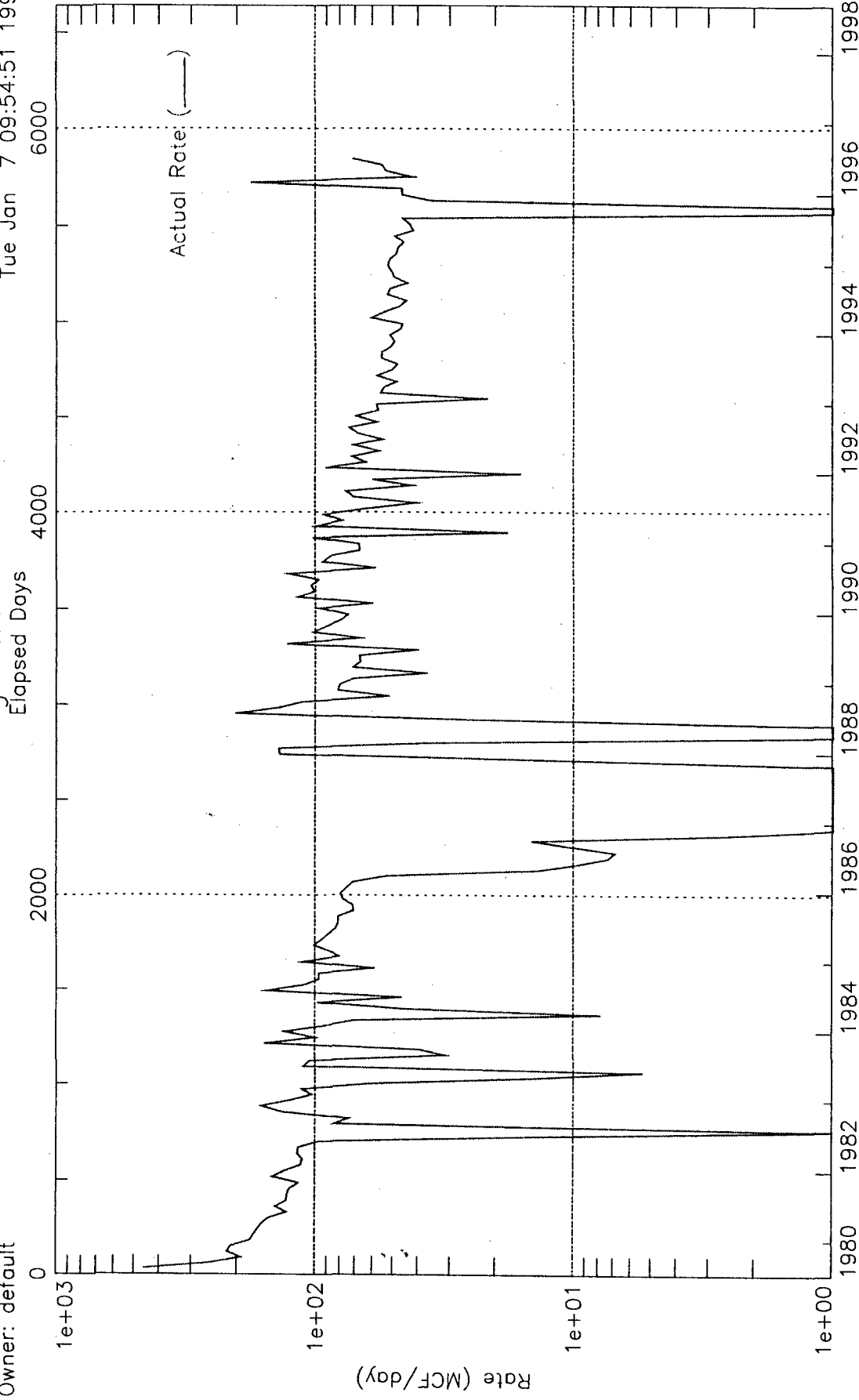
27N-8W



User: zmdr16
Owner: default

Single Well Gas3D

Tue Jan 7 09:54:51 1997



Cum Gas= 433.08 MMCF

Date (Years)

