

GALLEGOS LAW FIRM

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JUL 10 1997

July 10, 1997
(Our File No. 97-1.75)

MICHAEL J. CONDON

HAND-DELIVERED

Michael E. Stogner, Chief Hearing Examiner
Rand Carroll, Esq.
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Re: Application of Doyle Hartman, Case No. 6987, 11792
-- Water Encroachment

Gentlemen:

I am writing to clarify Mr. Hartman's position with respect to the water encroachment issue which the Division indicated at hearing on June 30, 1997, would be set for an evidentiary hearing.

To limit the inquiry to a one-half mile radius from the Myers "B" Federal No. 30 well as suggested at the hearing may preclude the introduction of relevant evidence on the water encroachment issue. Hartman intends to introduce evidence at the evidentiary hearing regarding the history of the Myers "B" Federal No. 30 well, which was originally drilled and completed as a Jalmat gas producer in late 1977 and early 1978. The well did not encounter water in the Yates zone when originally completed, was not productive of water, and production records do not indicate any significant water production as of 1991 when the well was plugged and abandoned. Hartman will also introduce evidence concerning other Jalmat gas wells completed by Hartman within the physical boundaries of the MLMU or adjacent to and on trend with the MLMU boundaries. Enclosed as Exhibit A is a map of the area depicting the various Hartman-completed Jalmat gas wells, as well as scout tickets and production graphs related to the Hartman-completed Jalmat gas wells. No discovery from Oxy is necessary on these elements of proof.

Hartman will also introduce evidence concerning the natural discovery condition of the Jalmat Yates-Seven Rivers Interval which confirms that water in the volumes encountered by Hartman in the reworking of the Myers "B" Federal No. 30 well are not naturally occurring, that water production from the Yates formation in the vicinity of the Myers "B" Federal No. 30 well occurred after the onset of waterflood operations, and

that the oil water contact in the area is substantially (more than 400') below the Yates zone. Proof on this issue will also consist of industry recognized geological and historical parameters confirming that the Yates zone in this area is not naturally productive of water.

In conformance with the NMOCD's suggested restricted area of investigation pertaining to the Myers "B" Federal No. 30 water problem, our proposed area of investigation will be limited to a 1.06-mile x 1.06-mile square consisting of nine original 80-acre 5-spot MLMU water injection patterns with the Myers "B" Federal No. 30 Jalmat well being located at approximately the center of the proposed area of investigation or an average perpendicular distance of 0.53 miles from the outer boundaries of the area of investigation. A well plat depicting the proposed 1.06-mile x 1.06-mile area of investigation is enclosed herewith as Exhibit B. Oxy well files will be requested for all MLMU wells lying within the proposed area of investigation including all water analyses and injection well tests and profiles associated with the area of investigation.

Hartman's testimony on the water encroachment issue will also require examination of various additional MLMU records and documents. While Hartman has some data on these issues, discovery from Oxy will be necessary. Hartman will introduce injection and withdrawal volumes corresponding to the proposed area of investigation which will demonstrate that there has been excessive water injection. Some of the information to be introduced was included in Tab 29 of Exhibit A offered at the June 30, 1997 hearing. Hartman will also request documents related to the MLMU No. 199 well located in Section 8, T-24-S, R-37-E. A copy of Texaco's April 28, 1987 letter to working interest owners confirming a waterflow in MLMU well No. 199, as well as the Sundry Notice filed by Texaco when the well was plugged and abandoned, are enclosed as Exhibit C. Please note that the Sundry notice filed by Texaco with the OCD did not mention the waterflow problem that was referenced in Texaco's April 28, 1987 letter. A copy of the subpoena reflecting the Oxy documents that Hartman is requesting and which most likely will be needed for Hartman's hearing presentation is enclosed as Exhibit D.

Texaco Exploration and Production Inc. operated the MLMU from the mid-1980s until December 1993. To the extent that Texaco turned over all MLMU files, water samples, water analyses unit files and all other documents related to the MLMU in connection with its assignment to Oxy in 1994, Hartman will probably not require discovery of Texaco. However, if Texaco did not transfer to Oxy all of its files in connection with the assignment of its MLMU rights and operations, Hartman may require discovery from Texaco. If Oxy could provide a list of the files transferred in connection with the assignment from Texaco of Texaco's MLMU interest, and Oxy's assumption of operatorship of the MLMU, Hartman could make a preliminary and early decision as to whether discovery from Texaco will be necessary.

Michael E. Stogner
Rand Carroll
July 9, 1997
Page 3

If you have any questions or need any additional information, please feel free to contact me.

Very truly yours,

GALLEGOS LAW FIRM, P.C.

By 
MICHAEL J. CONDON

MJC:sa

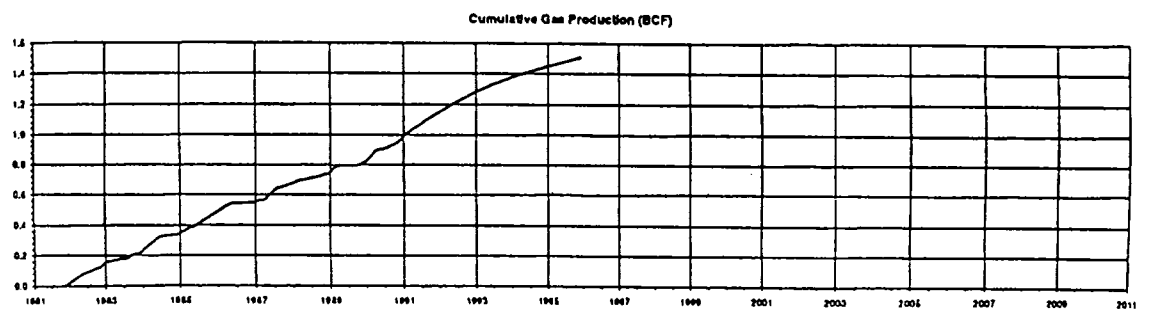
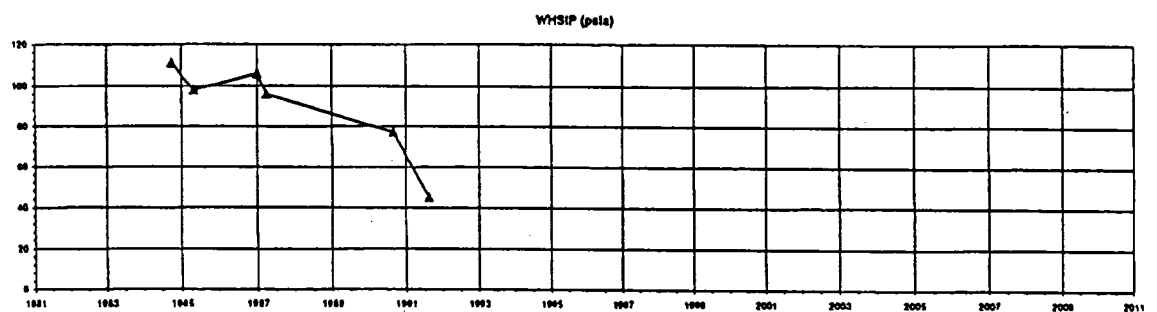
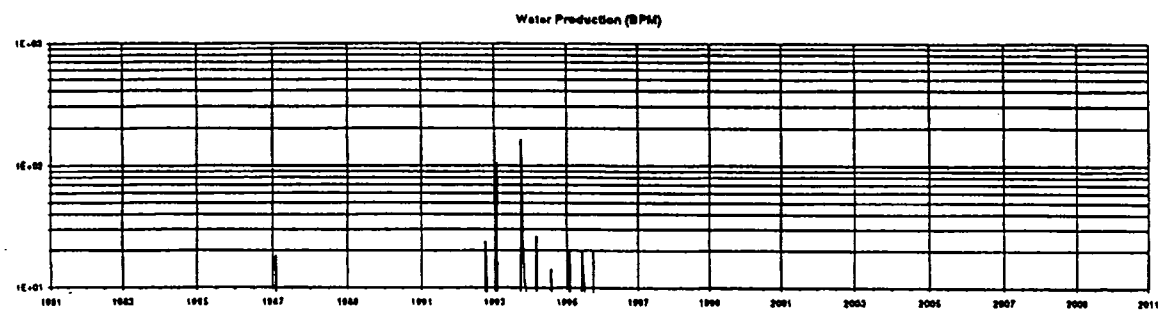
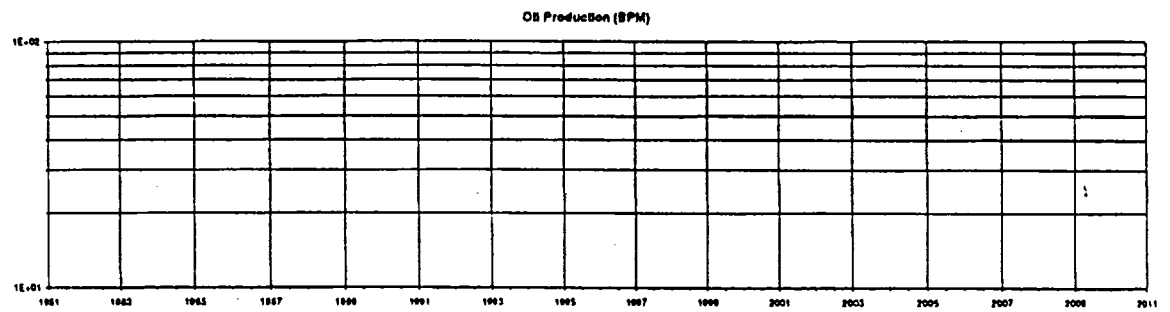
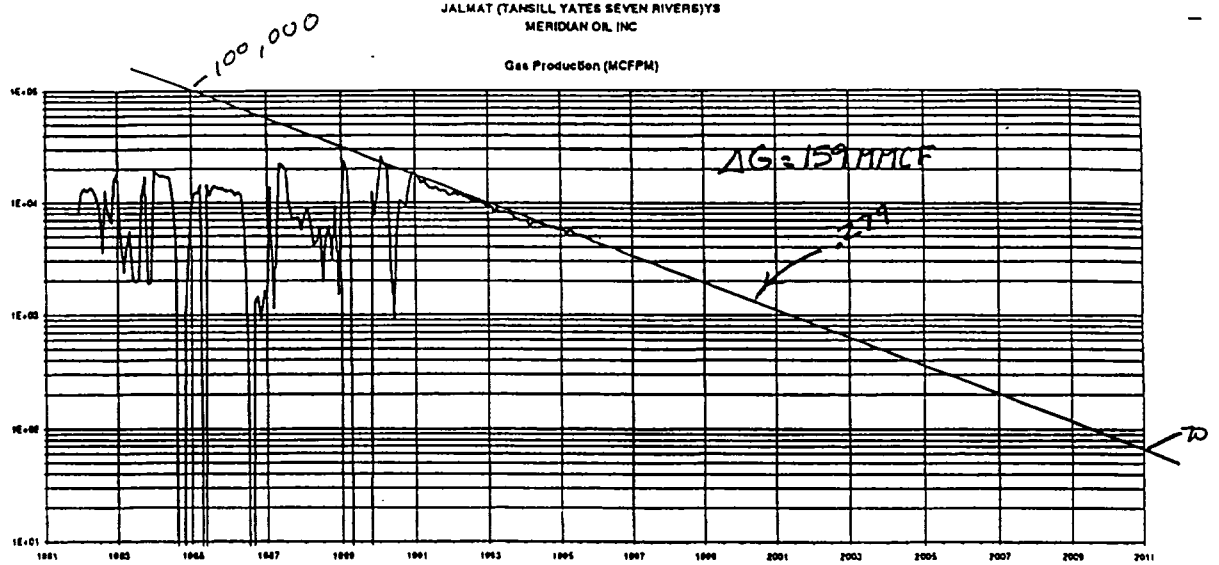
cc: William F. Carr
Thomas Kellahin
fxc: Doyle Hartman
Linda Land
ioc: J.E. Gallegos

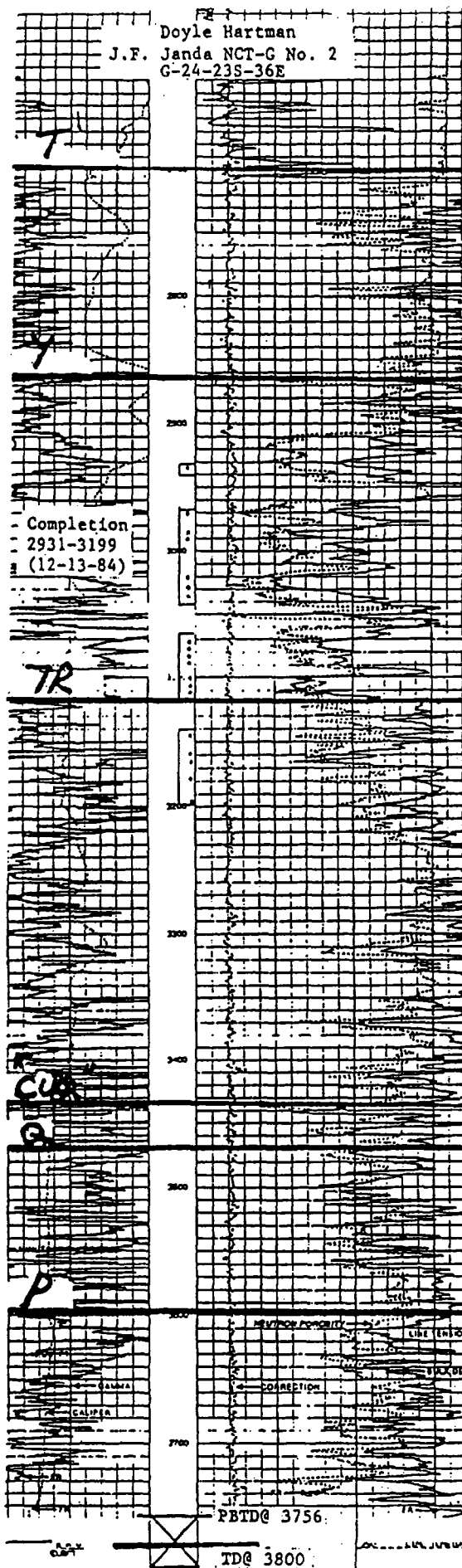
Hartman-Completed Infill Wells Jalmat Gas Pool

EXHIBIT
A



Seven Rivers Structure Map
T-23-S & T-24-S, R-36-E & R-37-E
Lea County, New Mexico





COMPANY Meridian
(Doyle Hartman)
WELL J.F. Janda "G" No. 2
FIELD Jalmat (Gas)
LOCATION 1980' FML & 1650' FEL (G)
Sec. 24, T-23-S, R-36-E
COUNTY Lea
STATE New Mexico
ELEVATIONS: KB 3354
OF
GL 3343

COMPLETION RECORD

SPUD DATE 11-25-84 COMP. DATE 12-16-84
TD 3800 PBTD

CASING RECORD:

9 5/8, 40# @ 430 w/300 (TOC @ Circ.)
7, 26# @ 3800 w/1400 (TOC @ Circ.)
(TOC @)
(TOC @)

COMP. INTERVAL Perf 2931-3199 w/23

STIMULATION A/5800 15% MCA

ATR = 6.2 BPH ATP = 2000 psi.
ISIP = 500 psi. 8-min. SIP = 0 psi.

POT P/61 MCFPD (After acid)

GOR GR

TP CP 22 psig

CHOKE 24/64 TUBING 2 3/8 @ 3488

REMARKS

12-12-84: SICP = 108 psig (After acid)

12-13-84: POP @ 8 x 54 x 1 K

12-19-84: Aborted Frac.

