

**Stabilized m-Factors (Pressure-Cum Slopes) for  
Additional Yates-U7R Infill Gas Wells**

| Current<br>Operator | Infill Well                 | Location<br>(T-R-S-U) | m <sub>2</sub> :<br>Stabilized<br>P/z Slope<br>(MCF/psi) | Initial<br>Pressure<br>(psia) | Projected<br>Ultimate<br>Recovery<br>(BCF) | Recovery<br>Improvement<br>Ratio<br>(m <sub>2</sub> /m <sub>1</sub> ) |
|---------------------|-----------------------------|-----------------------|----------------------------------------------------------|-------------------------------|--------------------------------------------|-----------------------------------------------------------------------|
| Gruy                | Shell State No. 5           | 23S-36E-13-J          | 18,782                                                   | 89 (10/21/81)                 | 1.3565                                     | 4.60                                                                  |
| Gruy                | Holt-Mexico State Com No. 1 | 23S-36E-36-O          | 11,818                                                   | 156 (09/20/85)                | 1.6985                                     | 3.09                                                                  |
| Hartman             | Liberty Royalties No. 6     | 24S-37E-07-O          | 18,994                                                   | 135 (09/12/89)                | 1.4759                                     | 5.84                                                                  |
| Gruy                | E. E. Jack No. 5            | 24S-37E-08-D          | 12,318                                                   | 173 (12/07/85)                | 1.7165                                     | 1.19                                                                  |
| Gruy                | Late-Thomas No. 2           | 24S-37E-17-L          | 16,818                                                   | 155 (10/27/81)                | 1.7088                                     | 2.87                                                                  |
| <b>Average:</b>     |                             |                       | <b>15,746</b>                                            |                               |                                            | <b>3.52</b>                                                           |

J-13-23S-36E

J-13-23S-36E

State "A" AC 1 No. 57  
B-13-23S-36E

State "A" AC 1 No. 20  
C-13-23S-36E

State "A" AC 1 No. 75  
F-13-23S-36E

Shell State No. 5  
J-13-23S-36E

State "A" AC 1 No. 21  
H-13-23S-36E

Shell State No. 2 309  
P-13-23S-36E

State "A" AC 1 No. 22  
N-13-23S-36E

J.F. Janda NCT G No. 1  
A-24-23S-36E

J.F. Janda NCT G No. 2  
G-24-23S-36E

INSIE LYNN (ONI  
UNIT  
CONT'4 (OPER)

+206  
ARCO +204

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION

Form O-1  
Supersedes O-1A  
1-1-79

All distances must be from the outer boundaries of the Section

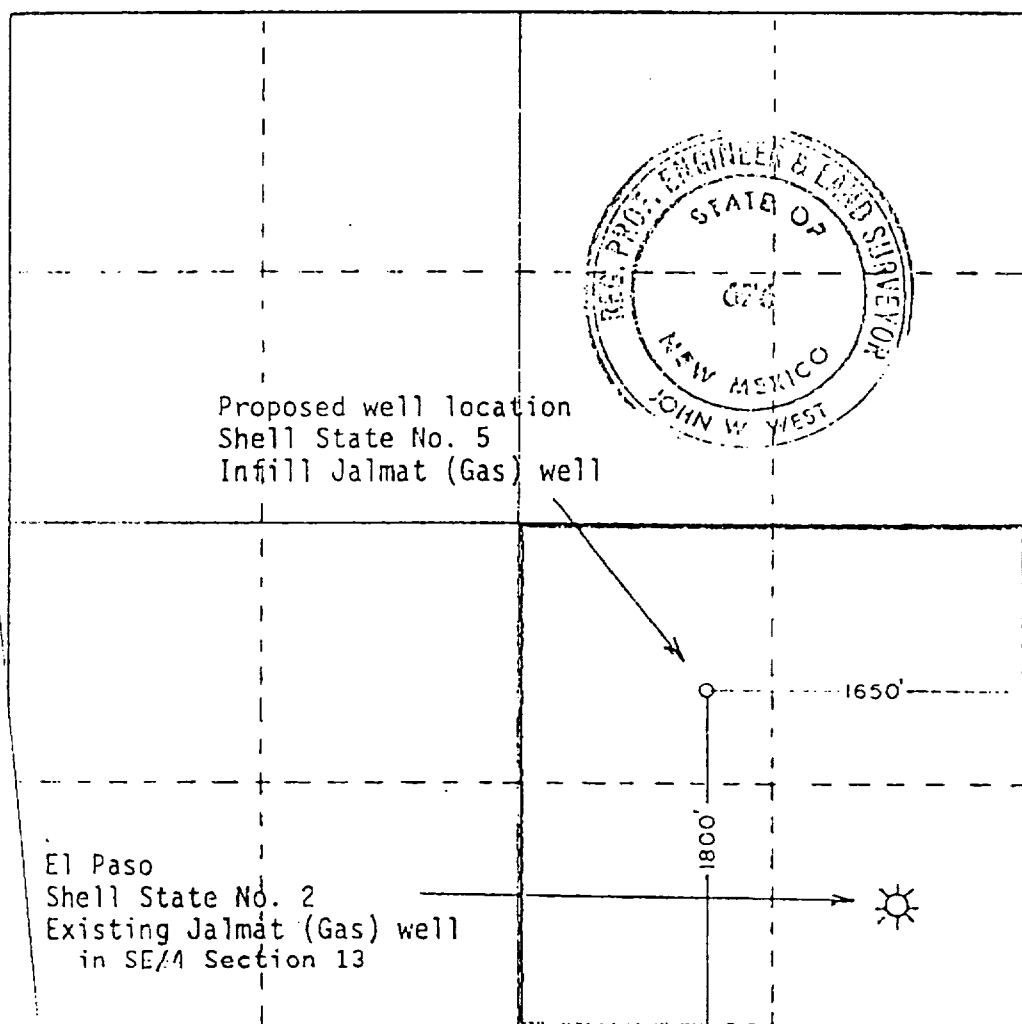
|                                    |                      |                                                  |                    |                          |                            |
|------------------------------------|----------------------|--------------------------------------------------|--------------------|--------------------------|----------------------------|
| Proprietor<br><b>Doyle Hartman</b> |                      | Lease<br><b>Shell State</b>                      |                    | Acres<br><b>5</b>        |                            |
| Well Letter<br><b>J</b>            | Section<br><b>13</b> | Township<br><b>23</b>                            | Range<br><b>36</b> | County<br><b>El Paso</b> | State<br><b>New Mexico</b> |
| Well Depth<br><b>1800</b>          |                      | Direction<br><b>South</b>                        |                    | Distance<br><b>1650</b>  |                            |
| Well Type<br><b>3367.1</b>         |                      | Producing Formation<br><b>Yates-Seven Rivers</b> |                    | Permit<br><b>Jalmat</b>  |                            |
| Well Type<br><b>3367.1</b>         |                      | Producing Formation<br><b>Yates-Seven Rivers</b> |                    | Permit<br><b>Jalmat</b>  |                            |
| Well Type<br><b>3367.1</b>         |                      | Producing Formation<br><b>Yates-Seven Rivers</b> |                    | Permit<br><b>Jalmat</b>  |                            |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, force-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



#### CERTIFICATION

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

*Larry G. Manning*  
Engineer

*Doyle Hartman*  
Owner

*September 29, 1981*  
Date

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.

0041270

Date Surveyed  
Sept. 26, 1981

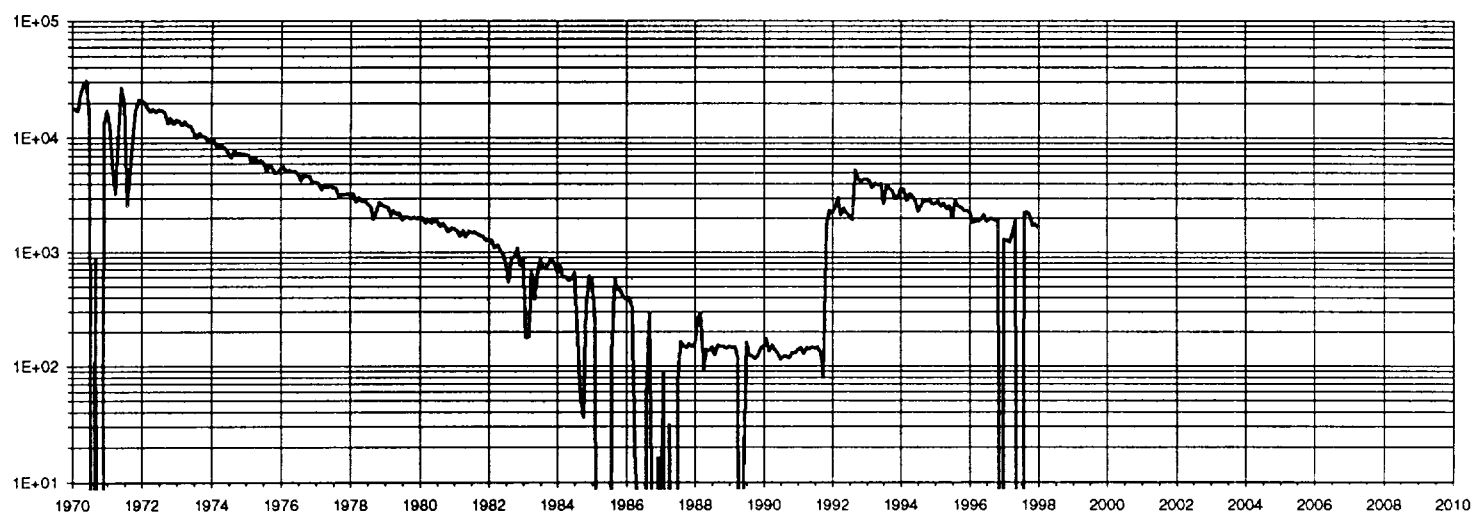
Registered Professional Engineer  
and Land and Surveyor

*John W. West*

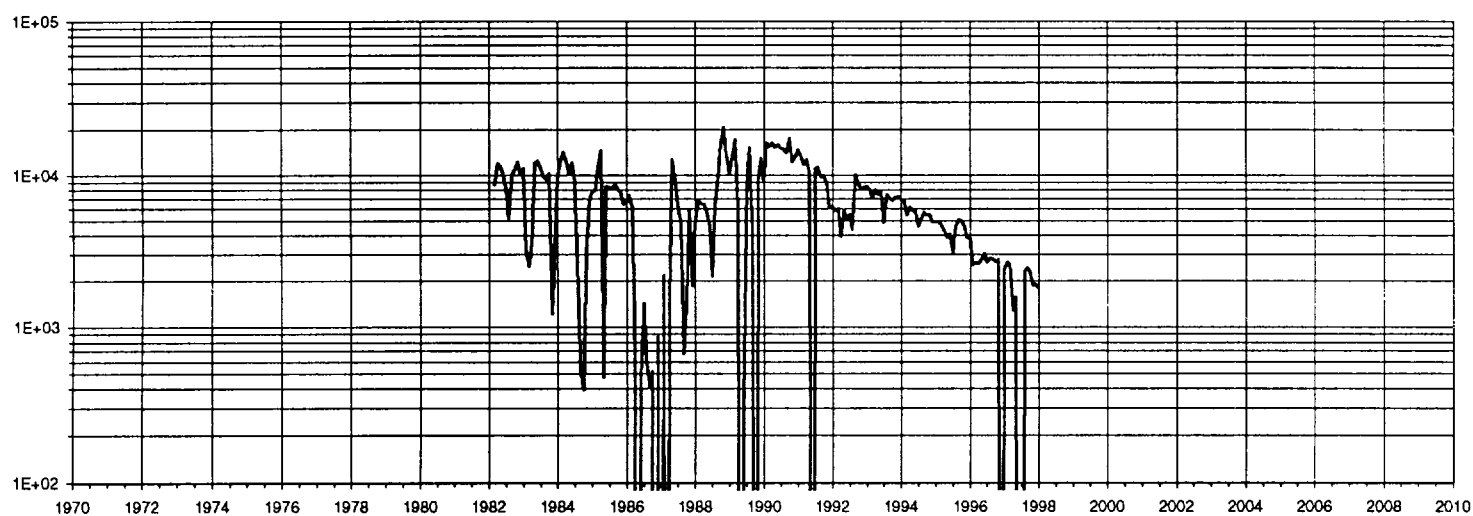
Certificate No. **JOHN W. WEST 876**  
**PATRICK A. ROMERO 6868**  
**Ronald J. Edison 3239**

Shell State Nos. 2 & 5  
Jalmat Gas Pool  
P & J-13-23S-36E  
Gruy Petroleum Management Co.

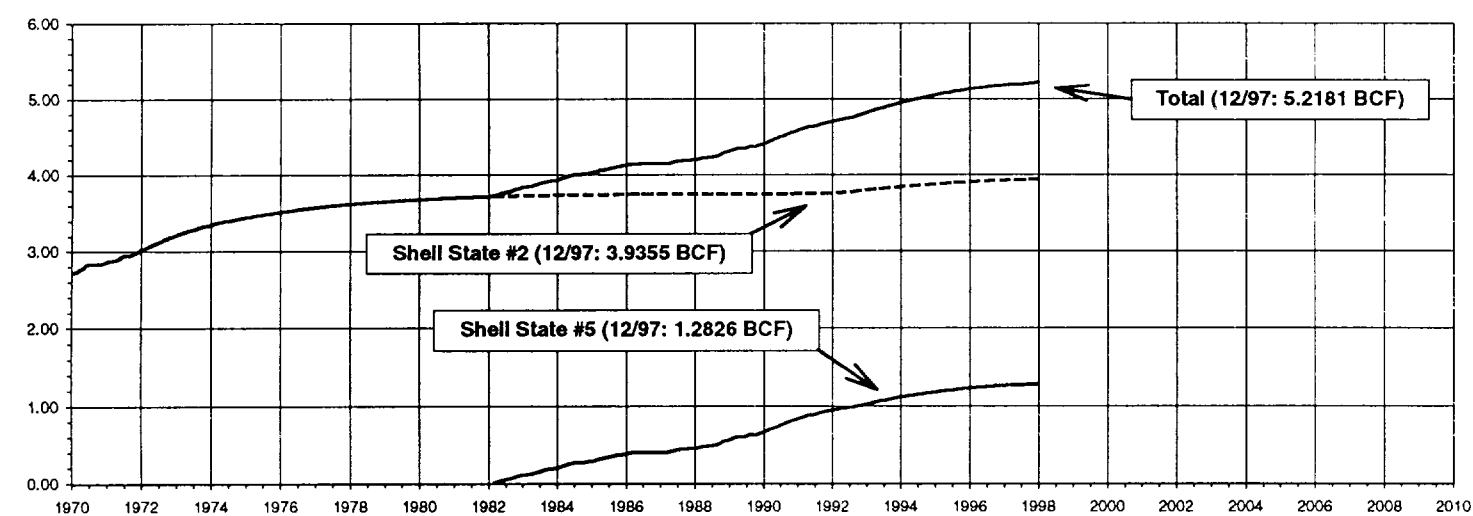
Shell State #2 Gas Production (MCFPM)



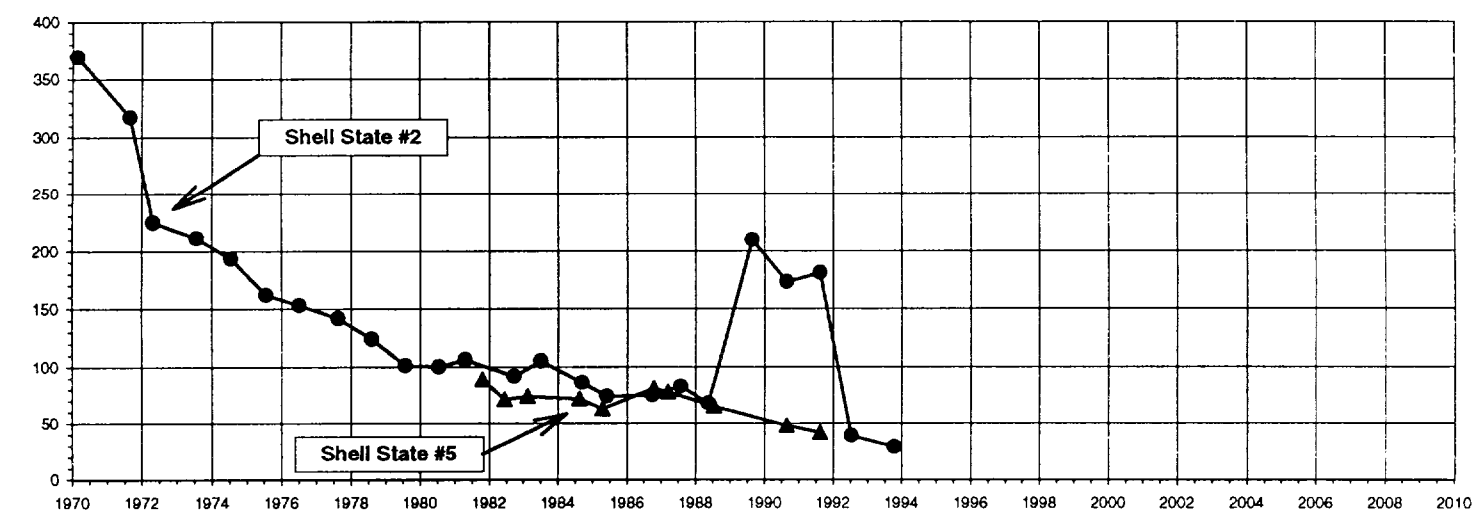
Shell State #5 Gas Production (MCFPM)



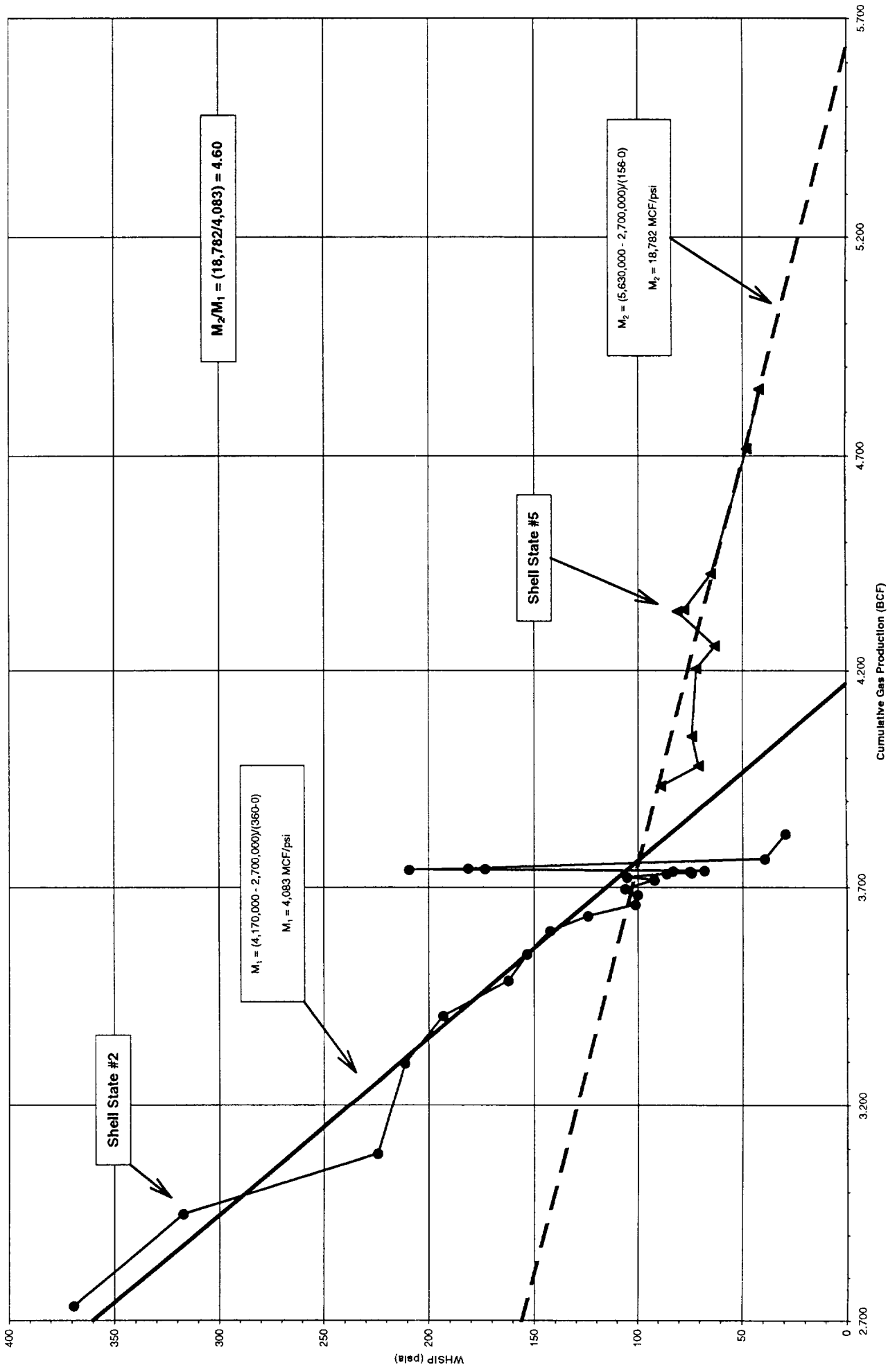
Cumulative Gas Production (BCF)



WHSIP (psia)



Shell State Nos. 2 & 5  
Jalmat Gas Pool  
P & J-13-23S-36E  
Gruy Petroleum Management Co.

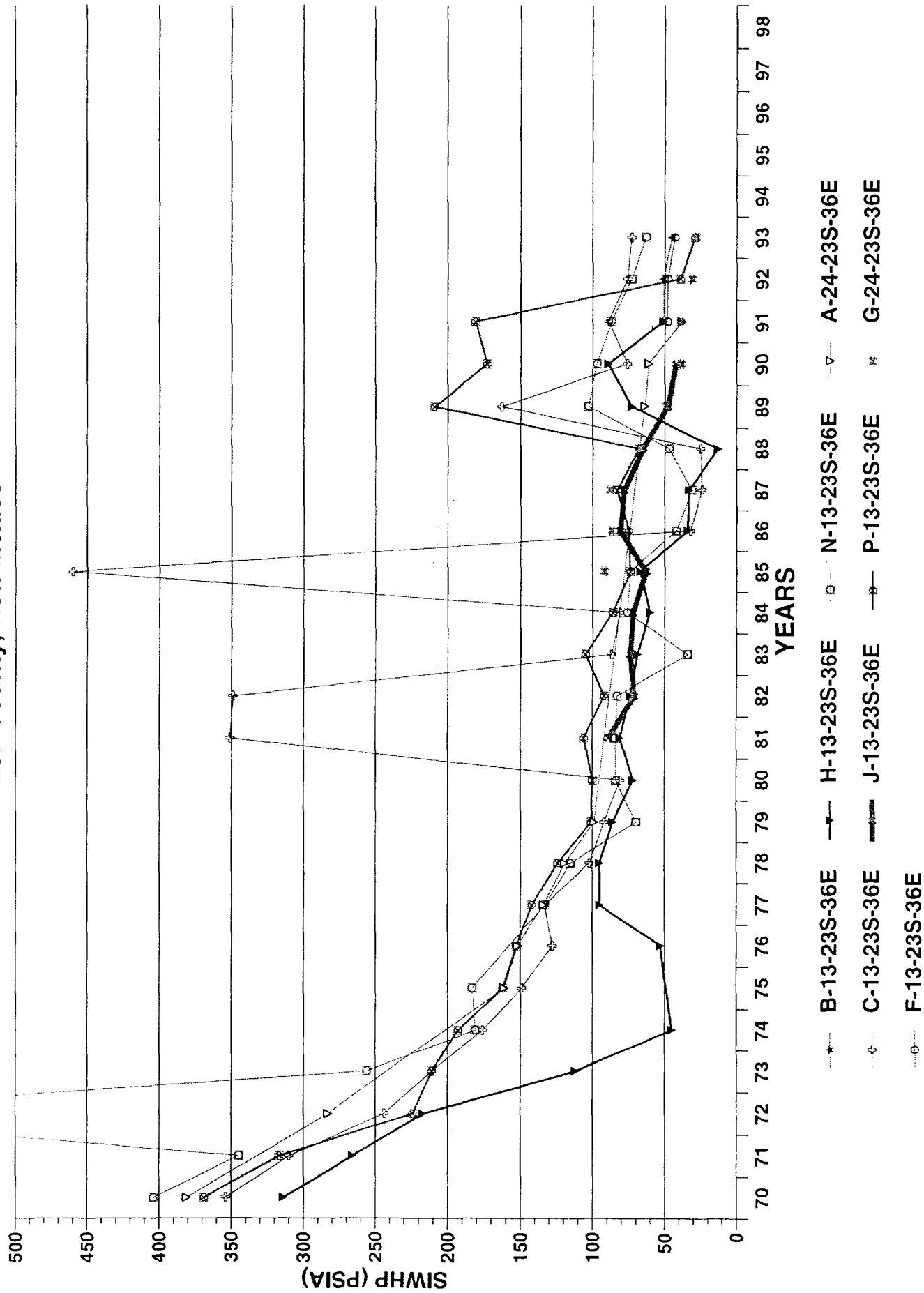


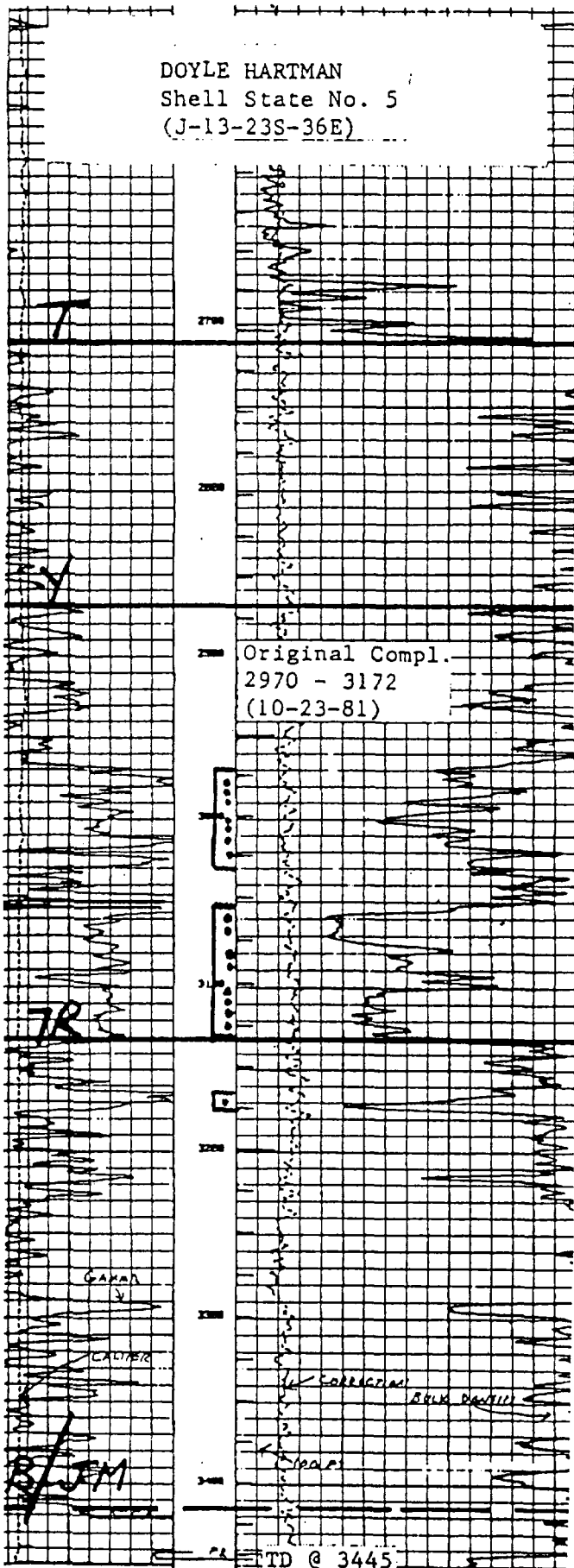
# Jalmat (Tansill-Yates-Seven-Rivers) Pool

Shell State # 5

Composite Pressure - Time Plot

Lea County, New Mexico





COMPANY Gruy Operating  
(Doyle Hartman)  
WELL Shell State No. 5  
FIELD Jalmat (Gas)  
LOCATION 1800' FSL & 1650' FEL (J)  
Sec. 13, T-23-S, R-36-E  
COUNTY Lea  
STATE New Mexico  
ELEVATIONS: KB 3377  
DF   
GL 3367