Well ID: 300452362800 604CHCR

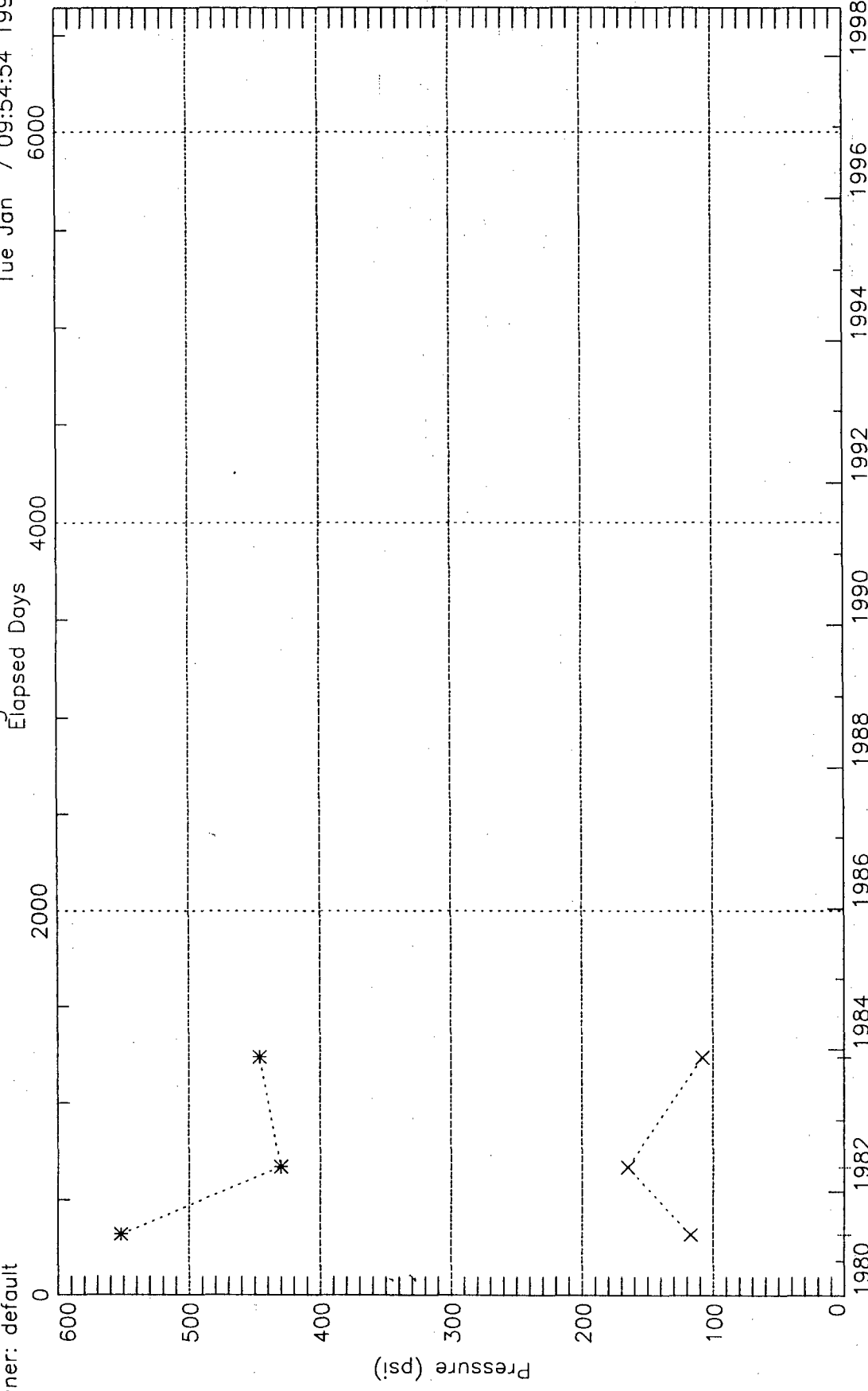
Well Name: CHARLES JOHN 8

Operator: FOUR STAR OIL & GAS COMPANY

User: zmdr16
Owner: default

Single Well Gas3D

Tue Jan 7 09:54:54 1997



WH_SIP (*)
BHP (+)
WH_FTP (x)