12-26-84: SWF/157,060 @ 320,000

ATR = 34 BPH
ATP = 1750 psi
ISIP = 730 psi
1-hr. SIP = 520 psi
Flare @ FCP = 211 psig
18.7-hr. Test:

Flow Path-annulus
Choke = 64/64
FCP = 35 psig
FTP = 45 psig

01-02-85: F/1048 MCFPD (After frac)

Choke = 40/64
FCP = 69 psig

4-96: AMR = 3000 MCFPH

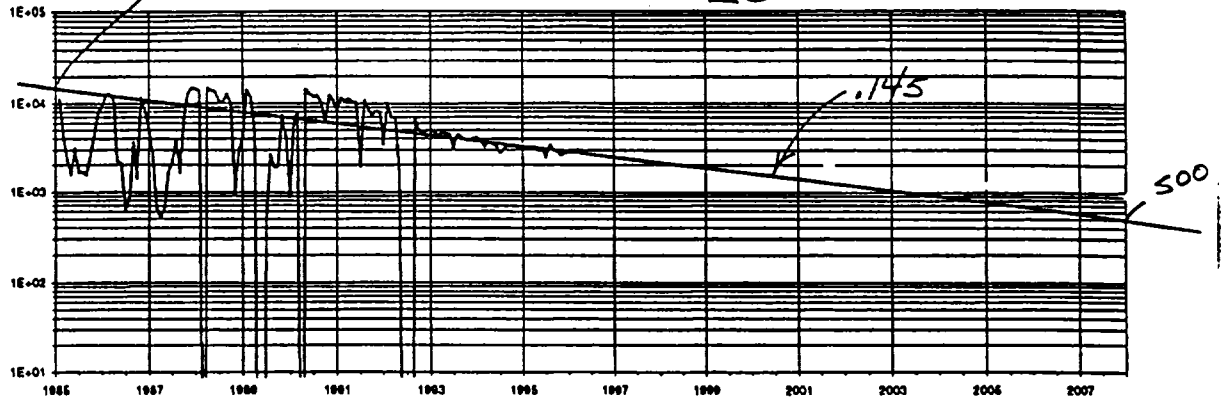
Cum. = 748 MMCF
Est. Rem. = 182 MMCF
Est. Ult. = 930 MMCF
b = 0.145

G-24-23S-36E

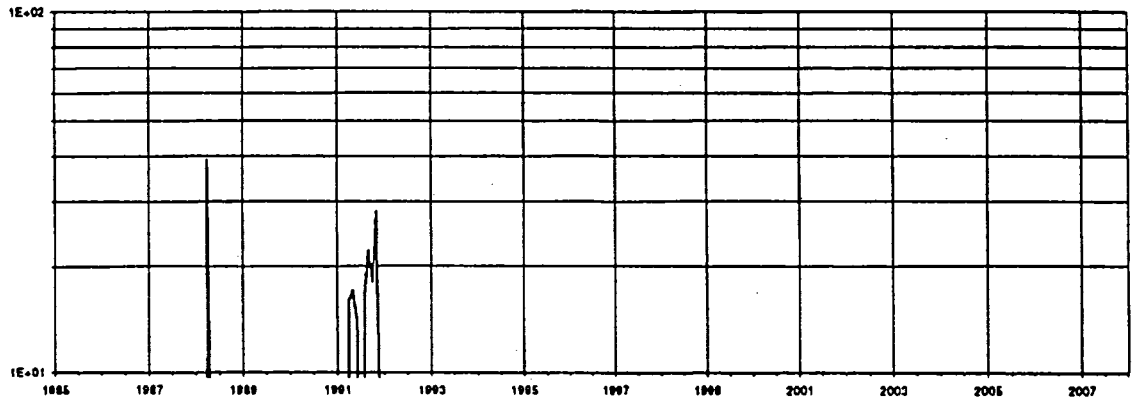
$$G_T = 748 + 182 = 930 \text{ MMCF}$$

Gas Production (MCFPM)

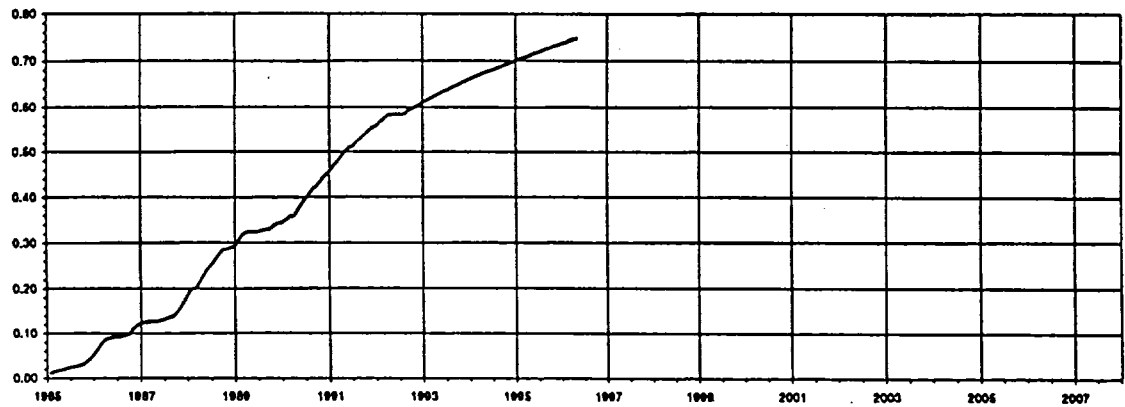
$$\Delta G = 182 \text{ MMCF}$$



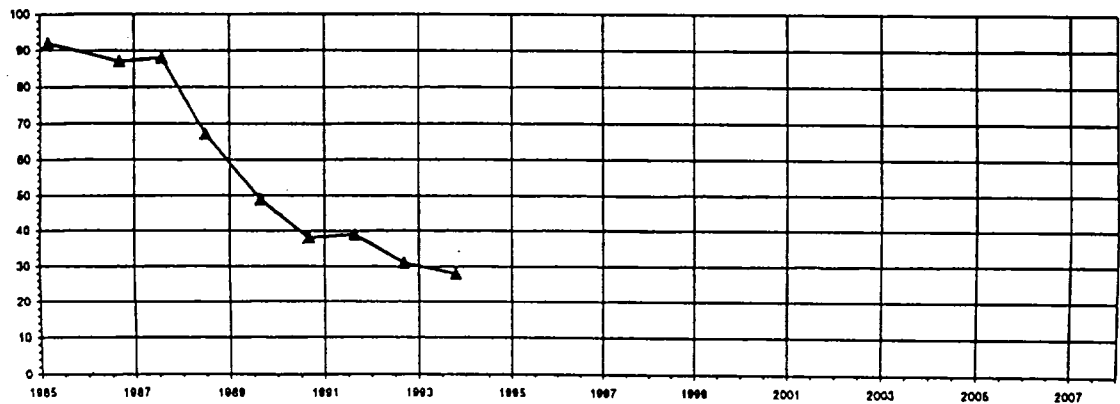
Water Production (BPM)



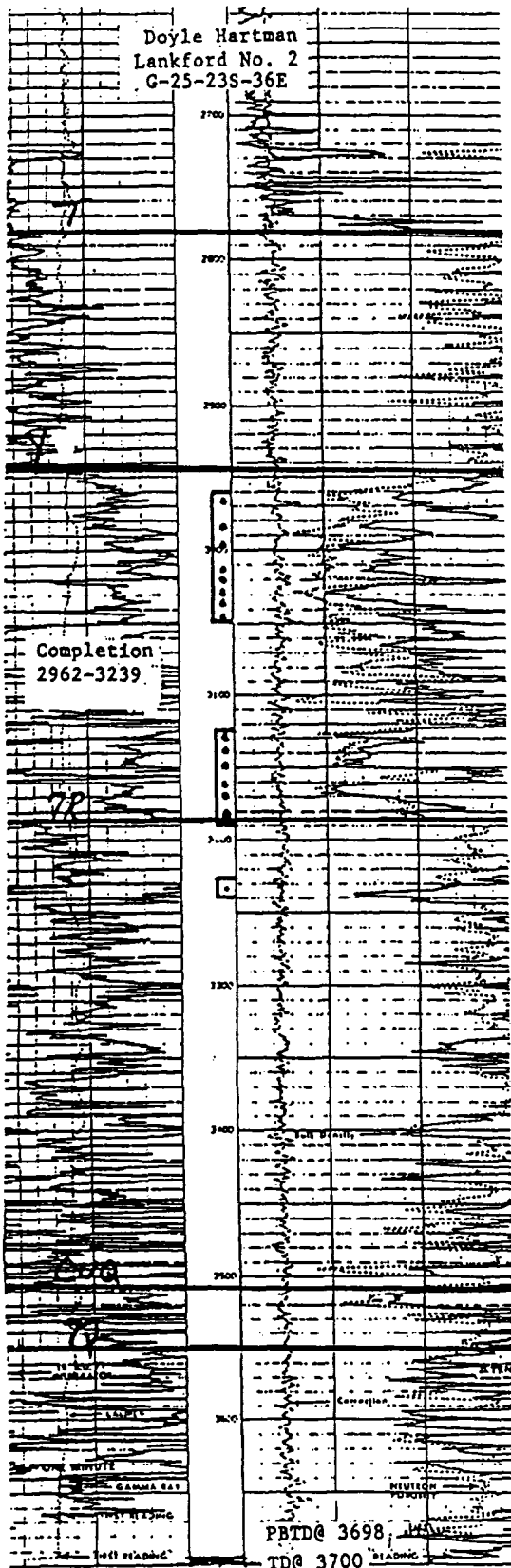
Cumulative Gas Production (BCF)



WHSIP (psia)



04/96: 0.748 BCF



G-25-23S-36E

COMPANY Meridian
(Doyle Hartman)
WELL Lankford No. 2
FIELD Jalmet (Gas)
LOCATION 1980' FNL & 1980' FEL (G)
Sec. 25, T-23-S, R-36-E
COUNTY Lea
STATE New Mexico
ELEVATIONS: KB 3360
OF
GL 3349

COMPLETION RECORD

SPUD DATE 12-17-83 COMP. DATE 1-7-84
TO 3700 PBTD
CASING RECORD:
9 5/8, 36# @ 400 w/250 (TOC @ Circ.)
7, 23# @ 3700 w/850 (TOC @ Circ.)
(TOC @)
(TOC @)
COMP. INTERVAL Perf 2962-3239 w/22
STIMULATION A/6000 15X MCA
ATR = 5.0 BPH. ATP = 1700 psi.
ISIP = 400 psi. 1.5-min. SIP = 0 psi.
POT P/130 MCFPD (After acid)
GOR GR
TP CP 23 psig (SICP = 95 psig)
CHOKE 32/64 TUBING 2 3/8 @ 3457
REMARKS
1-04-84: POP @ 9 x 64 x 1 K
SICP = 95 psig (After acid)
1-17-84: SWF/110,950 + 253,000
ATR = 32 BPH
ATP = 1900 psi
ISIP = 700 psi
1-hr. SIP = 520 psi
Flare @ FCP = 195 psig
1-19-84: 2.5-hr. SIP = 101 psig
1-20-84: P/657 MCFPD (After frac)
Choke = 43/64
FCP = 78 psig
Est. C = 154
1-30-84: 108-hr. SICP = 99 psig
4/96: AMR = 4800 MCFPH
Cum. = 1075 MMCF
Est. Rem. = 210 MMCF
Est. Ult. = 1285 MMCF
b = 0.229

JALMAT (TANSILL YATES SEVEN RIVERS)YS

25Q 23S 38E

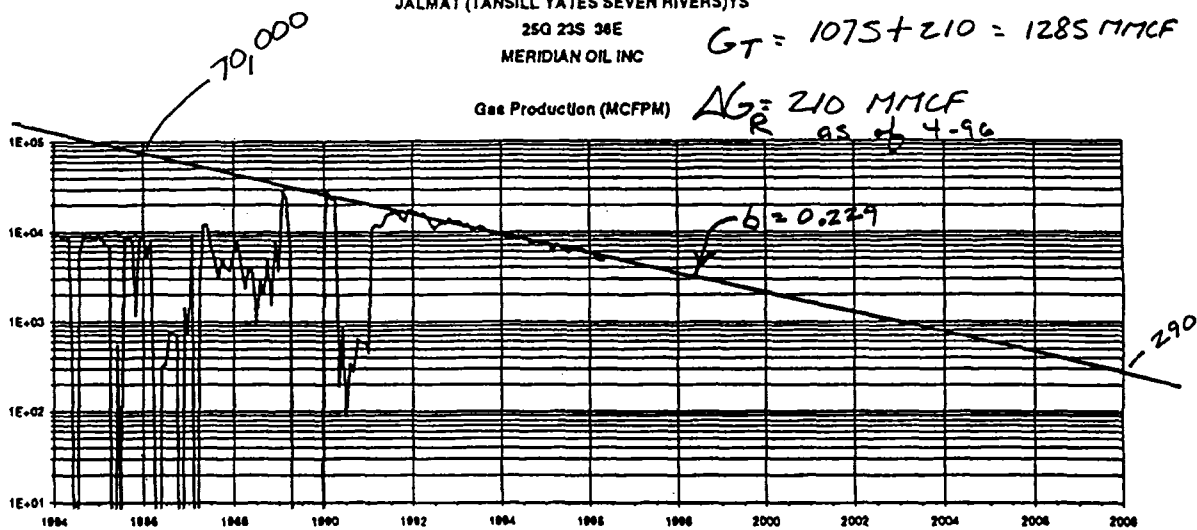
MERIDIAN OIL INC

$$GT = 1075 + 210 = 1285 \text{ MMCF}$$

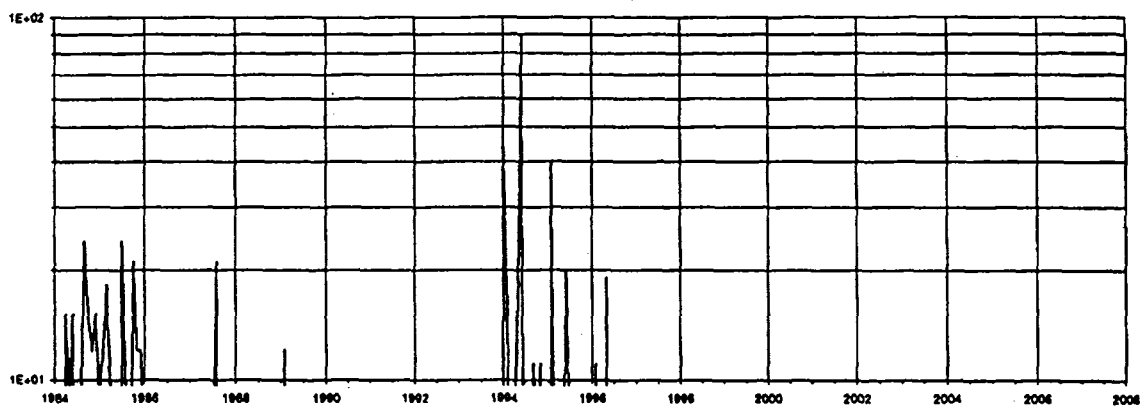
Gas Production (MCFPM)

$$AG_R = 210 \text{ MMCF}$$

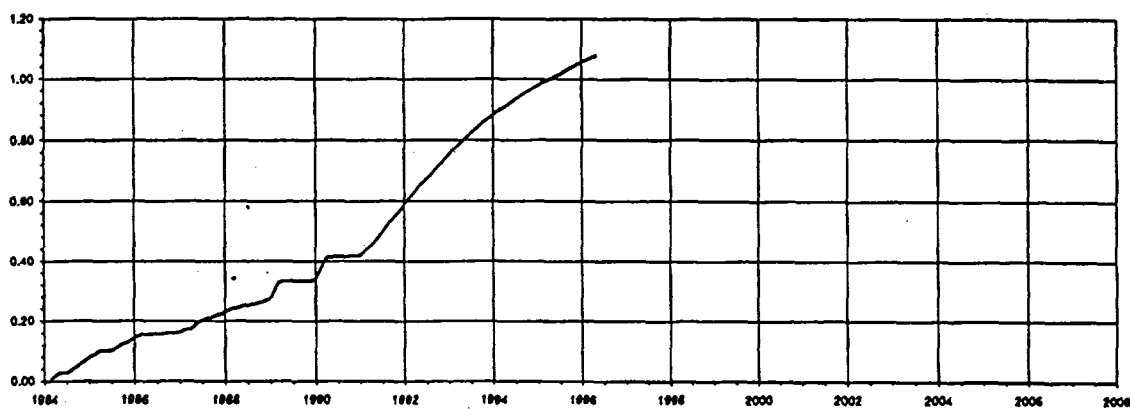
as of 4-96



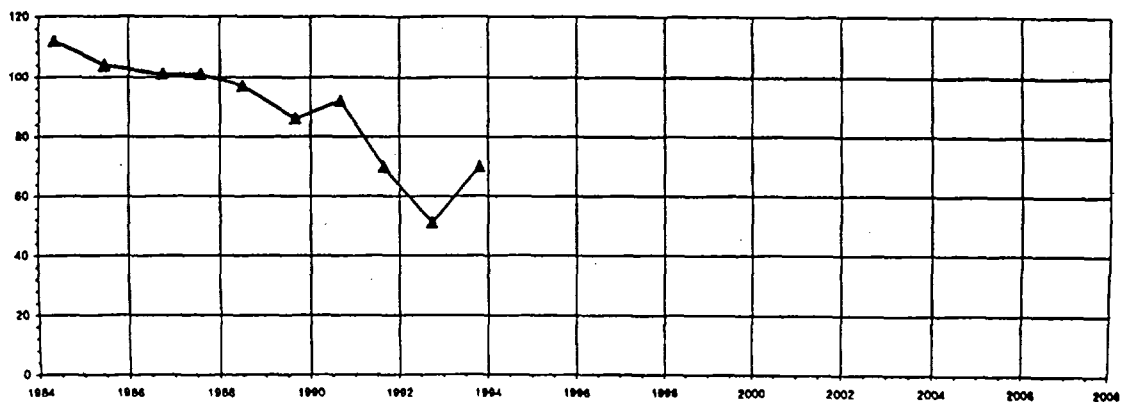
Water Production (BPM)



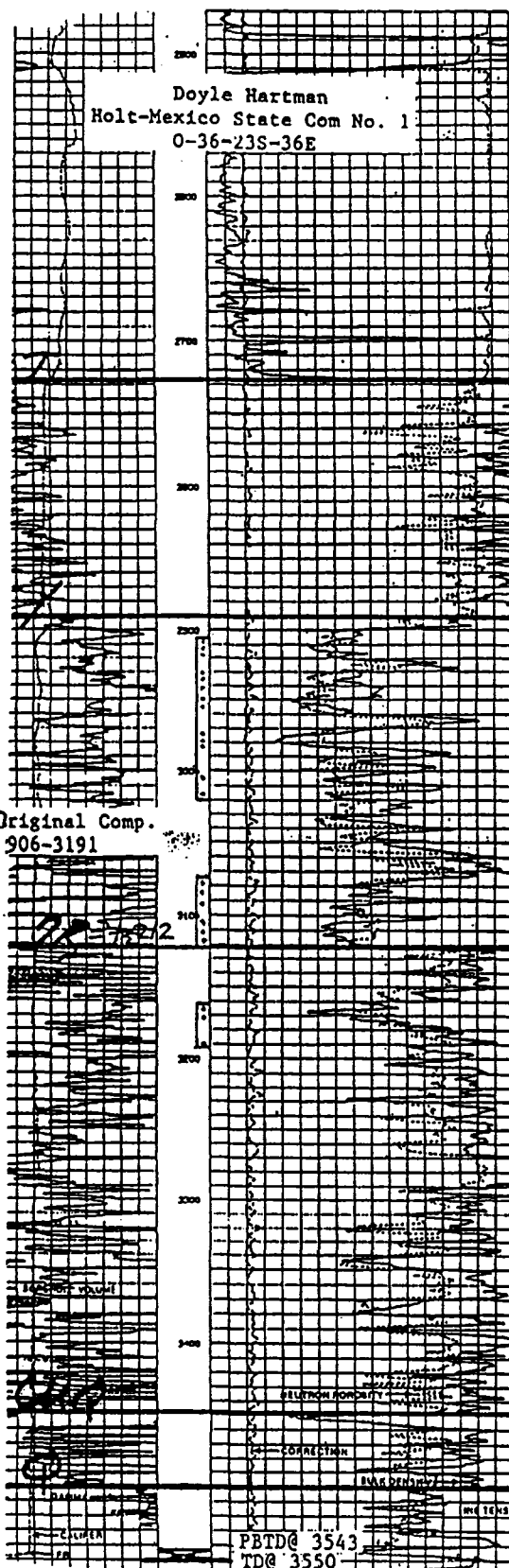
Cumulative Gas Production (BCF)