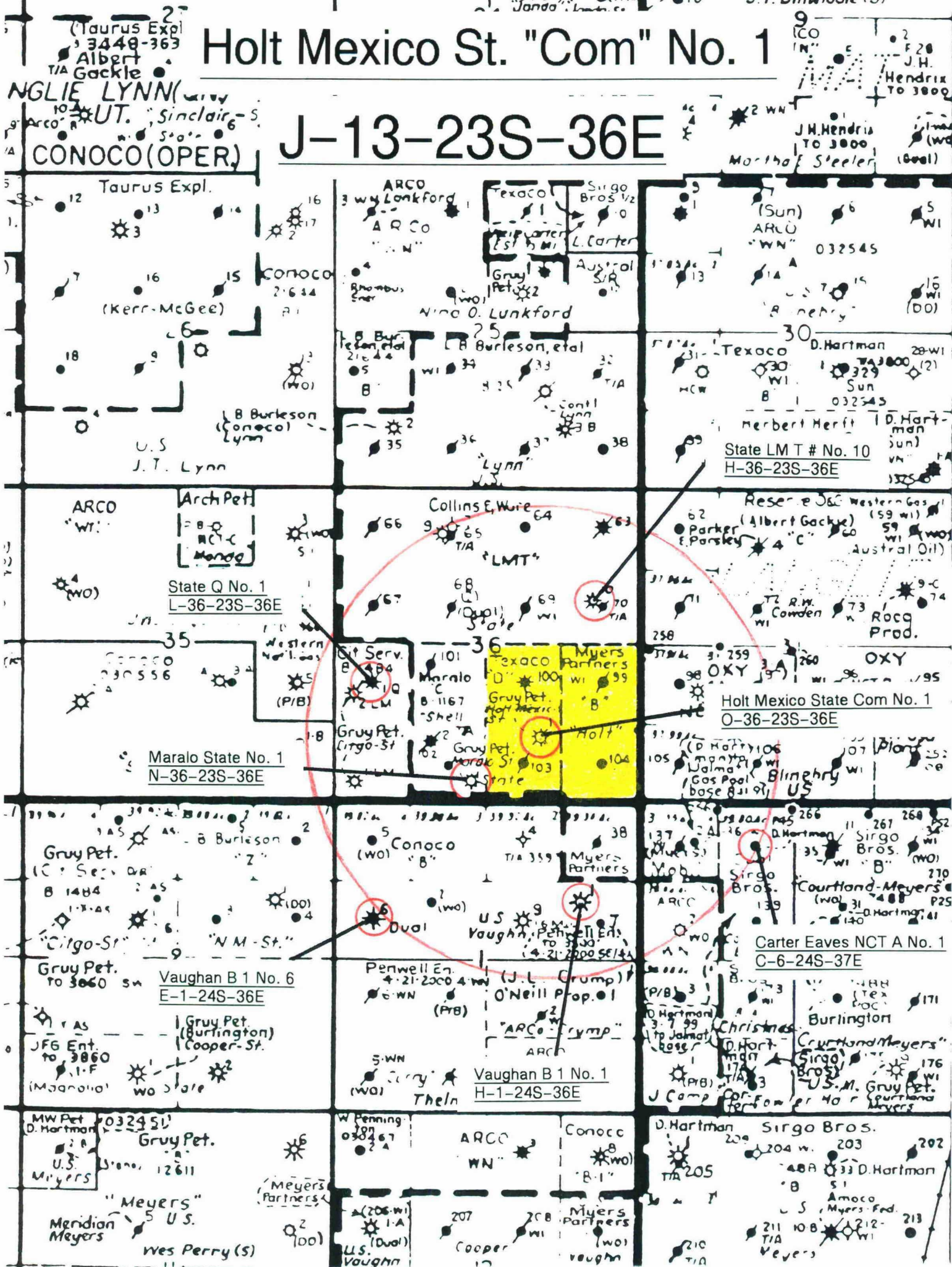
### COMPLETION RECORD

SPUD DATE 10-5-81 COMP. DATE 10-23-81  
TD 3450 PBD 3440  
CASING RECORD:  
9 5/8, 40# @ 435 w/225 (TOC @ Circ.)  
7, 23# @ 3450 w/550 (TOC @ Circ.)  
(TOC @ )  
(TOC @ )  
COMP. INTERVAL Perf 2970-3172 w/19  
STIMULATION A/4500 15% MCA  
ATR = 5.2 BPM. ATP = 1530 psi.  
ISIP = 0 psi.  
POT P/323 MCFPD (After frac)  
GOR  GR   
TP  CP 71 psig (SICP = 76 psig)  
CHOKE 25/64 TUBING 2 3/8 @ 3335  
REMARKS  
10-19-81: SICP = 115 psig.  
10-21-81: SICP = 76 psig.  
10-21-81: SWF/72,000 + 173,000  
ATR = 25 BPM  
ATP = 1400 psi  
ISIP = 560 psi  
1-hr. SIP = 540 psi  
10-22-81: POP @ 11 x 64 x 1 1/4  
1-14-82: Connected to EPNG.  
1-20-82: P/335 MCFPD  
Choke = 26/64  
PCP = 68 psig  
Est. C = 246  
1-1-98: Cum. = 1.2826 BCF  
Est. Rem. = 73.9 MMCF  
Est. Ult. = 1.3565 BCF  
b = 0.211

J-13-23S-36E

# Holt Mexico St. "Com" No. 1

## J-13-23S-36E



**NATIONAL OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION**

Form C-102  
Supersedes C-128  
Effective 1-1-85

All distances must be from the outer boundaries of the Section

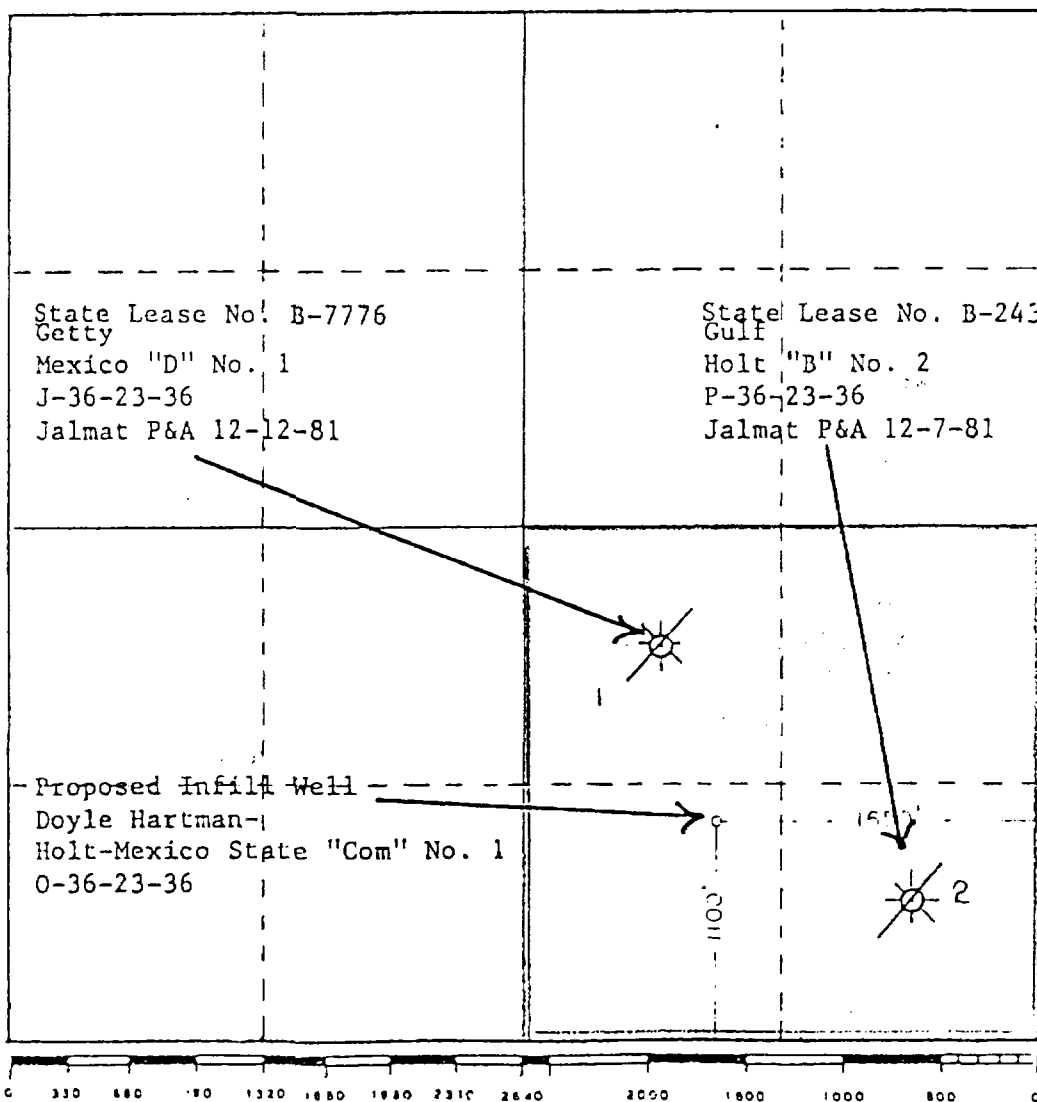
|                                                                                                                                |                                                  |                        |                                       |                                       |                   |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------|---------------------------------------|---------------------------------------|-------------------|
| Operator<br><b>DOYLE HARTMAN</b>                                                                                               |                                                  |                        | Lease<br><b>HOLT MEXICO ST. "COM"</b> |                                       | Well No. <b>1</b> |
| Well Letter<br><b>0</b>                                                                                                        | Section<br><b>36</b>                             | Township<br><b>23S</b> | Range<br><b>36E</b>                   | County<br><b>DEA</b>                  |                   |
| Actual Footage Location of Well:<br><b>1650</b> feet from the <b>EAST</b> line and <b>1100</b> feet from the <b>SOUTH</b> line |                                                  |                        |                                       |                                       |                   |
| Ground Level Elev.<br><b>3321.6</b>                                                                                            | Producing Formation<br><b>Yates-Seven Rivers</b> |                        | Pool<br><b>Jalmat (Gas)</b>           | Dedicated Acreage<br><b>160</b> Acres |                   |

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes    ☐ No    If answer is "yes," type of consolidation Communitization

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

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

*Larry A. Nermyr*

Name  
**Larry A. Nermyr**

Position  
**Engineer**

Company  
**Doyle Hartman**

Date  
**June 24, 1985**

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.

Date Surveyed  
**6/20/85**

Registered Professional Engineer and/or Land Surveyor

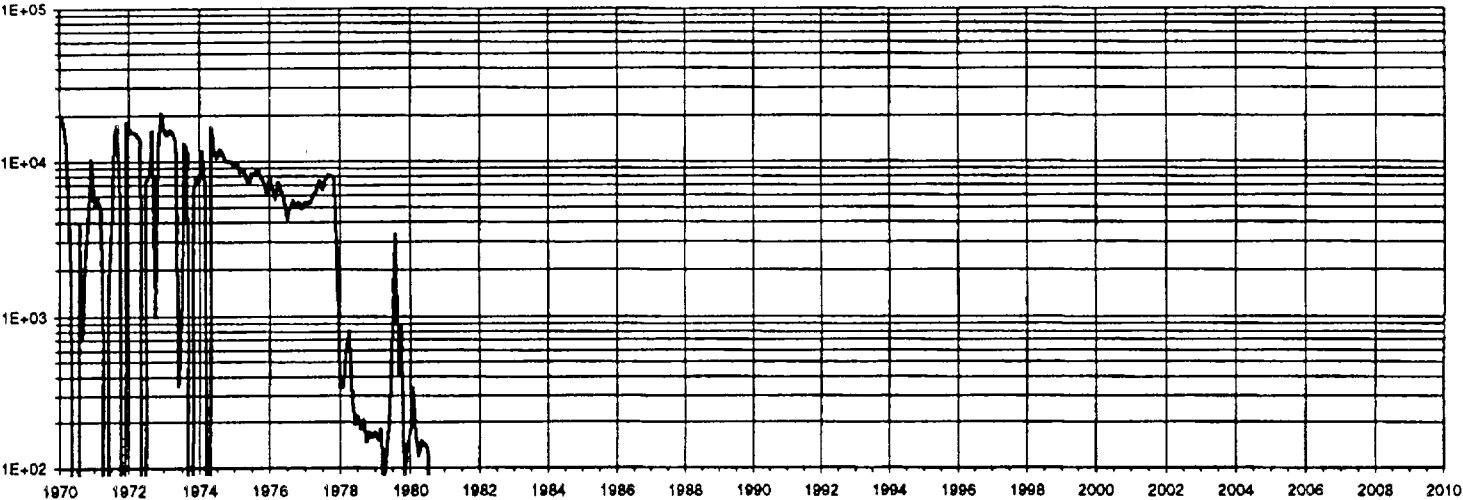
*John W. West*

Certificate No. **JOHN W. WEST 676**  
**RONALD J. EIDSON 3239**

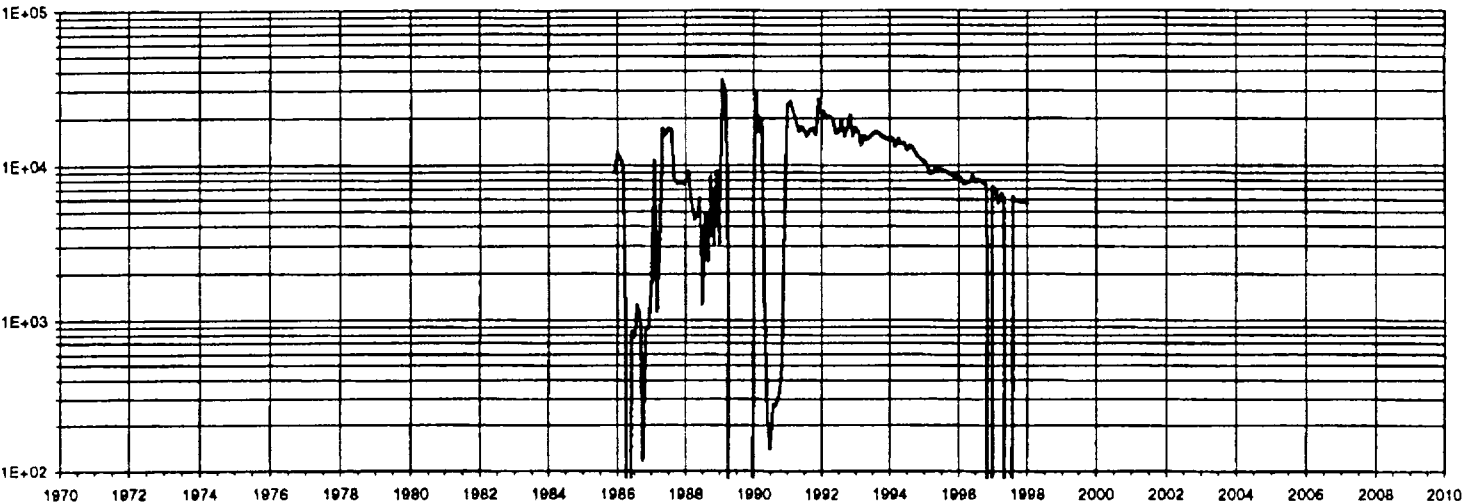
**AUG 12 1985 04419**

Mexico D #1 & Holt Mexico State Com #1  
Jalmat Gas Pool  
J & O-36-23S-36E  
Gruy Petroleum Management Co.

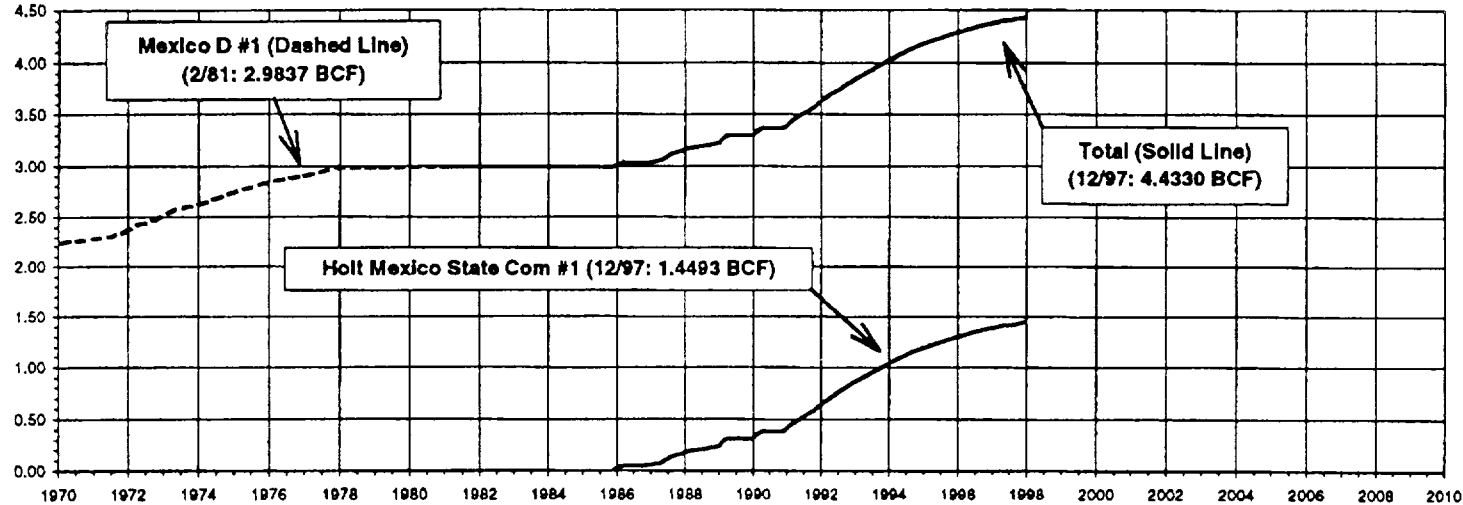
Mexico D #1 Gas Production (MCFPM)



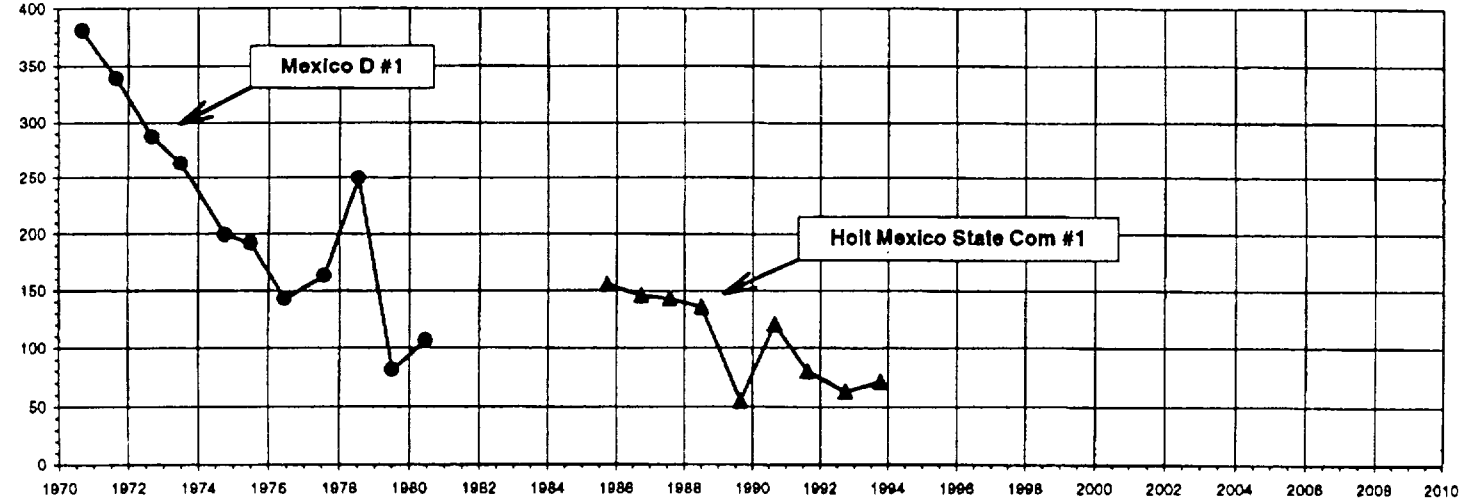
Holt Mexico State Com #1 Gas Production (MCFPM)



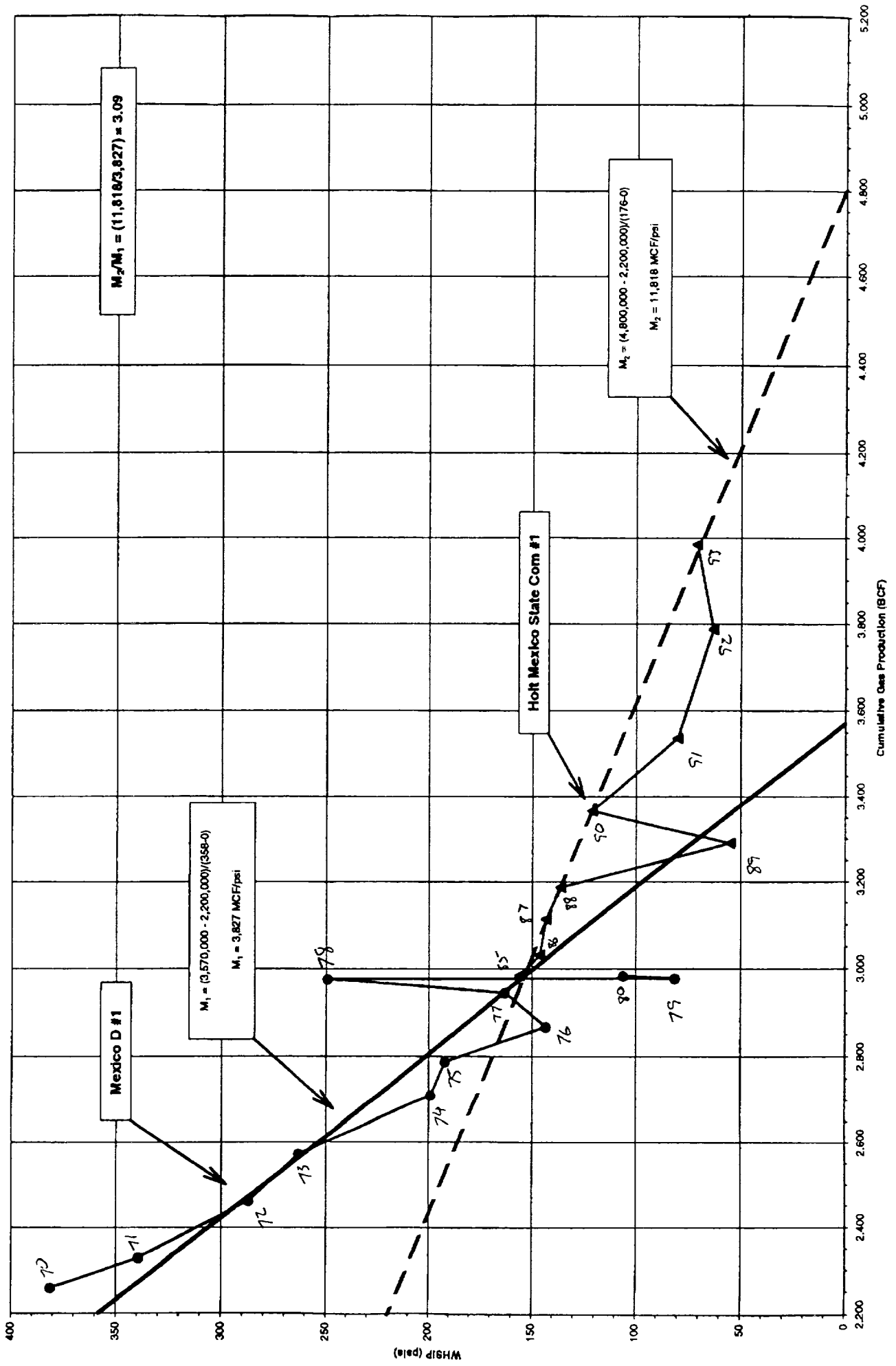
Cumulative Gas Production (BCF)



WHSIP (psia)

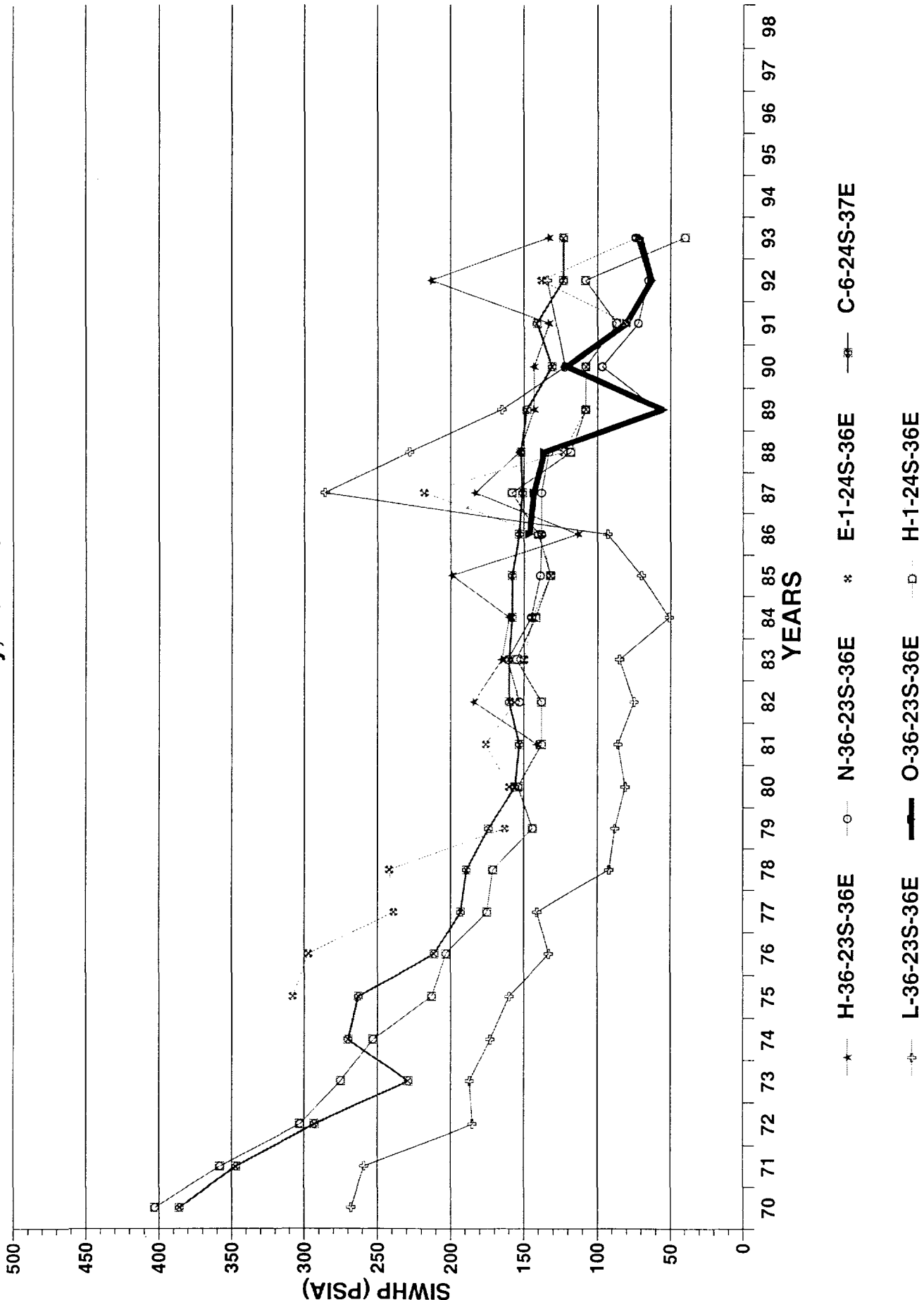


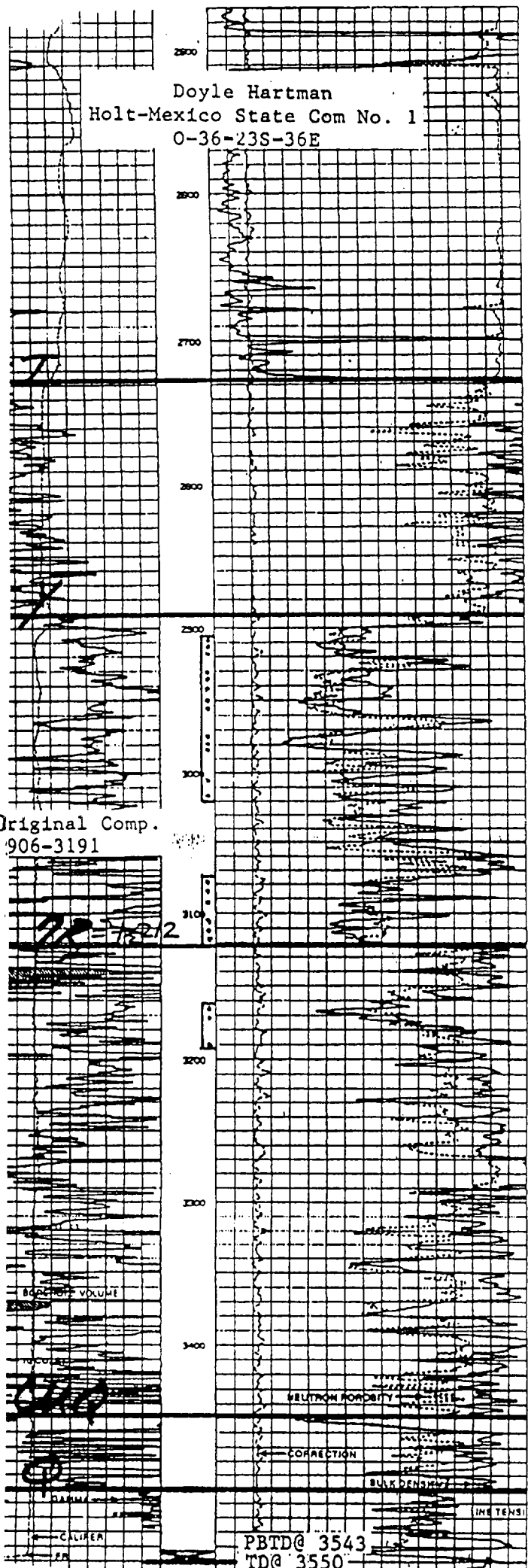
Mexico D #1 & Holt Mexico State Com #1  
 Jalmat Gas Pool  
 J & O-36-23S-36E  
 Gruy Petroleum Management Co.