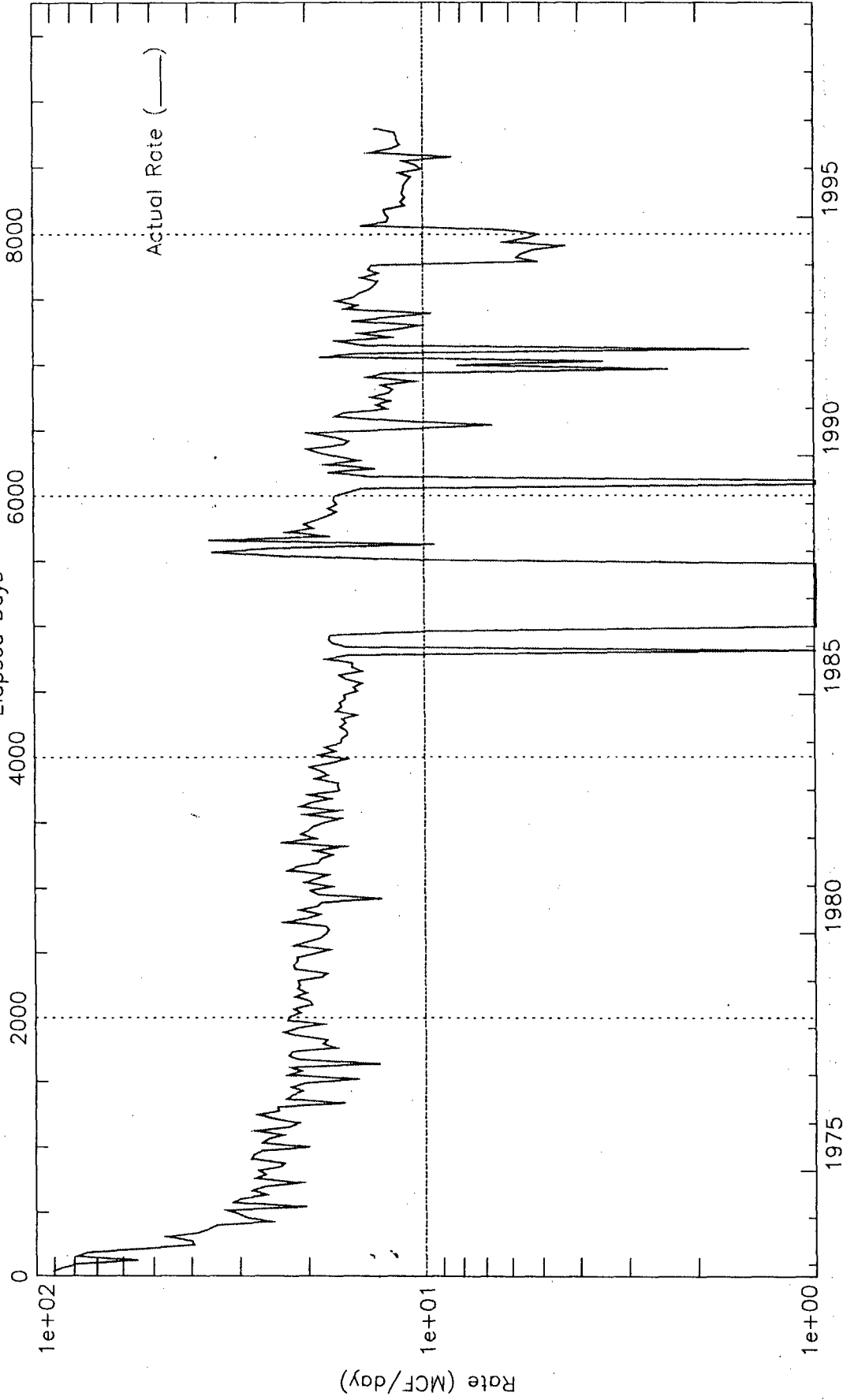
Date (Years)

Well ID: 300452362800 604CHCR
Well Name: CHARLES JOHN 8
Operator: FOUR STAR OIL & GAS COMPANY

User: zmdr16
Owner: default

Single Well Gas3D

Tue Jan 7 09:55:38 1997



Date (Years)