WHSIP (psia)



04/96: 1.075 BCF



O-36-23S-36E

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

COMPLETION RECORD

SPUD DATE 8-27-85 COMP. DATE 9-12-85
TD 3550 PBTD 3543
CASING RECORD:
9 5/8 @ 445 w/350' (TOC @ Circ.)
7 @ 3550 w/800' (TOC @ Circ.)
(TOC @)
(TOC @)
PERFORATING RECORD Perf: 2906 - 3191 w/25
(Tates - Upper 7R)
STIMULATION A/5600 15% HCA
Avg. Rate = 5.25 BPM
Avg. Press = 2195 PSI ISIP = 0 PSI
IP 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

9/18/85: SWF/187,890 + 400,000
Avg. Rate = 35.5 BPM
Avg. Press = 880 psi
Max. Press = 1120 psi
ISIP = 630 psi
15-Min. SIP = 510 psi
Flare @ 305 psi
64/64: FCP = 35 psi, FTP = 105 psi

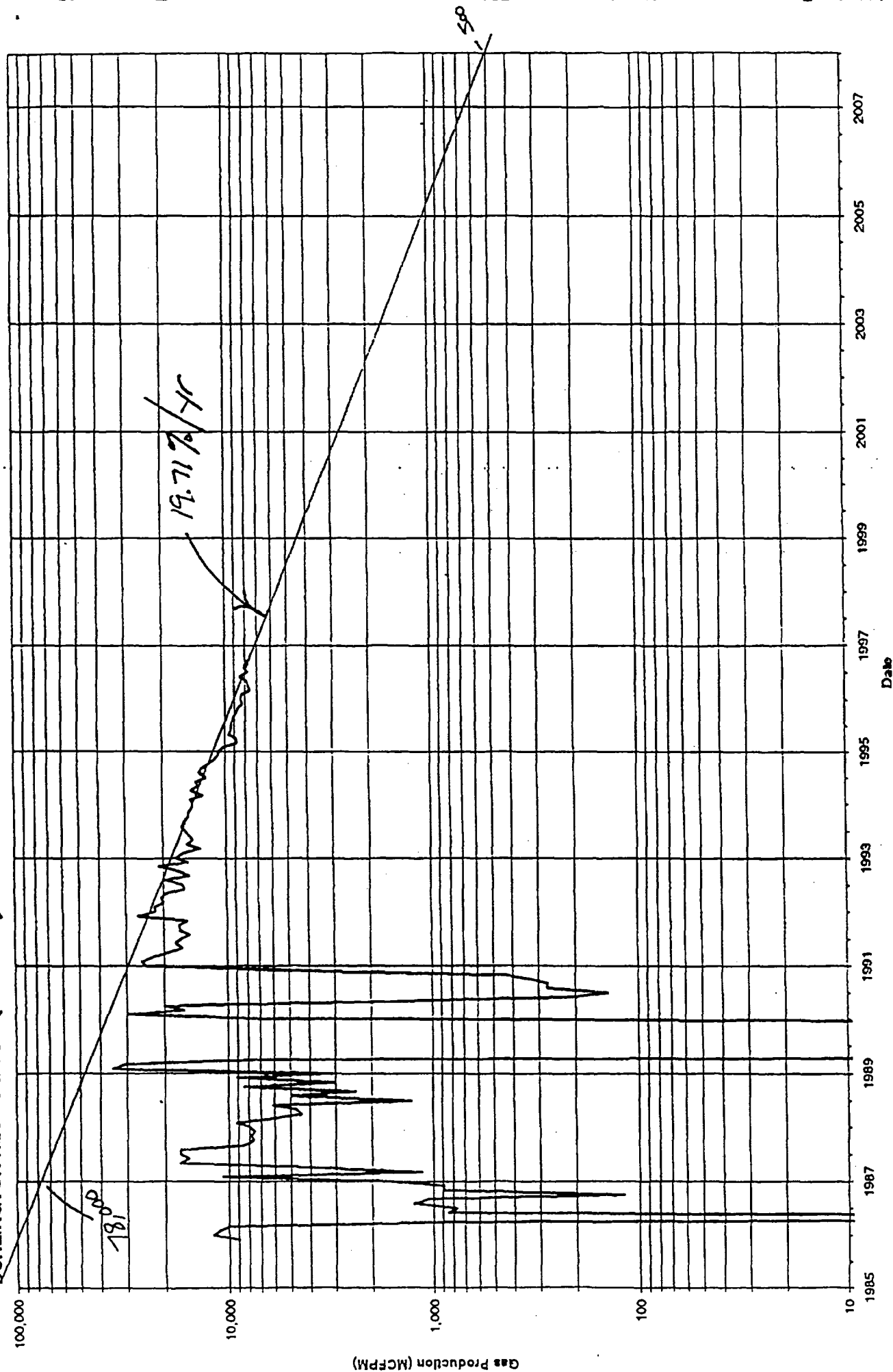
9/20/85: 5 hr Test: P/1150 MCFPD.
Choke = 26/64, CP = 114 psi.
After Frac, C = 172.

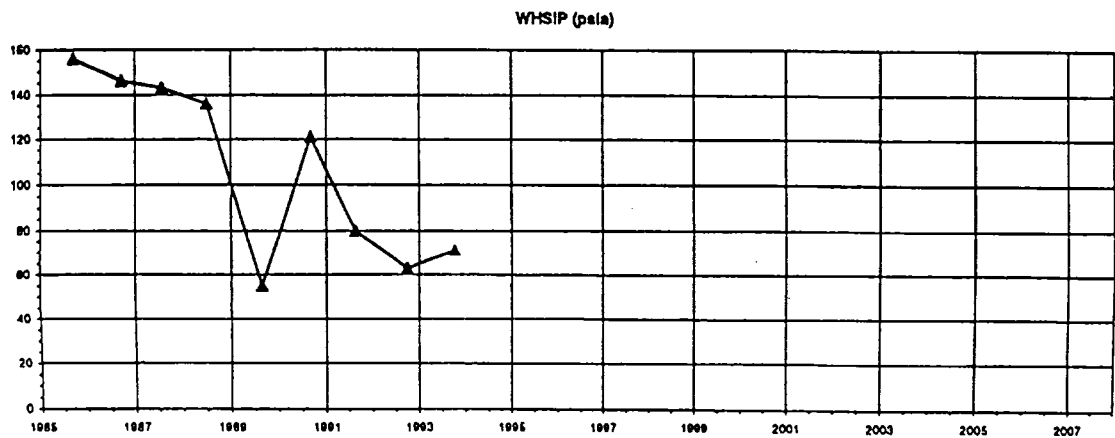
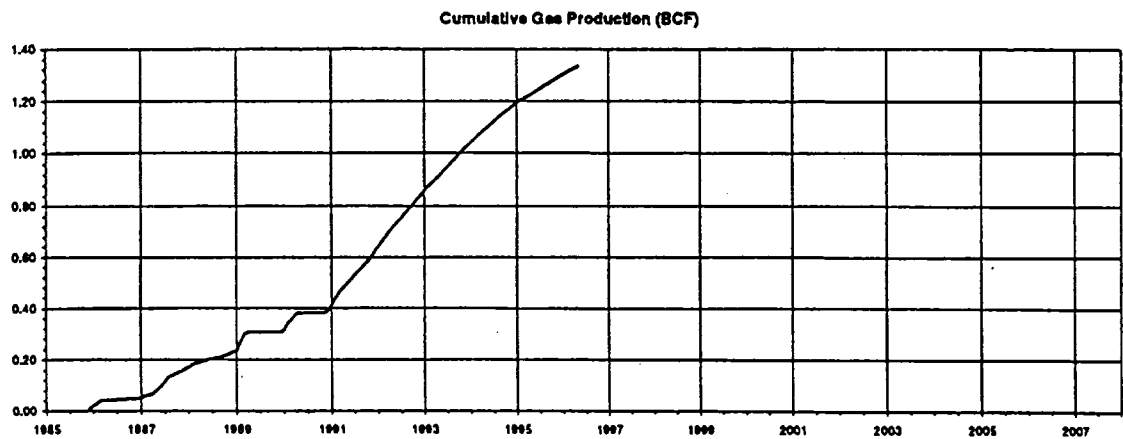
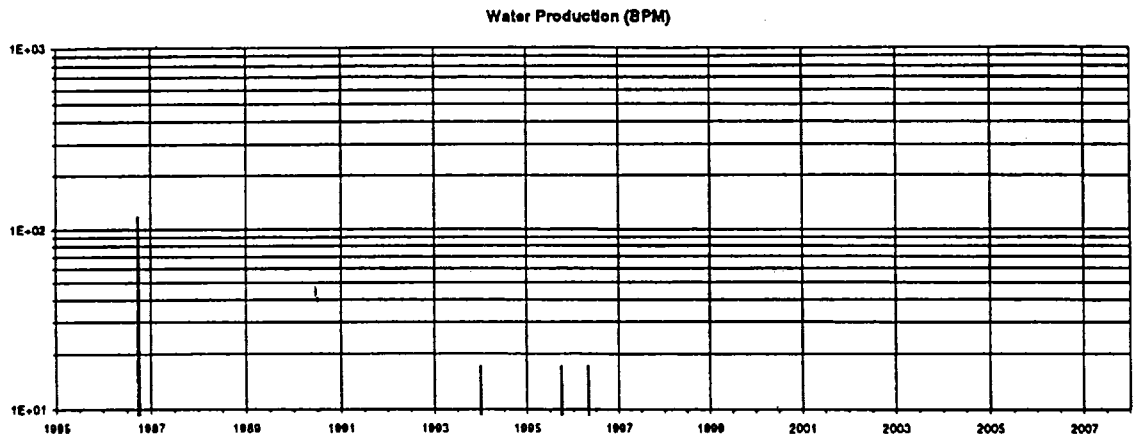
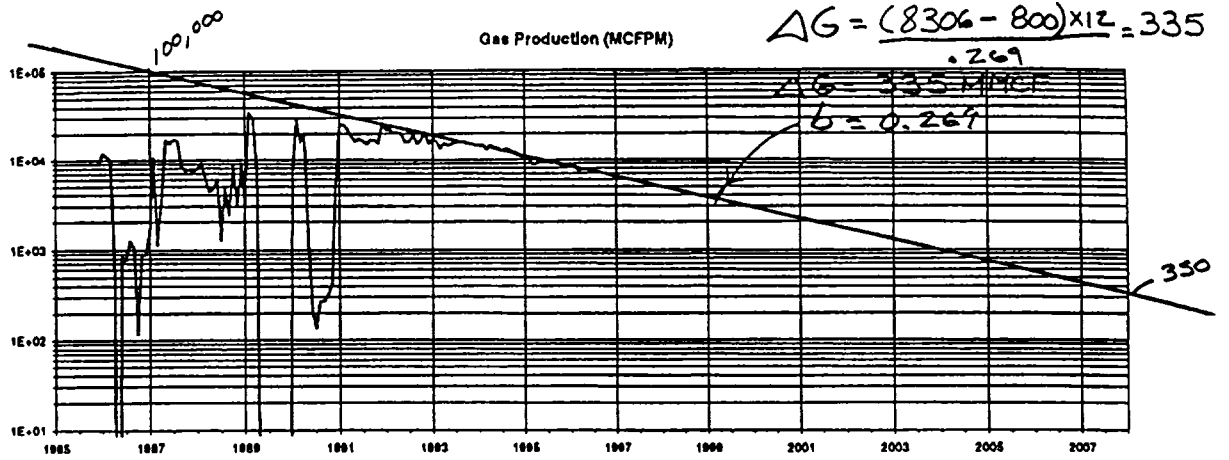
2/87: SICP = 128 psig.
6/87: ADR = 566 MCFPD. Choke = 36/64.
PCP = 114 psig, Est. C = 194.

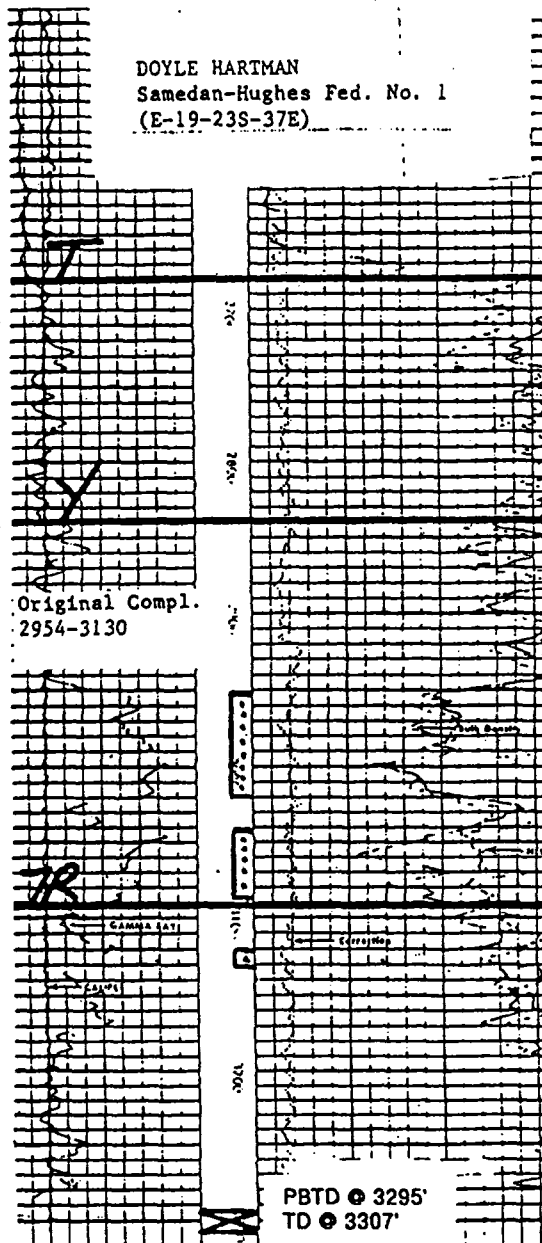
1/96: AMR = 8306 MCFPH
Cur. = 1311 MMCF
Est. Rem. = 335 MMCF
Est. Ult. = 1646 MMCF
b = 0.269

HOLT MEXICO STATE COM #1
JALMAT (TANSILL YATES SEVEN RIVERS)YS
360 23S 36E
BURLINGTON RES O&G CO (DH00)

10/1996: 1.381363 BCF







E-19-23S-37E

COMPANY Meridian
(Doyle Hartman)
WELL Samedan Hughes Federal No. 2
FIELD Jalnet (Gas)
LOCATION 1980' FSL & 660' FWL (E)
Sec. 19, T-23-S, R-37-E
COUNTY Lea
STATE New Mexico
ELEVATIONS: KB 3388
DF
GL 3378

COMPLETION RECORD

SPUD DATE 10-13-80 COMP. DATE 11-6-80
TD 3307 PBTD

CASING RECORD:

8 5/8, 23# @ 453 w/300 (TOC @ Circ.)
5 1/2, 17# @ 3307 w/500 (TOC @ Circ.)
(TOC @)
(TOC @)

COMP. INTERVAL Perf 2954-3130 w/17

STIMULATION A/4500 15% HCA

ATR = 4.5 BPM. ATP = 1500 psi.

ISIP = 800 psi. 3-min. SIP = 0 psi.