# Jalmat (Tansill-Yates-Seven-Rivers) Pool

Holt Mexico # 1  
Composite Pressure - Time Plot  
Lea County, New Mexico





COMPANY Gruy Operating  
(Doyle Hartman)  
WELL Holt-Mexico Com No. 1  
  
FIELD Jalmat (Gas)  
LOCATION 1100' FSL & 1650' FEL (O)  
Sec. 36, T-23-S, R-36-E  
COUNTY Lea  
STATE New Mexico  
ELEVATIONS: KB 3332'  
DF   
GL 3322'

COMPLETION RECORD

SPUD DATE 08-27-85 COMP. DATE 09-12-85  
TO 3550' PBTDC 3543'  
CASING RECORD:  
9 5/8" @ 445' w/350 sx (TOC @ (Circ) )  
7" @ 3550' w/800 sx (TOC @ (Circ) )  
(TOC @ )  
(TOC @ )  
COMP. INTERVAL Perf 2906-3191 w/25  
(Yates - Upper 7R)  
STIMULATION A/5600 15% MCA  
ATR = 5.25 BPM. ATP = 2195 psi.  
ISIP = 0 psi  
POT IPP = 499 MCFPD (Acid)  
GOR GR  
TP CP 33 psi (SICP = 138 psi)  
CHOKE 44/64 TUBING 2 3/8 @ 3215  
REMARKS After acid, C = 24.1  
09-14-85: SIP = 138 psig  
  
09-18-85: SWF/187,890 + 400,000  
ATR = 35.5 BPM  
ATP = 880 psi  
ISIP = 630 psi  
15-Min. SIP = 510 psi  
Flare @ 305 psi. Choke = 64/64  
FCP = 55 psi. FTP = 105 psi  
  
09-20-85: SIP = 143 psig  
5-hr test: P/1150 MCFPD  
Choke = 26/64  
CP = 114 psi  
After Frac, C = 172  
  
02-87: SICP = 128 psig  
  
06-87: ADR = 566 MCFPD. Choke = 36/64.  
PCP = 114 psig. Est. C = 194.  
  
01-01-98: Cum. = 1.4493 BCF  
Est. Rem. = 249.2 MMCF  
Est. Ult. = 1.6985 BCF  
b = 0.236  
m = 11,818 MCF/psi

O-36-23S-36E

# Liberty Royalties No. 6

## O-7-24S-37E



Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

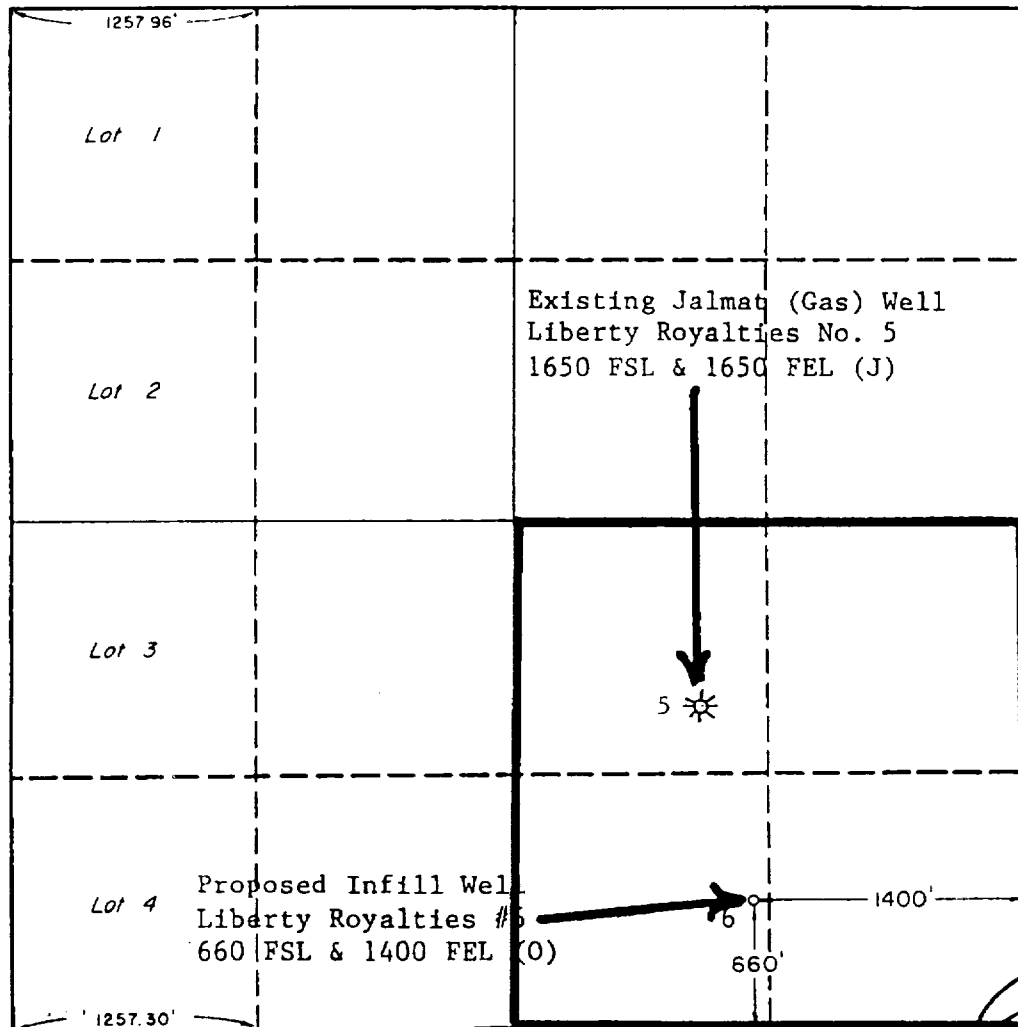
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

|                                                                                                   |              |                              |                            |                      |  |                                 |  |  |
|---------------------------------------------------------------------------------------------------|--------------|------------------------------|----------------------------|----------------------|--|---------------------------------|--|--|
| Operator<br>Doyle Hartman                                                                         |              |                              | Lease<br>Liberty Royalties |                      |  | Well No.<br>6                   |  |  |
| Unit Letter<br>0                                                                                  | Section<br>7 | Township<br>24 South         | Range<br>37 East           | County<br>NMPM       |  | Lea                             |  |  |
| Actual Footage Location of Well:<br>660 feet from the south line and 1400 feet from the east line |              |                              |                            |                      |  |                                 |  |  |
| Ground level Elev.<br>3305.0                                                                      |              | Producing Formation<br>Yates |                            | Pool<br>Jalmat (Gas) |  | Dedicated Acreage:<br>160 Acres |  |  |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
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3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary).  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, 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.

*Michelle Wilcox*  
Signature  
Michelle Wilcox  
Printed Name  
Administrative Assistant  
Position  
Doyle Hartman  
Company  
May 9, 1989  
Date

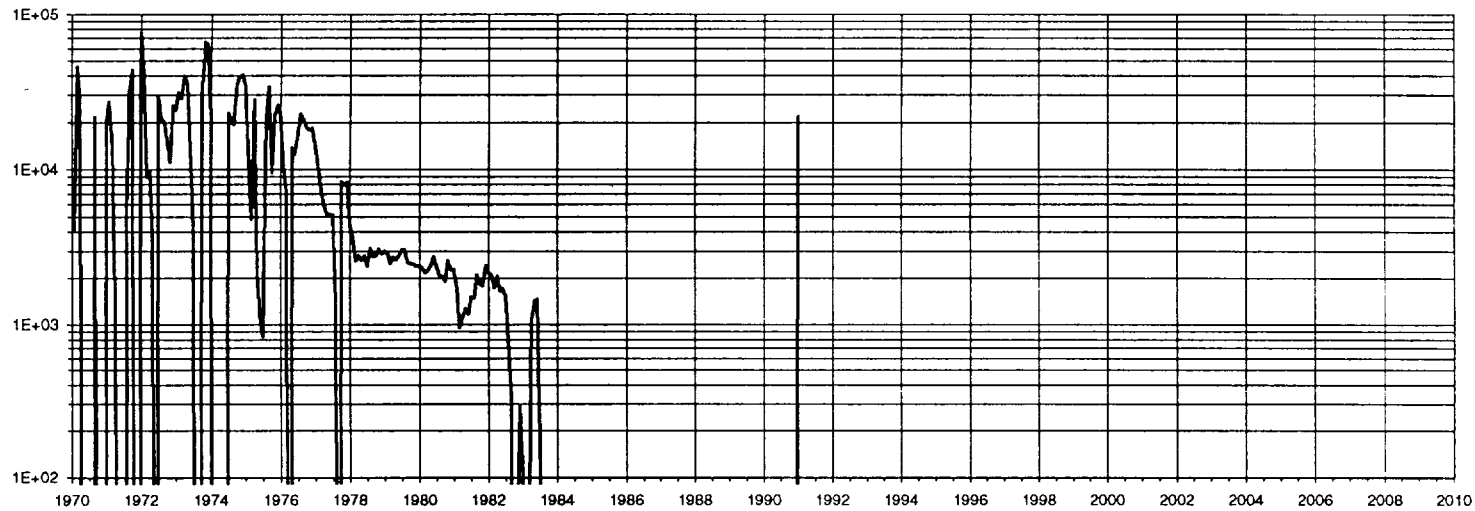
SURVEYOR CERTIFICATION

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 knowledge and belief.

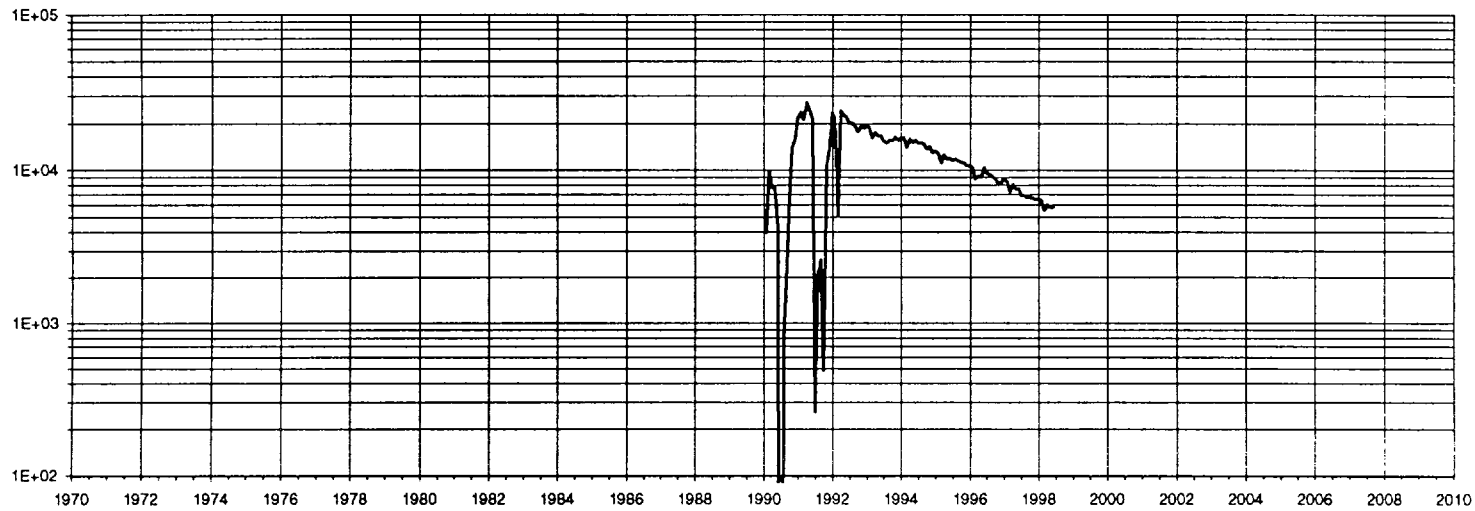
Date Surveyed  
April 21, 1989  
Signature  
Printed Name  
Professional Engineer  
No. 576  
JOHN W. WEST  
BOULEVARD, DENVER, CO 80202  
676  
3219

Liberty Royalties Nos. 5 & 6  
Jalmat Gas Pool  
J & O-7-24S-37E  
Doyle Hartman

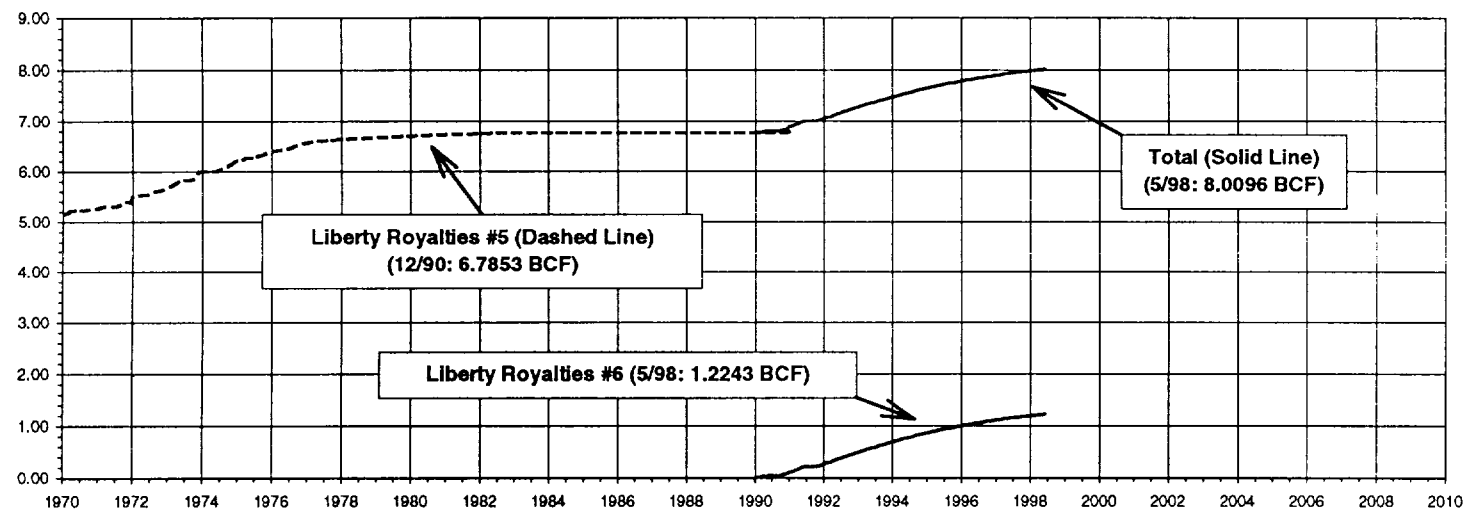
Liberty Royalties #5 Gas Production (MCFPM)



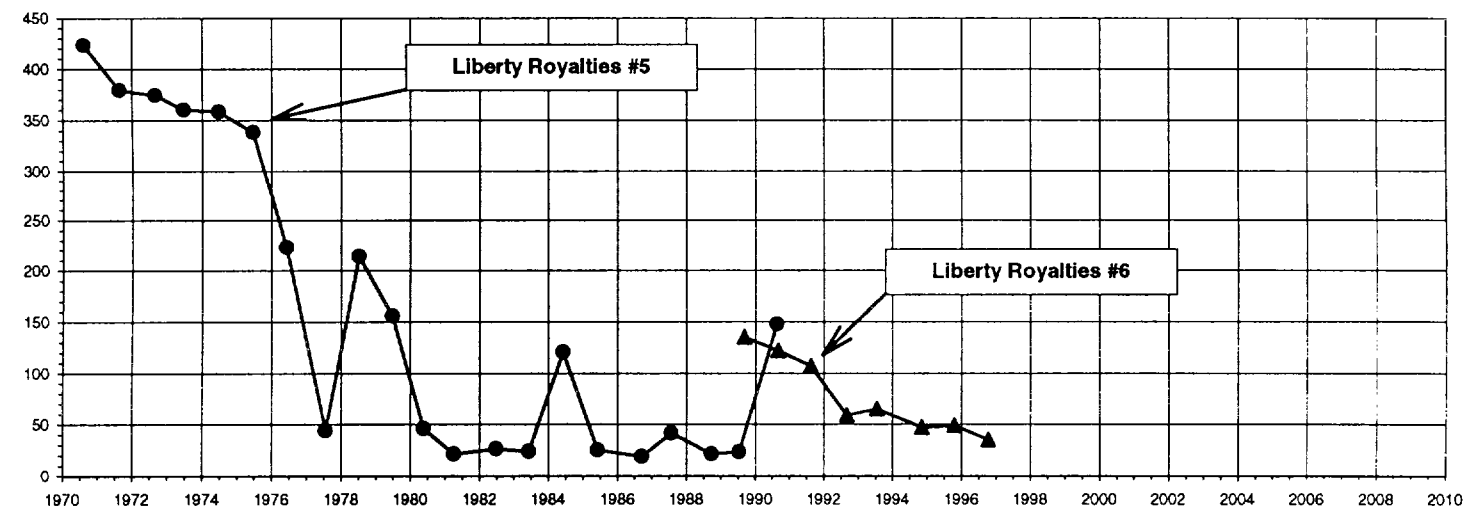
Liberty Royalties #6 Gas Production (MCFPM)



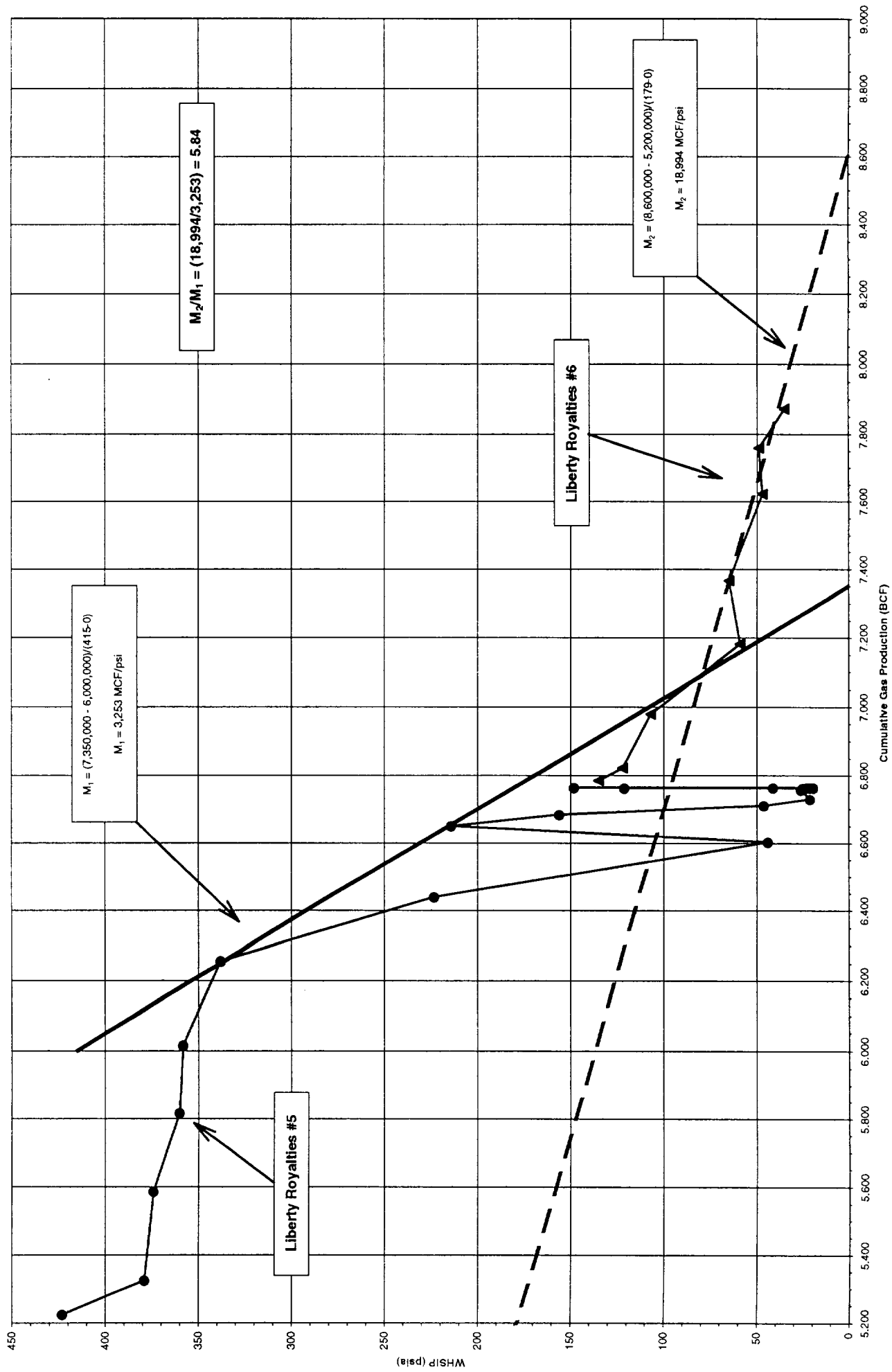
Cumulative Gas Production (BCF)



WHSIP (psia)

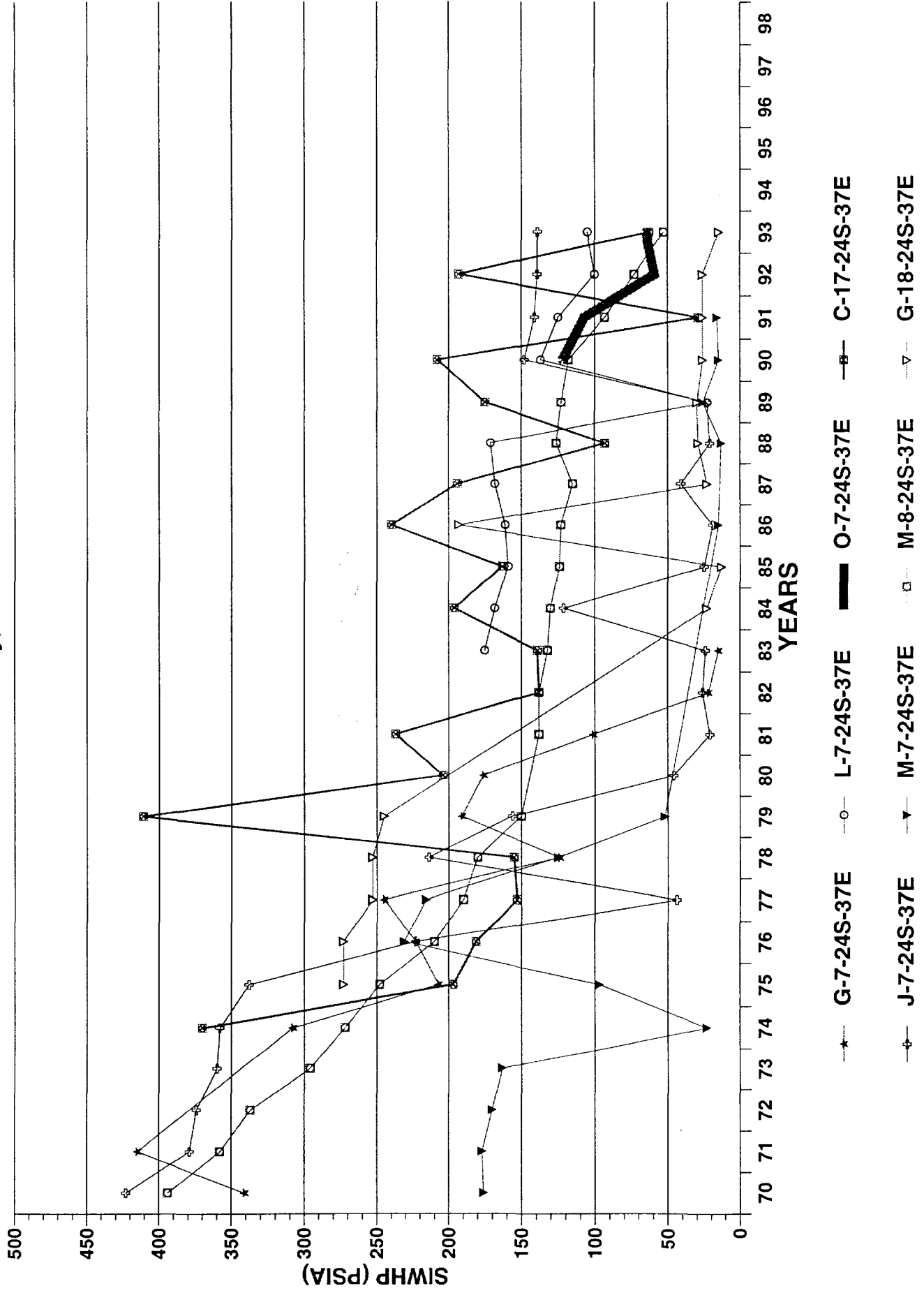


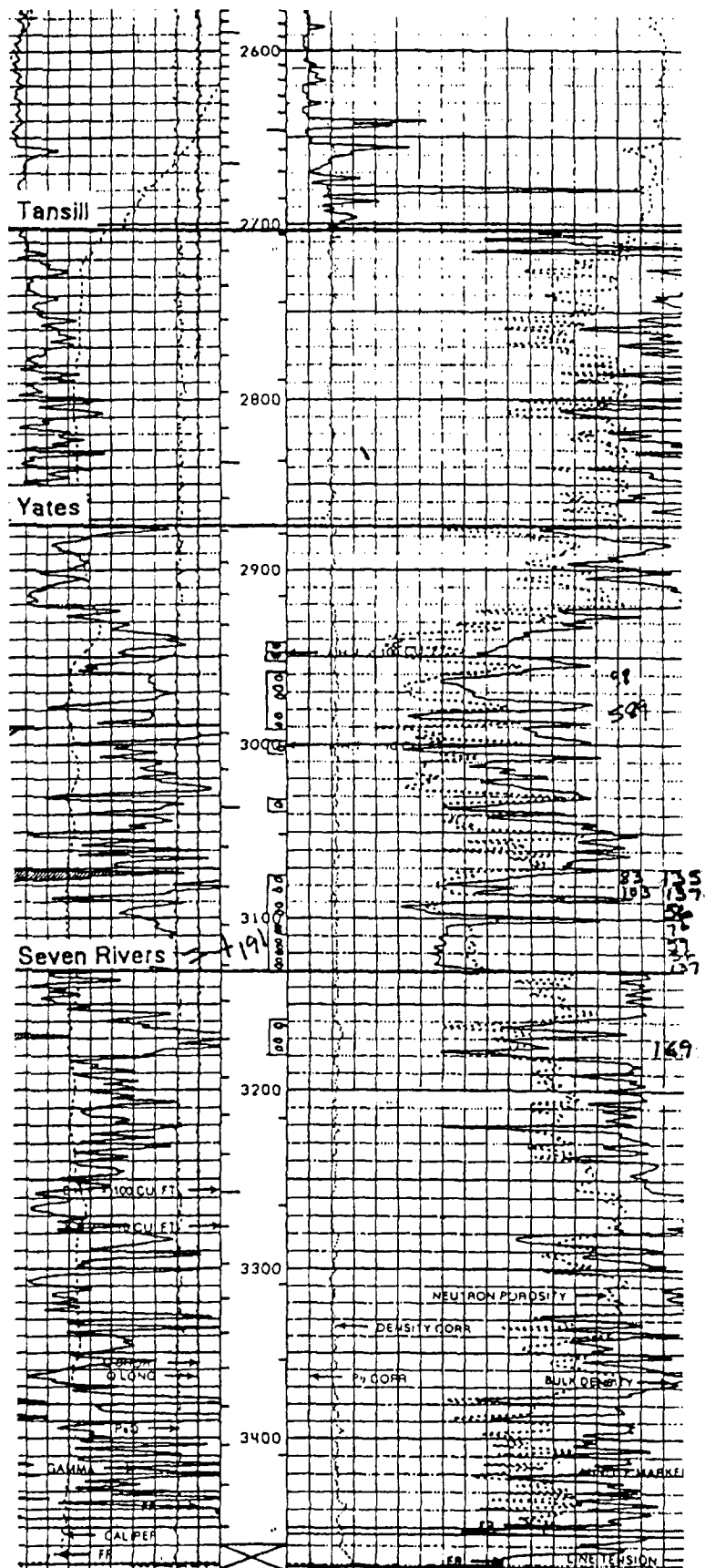
Liberty Royalties Nos. 5 & 6  
Jalmat Gas Pool  
J & O-7-24S-37E  
Doyle Hartman



# Jalmat (Tansill-Yates-Seven-Rivers) Pool

Liberty Royalties # 6  
Composite Pressure - Time Plot  
Lea County, New Mexico





COMPANY Doyle Hartman

WELL Liberty Royalties No. 6

FIELD Jalmat (Gas)

LOCATION 660' FSL & 1400' FEL (O)

Sec. 7, T-24-S, R-37-E

COUNTY Lea

STATE New Mexico

ELEVATIONS: KB 3316

DF

GL 3305

### COMPLETION RECORD

SPUD DATE 9-18-89 COMP. DATE 8-30-89

TD 3486 PBTD

CASING RECORD:

9 5/8, 36# @ 421 w/250 (TOC @ Circ.)