Cum Gas= 157.35 MMCF

Well ID: 300452092500 604CHCR

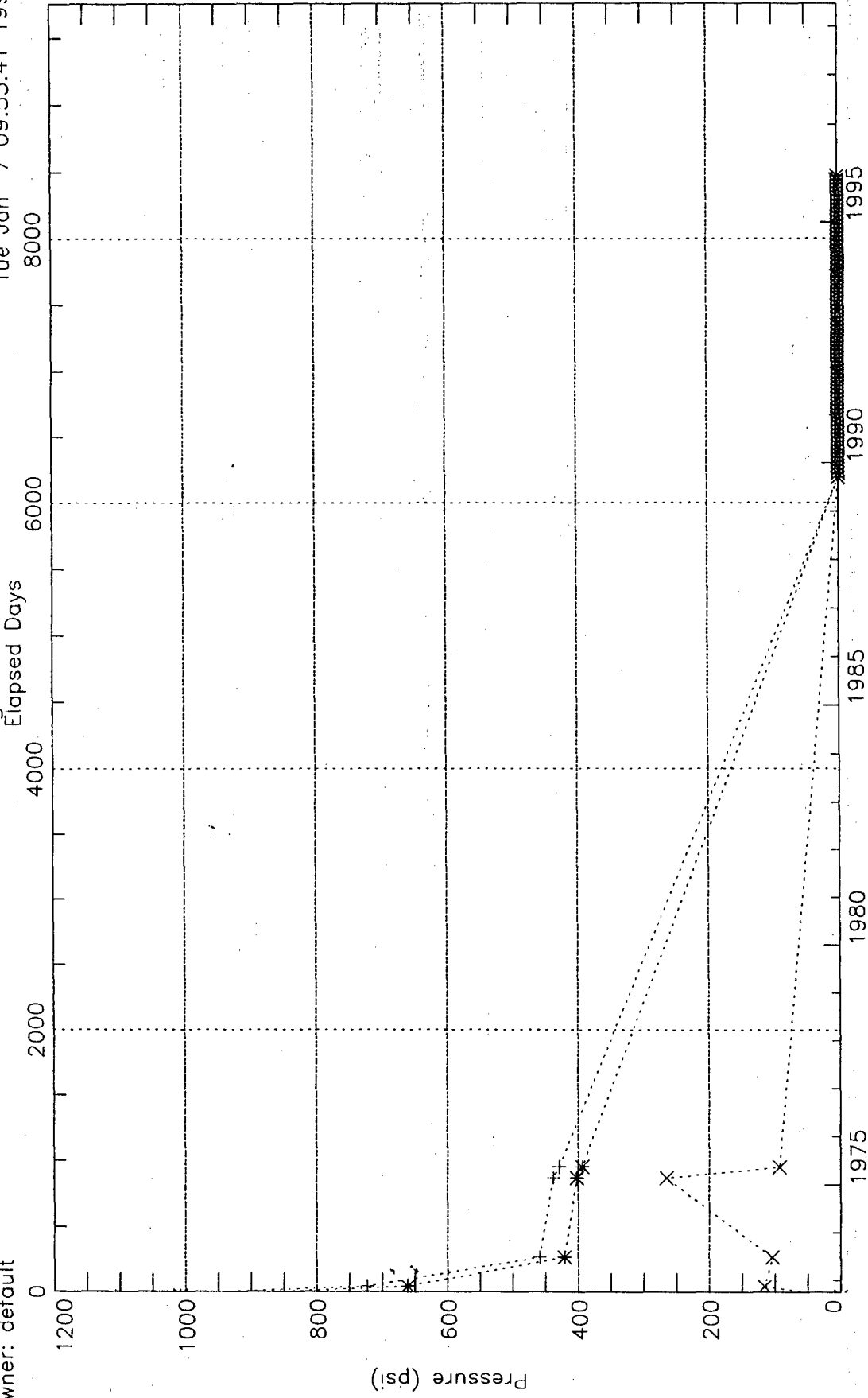
Well Name: FLORANCE D LS 1-3,5-9,11-16 /PC/ 09 017P17

Operator: AMOCO PRODUCTION COMPANY

User: zmdr16
Owner: default

Single Well Gas3D

Tue Jan 7 09:55:41 1997



Date (Years)

WH_SIP (*)
BHP (+)
WH_FTP (x)