POT P/450 MCFPD (After frac)

GOR GR

TP CP 83 psig (SICP = 110 psig)

CHOKE 30/64 TUBING 2 3/8 @ 3205

REMARKS

10-26-80: SICP = 96 psig

10-28-80: SICP = 110 psig

10-28-80: SWF/60,000 + 132,000

ATR = 20 BPM

ATP = 1800 psi

ISIP = 740 psi

1-hr. SIP = 475 psi

11-4-80: Choke = 64/64

FTP = 22 psig

FCP = 77 psig

11-5-80: POP @ 8 x 62 x 1 1/2

12-14-80: P/352 MCFPD

Choke = 33/64

FCP = 83 psig

Est. C = 59.5

4-96: AMR = 2000 MCFPM

Cur. = 906 MMCF

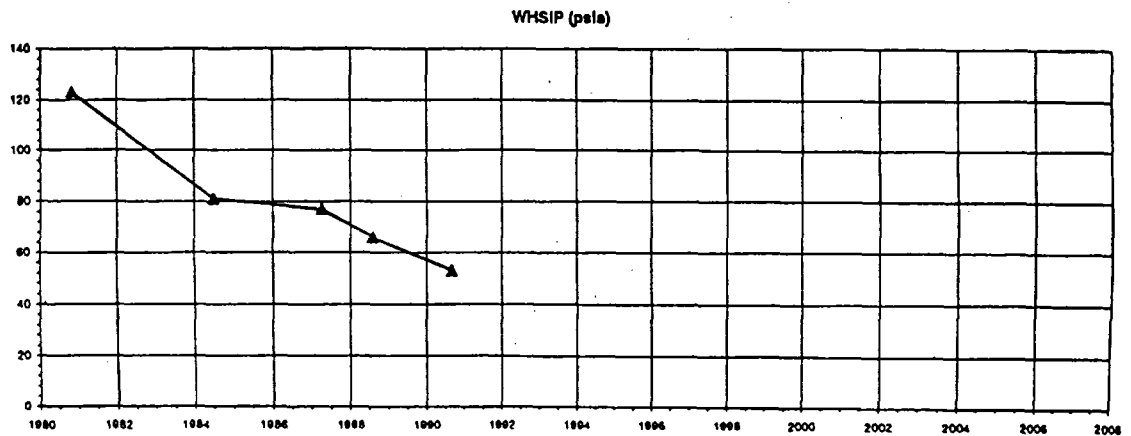
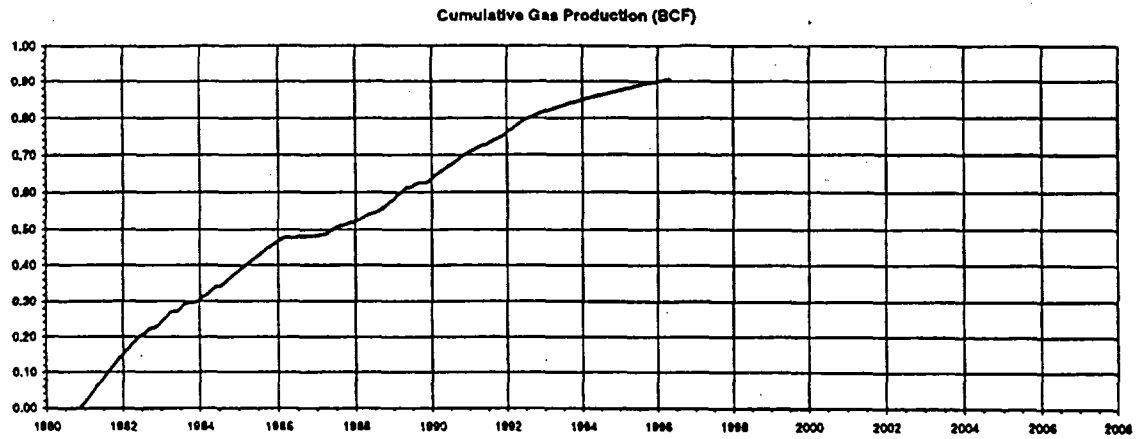
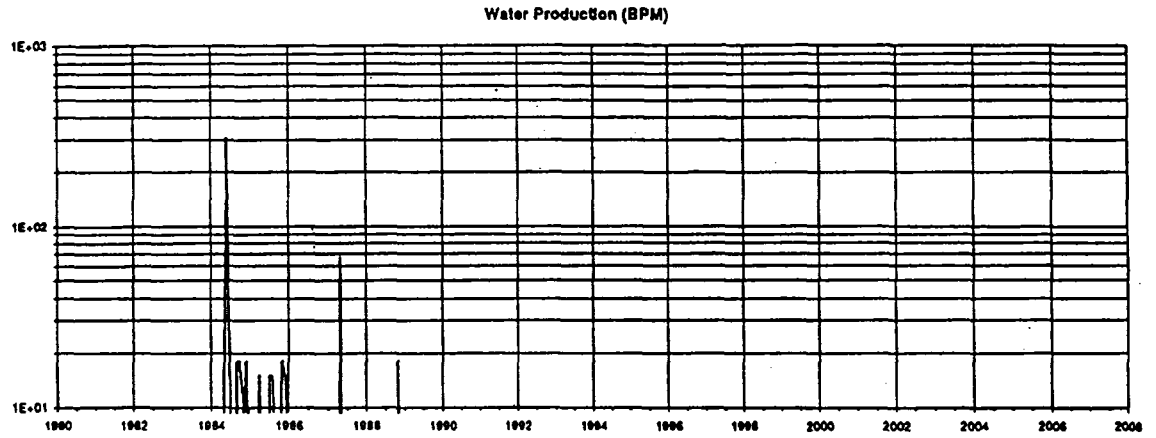
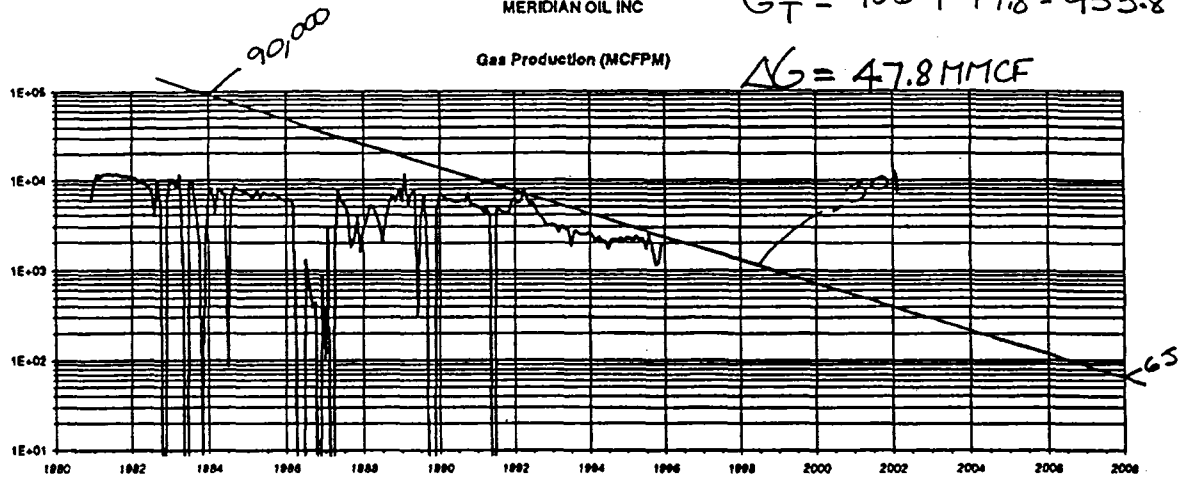
Est. Rem. = 48 MMCF

Est. Ult. = 954 MMCF

b = 0.301

$$G_T = 906 + 47.8 = 953.8$$

$$\Delta G = 47.8 \text{ MMCF}$$

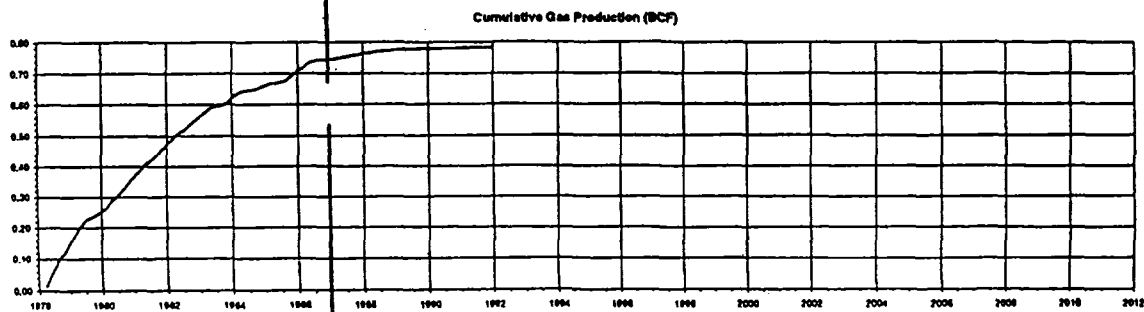
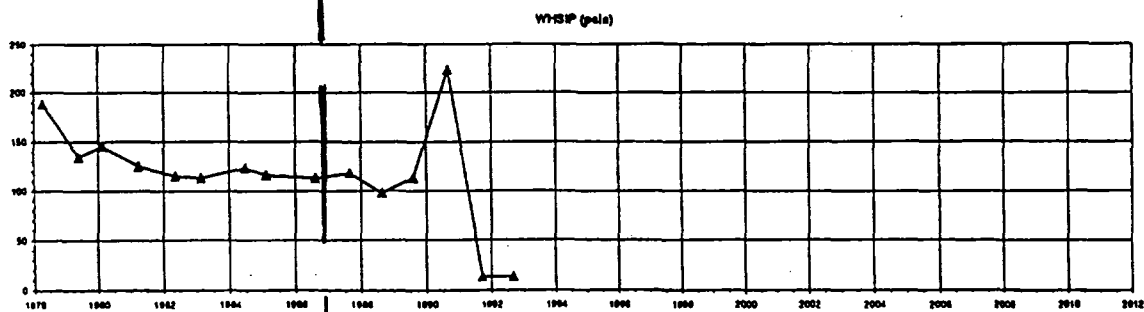
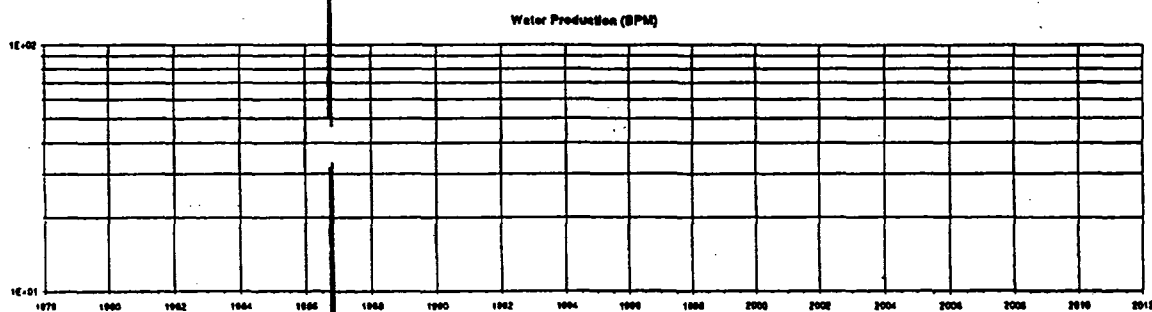
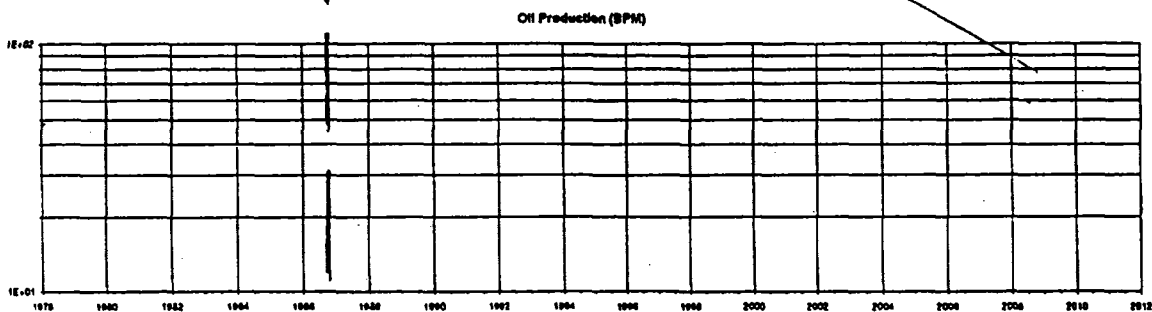
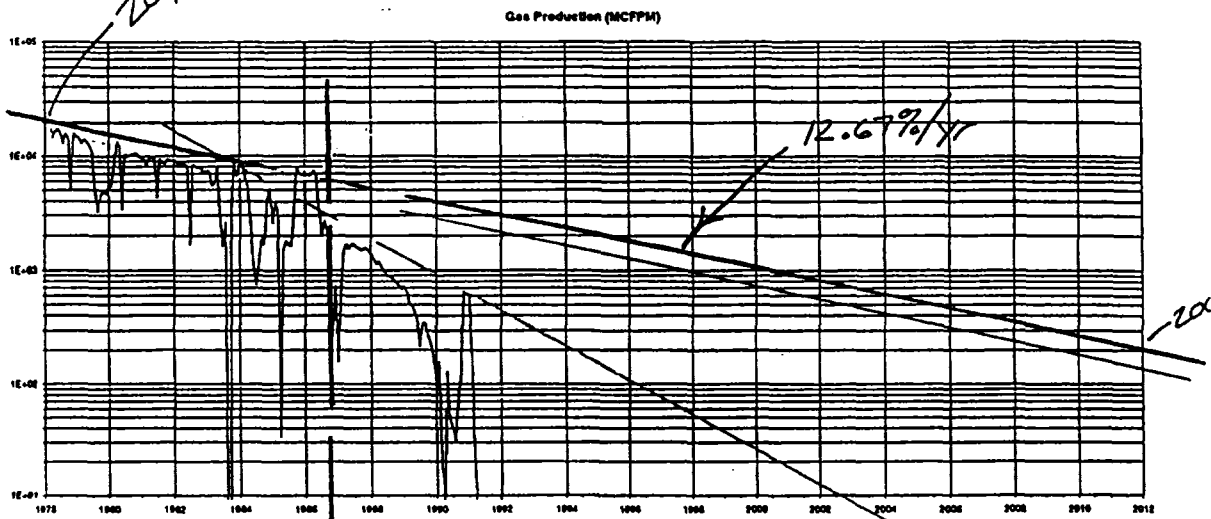


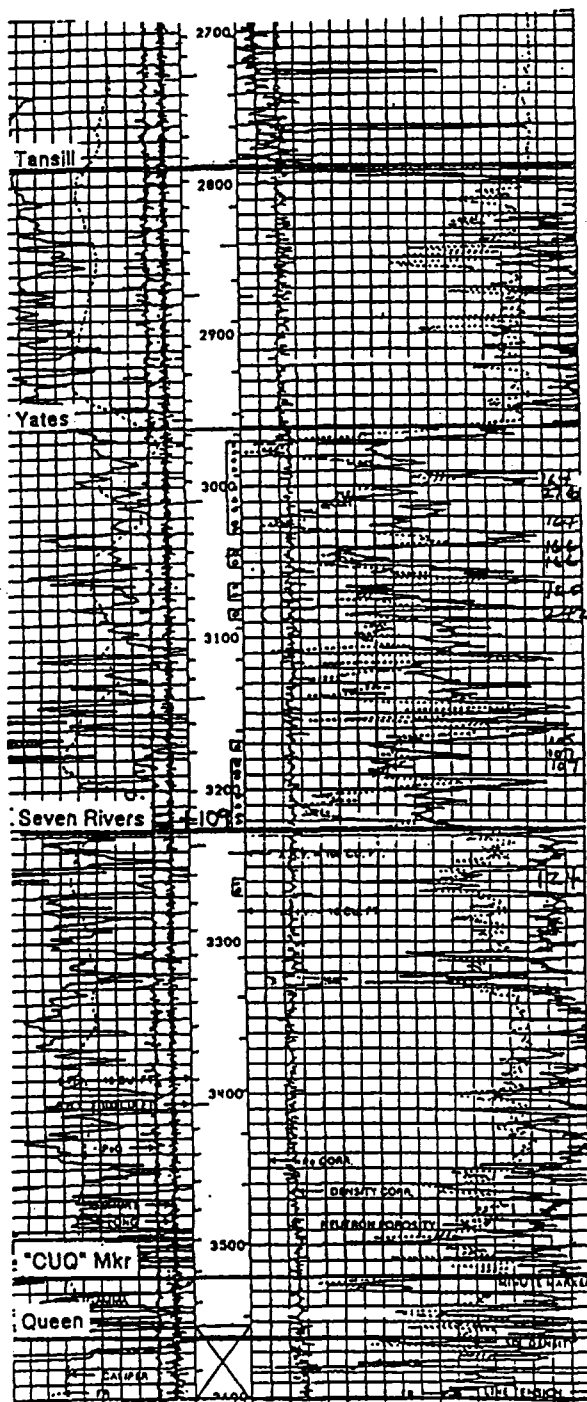
AMOCO PROD. CO.
Myers "HB" Federal No. 30
E-5-24S-37E

Original Comp.
3054-3190
(1-24-78)

TD@3405

E-5-24S-37E





D-6-24S-37E

COMPANY Doyle Hartman

WELL Carter-Eaves "NCT-A" No. 2

FIELD Jalnet

LOCATION 660' FNL & 924' FNL (D)

Sec. 6, T-24-S, R-37-E

COUNTY Lea

STATE New Mexico

ELEVATIONS: KB 3334.3

DF

GL 3317.3

COMPLETION RECORD

SPUD DATE 1-28-91 COMP. DATE 3-2-91

TD 3600 PBTD 3552

CASING RECORD:

13 3/8, 48# @ 454 w/700 (TOC @ Circ.)

7, 23# @ 3599 w/1525 (TOC @ Circ.)

(TOC @)

(TOC @)

COMP. INTERVAL Perf 2972-3265 w/25

STIMULATION A/7125 15% MCA

ATR = 5 BPH. ATP = 1150 psi.

ISIP = 300 psi. 5-min SIP = 0 psi.

POT P/952 MCFFD + 43 BOPD (After frac)

GOR 20,555 GR

TP CP 46 psig (SICP = 136 psig)

CHOKE 70/64 TUBING 2 3/8 @ 3368

REMARKS

2-11-91: P/25 MCFFD + 4 BOPD (After acid).

FCP = 8 psig.

2-13-91: SICP = 136 psig (After acid).

2-13-91: SWF/246,120 + 595,413

ATR = 40 BPH

ATP = 1574 psi

ISIP = 1433 psi

1-hr. SIP = 1175 psi

Flare @ 123 psi

2-14-91: 4 % hr SICP = 192 psig.

CO to PBTD @ 3550'.

POP @ 9 x 54 x 1 %.