7, 23# @ 3486 w/1100 (TOC @ Circ.)

(TOC @ )

(TOC @ )

COMP. INTERVAL Perf 2944-3177 w/23

STIMULATION A/6660 15% MCA

ATR = 5 BPM

ATP = 1600 psi

POT P/151 MCFPD (After acid)

GOR  GR

TP  CP 29 psig (SICP = 151 psig)

CHOKE 64/64 TUBING 2 3/8 @ 3301

REMARKS

8-29-89: POP @ 9 x 64 x 1 1/2

8-30-89: SICP = 151 psig (After acid)

8-31-89: SWF/175,000 + 336,000

ATR = 37 BPM

ATP = 1447 psi

SITP = 302 psi

SICP = 380 psi

9-1-89: SICP = 186 psig

9-5-89: F/1746 MCFPD

Choke = 64/64

FCP = 91 psig

9-10-89: 25-hr. SICP = 111 psig (After frac)

6-1-98: Cum. = 1.2243 BCF

Est. Rem. = 251.6 MMCF

Est. Ult. = 1.4759 BCF

b = 0.240

O-7-24S-37E

D-8-24S-37E

Hair Fowler No. 1  
M-8-24S-37E

# ILLEGIBLE

## NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Superseded C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

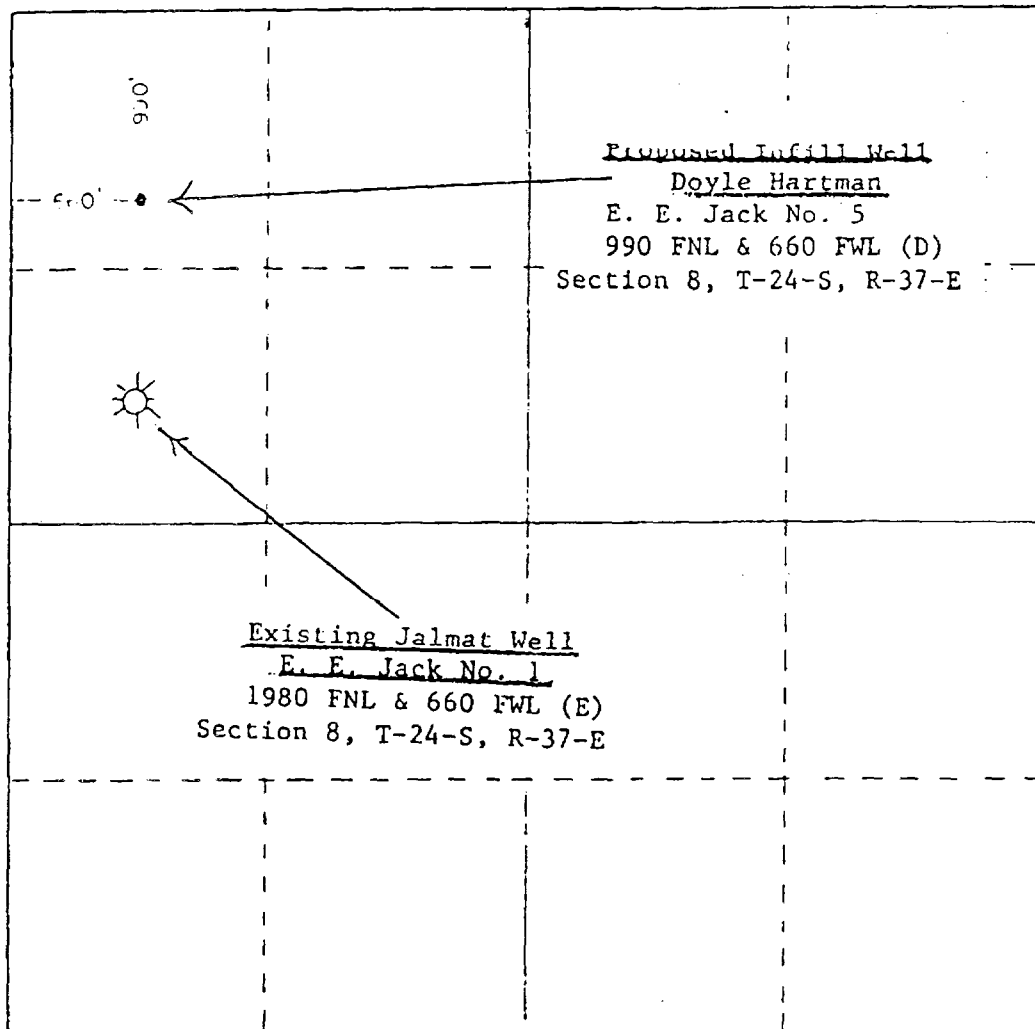
|                                                                                                                               |                                                  |                            |                              |                      |                                 |
|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------|------------------------------|----------------------|---------------------------------|
| Operator<br><b>DOYLE HARTMAN</b>                                                                                              |                                                  | Lessee<br><b>E.E. JACK</b> |                              | Acres<br><b>5</b>    |                                 |
| Tract Letter<br><b>D</b>                                                                                                      | Section<br><b>8</b>                              | Township<br><b>24S</b>     | Range<br><b>37E</b>          | County<br><b>LEA</b> |                                 |
| Actual Portion Location of Wells:<br><b>660</b> feet from the <b>WEST</b> line and <b>990</b> feet from the <b>NORTH</b> line |                                                  |                            |                              |                      |                                 |
| Ground Level Elev.<br><b>3312.5</b>                                                                                           | Producing Formation<br><b>Yates-Seven Rivers</b> |                            | Prod.<br><b>Jalmat (Gas)</b> |                      | Dedicated Acreage<br><b>160</b> |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes," type of consolidation Force-Pooling

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



### CERTIFICATION

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

By  
**Larry A. Nermyr**

Engineer

Doyle Hartman

May 31, 1985

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.

Date Surveyed

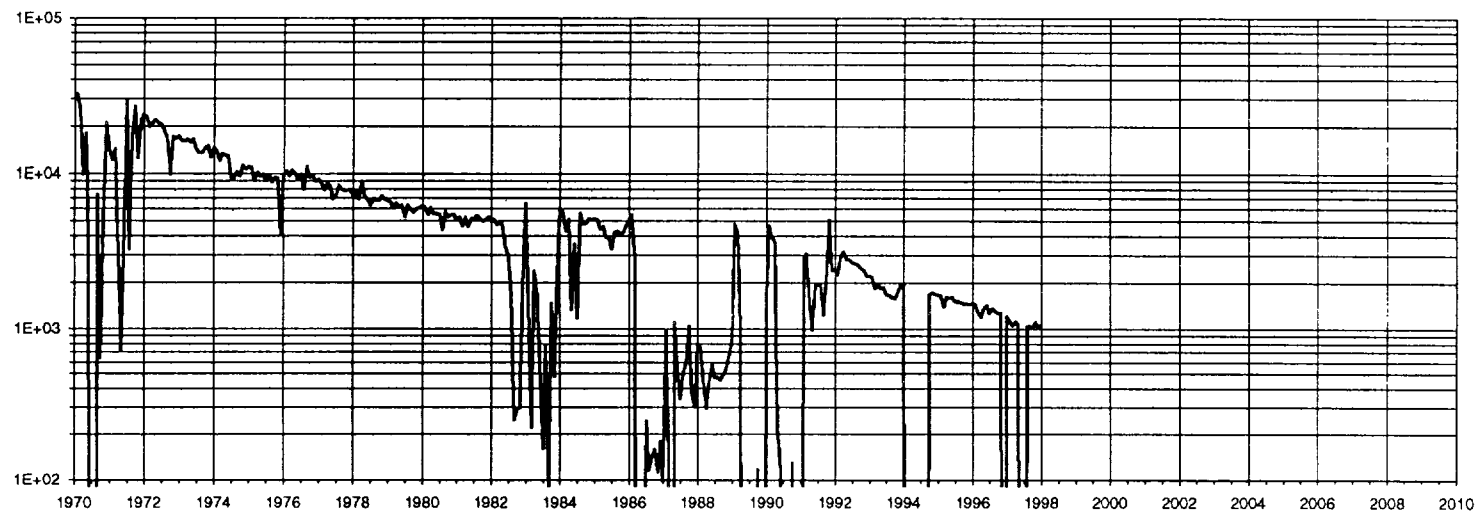
5/15/85

Registered Professional Engineer and Oil and Gas Surveyor

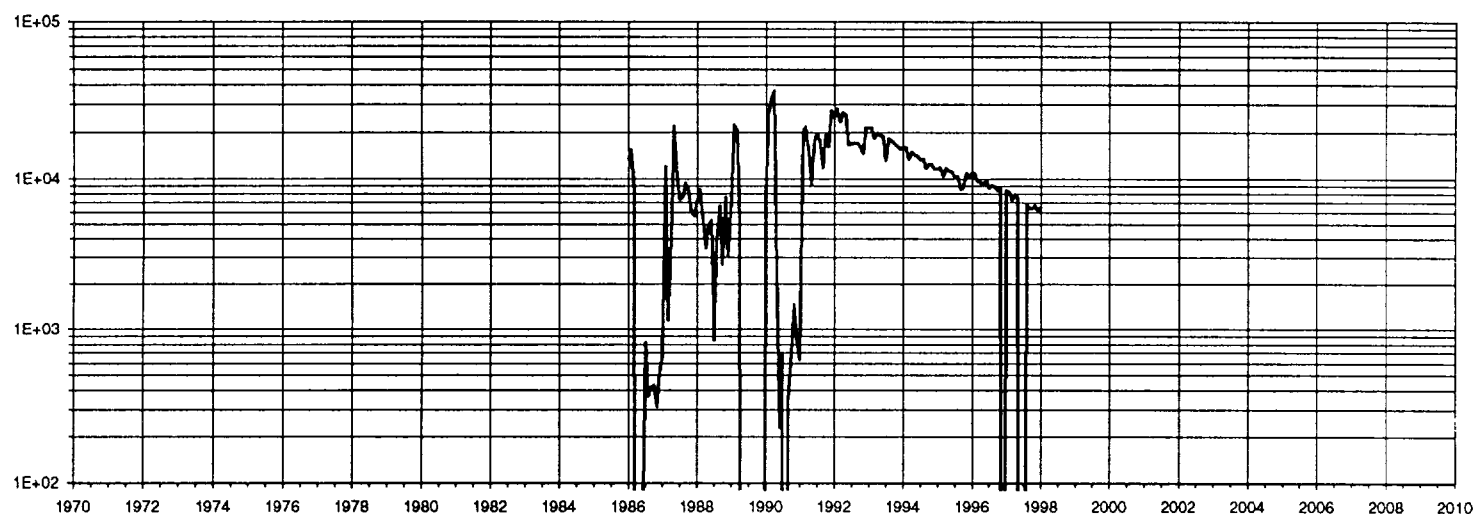
*John W. West*  
Attorney at Law  
JOHN W. WEST  
004724  
576  
3239

E. E. Jack Nos. 1 & 5  
Jalmat Gas Pool  
E & D-8-24S-37E  
Gruy Petroleum Management Co.

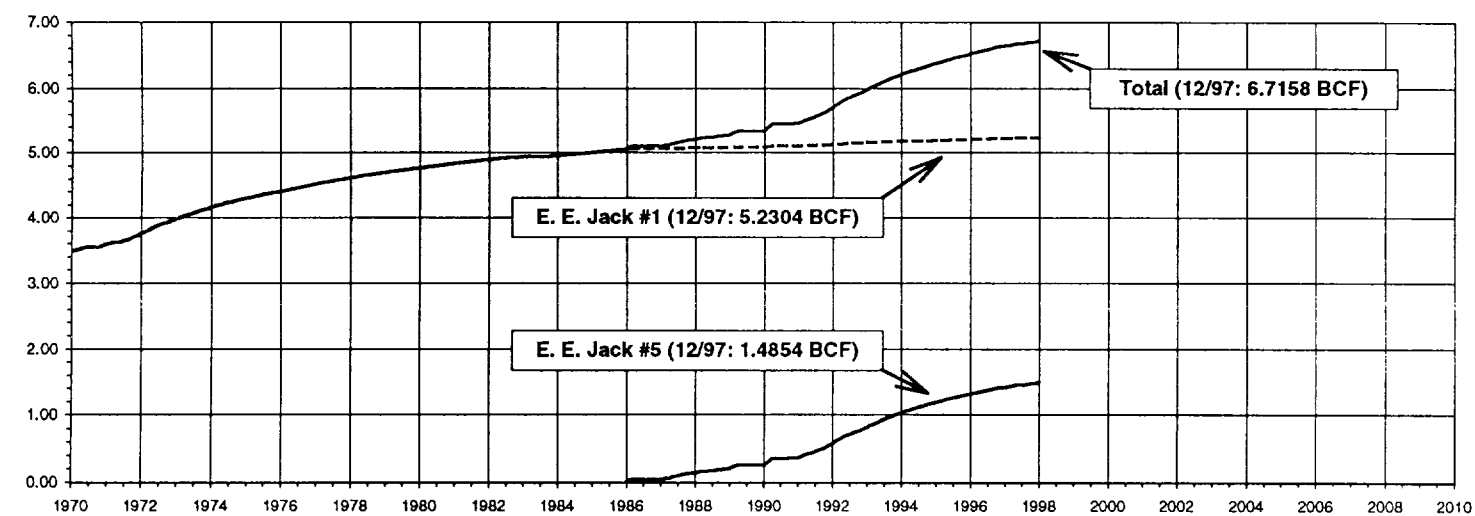
E. E. Jack #1 Gas Production (MCFPM)



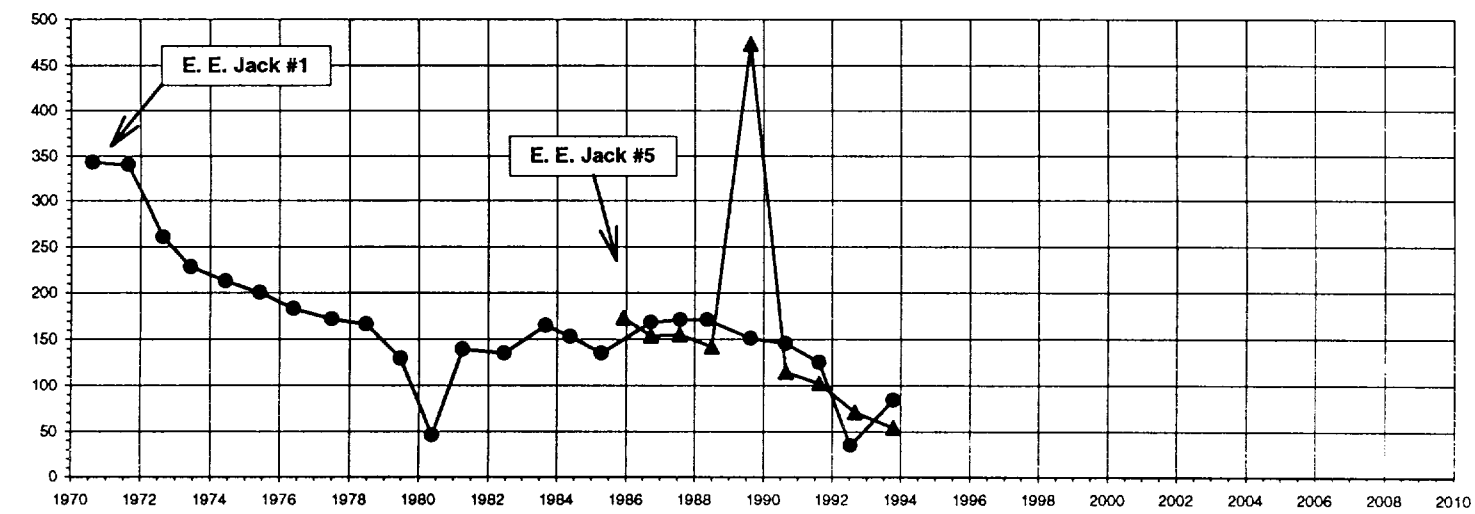
E. E. Jack #5 Gas Production (MCFPM)



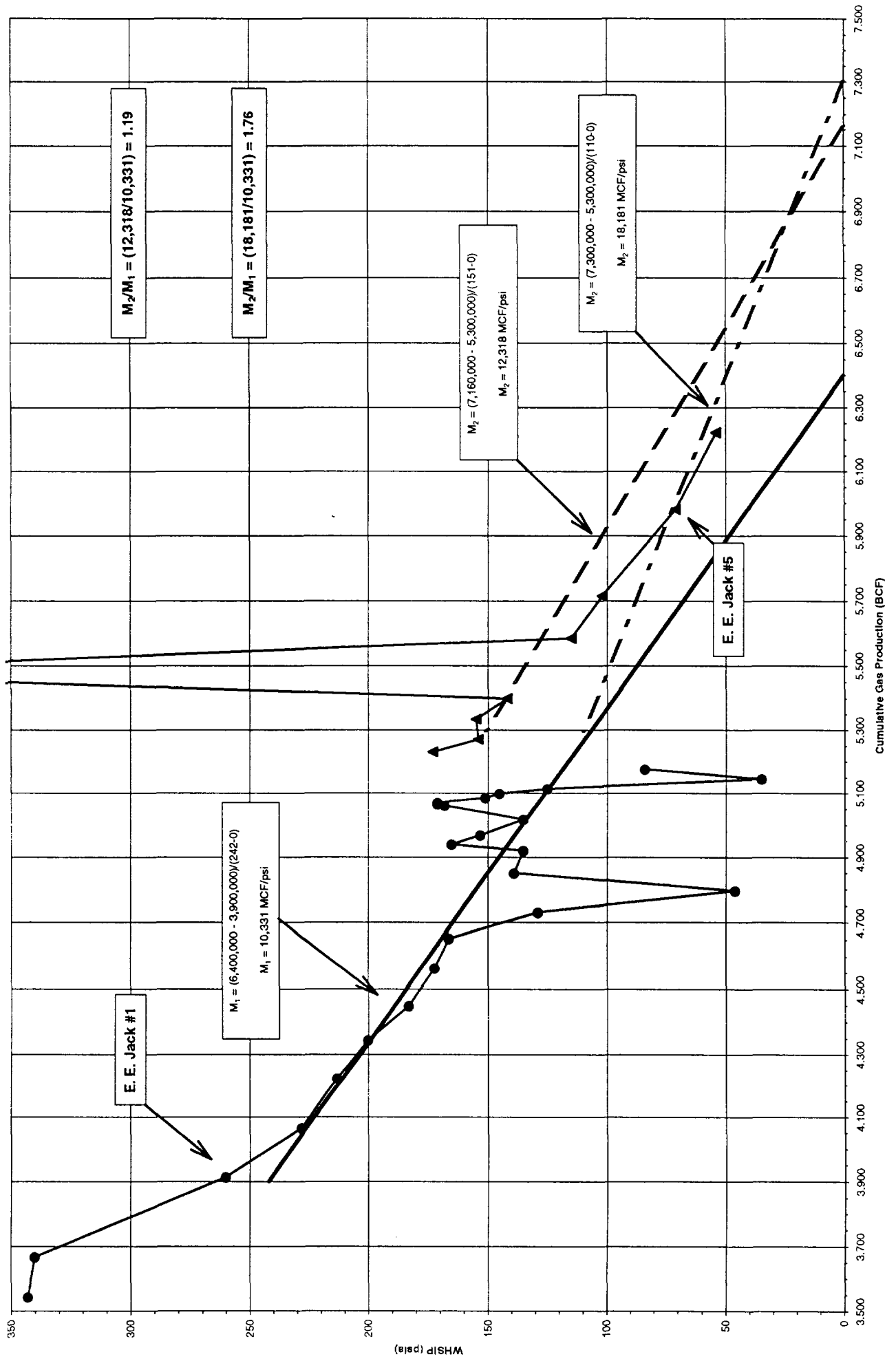
Cumulative Gas Production (BCF)



WHSIP (psia)

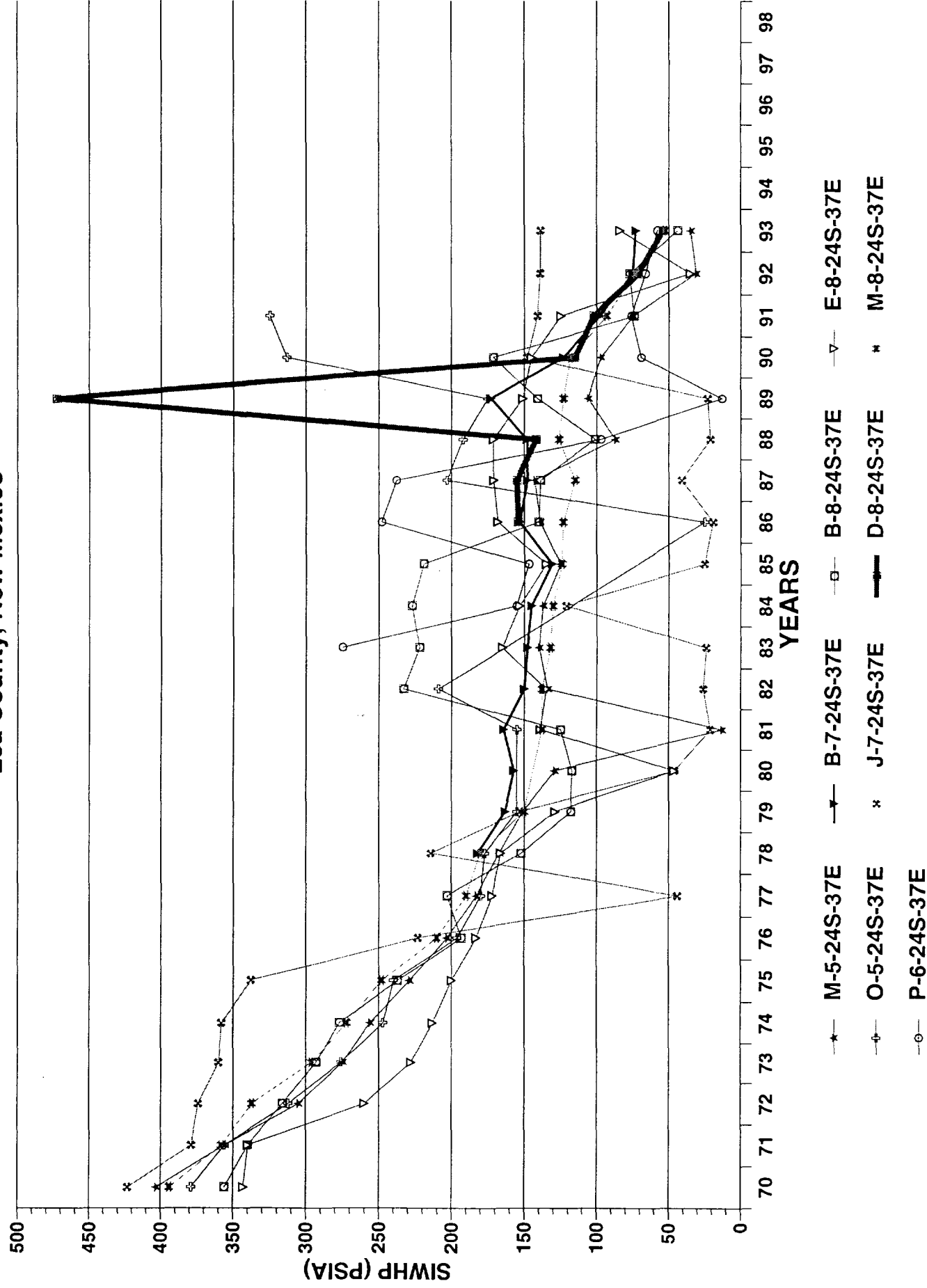


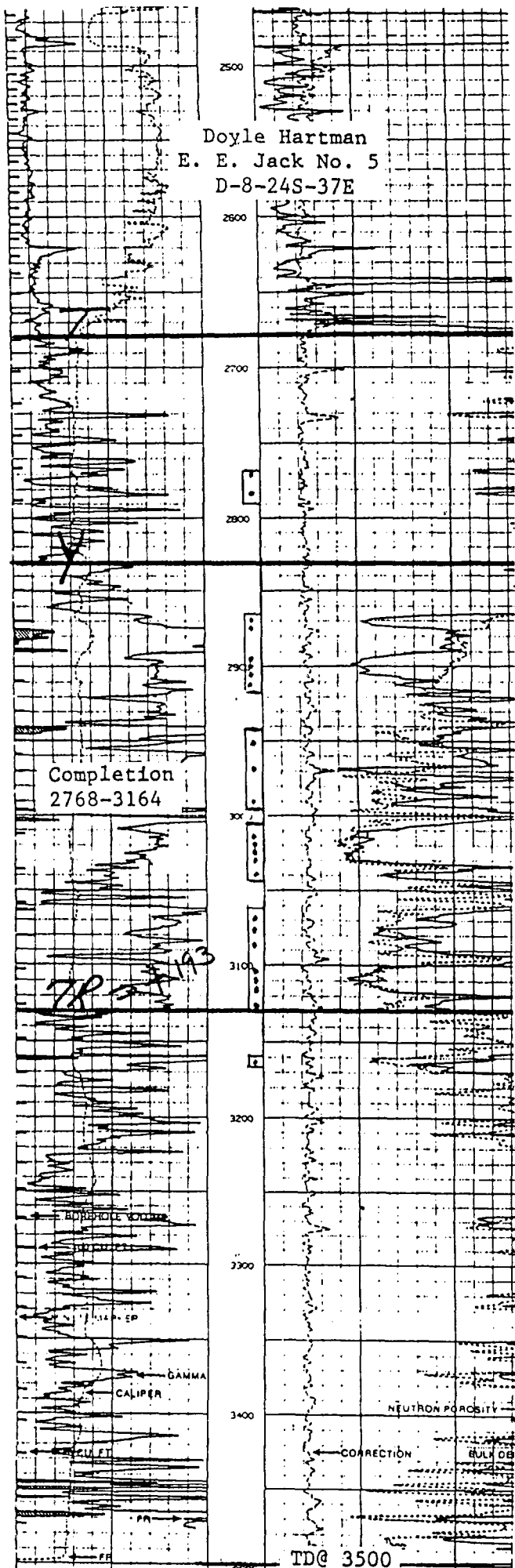
E. E. Jack Nos. 1 & 5  
Jalmat Gas Pool  
E & D-8-24S-37E  
Gruy Petroleum Management Co.