Well ID: 300452092500 604CHCR

Well Name: FLORANCE D LS 1-3,5-9,11-16 /PC/ 09 017P17

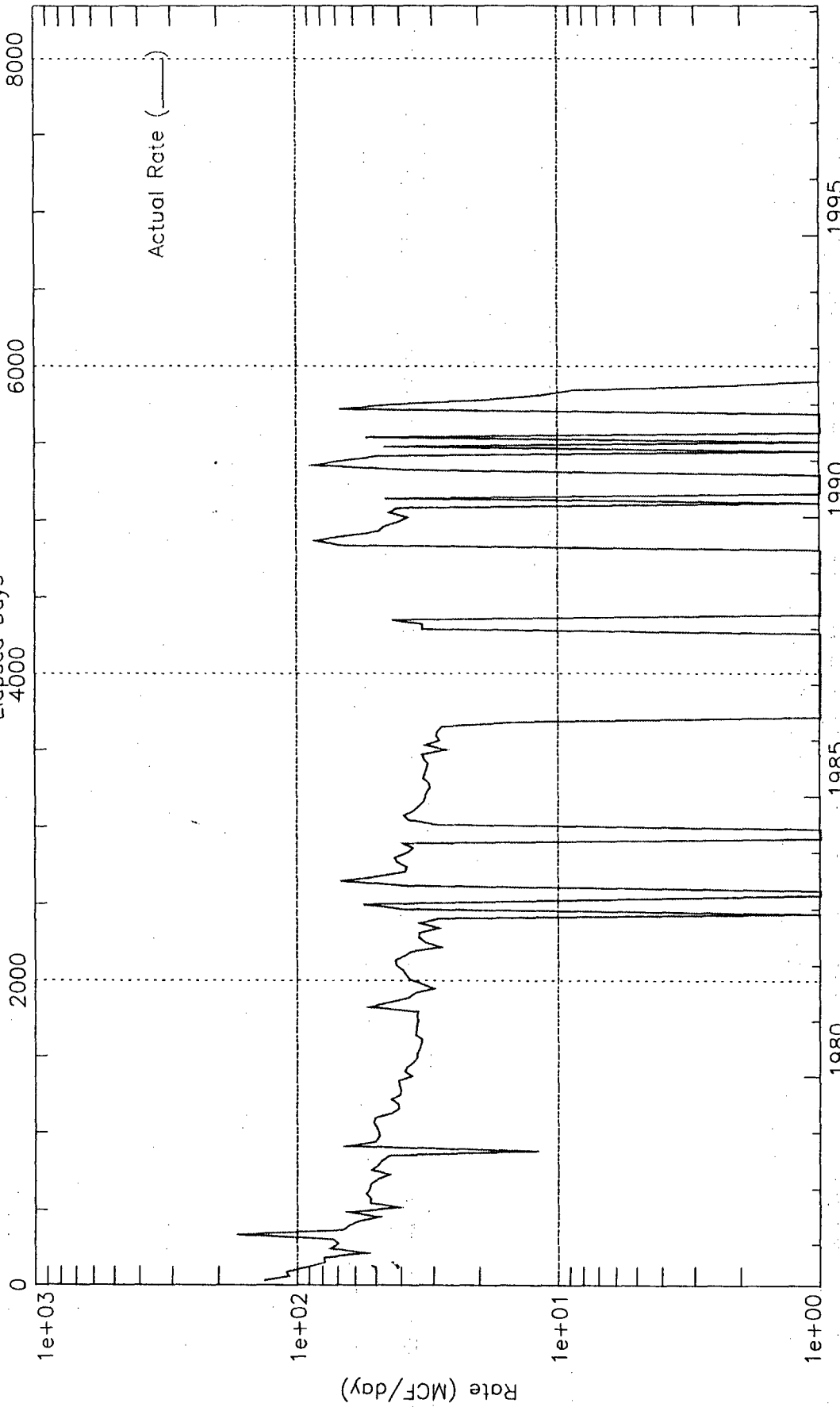
Operator: AMOCO PRODUCTION COMPANY

User: zmdr16
Owner: default

Single Well Gas3D

Tue Jan 7 09:57:05 1997

Elapsed Days



Cum Gas= 190.15 MMCF

Date (Years)