2-22-91: POP @ 12 x 54 x 1 % (Increased SPM)

3-2-91: Est. C = 50

5/96: AMR = 7,000 MCFFD + 160 BOPD

Cum. = 720 MMCF + 18.5 MBO

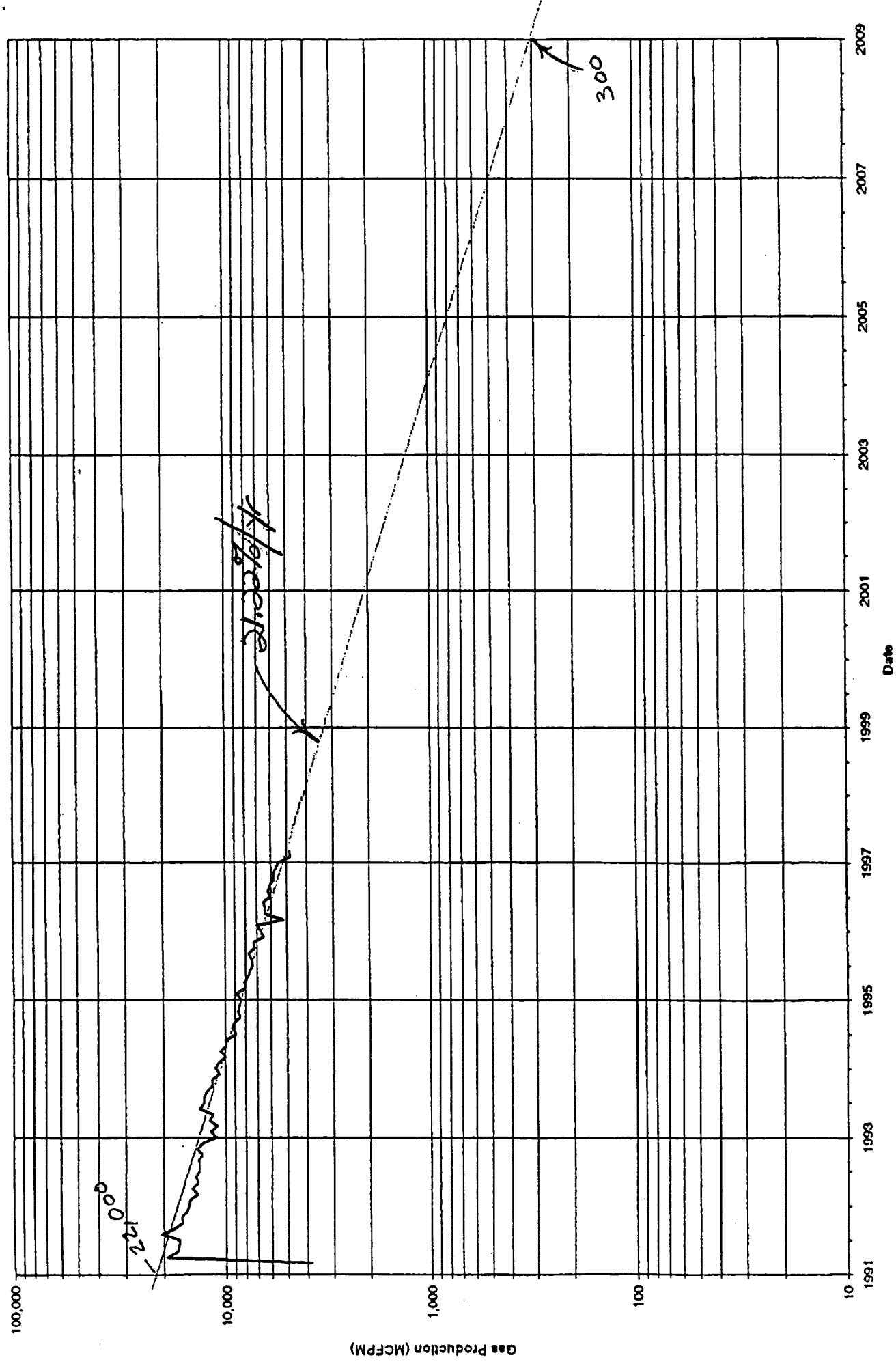
Est. Rem. = 341 MMCF + 7.2 MBO

Est. Ult. = 1061 MMCF + 25.7 MBO

b = 0.217

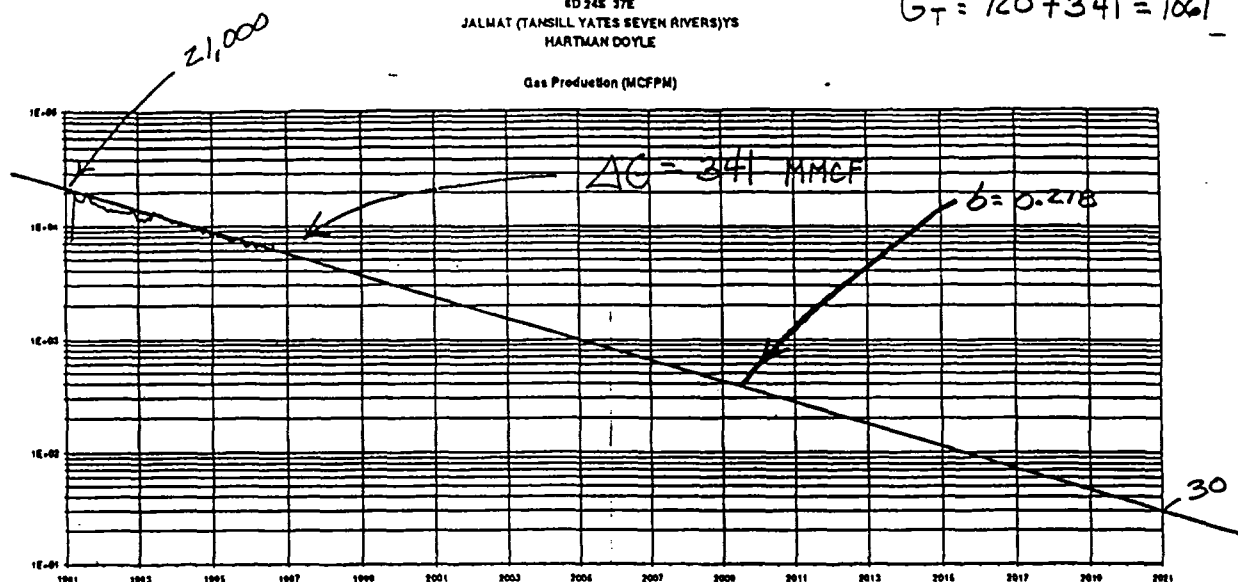
CAK REAVES NCT A #2
JALMAT (TANSILL YATES SEVEN RIVERS)YS
6D 24S 37E
HARTMAN DOYLE

2/1997: 0.765188 BCF



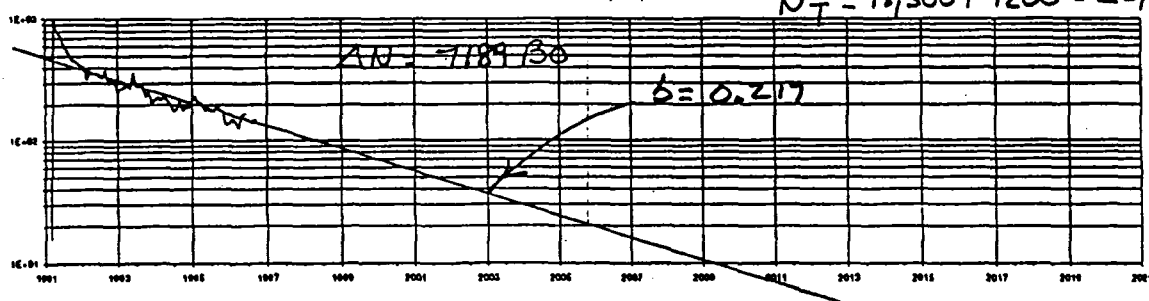
$$G_T = 720 + 341 = 1061$$

Gas Production (MCFPM)

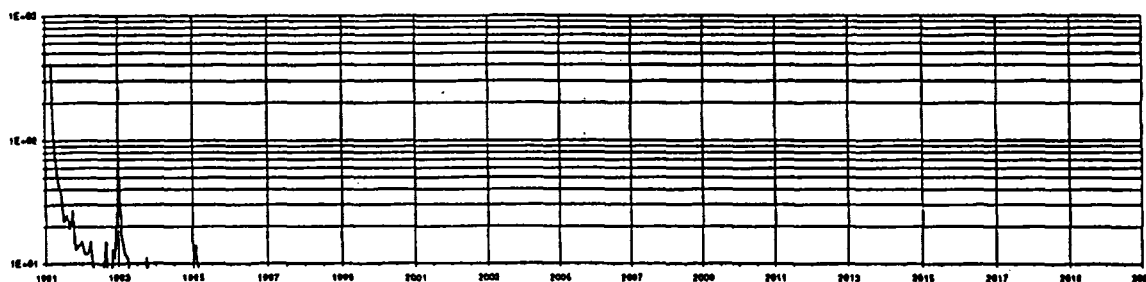


Oil Production (BPM)

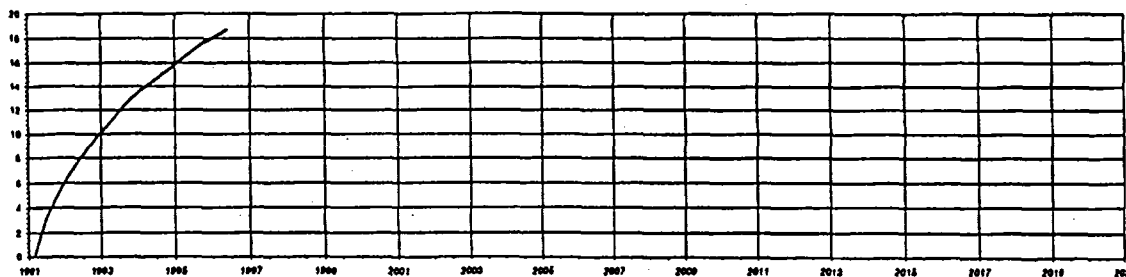
$$N_T = 18,500 + 7200 = 25,700 \text{ Bc}$$



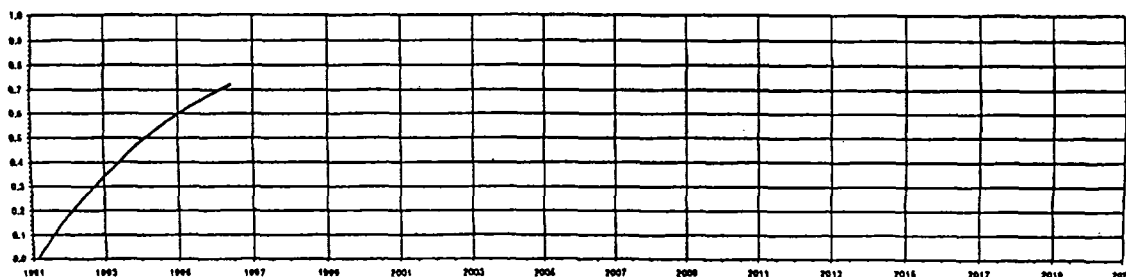
Water Production (BPM)

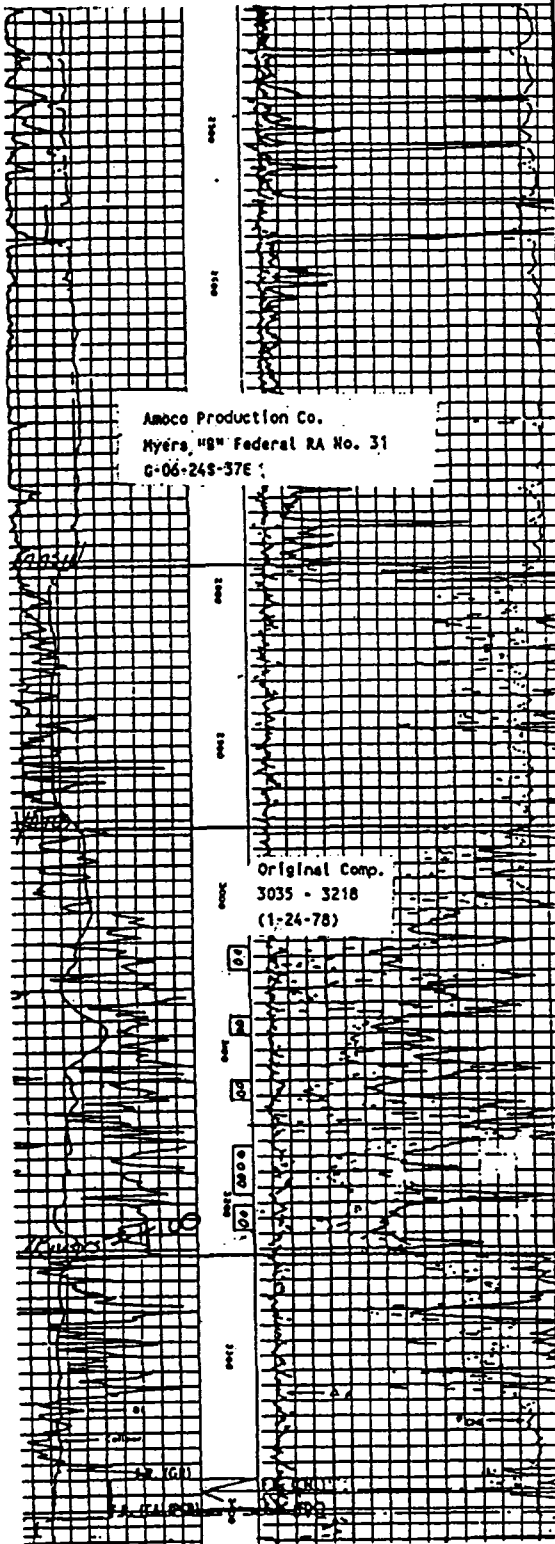


Cumulative Oil Production (MBBLs)



Cumulative Gas Production (BCF)





Amoco Production Co.
Myers "B" Federal RA No. 31
G-06-24S-37E

Original Comp.
3035 - 3218
(1-24-78)

COMPANY Amoco Production Co.

WELL Myers "B" Federal RA No. 31

FIELD Jalmat (Gas)

LOCATION 1650 FNL & 1830 FEL (G)

Section 6, T-24-S, R-37-E

COUNTY Lea

STATE New Mexico

ELEVATIONS:

KB

DF

GL 3325

COMPLETION RECORD

SPUD DATE 12-31-77 COMP. DATE 1-24-78

TD 3400 PBD

CASING RECORD 8-5/8 @ 1193 w/550 Circ/50 sx

5-1/2 @ 3400 w/600 Circ/40 sx

PERFORATING RECORD Perf: 3035 - 3218 w/144 shot

STIMULATION A/3000

SF/50,000 + 61,000

IP IPF = 1904 MCFPD

GOR GR

TP 100# SITP 260# CP 100#

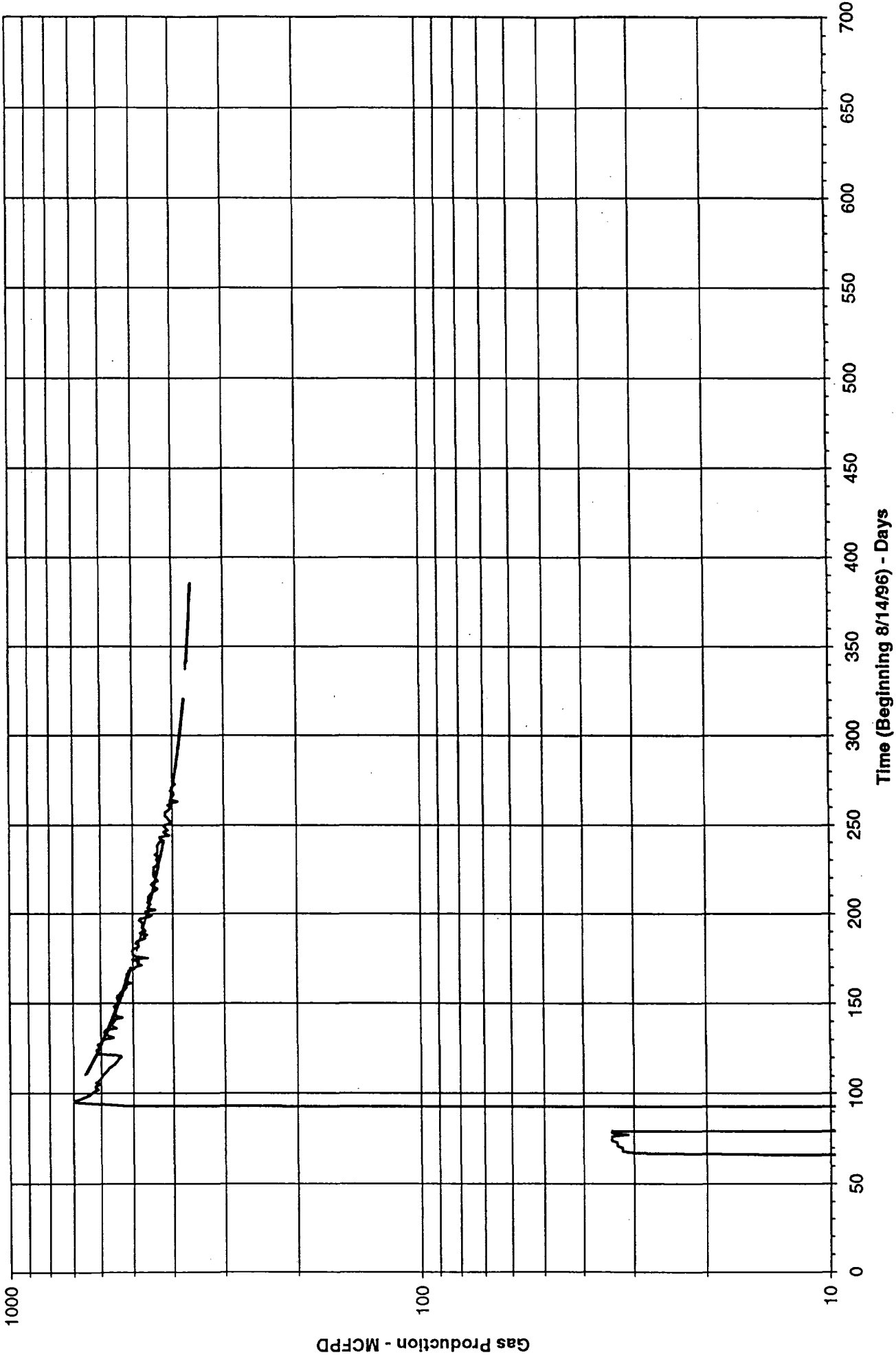
CHOKE 32/64 TUBING @

REMARKS

Clean out to approx 3380
Add perfs 3010 - 3030
Frac with large frac

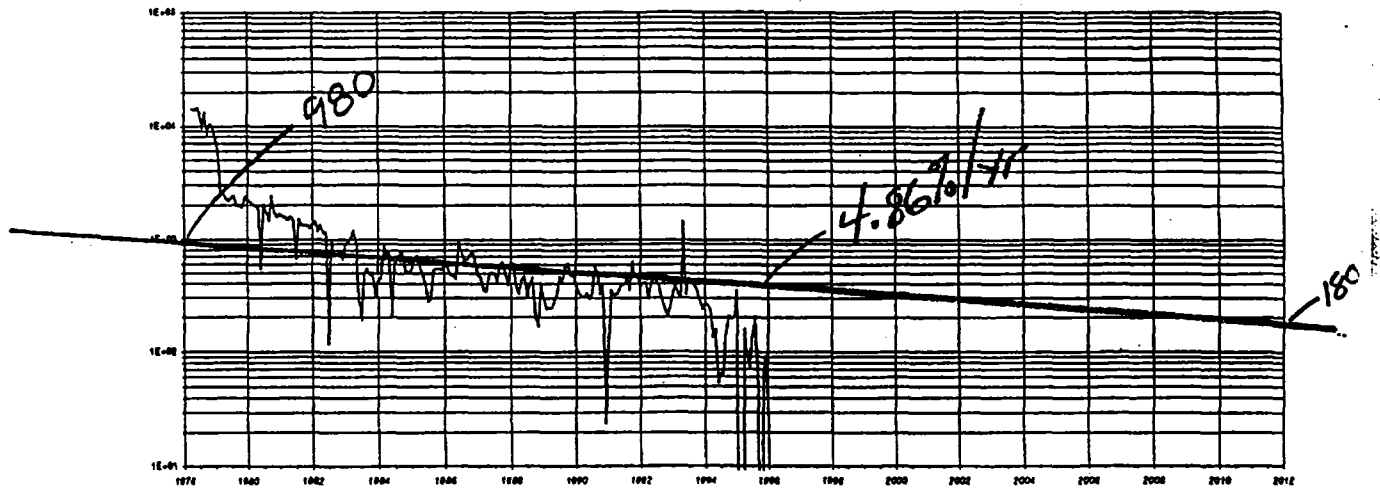
G-06-24S-37E

Myers B Federal No. 31
Jalmat Gas Pool
G-6-24S-37E

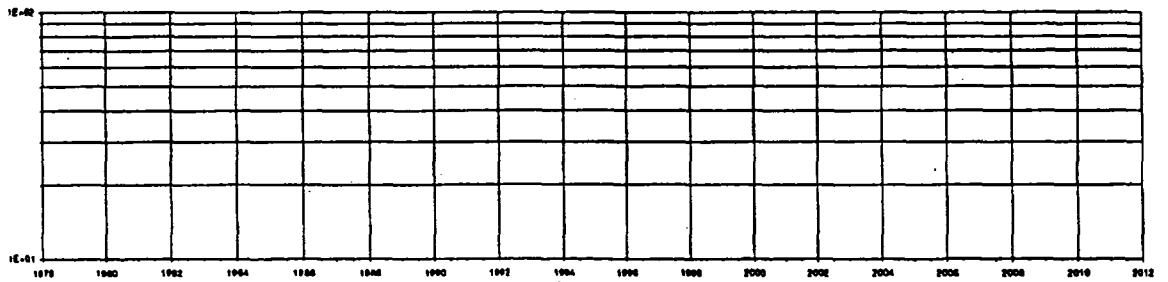


MYERS B FEDERAL RA #21
 SQ 24S 37E
 JALMAT (TANSHILL YATES SEVEN RIVERS)YS
 AMOCO PRODUCTION CO

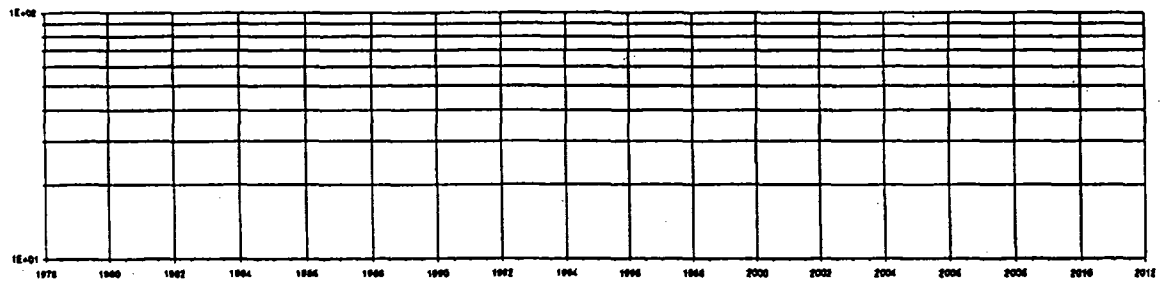
Gas Production (MCFPM)



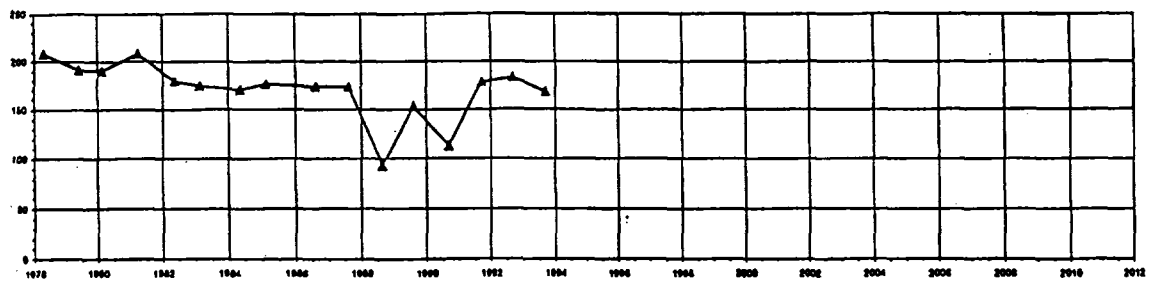
Oil Production (BPM)



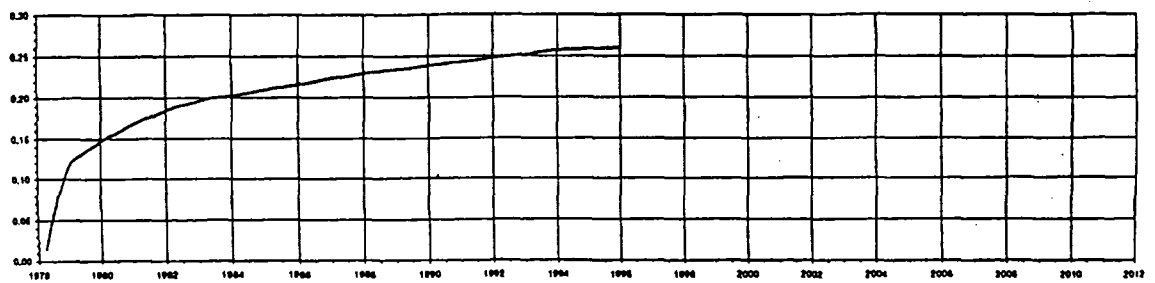
Water Production (BPM)

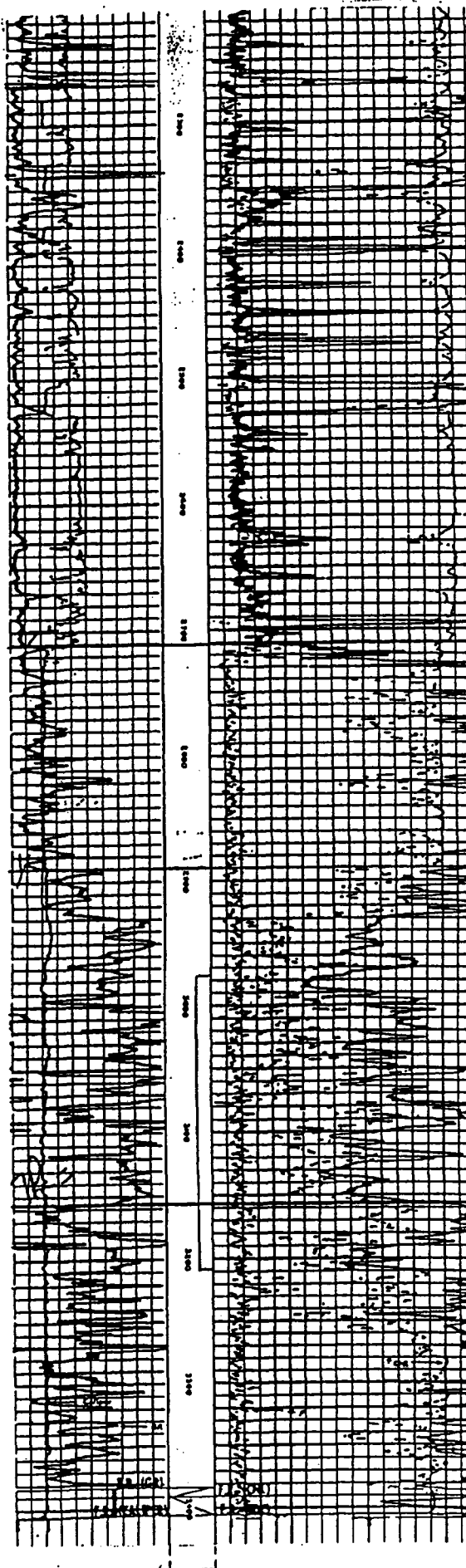


WHSIP (psia)



Cumulative Gas Production (BCF)





B-07-24S-37E

COMPANY: AMOCO
 WELL: Myers "B" Federal RA No. 33
 FIELD: Jalmat
 LOCATION: 940' ENL & 2090' FEL (B)
Section 7, T-24-S, R-37-E
 COUNTY: Lea
 STATE: New Mexico
 ELEVATIONS: KB _____
 DF _____
 GL: 3305