# Jalmat (Tansill-Yates-Seven-Rivers) Pool

E. E. Jack # 5  
Composite Pressure - Time Plot  
Lea County, New Mexico





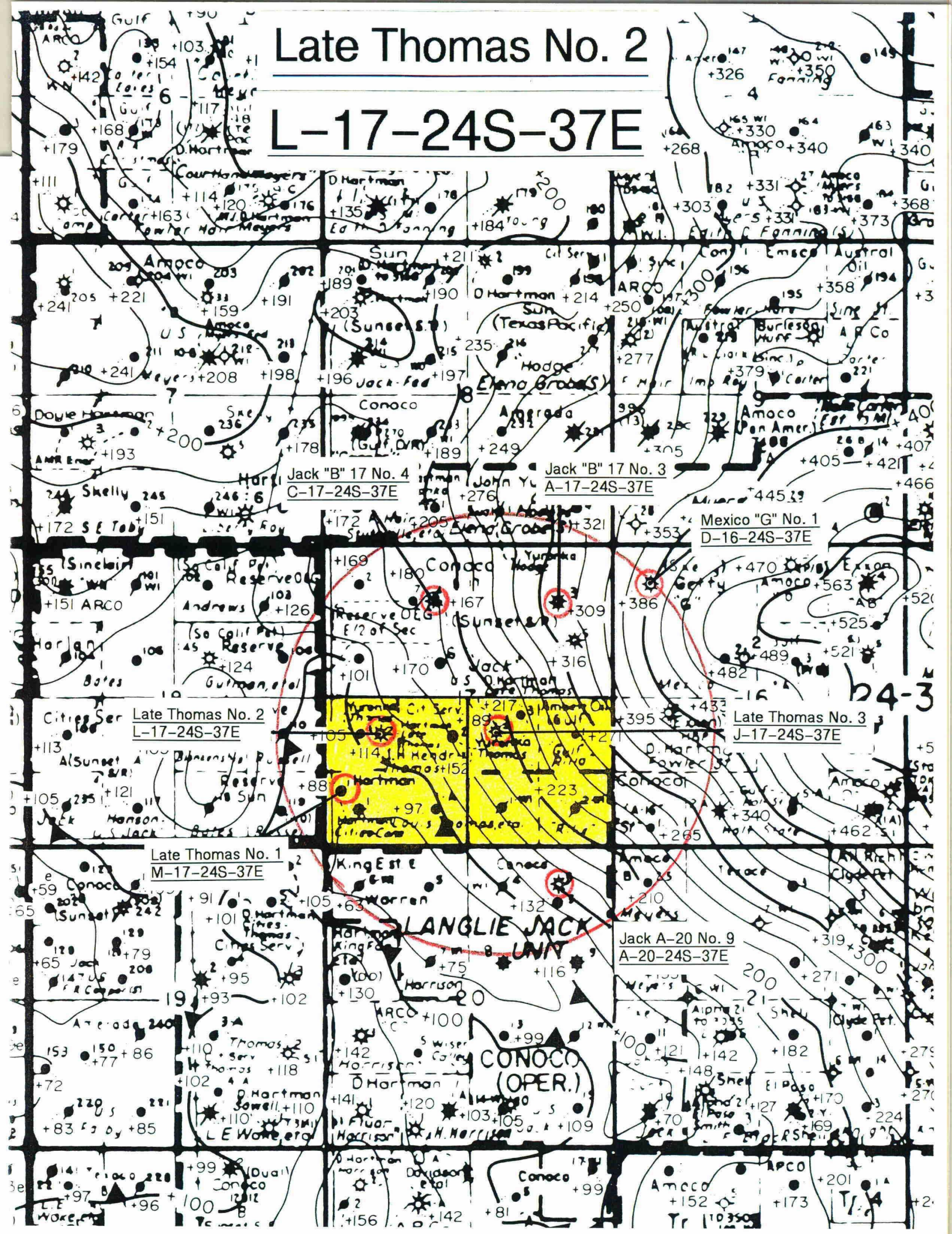
D-8-24S-37E

COMPANY Gruy Operating  
(Doyle Hartman)  
WELL E.E. Jack No. 5  
FIELD Jalpat (Gas)  
LOCATION 990' FNL & 660' FWL (D)  
Sec. 8, T-24-S, R-37-E  
COUNTY Lea  
STATE New Mexico  
ELEVATIONS: KB 3323  
DF   
GL 3312

### COMPLETION RECORD

SPUD DATE 9-27-85 COMP. DATE 10-9-75  
TD 3500 PBTD 3471  
CASING RECORD:  
9 5/8, 40# @ 402' w/350 (TOC @ Circ.)  
7, 26# @ 3498' w/1150 (TOC @ Circ.)  
(TOC @ )  
(TOC @ )  
COMP. INTERVAL Perf: 2768-3164 w/24  
STIMULATION A/5675 15% MCA  
ATR = 4.5 BPM ATP = 2536 psi.  
ISIP = 1500 psi. 15-min. SIP = 200 psi.  
POT IPF = 603 MCFPD (Kicked off w/o swabbing)  
GOR  GR   
TP 78 CP 103  
CHOKE 32/64 TUBING @  
REMARKS Gas Show: While drilling, experienced gas entry  
from Tansil.  
10-11-85: Lowered tubing to 2955'. F/310 MCFPD.  
Choke = 16/64. FTP = 175 psi. FCP = 228 psi.  
10-13-85: SICP = 233 psig.  
10-15-85: SWF/214,000 + 449,000.  
ATR = 36 BPM. ATP = 1760 psi.  
ISIP = 590 psi. 1-hr. SIP = 530 psi.  
Flare @ 345 psig. After 19 hrs, FTP = 66,  
FCP = 206 on 64/64 choke.  
10-16-85: SIP = 211 psig.  
10-17-85: F/922 MCFPD.  
Choke = 24/64. FTP = 151.  
FCP = 189.  
12-07-85: SIP = 160 psig.  
1-01-98: Cum. = 1.4854 BCF  
Est. Rem. = 231.1 MMCF  
Est. Ult. = 1.7165 BCF  
b = 0.270

L-17-24S-37E



# NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form O-112  
Supersedes O-178  
Effective 1-1-85

All distances must be from the outer boundaries of the Section

|                                     |                                                  |                             |                                  |                      |
|-------------------------------------|--------------------------------------------------|-----------------------------|----------------------------------|----------------------|
| Operator<br><b>DOYLE HARTMAN</b>    |                                                  | Lease<br><b>THOMAS</b>      |                                  | Well No.<br><b>2</b> |
| Tract Letter<br><b>L</b>            | Section<br><b>17</b>                             | Township<br><b>24 SOUTH</b> | Range<br><b>37 EAST</b>          | County<br><b>LEA</b> |
| Actual Wellbore Location of Well:   |                                                  |                             |                                  |                      |
| <b>1930</b>                         | feet from the                                    | <b>SOUTH</b>                | line and                         | <b>990</b>           |
|                                     |                                                  |                             |                                  | feet from the        |
|                                     |                                                  |                             |                                  | <b>WEST</b>          |
| Ground Level Elev.<br><b>3281.5</b> | Producing Formation<br><b>Yates-Seven Rivers</b> | Pool<br><b>Jalmat (Gas)</b> | Depth of A to Top<br><b>320*</b> |                      |

- 1 Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- 2 If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 3 If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☒ Yes ☐ No If answer is "yes" type of consolidation Communitization Agreement

Compulsory Pooling R-6781

If answer is "no," list the owners and tract descriptions which have actually been consolidated (Use reverse side of this form if necessary.)

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

\* Simultaneous dedication of Late-Thomas Nos. 1, 2, and 3 to existing proration unit consisting of S/2 Section 17, T-24-S, R-37-E approved under NMOCD Order R-6781.

\*\* Unorthodox location for Late-Thomas No. 2 approved under NMOCD Order R-6807.

## CERTIFICATION

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

*Michelle Hembree*

Signature

Michelle Hembree

Position

Administrative Assistant

Company

Doyle Hartman

Date

10-28-81

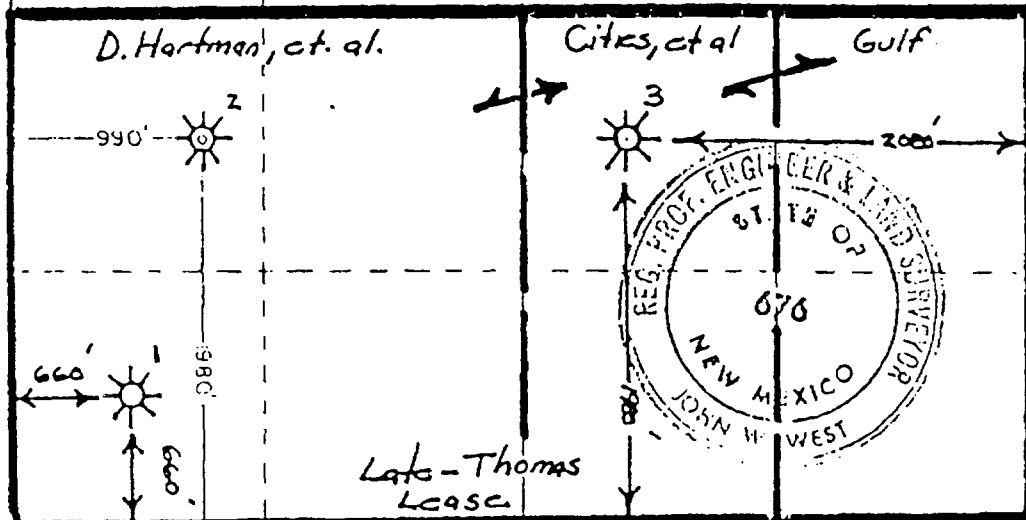
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

8-4-81

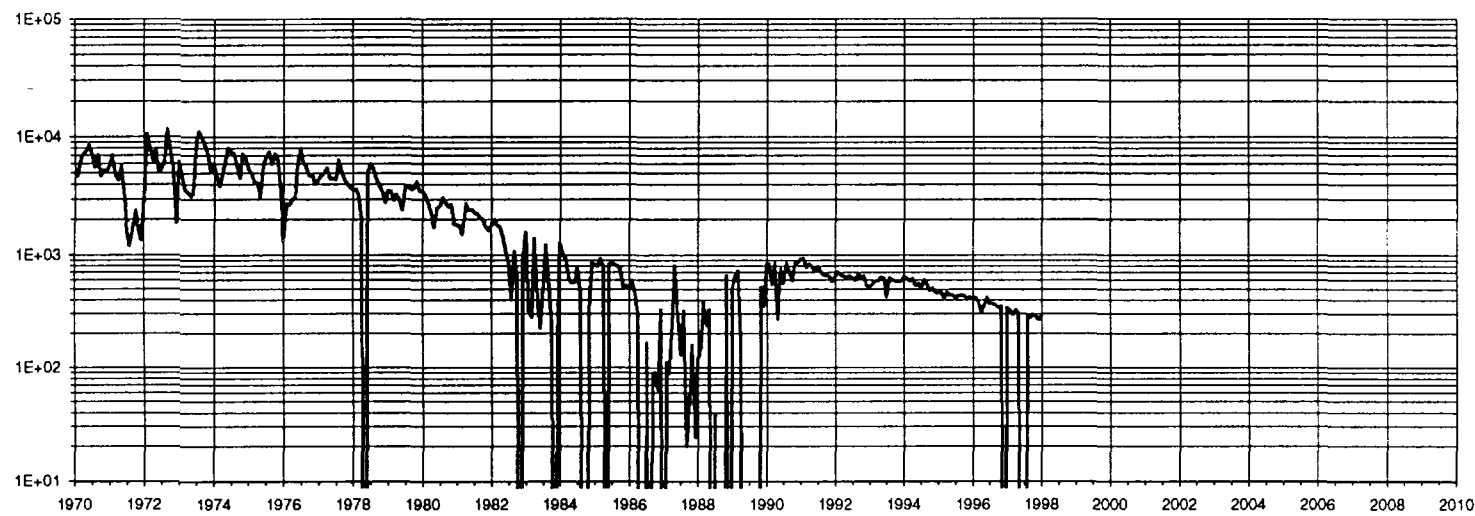
Registered Professional Engineer and Land Surveyor

*John W. West*  
Certification No. **JOHN W. WEST** **678**  
DALLAS, TEXAS

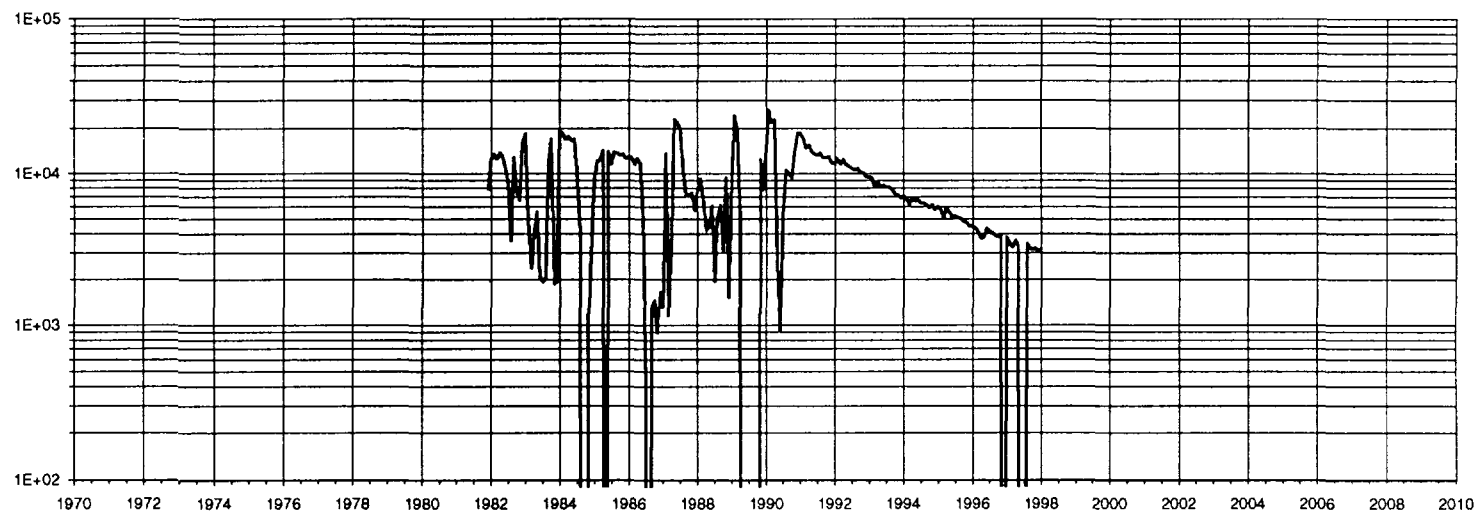


Late Thomas Nos. 1 & 2  
Jalmat Gas Pool  
L-17-24S-37E  
Gruy Petroleum Management Co.

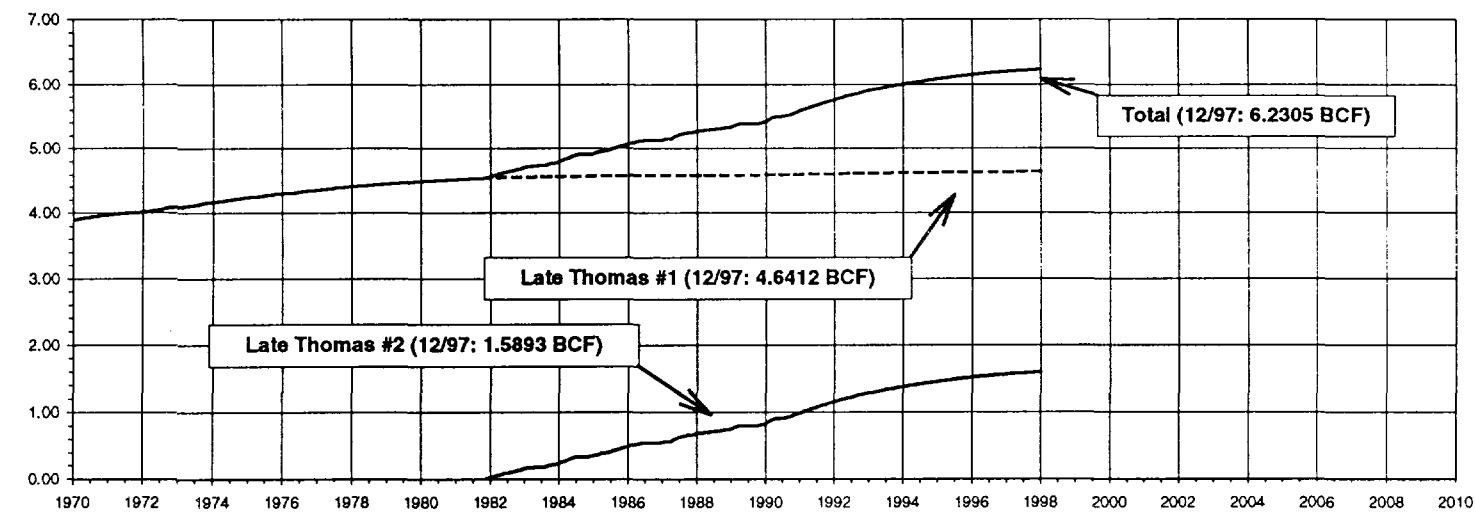
Late Thomas #1 Gas Production (MCFPM)



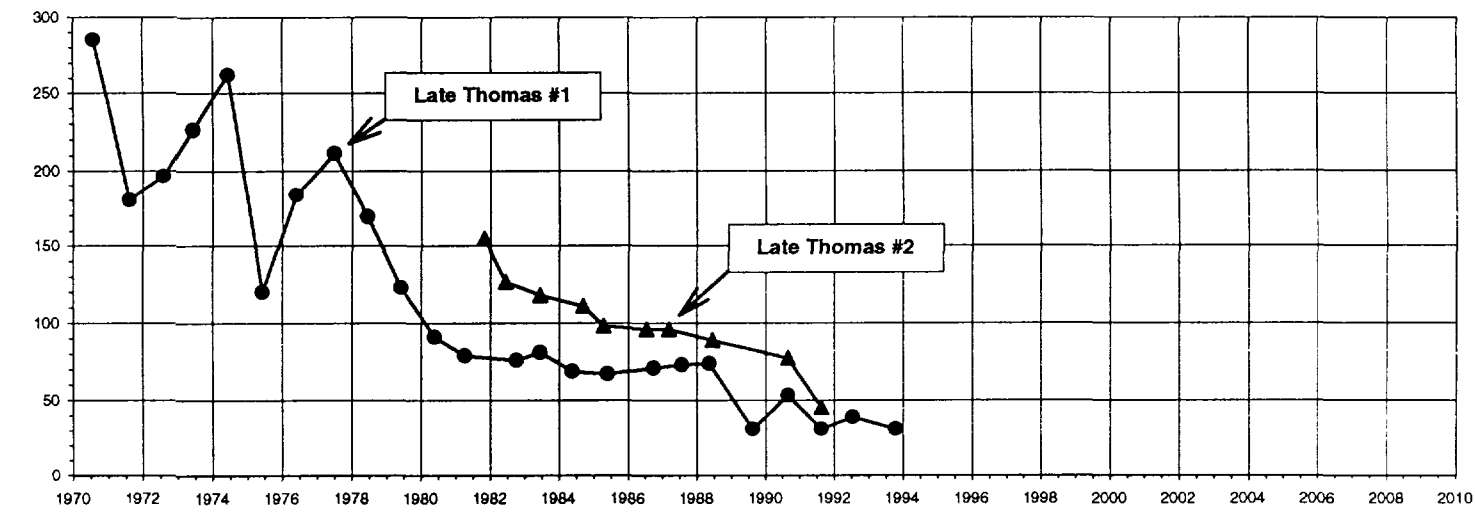
Late Thomas #2 Gas Production (MCFPM)



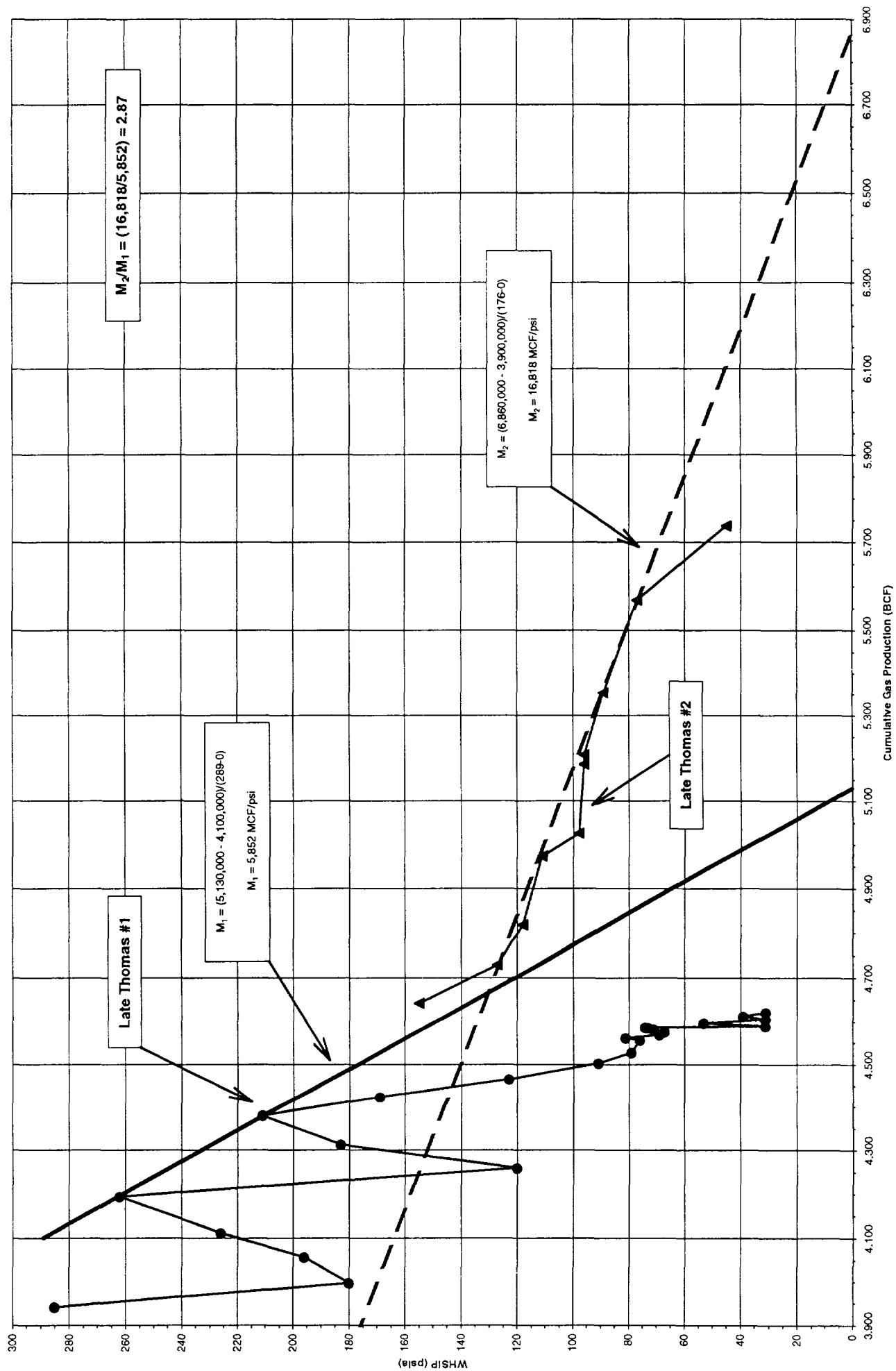
Cumulative Gas Production (BCF)



WHSIP (psia)

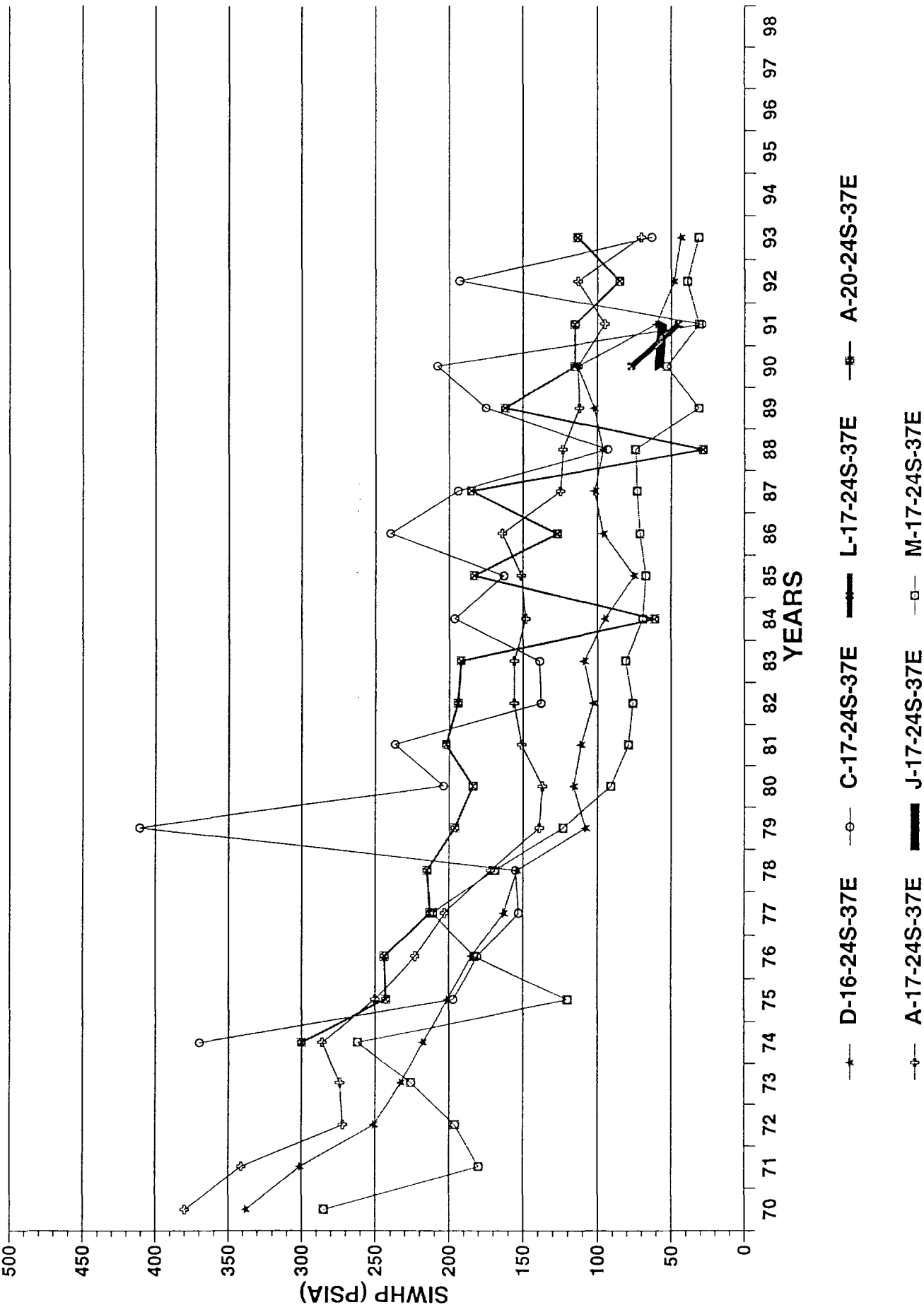


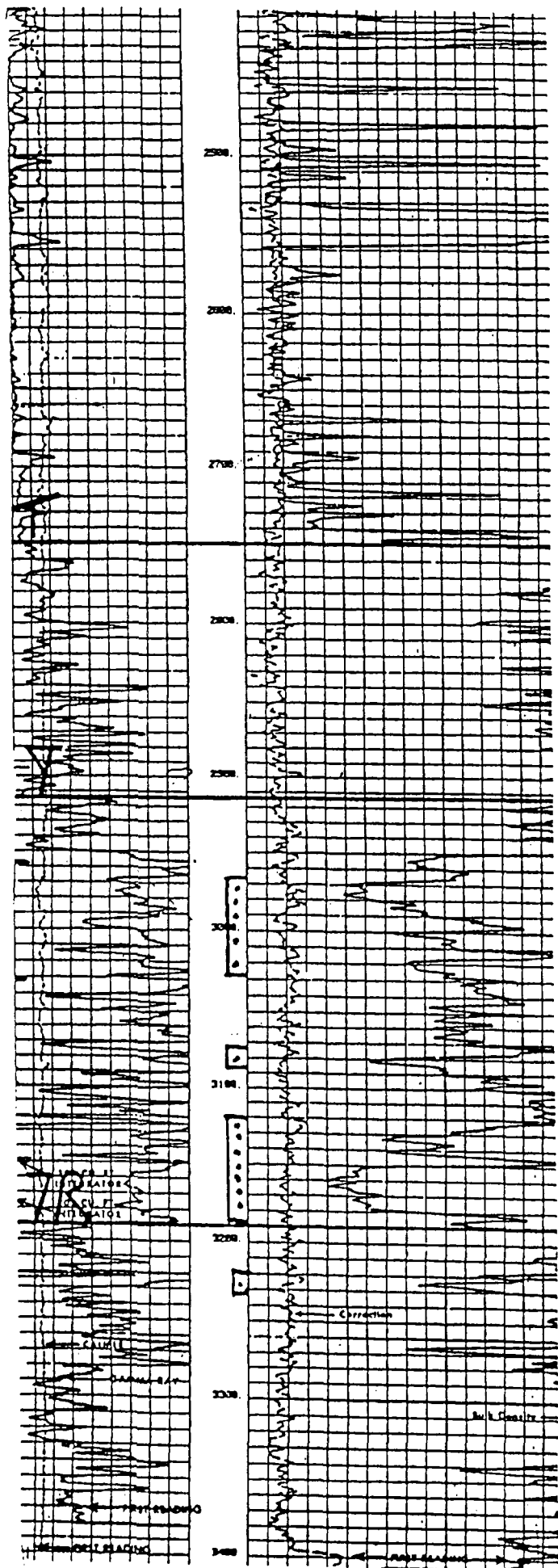
Late Thomas Nos. 1 & 2  
Jalmat Gas Pool  
L-17-24S-37E  
Gruy Petroleum Management Co.