Well ID: 300452189200 604CHCR

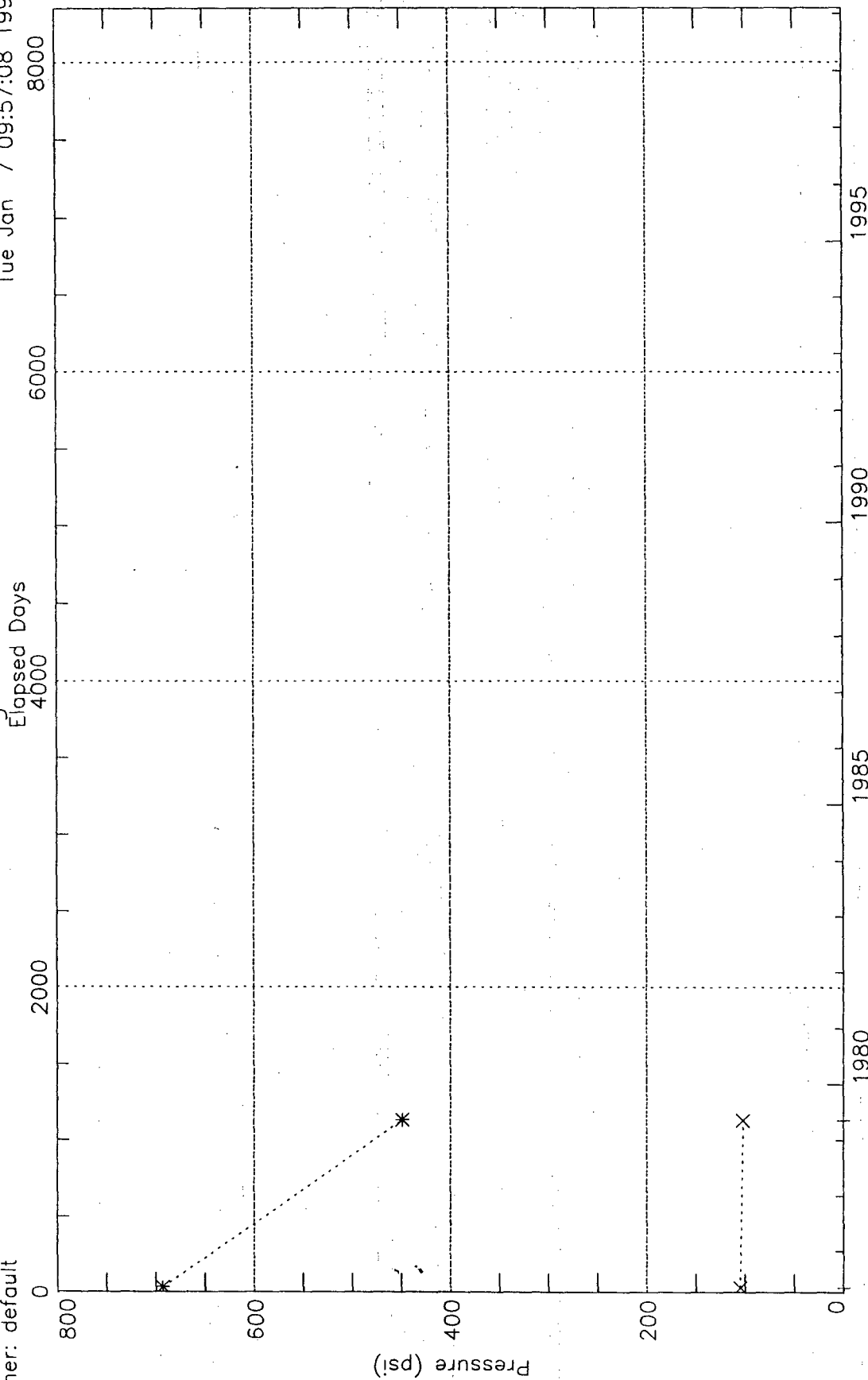
Well Name: MARRON 42-A

Operator:

User: zmdr16
Owner: default

Single Well Gas3D

Tue Jan 7 09:57:08 1997



WH_SIP (*)
BHP (+)
WH_FTP (x)

Date (Years)

Well ID: 300452189200 604CHCR

Well Name: MARRON 42-A

Operator:

Wellbore Configuration
Florance D LS #14

Note that this well is currently a Pictured Cliffs and Mesaverde Dual Completion. The Pictured Cliffs formation pressure is too low to be commingled at this point with the Chacra and Mesaverde. Therefore, the wellbore will be configured with the Pictured Cliffs zone isolated as a dual completion with the Mesaverde and Chacra downhole commingled.

Allocation Method and Bottomhole Pressure Data
Florance D LS #14

We recommend allocating production based on modeling of the surrounding wells. The Chacra is estimated to produce at an average rate of 120 MCFD and no condensate at a reservoir pressure of 635 PSI. Average production for the past month in the Mesaverde is 131 MCFD with 0.5 BOPD and 0.5 BWPD. Therefore we recommend allocation of 48% of the gas production to the Chacra and 52% of the gas production to the Mesaverde. Allocation of condensate should be 100% to the Mesaverde as the Chacra does not produce liquids in this area.

OFFSET OPERATORS
Florance D LS #14

Conoco, Inc.
10 Desta Drive West
Midland, Texas 79705

M & G Drilling Co. Inc.
C/O KM Production Co.
P.O. Box 2406
Farmington, NM 87499