COMPLETION RECORD

PROD DATE 6-23-78 COMP. DATE 7-26-78
 TD 3450 PBTD 3412

CASING RECORD 8 5/8 @ 1205 w/500
5 1/2 @ 3450 w/575

PERFORATING RECORD Perf: 2977-3207

STIMULATION A/3600 15%
SE/40,000 + 100,000
w/10,000 CO₂

IP TPF = 580 MCFPD

GOR _____ GR _____
 TP 160" CP 240"
 CHOKE 25/64 TUBING _____ @ _____

REMARKS

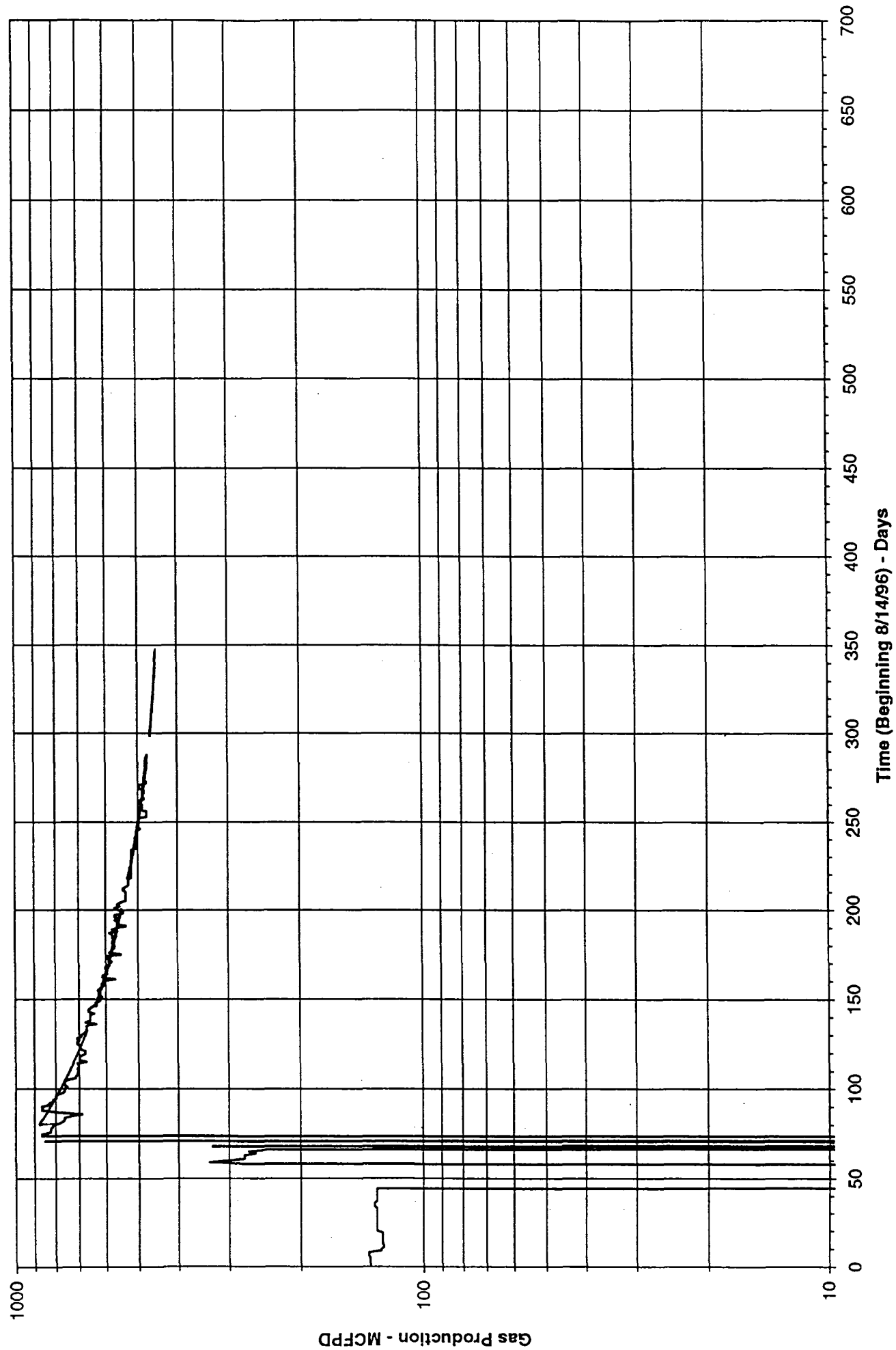
12/78 CAOF 20LS MCFPD

AVG. 1990 CUM JALMAT Prod 930 MMCF

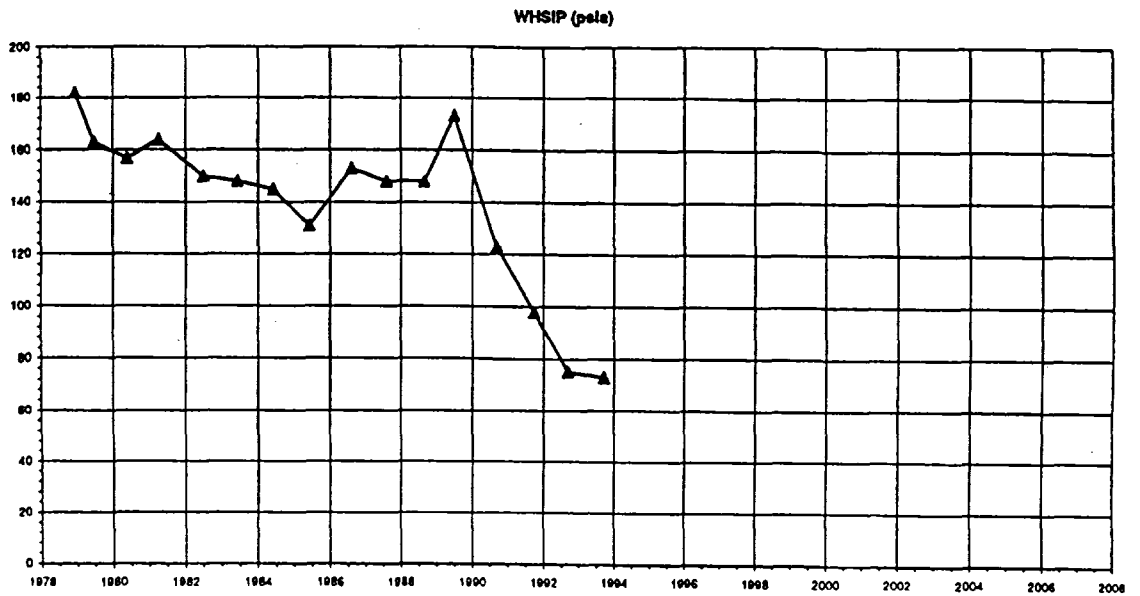
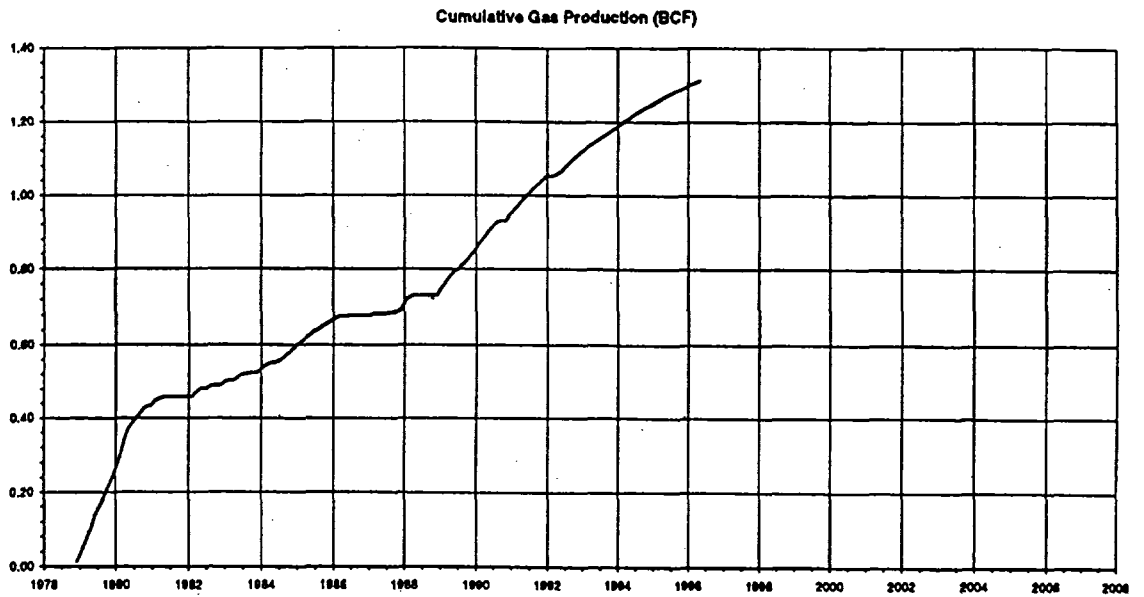
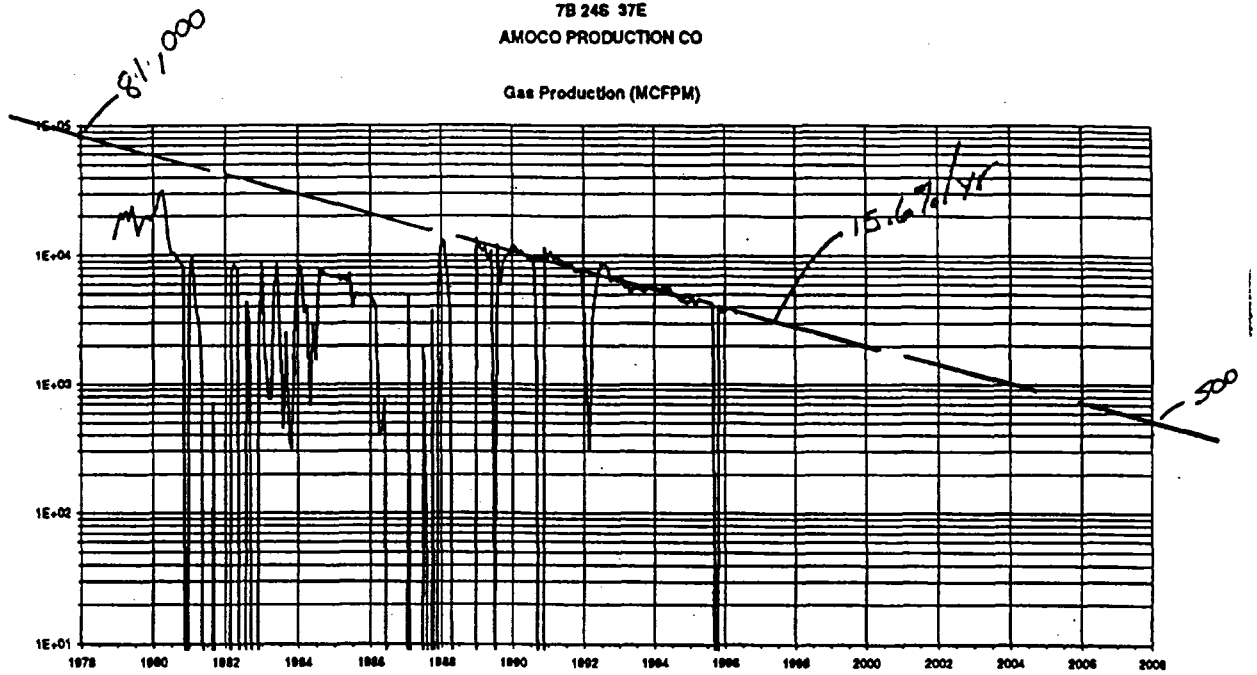
1990 AVG JALMAT Prod 313 MCFPD

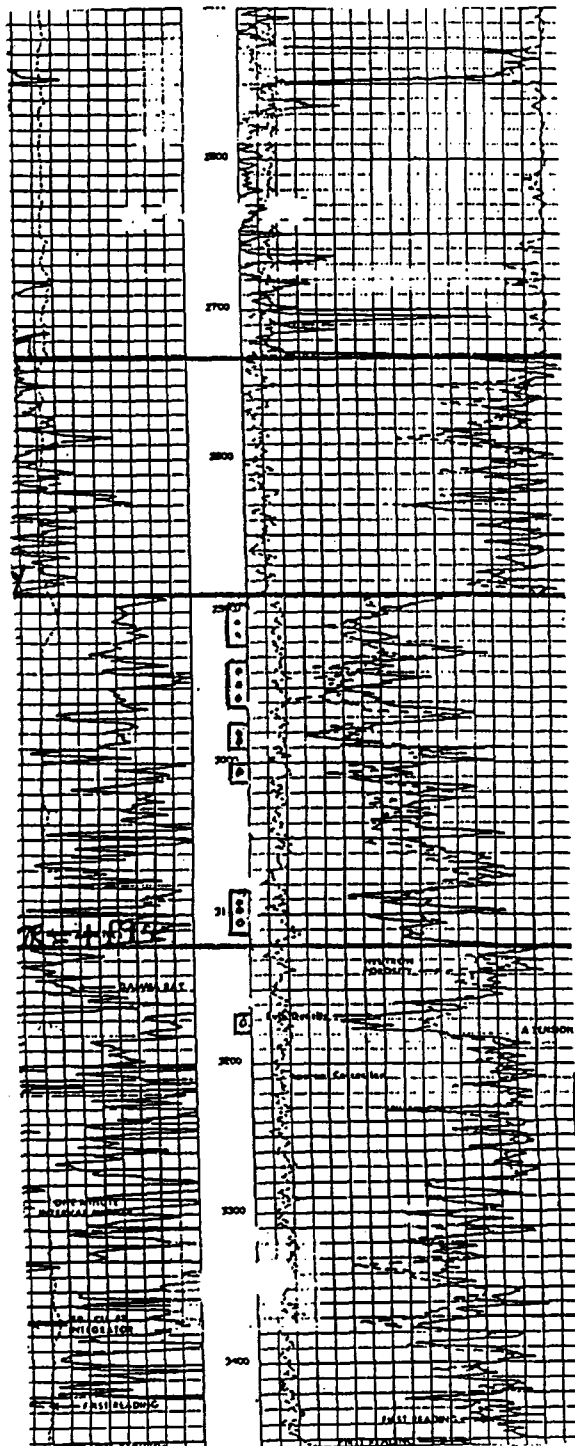
(238 DAYS)

Myers B Federal No. 33
Jalmat Gas Pool
B-7-24S-37E



MYERS B FEDERAL RA B #33
JALMAT (TANSILL YATES SEVEN RIVERS)YS
7B 24S 37E
AMOCO PRODUCTION CO





L-7-24S-37E

COMPANY Meridian
 (Doyle Hartman)
 WELL Toby No. 3
 FIELD Jalnet (Gas)
 LOCATION 1780' FSL & 1100' FWL (L)
Sec. 7, T-24-S, R-37-E
 COUNTY Lea
 STATE New Mexico
 ELEVATIONS: KB 3314
 DF
 GL 3303

COMPLETION RECORD

SPUD DATE 5-28-82 COMP. DATE 6-12-82
 TD 3450 PBTD 3386

CASING RECORD:

9 5/8, 36# @ 430 w/250 (TOC @ Circ.)
7, 23# @ 3450 w/500 (TOC @ Circ.)
 (TOC @)
 (TOC @)

COMP. INTERVAL Perf 2897-3177 w/21

STIMULATION A/5600 15% MCA

ATR = 5 % BPM. ATP = 1450 psi.

ISIP = 300 psi. 3-min. SIP = 0.

POT P/725 MCFPD (After Frac)

GOR GR

TP CP 182 psig (SICP = 196 psig)

CHOKE 28/64 TUBING 2 3/8 @ 3262

REMARKS

6-9-82: SICP = 206 psig (After acid)

6-10-82: SWF/92,000 + 214,000

ATR = 30 BPM

ATP = 1300 psi

ISIP = 530 psi

1-hr. SIP = 470 psi

19.5-hr. Test:

Flow Path - annulus

Choke = 64/64

FCP = 63 psi

FTP = 153 psi

(Sand Fill @ 3310' RKB)

6-11-82: POP @ 8 1/2 x 64 x 1 %.

SICP = 196 psig (After Frac)

6-12-82: Est. C = 128

1/96: AMR = 10,000 MCFPM

Cum. = 1140 MMCF

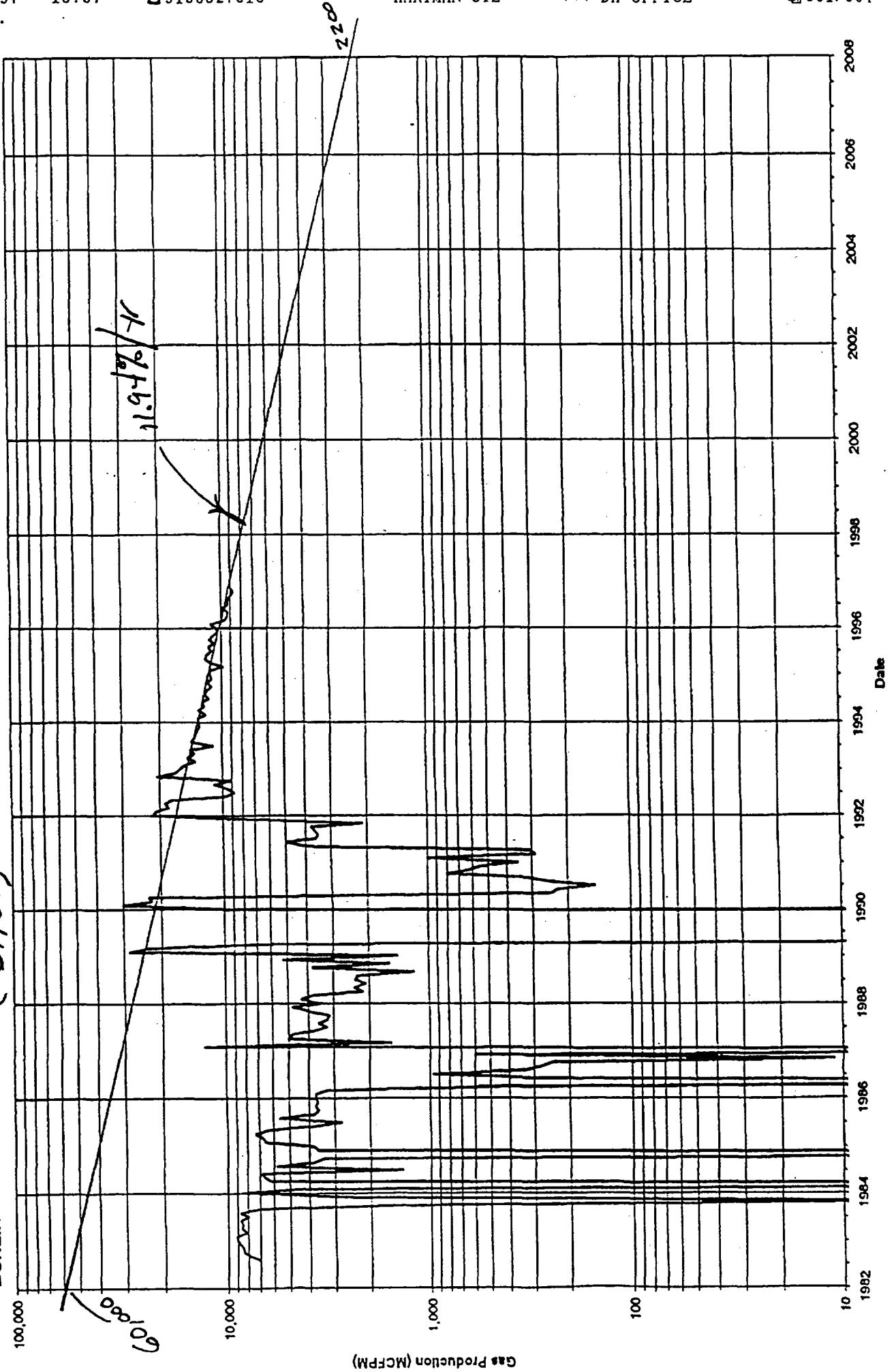
Est. Rem. = 611 MMCF

Est. Ult. = 1751 MMCF

b = 0.161

TOBY #3
JALMAT (TANSILL YATES SEVEN RIVERS)YS
7L 24S 37E
BURLINGTON RES O&G CO (DH00)

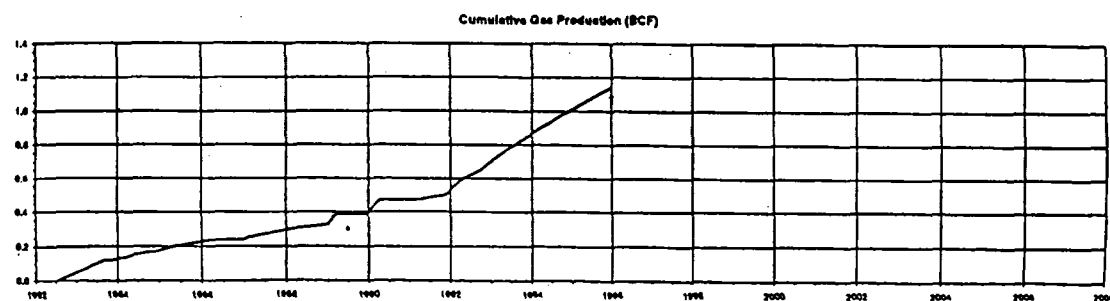
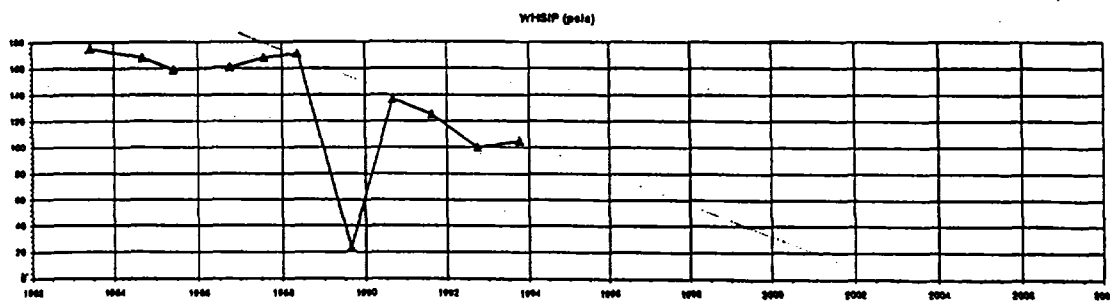
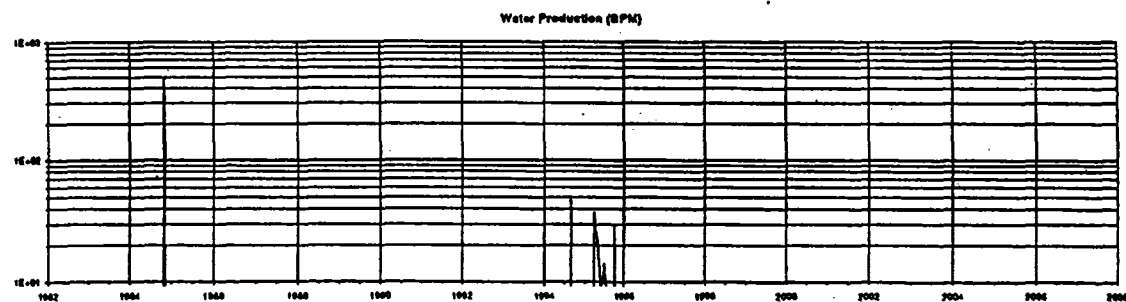
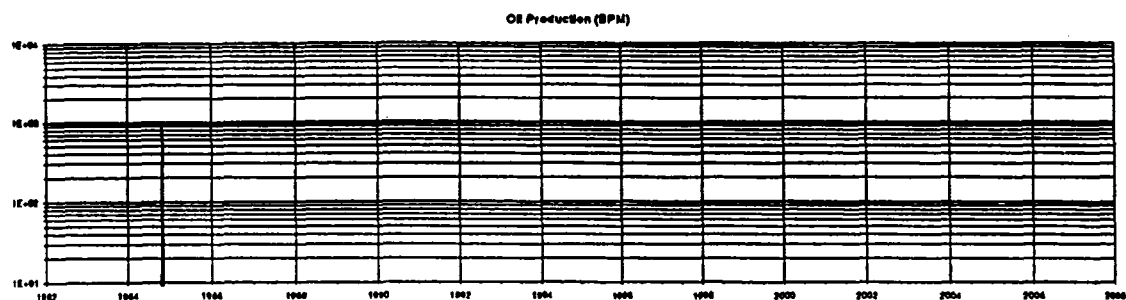
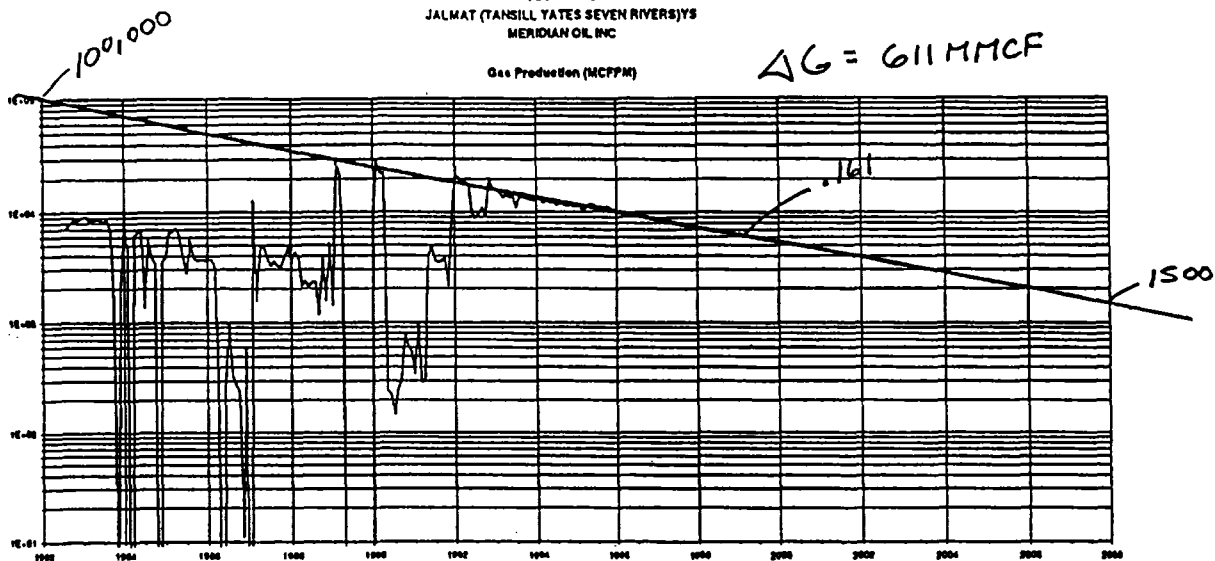
10/1996: 1.237483 BCF