# Jalmat (Tansill-Yates-Seven-Rivers) Pool

Late Thomas # 2, 3  
Composite Pressure - Time Plot  
Lea County, New Mexico





COMPANY Gruy Operating  
(Doyle Hartman)  
WELL Late-Thomas No. 2  
FIELD Jalmat (Gas)  
LOCATION 1980' FSL & 990' FWL (L)  
Sec. 17, T-24-S, R-37-E  
COUNTY Lea  
STATE New Mexico  
ELEVATIONS: KB 3292  
DF   
GL 3282

### COMPLETION RECORD

SPUD DATE 10-14-81 COMP. DATE 10-29-81  
TD 3400 PBTD 3319

CASING RECORD:  
9 5/8, 36# @ 425 w/225 (TOC @ Circ.)  
7, 23# @ 3400 w/450 (TOC @ Circ.)  
(TOC @ )  
(TOC @ )

COMP. INTERVAL Perf 2957-3226 w/20

STIMULATION A/5500 15% MCA  
ATR = 4.4 BPM

ATP = 1950 psi ISIP = 0 psi

POT IPP = 1497 MCFPD (After Frac)

GOR  GR

TP  CP 110 psi (SICP = 142 psi)

CHOKE 44/64 TUBING 2 3/8 @ 3265

REMARKS

10-27-81: SWF/72,000 + 175,000

ATR = 25 BPM

ATP = 1300 psi

ISIP = 900 psi

1.33-hr. SIP = 550 psi

60/64: FCP = 64, FTP = 108

10-28-81: SIP = 136 psig.

10-28-81: POP @ 8 1/2 x 64 x 1 1/2

10-29-81: F/1497 MCFPD (Est.)

Choke = 44/64

FCP = 110 psig

Est. C = 181

01-01-98: Cum. = 1.5893 BCF

Est. Rem. = 119.5 MMCF

Est. Ult. = 1.7088 BCF

b = 0.221

L-17-24S-37E

# 160-acre Standard Single-Well S.P.U.

SW / 4 Sec. 4, T-26-S, R-37-E

(C-102 Filed 3-2-82)

Farnsworth "4" # 5 (RFU # 43)

3-11-98: Recompleted (2680' - 2923')

3-13-98: Opened on 30 / 64" ck

7-14-98: Filed 3160-5

Farnsworth "C" # 1 (RFU # 41)

Completed 10-13-39

F / 4790 MCFPD (2695' - 3160')

Original Pressure-Cum Slope = 16,923 MCF / psi

Cagle "A" # 2

Completed 7-14-38 (2780' - 3060')

Original Pressure-Cum Slope = 32,286 MCF / psi

12-31-43 Cum = 11.434 BCF

RFU # 415

6-16-98: Spudded Well

7-24-98: F / 140 MCFPD (2740' - 2837')

(No 3160-4 or Final 3160-5 as of 8-25-98)

Cagle "A" # 1

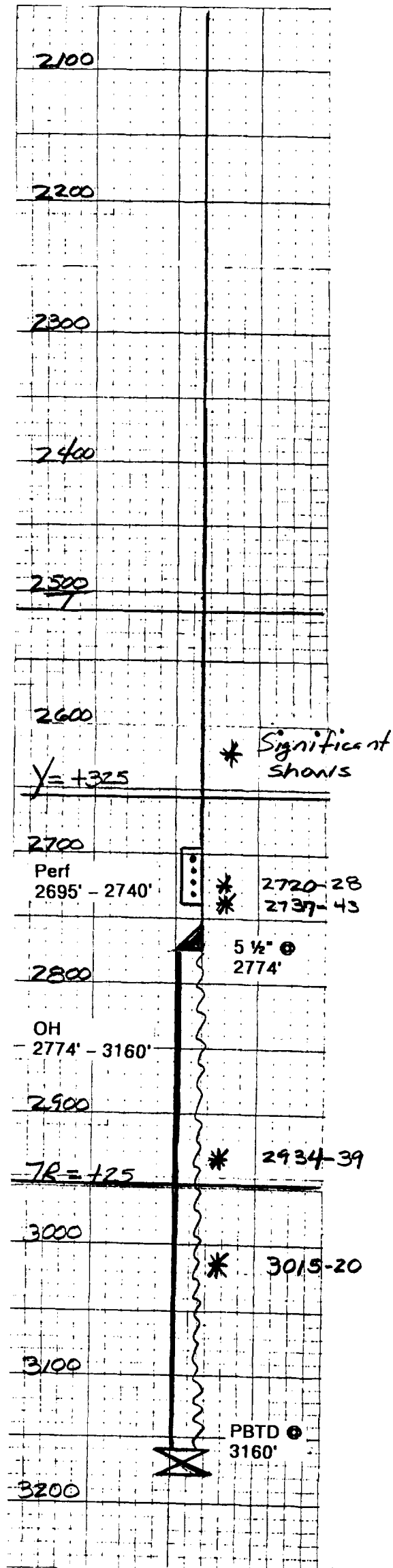
Completed 1-2-29 (2701' - 3200')

Original Pressure-Cum Slope = 29,927 MCF / psi

12-31-43 Cum = 20.263 BCF

OIL CONSERVATION DIVISION  
HARTMAN EXHIBIT NO. 33  
CASE NOS. 12015 & 12017

RFU # 41  
(Farnsworth "C" # 1)  
N-4-26S-37E



Original  
Pressure-Cum Slope =  
16,923 MCF / psi

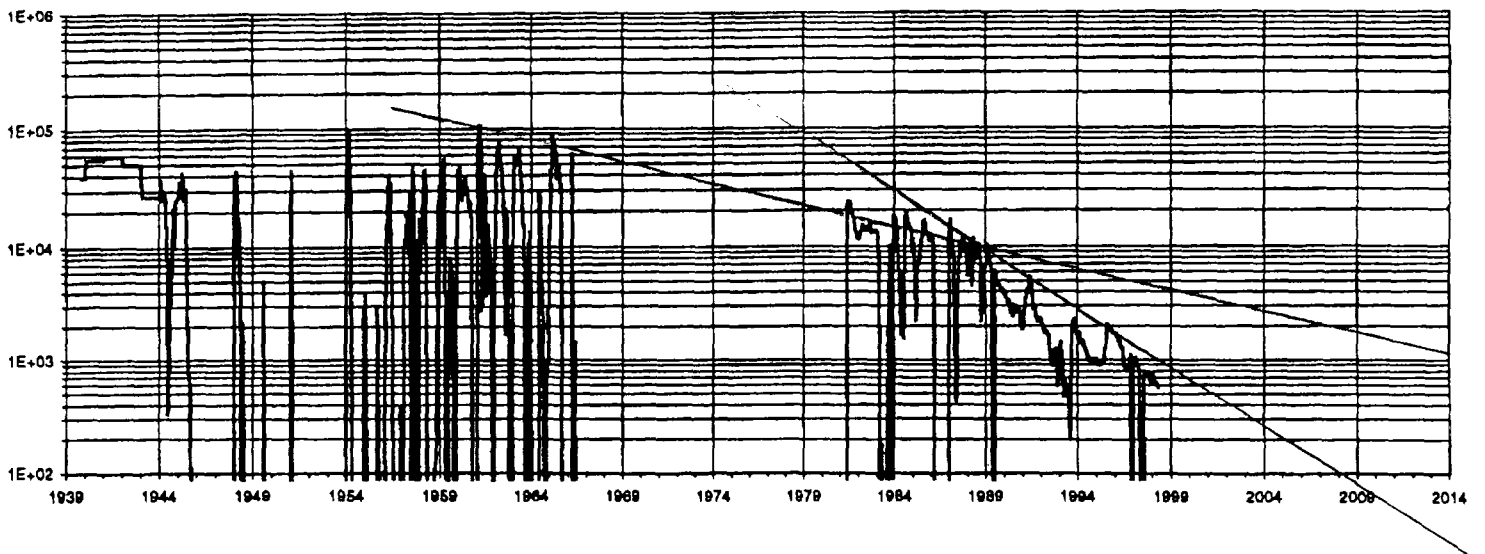
COMPANY Gruy Petroleum Management Company  
(Stanolind Oil & Gas Co.)  
WELL RFU No. 41  
(C.M. Farnsworth "C" No. 1)  
FIELD Rhodes Gas Pool  
LOCATION 990' FSL & 1650' FWL (N)  
Sec. 4, T-26-S, R-37-E  
COUNTY Lea  
STATE New Mexico  
ELEVATIONS: KB \_\_\_\_\_  
DF \_\_\_\_\_  
GL 2983'

### COMPLETION RECORD

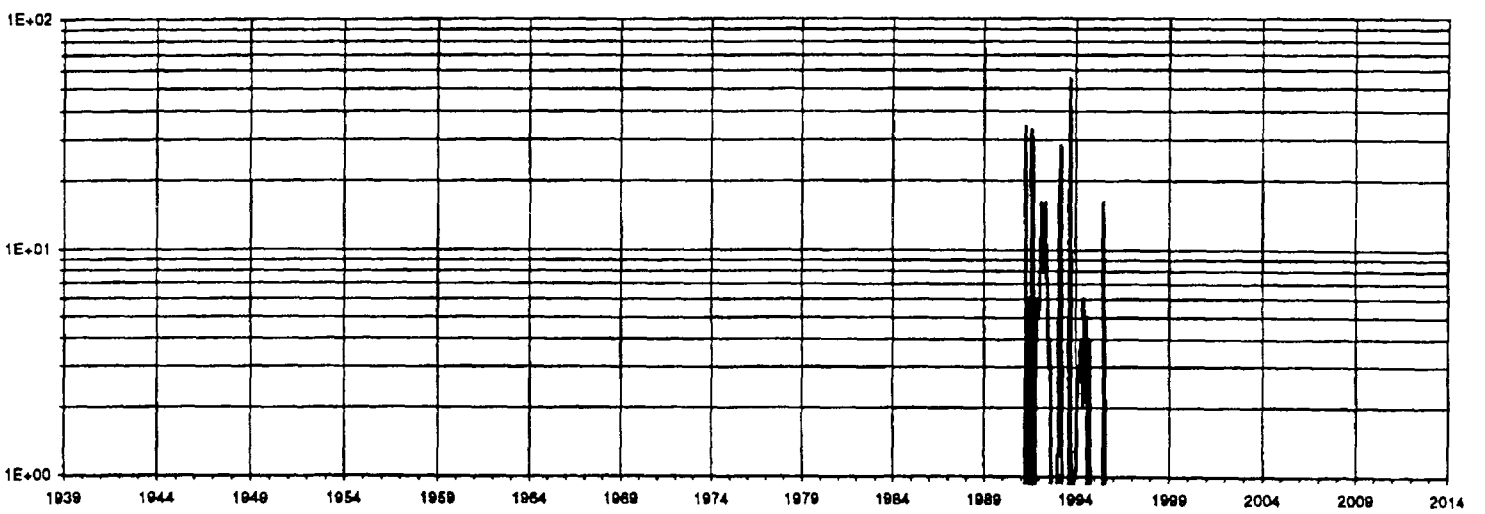
SPUD DATE 09-03-39 COMP. DATE 10-13-39  
TD 3160' PBTB 3160'  
CASING RECORD:  
13" @ 290' w/200 sx (TOC @ \_\_\_\_\_)  
8 5/8" @ 1077' w/325 sx (TOC @ \_\_\_\_\_)  
5 1/2" @ 2774' w/100 sx (TOC @ \_\_\_\_\_)  
(TOC @ \_\_\_\_\_)  
COMP. INTERVAL OH: 2744 - 3160'  
Perfs: 2695' - 2740' w/56  
STIMULATION \_\_\_\_\_  
POT F/4790 MCFPD  
GOR \_\_\_\_\_ GR \_\_\_\_\_  
TP \_\_\_\_\_ CP (ISIP = 1010 psi)  
CHOKE \_\_\_\_\_ TUBING 2 7/8" @ 3028'  
REMARKS  
Gas Zones: 2720-2728 \*  
2737-2743  
2934-2939  
3015-3020  
05-18-73: 4-day CAOF = 1868 MCFPD.  
72-hr SITP = 394 psi.  
07-09-79: Set 4 1/2" L @ 2626-3160' (uncemented).  
Perf 2690-3025' w/55 holes.  
03-02-82: SW/4 Sec. 4 designated Rhodes Gas Pool  
single-well SPU.  
02-08-91: SF/30,000 + 80,000.  
03-02-91: Landed 2 3/8" @ 2918'. 15-hr SITP = 112 psi.  
Opened to Sales Line.  
07-29-93: Sqz'd with 350 gal of scale converter.  
A/6000 (acid + CO<sub>2</sub>).  
\* Initial completion reported by G.F. Kendrick of EPNG.

Farnsworth C #1  
 Rhodes (Yates-Seven Rivers) Gas Pool  
 N-4-26S-37E  
 Gruy Petroleum Management Co.

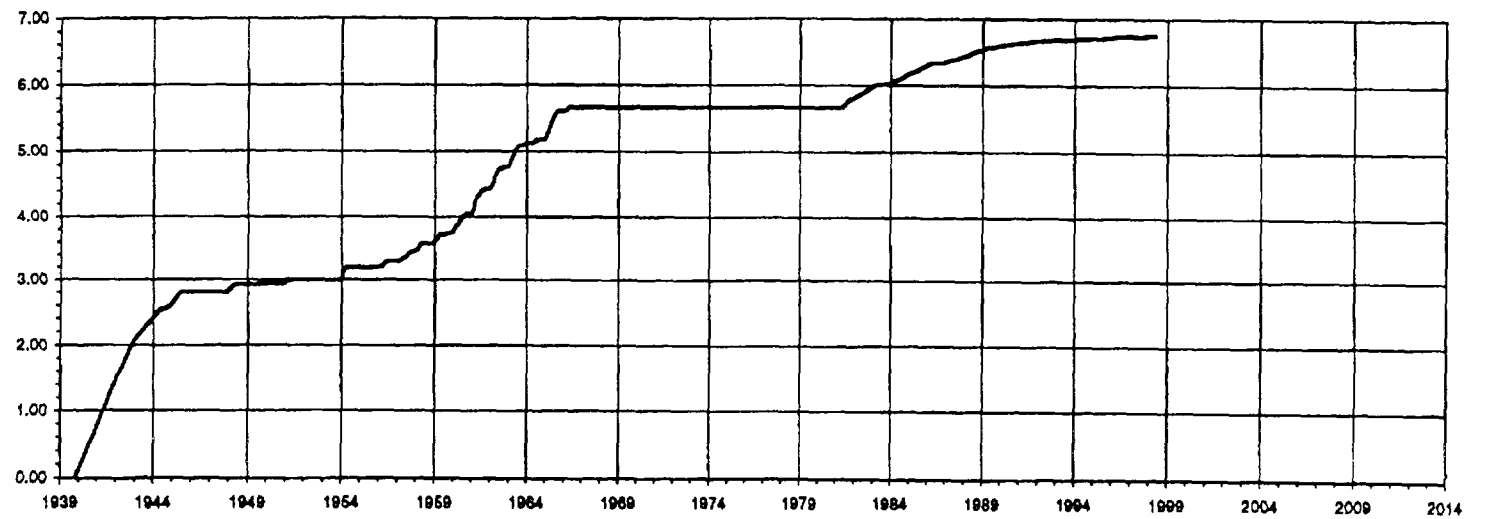
Gas Production (MCFPM)



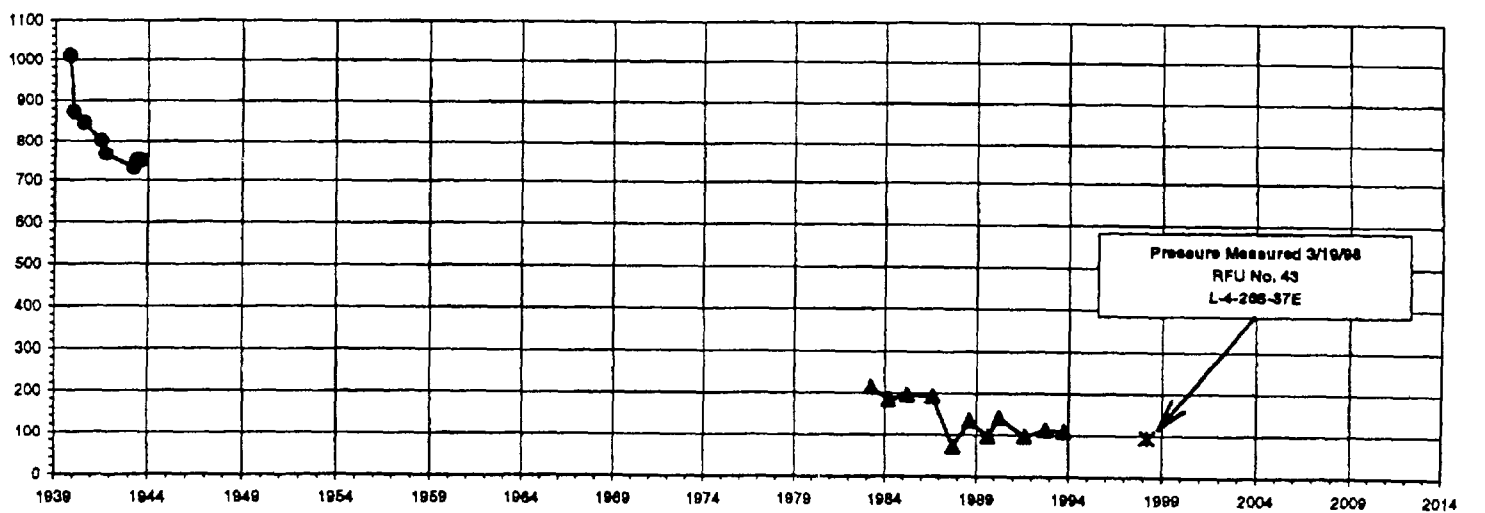
Water Production (BPM)



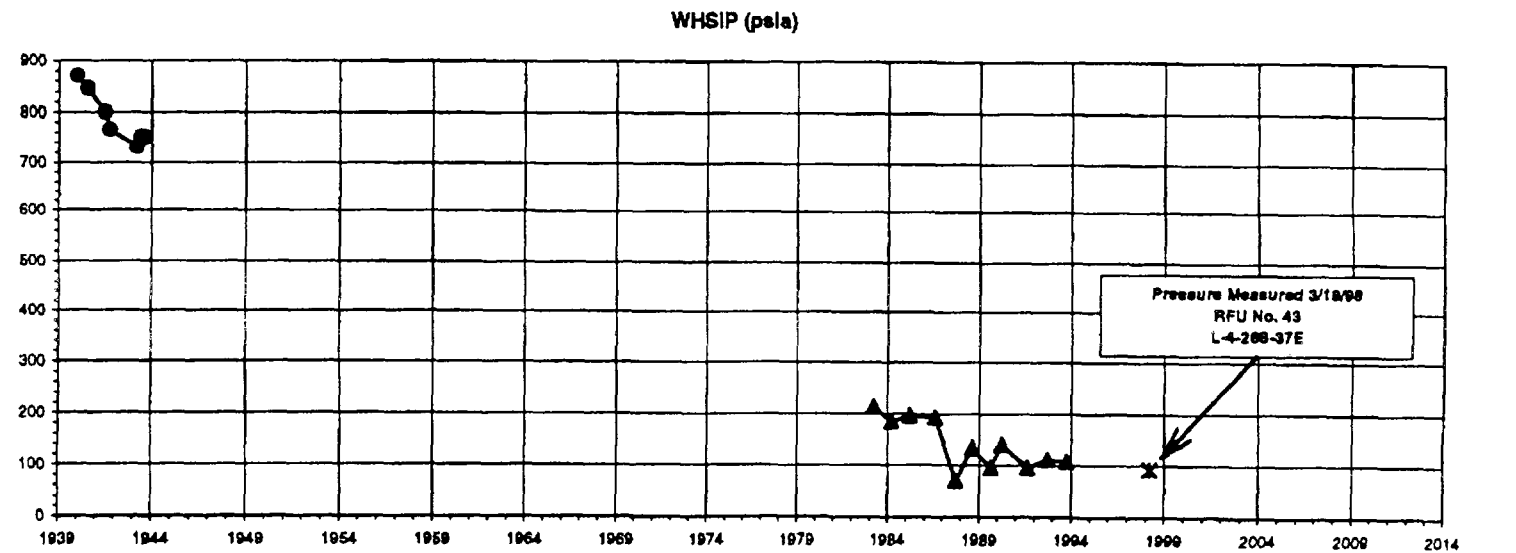
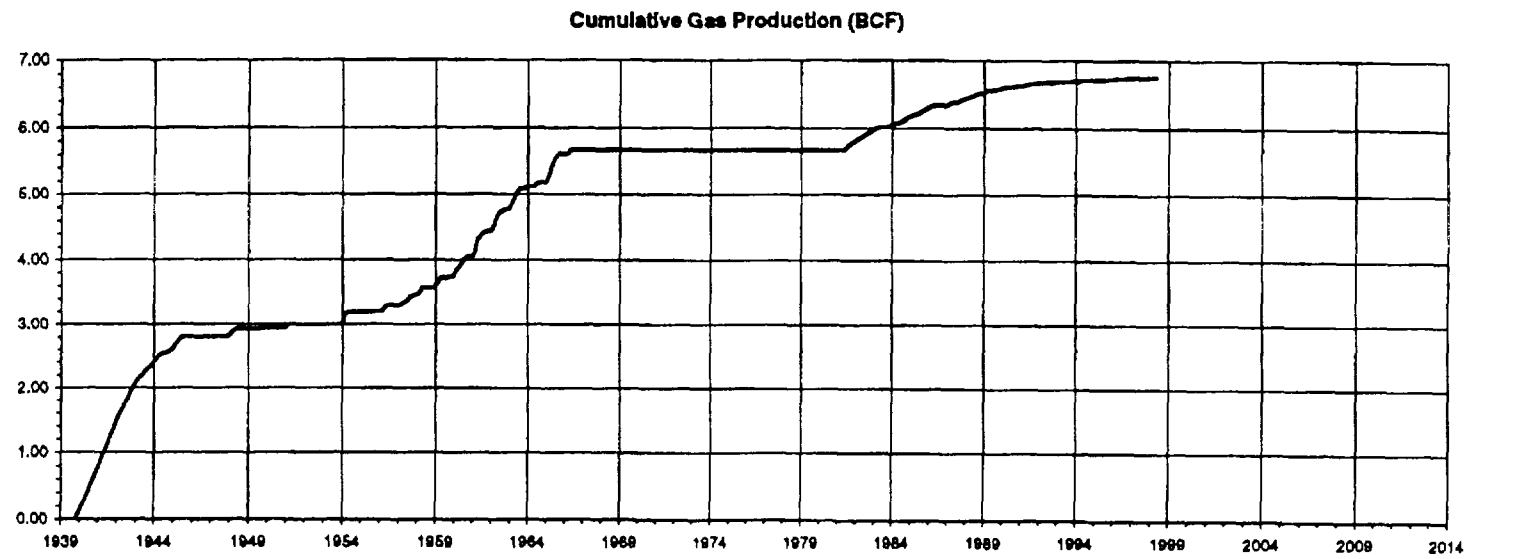
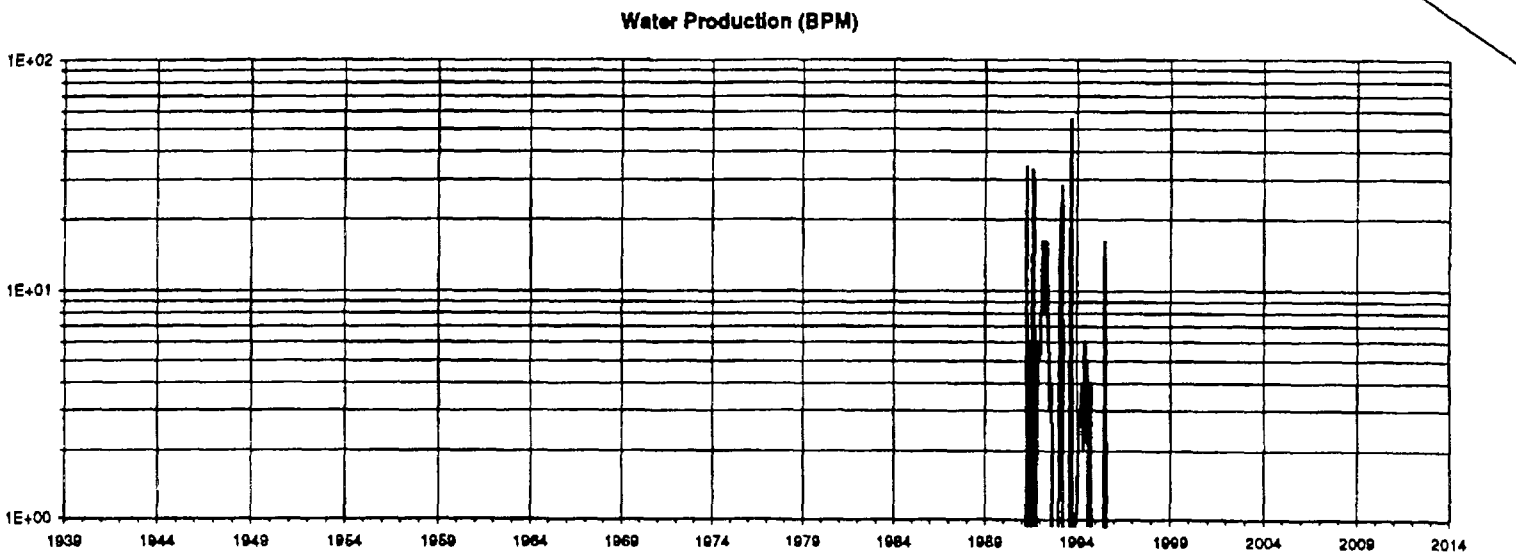
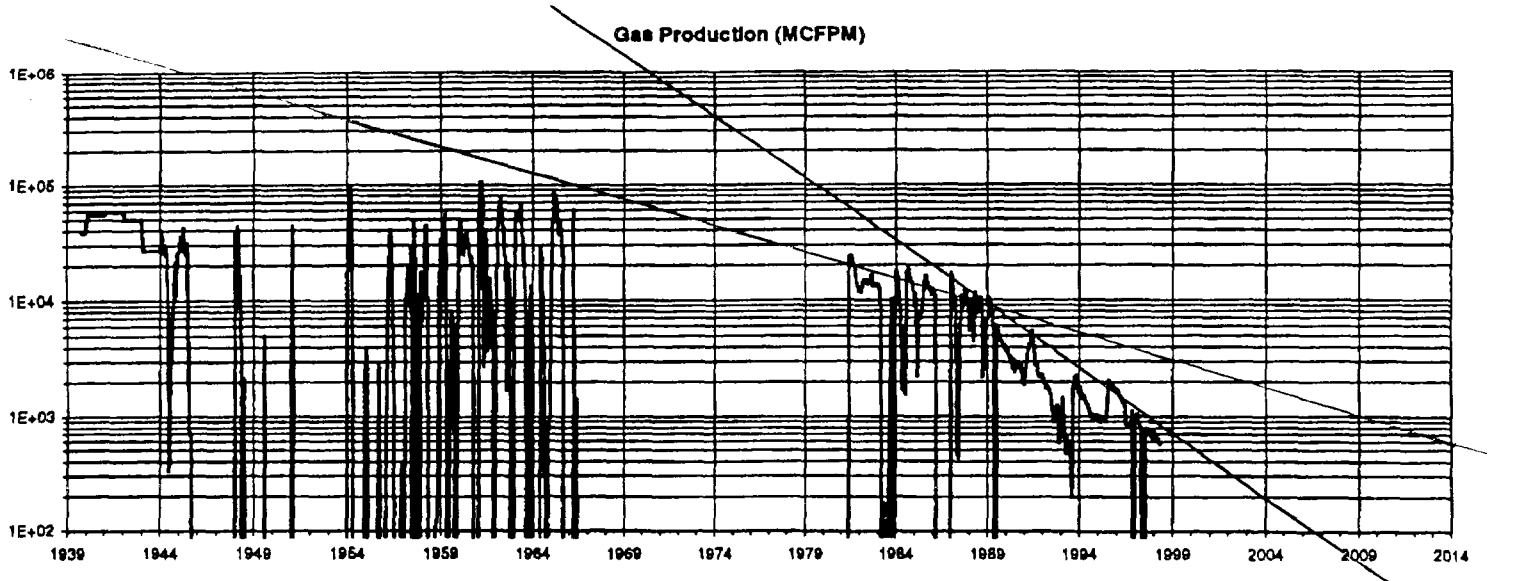
Cumulative Gas Production (BCF)



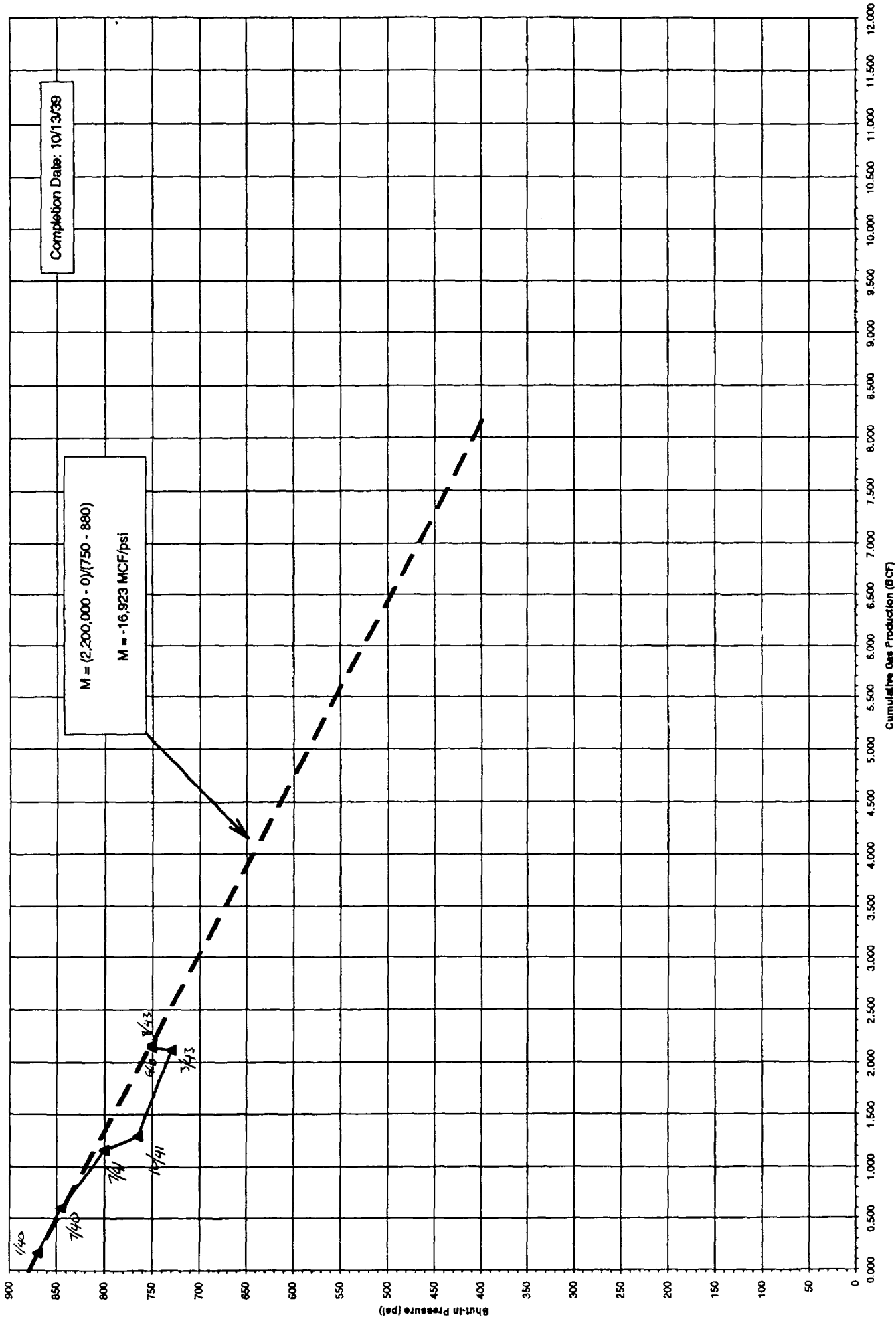
WHSIP (psia)



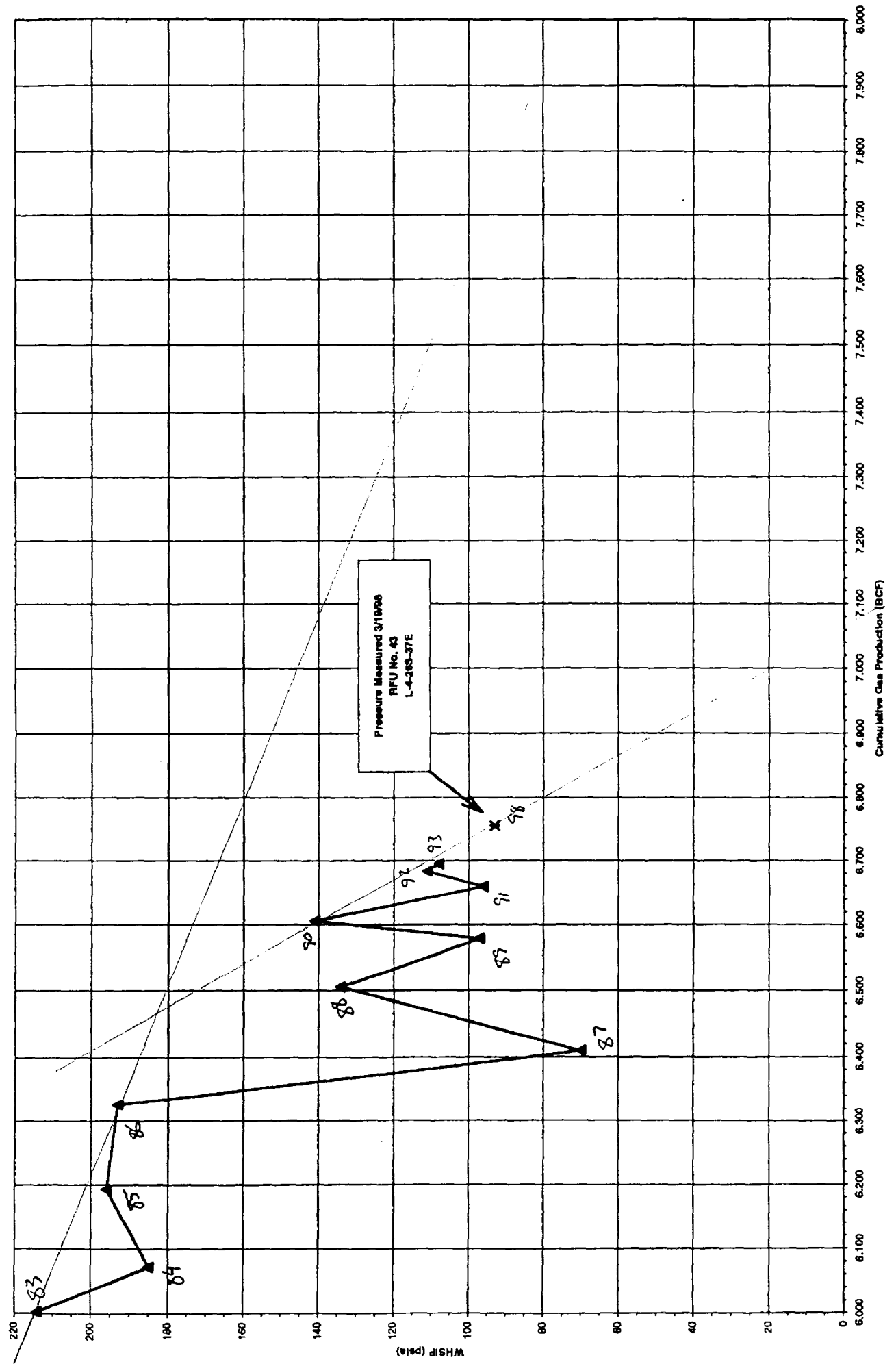
Farnsworth C #1  
Rhodes (Yates-Seven Rivers) Gas Pool  
N-4-26S-37E  
Gruy Petroleum Management Co.



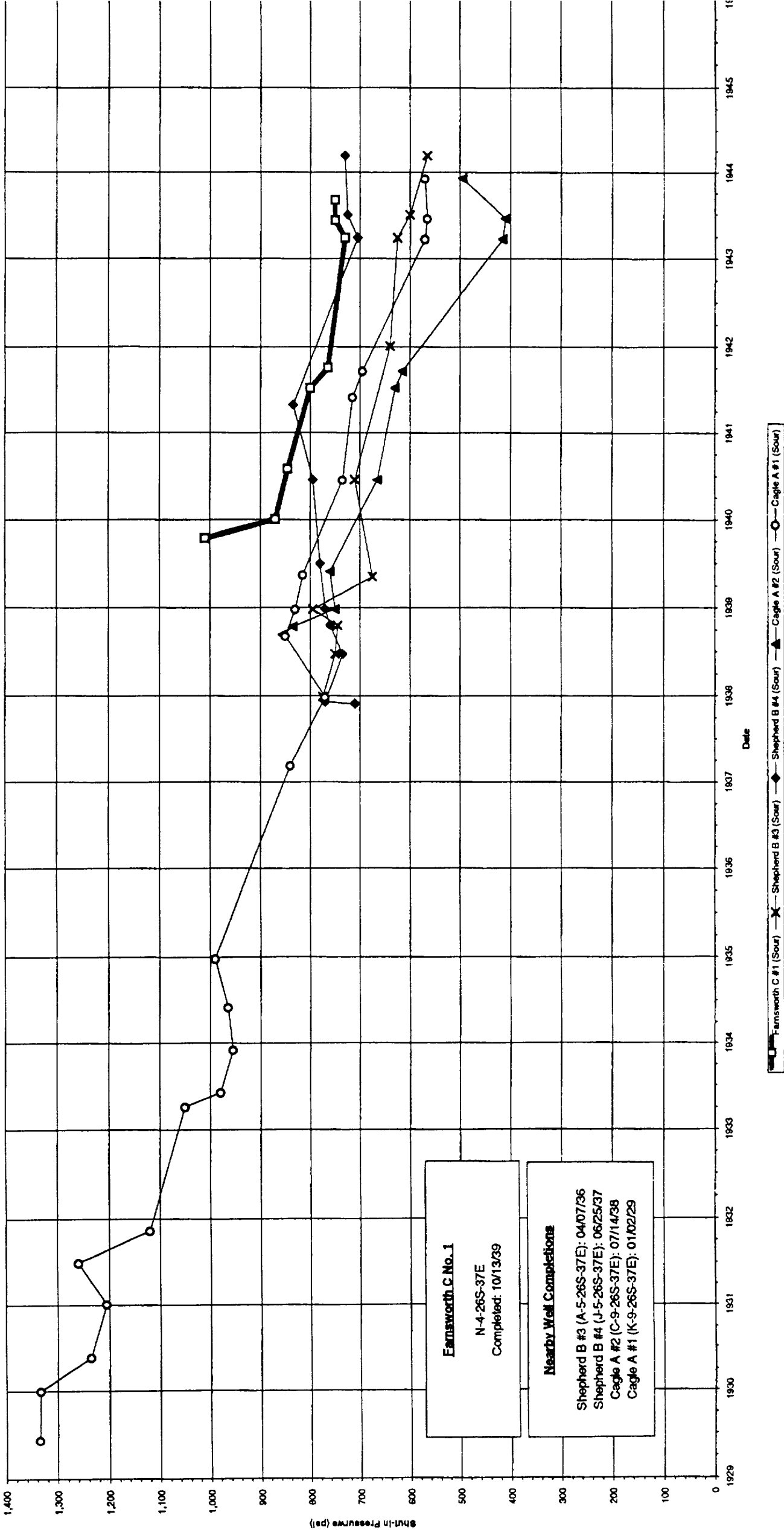
**Farnsworth C No. 1**  
**Rhodes (Yates-Seven Rivers) Gas Pool**  
**N-04-26S-37E**  
**Stanolind Oil Company**



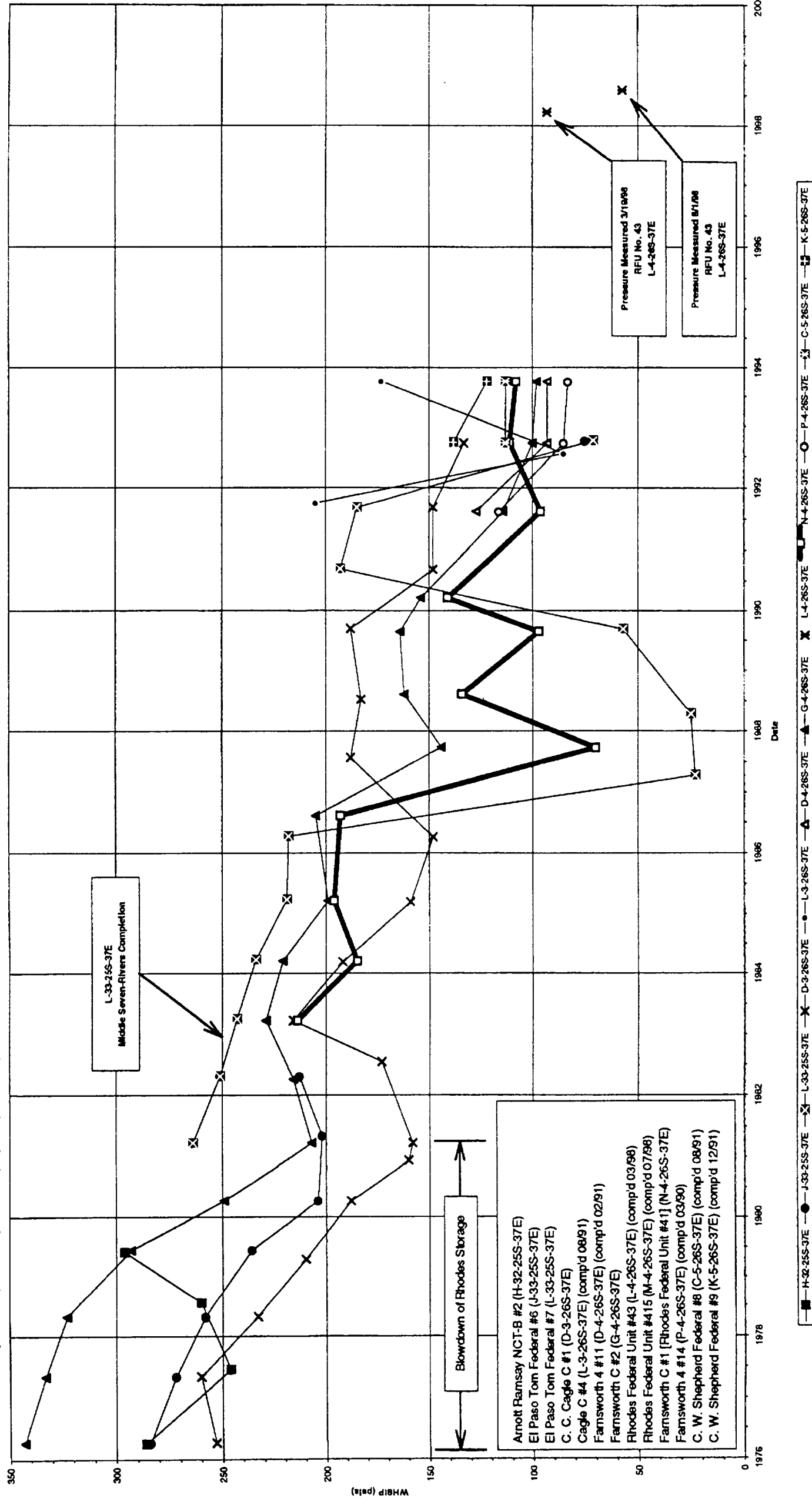
Farnsworth C #1  
Rhodes (Yates-Seven Rivers) Gas Pool  
N-4-26S-37E  
Gruy Petroleum Management Co.



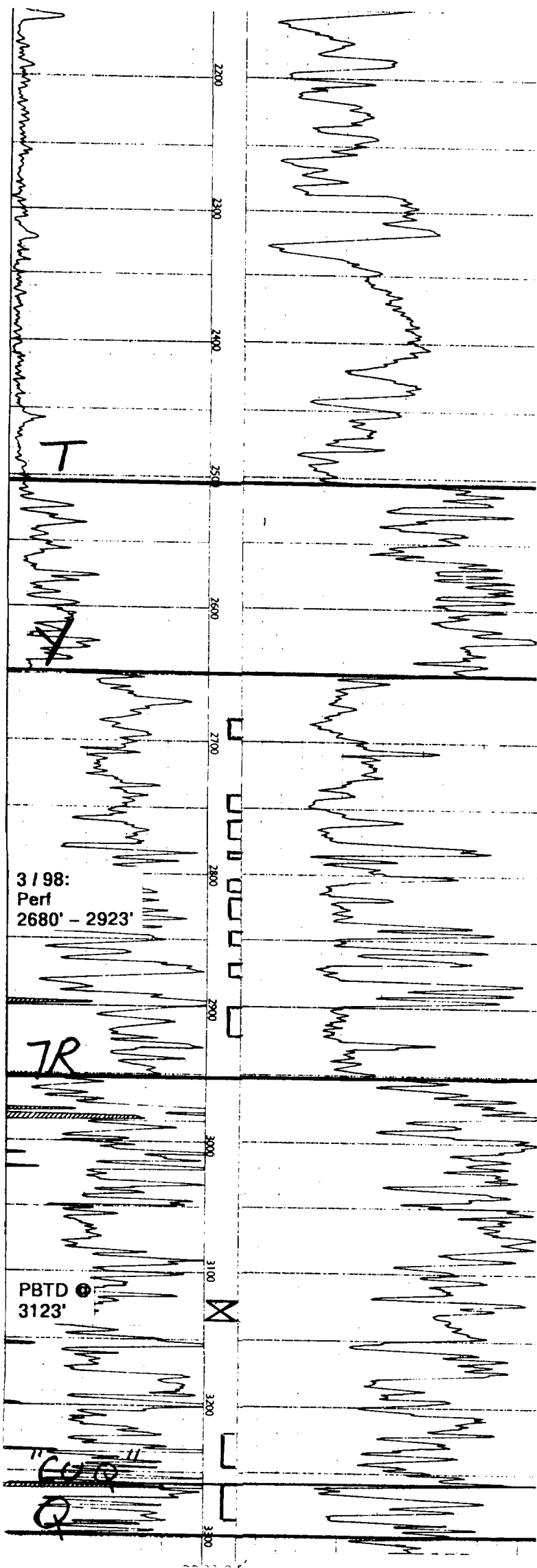
Pressure-Time Plot (1/1/29 to 12/31/45)  
Farnsworth "C" No. 1 and Nearby Wells  
Rhodes Yates-Seven Rivers Gas Pool  
Secs. 4, 5 & 9, T-26-S, R-37-E



**Secs. 32 & 33, T-25-S, R-37-E; Secs. 3, 4, & 5, T-26-S, R-37-E**



RFU # 43  
(Farnsworth "4" # 5)  
L-4-26S-37E

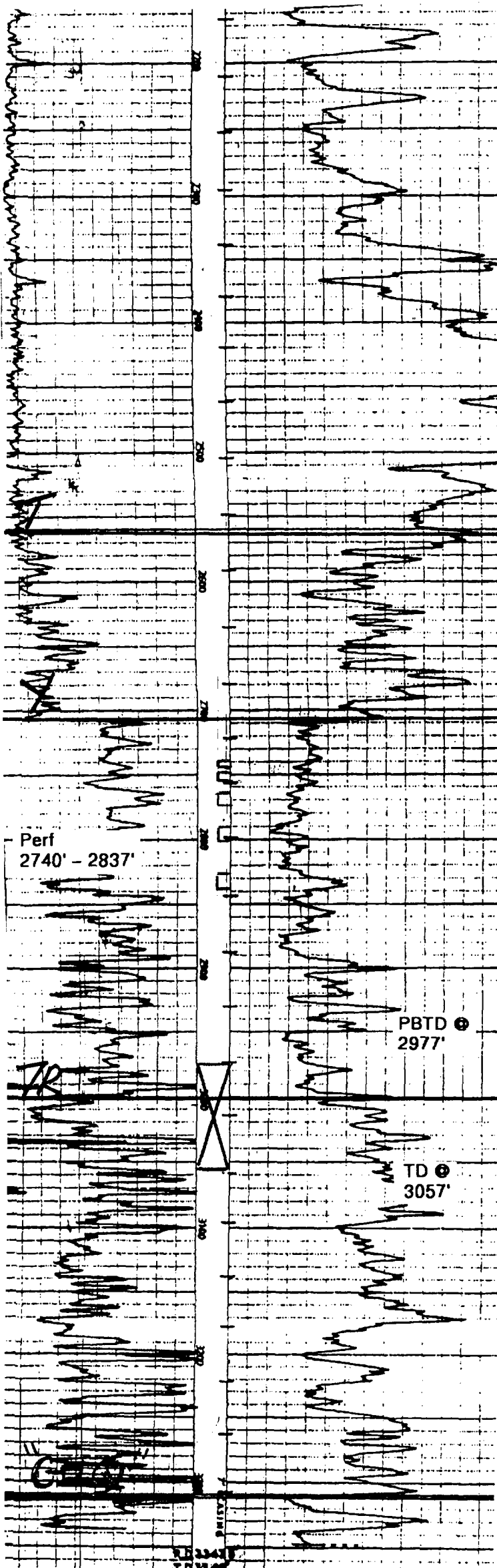


COMPANY Gruy Petroleum Management Company  
(R. Olsen)  
WELL RFU No.43  
(Farnsworth "4" No. 5)  
FIELD Langlie Mattix/Rhodes (Gas)  
LOCATION 2310' FSL & 990' FWL (L)  
Sec. 4, T-26-S, R-37-E  
COUNTY Lea  
STATE New Mexico  
ELEVATIONS: KB \_\_\_\_\_  
DF 2997'  
GL 2986'  
(Recompleted to Rhodes (Gas) 3/98)

### COMPLETION RECORD

SPUD DATE 3-18-58 COMP. DATE 4-20-58  
TD 3312' PBDT 3308'  
CASING RECORD:  
9 5/8" @ 300' w/300 sx (TOC @ \_\_\_\_\_)  
7" @ 3309' w/500 sx (TOC @ \_\_\_\_\_)  
(TOC @ \_\_\_\_\_)  
(TOC @ \_\_\_\_\_)  
COMP. INTERVAL Perfs: 3260' - 3288'  
(Langlie Mattix)  
STIMULATION SOF/10,000 + 10,000  
POT IPP = 50 BOPD + 50 BWPD  
GOR \_\_\_\_\_ GR 33.2  
TP \_\_\_\_\_ CP \_\_\_\_\_  
CHOKE \_\_\_\_\_ TUBING 2 3/8" @ 3250'  
REMARKS  
10-22-82: Perf 3220' - 3248'. A/3200.  
IPP = 1 BOPD + 158 BWPD.  
1983: TA'd.  
03-05-98/ Tagged CIBP @ 3150'. Perf 2680'-2923' w/114  
03-11-98: holes. Dumped 2 sx cmt. PBDT @ 3130'. A/2200  
(8 stages). SF/54,431 + 77,200. ATR = 50.5 BPM.  
ATP = 740 psi. ISIP = 499 psi. PBDT @ 3123'.  
Landed 2 3/8" tbg @ 2915'. Flow tested well.  
03-12-98: Shut-in. WO Pipeline Connection.  
03-13-98: Placed on production. CK = 30/64.  
F/184 MCFPD. FTP = 52 psi. FCP = 52 psi.  
03-16-98: Took gas sample. FTP = 21 psi. 13.9% CO<sub>2</sub>.  
03-19-98: 71-hr SIBHP = 85 psi.  
05-29-98: 24-hr well test. F/240 MCFPD. FTP = 18 psi.  
07-13-98: F/168 MCFPD (riding line).  
07-14-98: Filed 3160-5 reporting Rhodes completion.  
08-19-98: F/143 MCFPD (riding line). FTP = 18 psi.  
08-26-98: Well shut in.

RFU # 415  
M-4-26S-37E



Note:  
Log from Farnsworth "4" # 6  
(M-4-26S-37E)

COMPANY Gruy Petroleum Management Company

WELL RFU No. 415

FIELD Rhodes Gas Pool

LOCATION 660' FSL & 660' FWL (M)  
Sec. 4, T-26-S, R-37-E

COUNTY Lea

STATE New Mexico

ELEVATIONS: KB \*  
DF   
GL 2984'

### COMPLETION RECORD

SPUD DATE 6-16-98 COMP. DATE 07-25-98

TD 3057' PBD 2977'

#### CASING RECORD:

8 5/8" @ 771' w/475 (TOC @ Circ)

5 1/2" @ 3005' w/850 (TOC @ Circ)

(DV Tool @ 2618') (TOC @ )

(TOC @ )

COMP. INTERVAL Perfs: 2740' - 2837'

(39 net feet)

STIMULATION A/200

SF/190,000 sd

POT F/260 MCFPD (08-20-98)

GOR  GR

TP  CP

CHOKE  TUBING  @

#### REMARKS

06-20-98: Well drilled without fluid loss control.  
Lost circulation at 3057'. Spotted 25 sx.  
PBD @ 3005'. Ran 5 1/2", 15.5# casing. Did  
not run open-hole logs.

06-24-98: Ran cased-hole log. Ran tbq. Shut down.  
Moved off.

07-23-98: SF/190,000. ATR = 21 BPM. ATP = 660 psi.  
30-min SIP = 720 psi.

07-24-98: F/124 MCFPD. FTP = 40 psi.

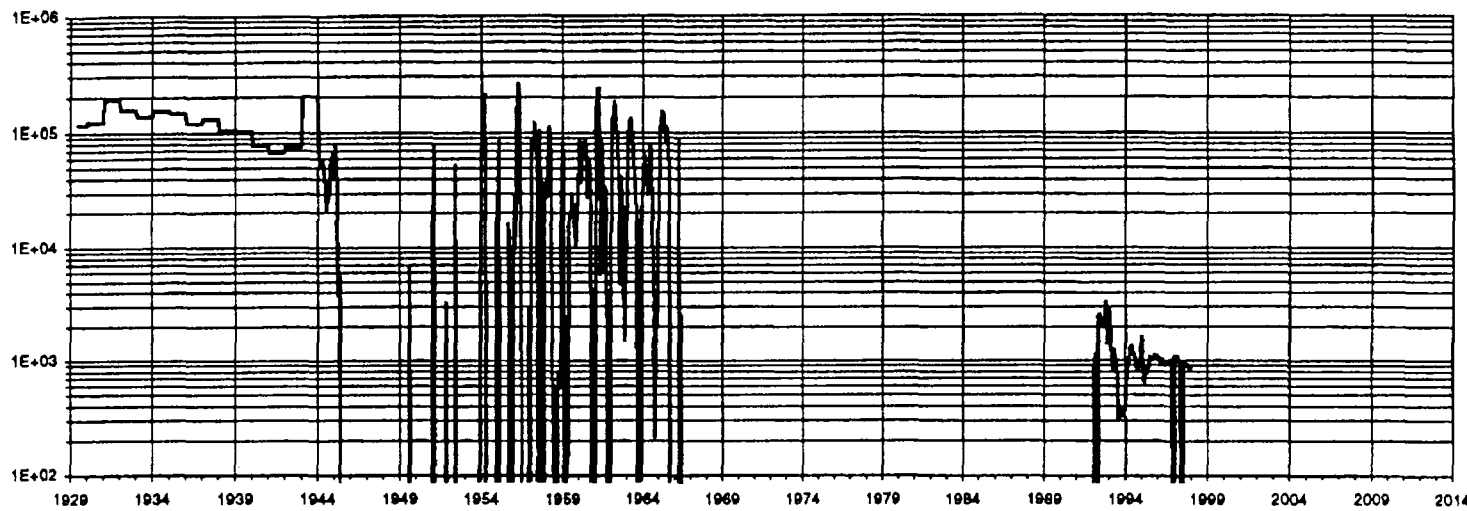
08-20-98: F/260 MCFPD (Riding Line). FTP = 14 psi.  
FCP = 35 psi.

08-26-98: F/266 MCFPD (Riding Line). FTP = 12 psi.  
FCP = 35 psi.

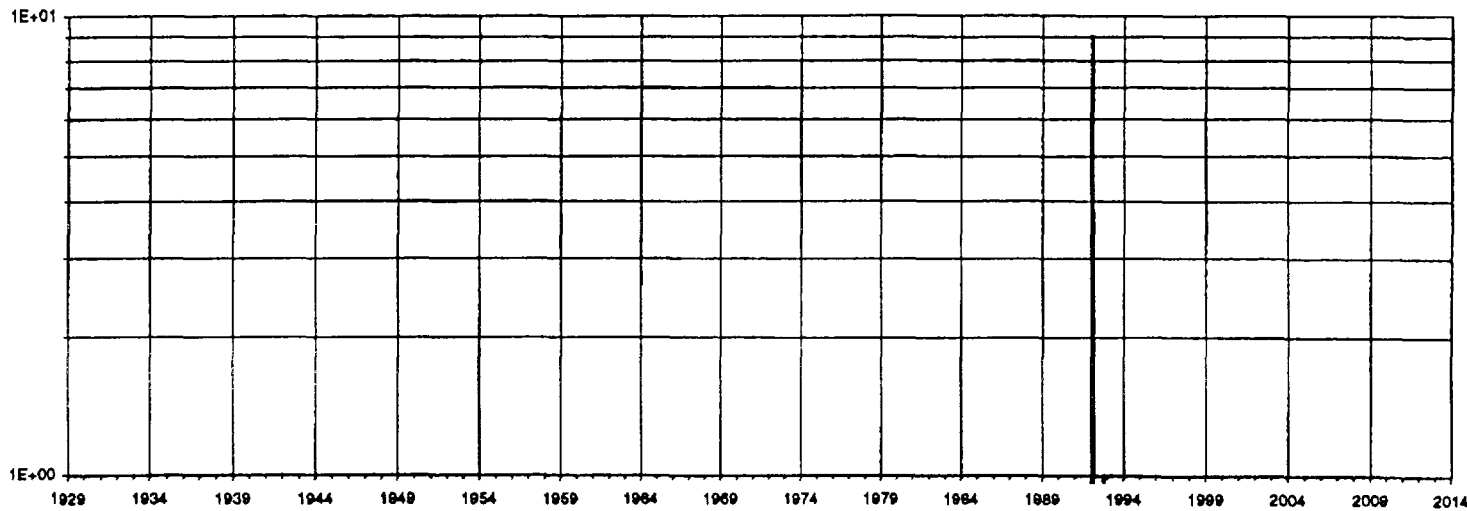
\* KB not available. Form 3160-4 not filed with BLM as of  
8/26/98.

Cagle A #1  
Rhodes (Yates-Seven-Rivers) Gas Pool  
K-9-268-37E  
Gruy Petroleum Management Co.

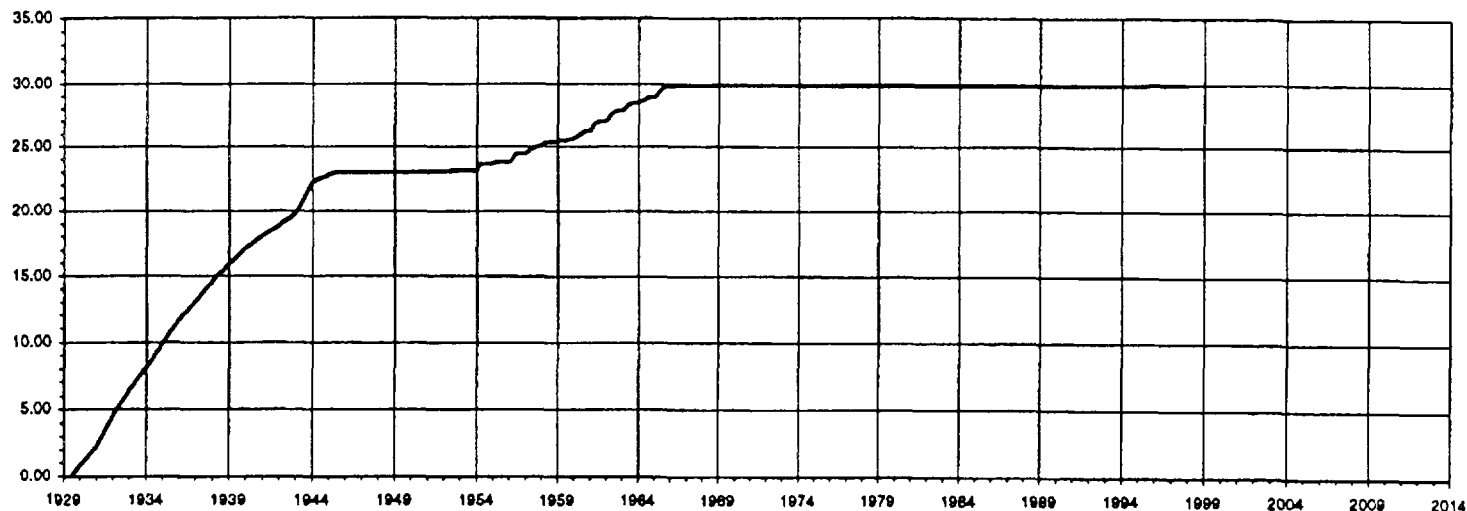
Gas Production (MCFPM)



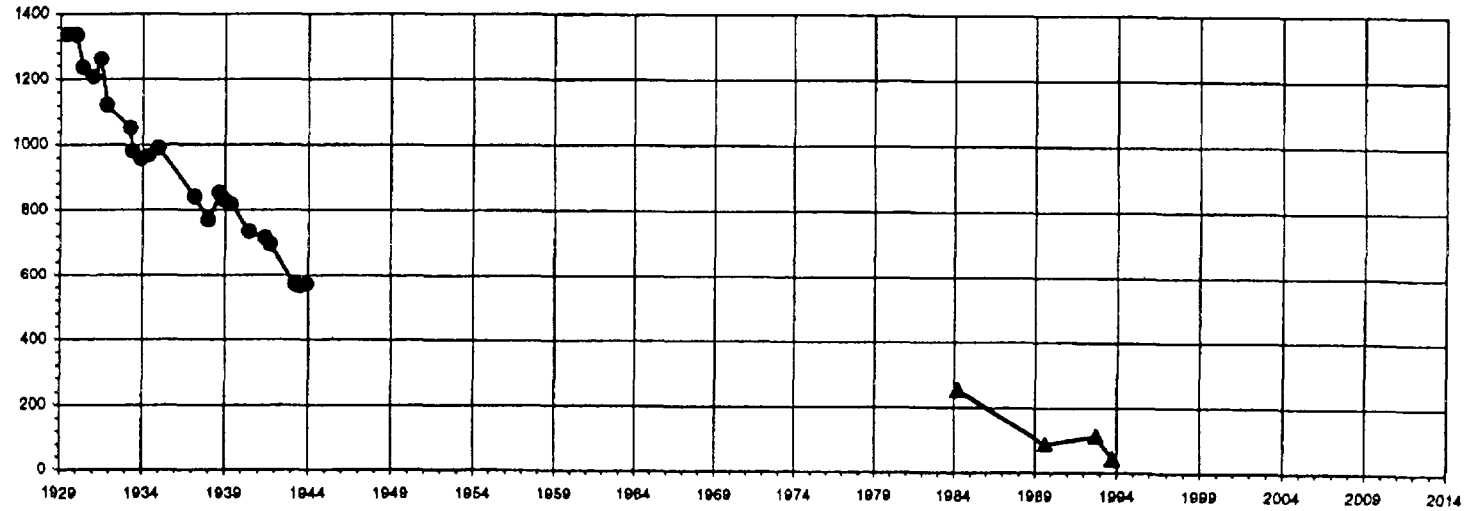
Water Production (BPM)



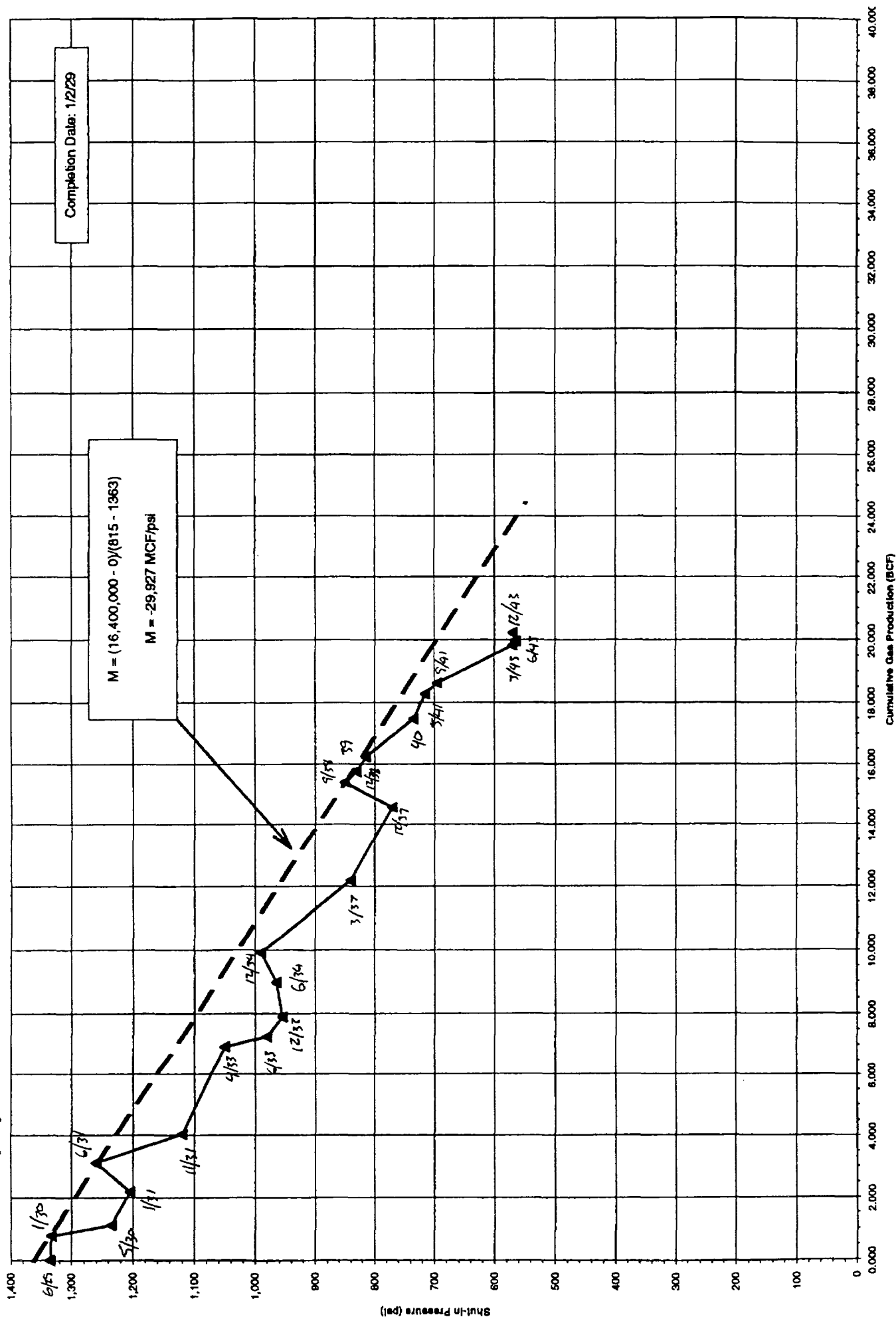
Cumulative Gas Production (BCF)



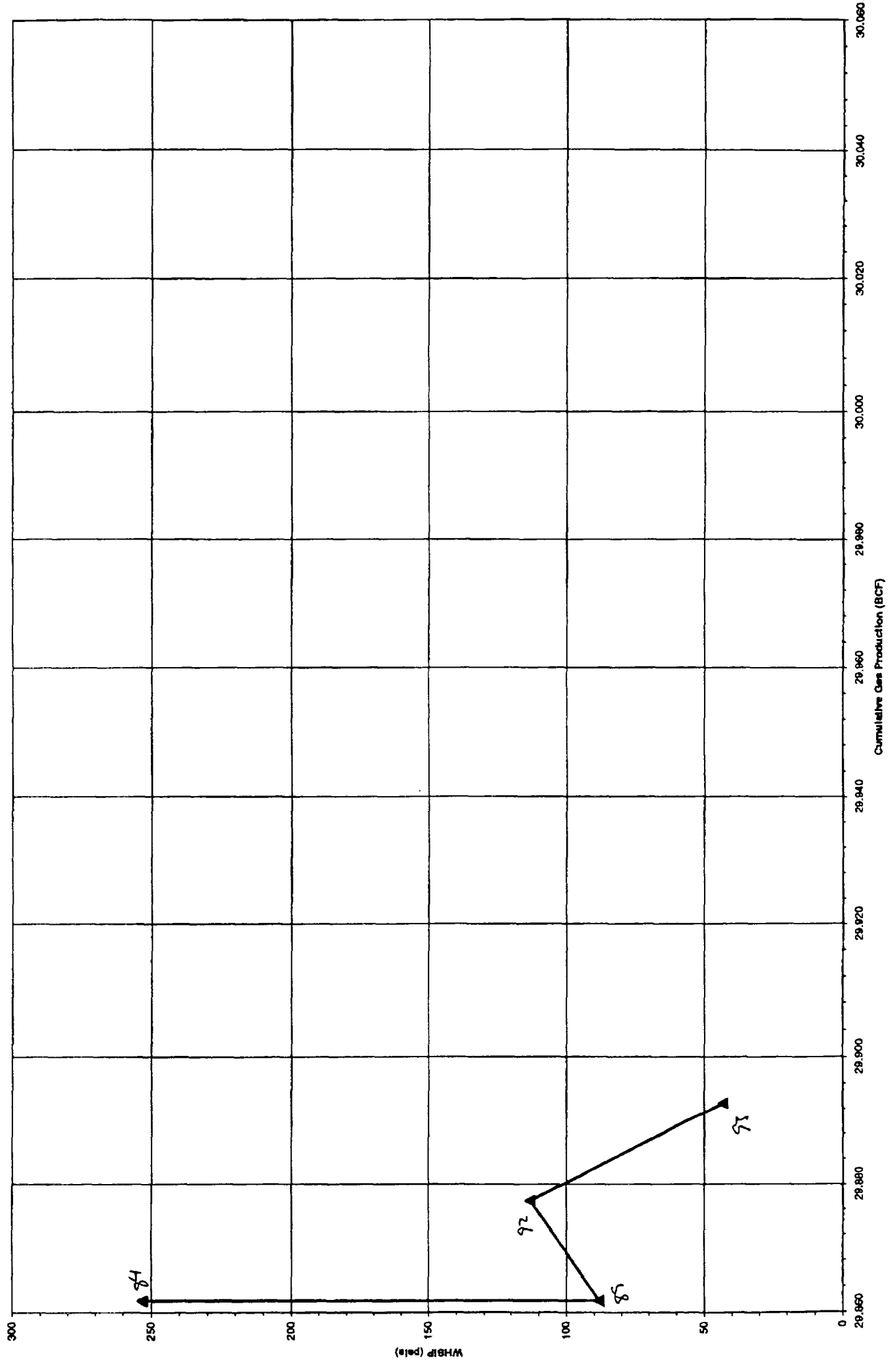
WHSIP (psia)



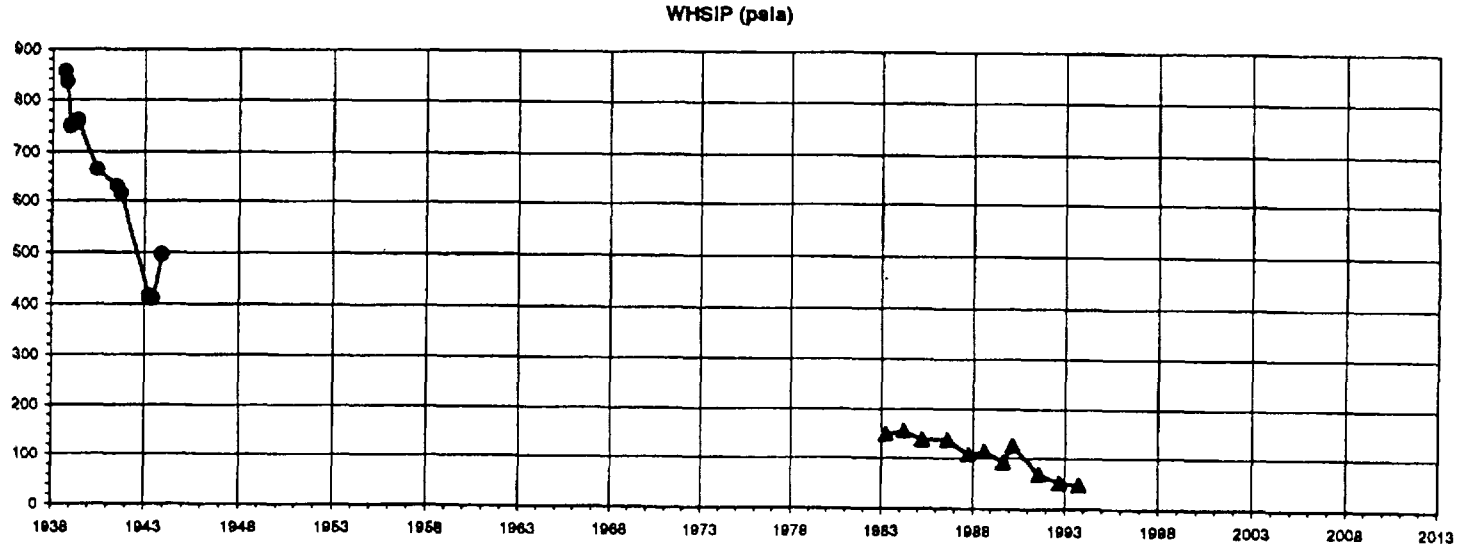
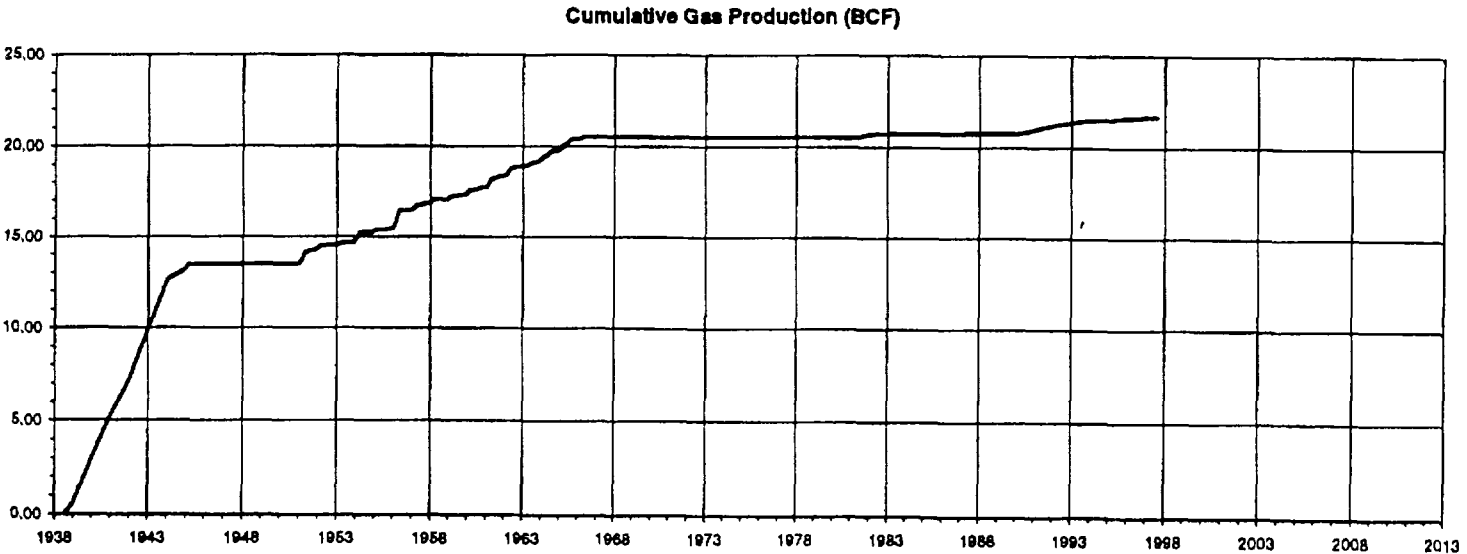
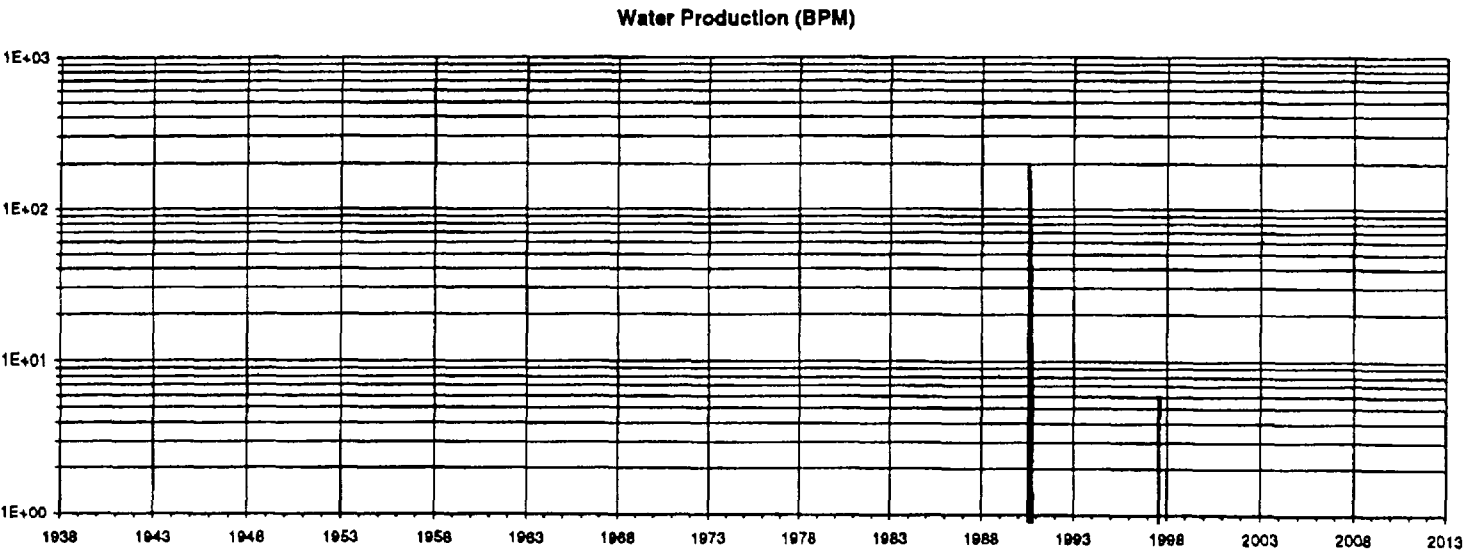
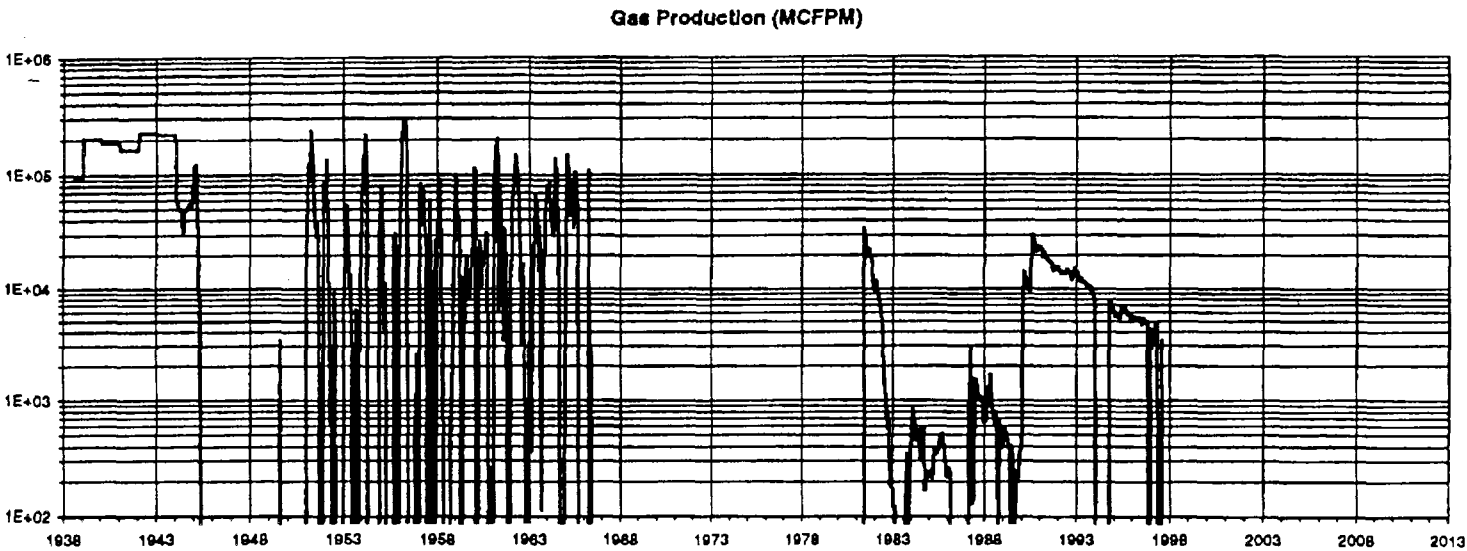
**Cagle A No. 1**  
**Rhodes (Yates-Seven Rivers) Gas Pool**  
**K-09-26S-37E**  
**Texas Company**



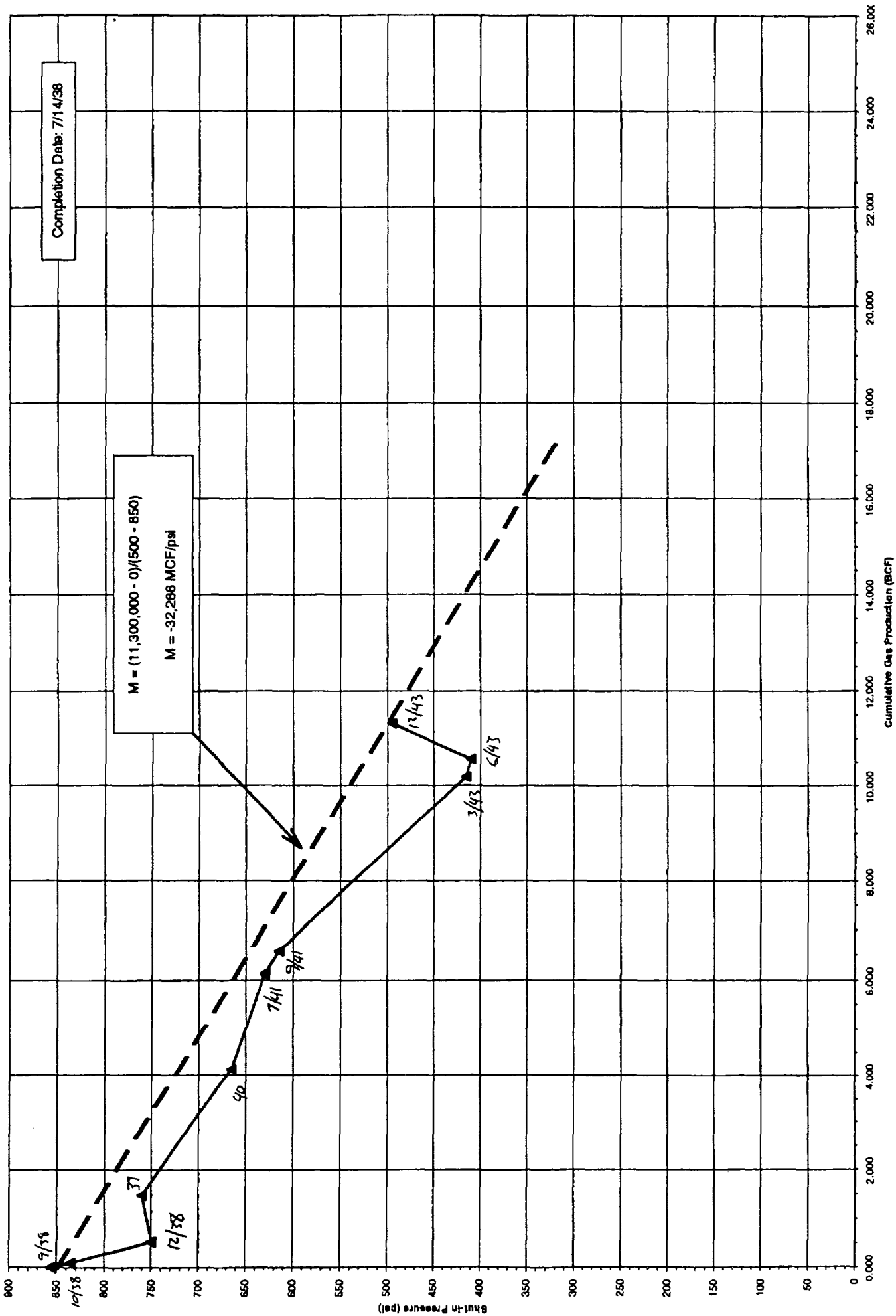
Cagle A #1  
Rhodes (Yates-Seven-Rivers) Gas Pool  
K-9-26S-37E  
Gruy Petroleum Management Co.



Cagle A #2  
Rhodes (Yates-Seven-Rivers) Gas Pool  
C-9-26S-37E  
Gruy Petroleum Management Co.



**Cagle A No. 2**  
**Rhodes (Yates-Seven Rivers) Gas Pool**  
**C-09-26S-37E**  
**Texas Company**



Cagle A #2  
 Rhodes (Yates-Seven-Rivers) Gas Pool  
 C-9-26S-37E  
 Gruy Petroleum Management Co.