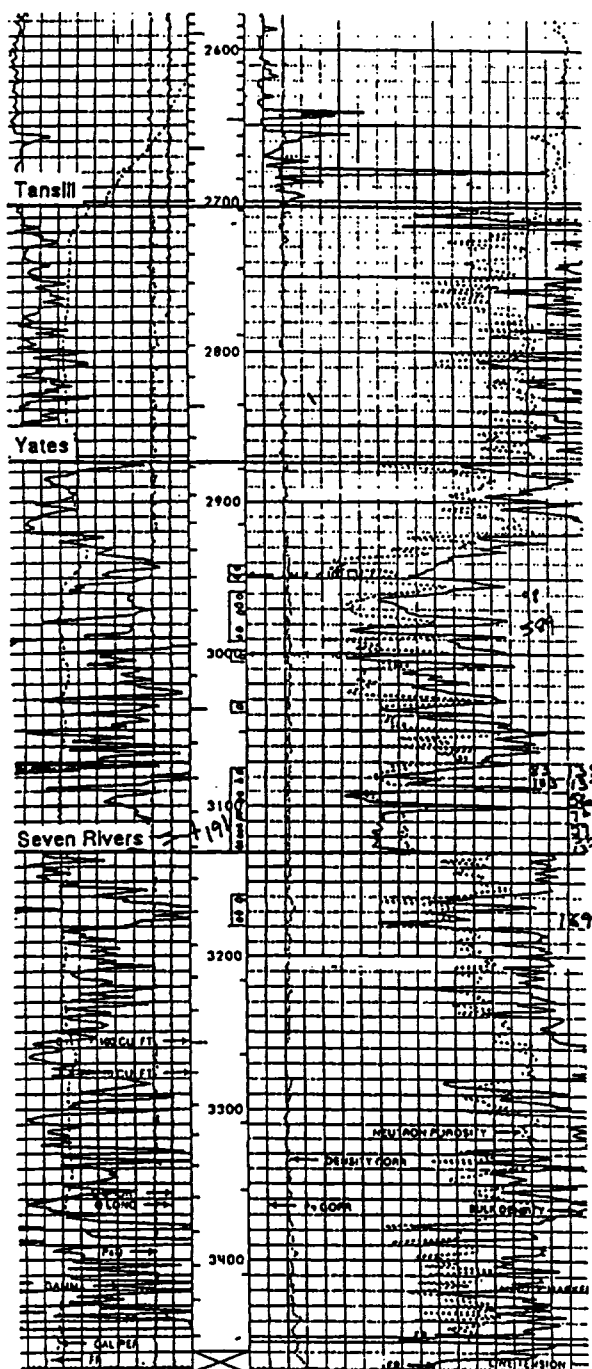


TOBY #3
7L 348 37E
JALMAT (TANSILL YATES SEVEN RIVERS)YS
MERIDIAN OIL, INC

$$G_1 = 1150 + 411 = 1561$$

$$\Delta G = 611 \text{ MMCF}$$





O-7-24S-37E

COMPANY Doyle Hartman

WELL Liberty Royalties No. 6

FIELD Jalmar (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 15X MCA

ATR = 5 BPH

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 K

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

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

ATR = 37 BPH

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)

3/96: AMR = 10,000 MCFPH

Cum. = 1040 MMCF

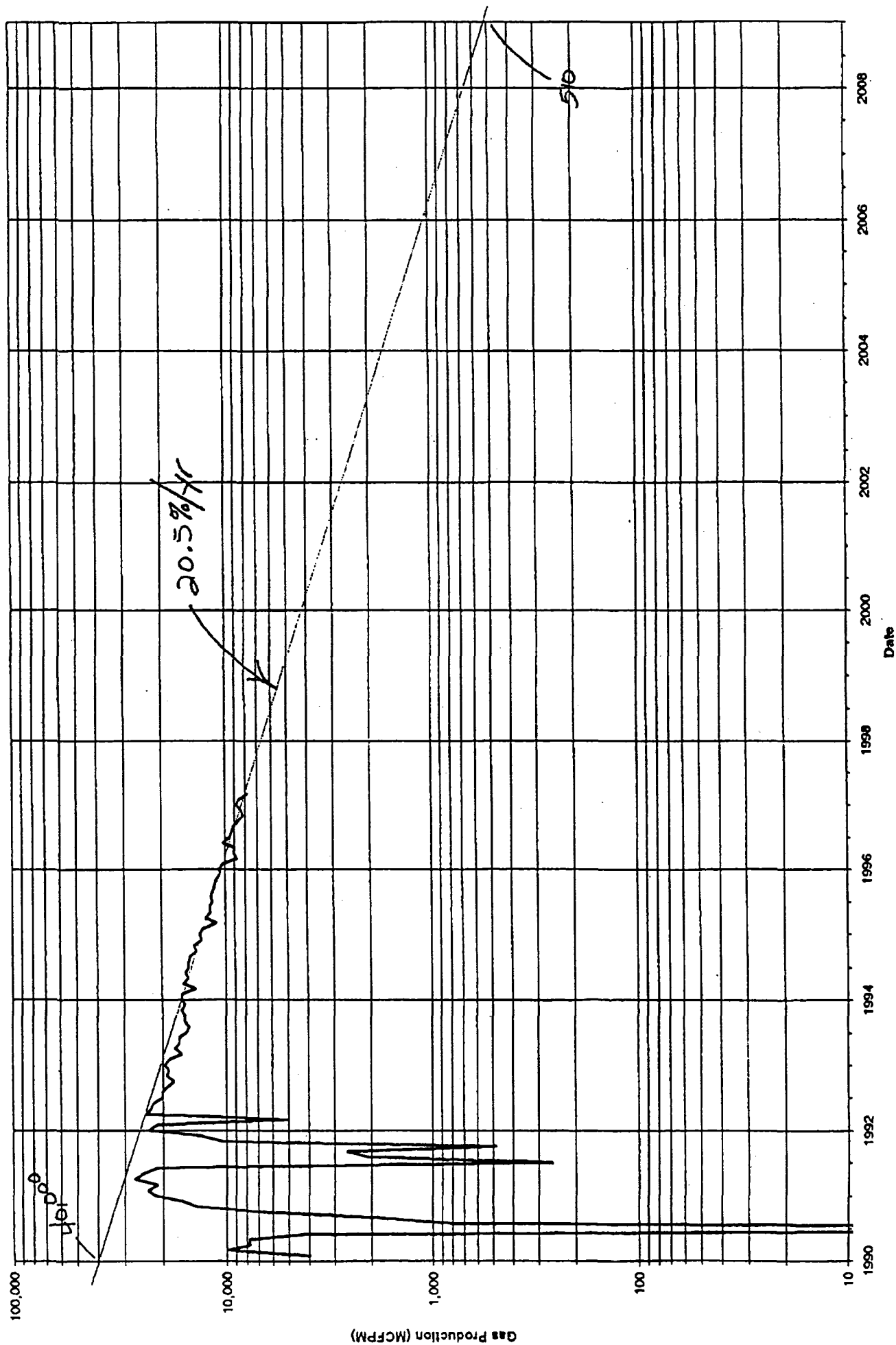
Est. Rem. = 584 MMCF

Est. Ult. = 1624 MMCF

b = 0.191

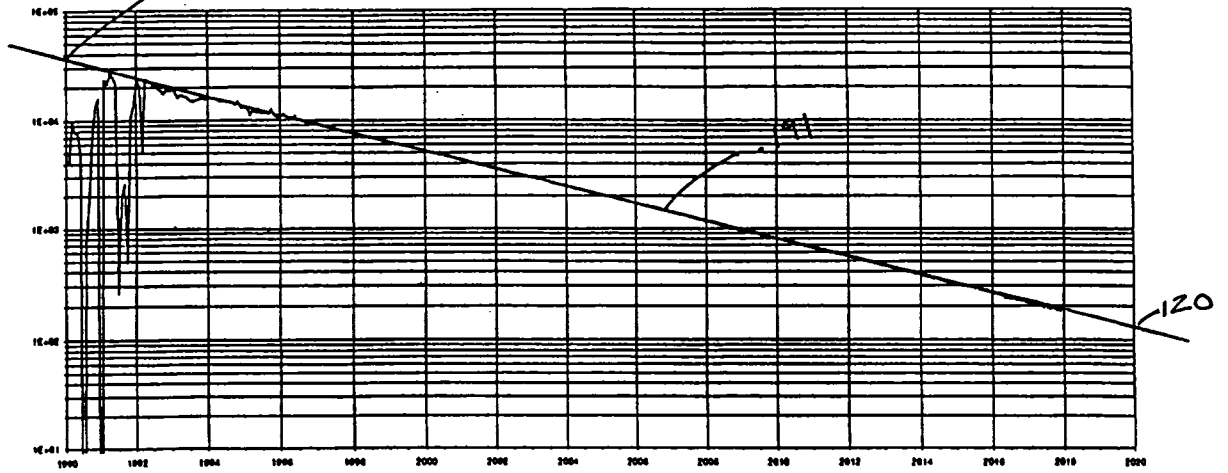
LIBL X ROYALTIES #6
JALMAT (TANSILL YATES SEVEN RIVERS)YS
70 24S 37E
HARTMAN DOYLE

2/1997: 1.12596 BCF

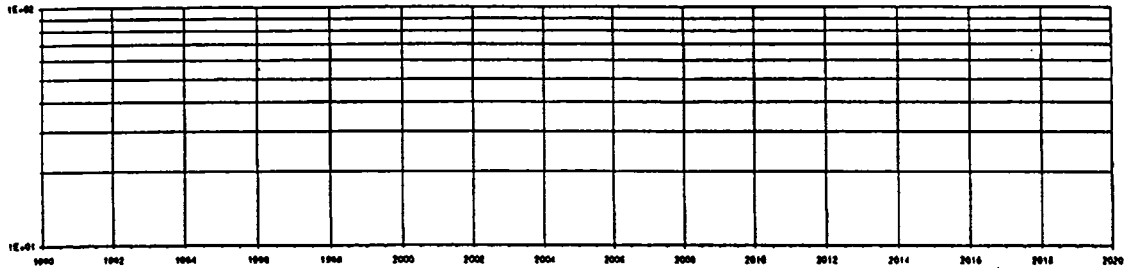


$\Delta G = 584 \text{ MMCF}$

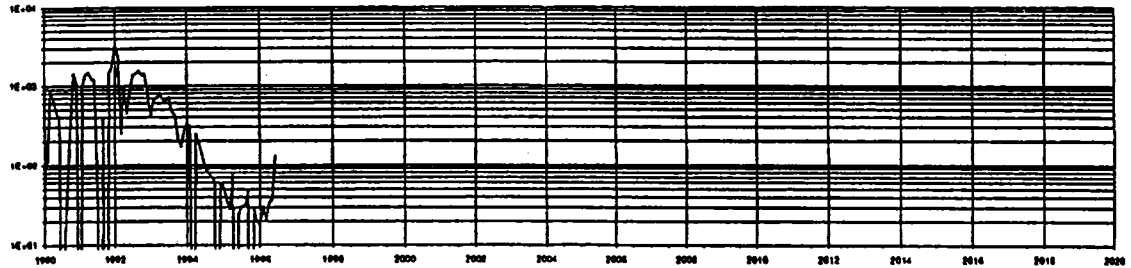
Gas Production (MCFPM)



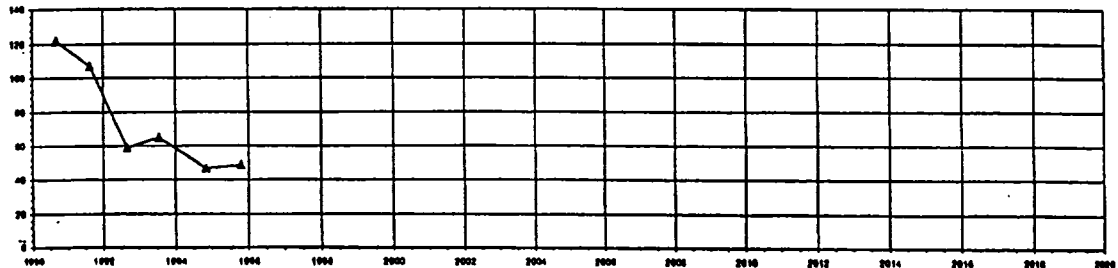
Oil Production (BPM)



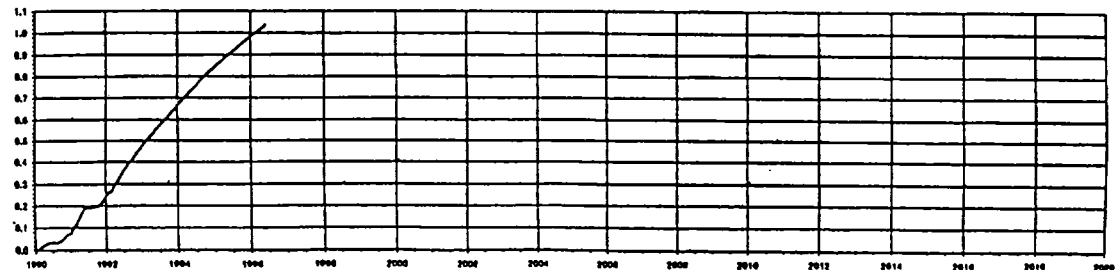
Water Production (BPM)

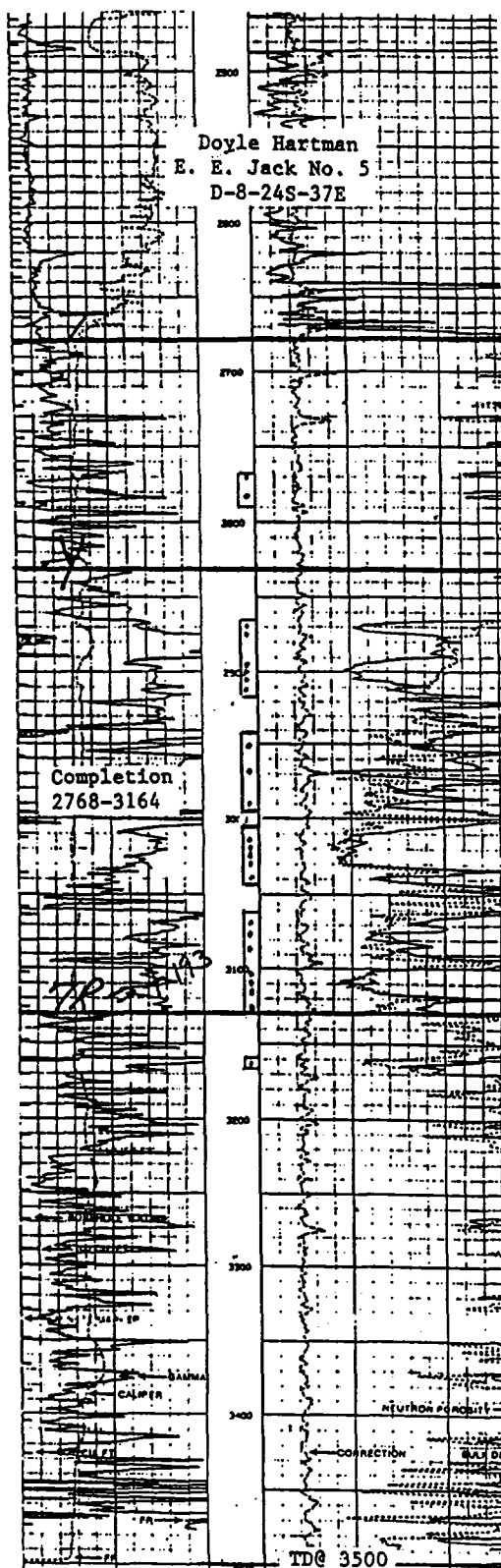


WHSP (psia)



Cumulative Gas Production (BCF)





D-8-24S-37E

COMPANY Meridian
(Doyle Hartman)
WELL E.E. Jack No. 5
FIELD Jalnet (Gas)
LOCATION 990' FNL & 660' FVL (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 15X 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 Tensil.

10-11-85: Lowered tubing to 2955'. F/310 MCFPD.

Choke = 16/64. FTP = 175 psi. FCP = 228 psi.

10-13-85: SICP = 233 psi.

10-15-85: SNF/214,000 + 449,000.

ATR = 36 BPM. ATP = 1760 psi.

ISIP = 590 psi. 1-hr. SIP = 530 psi.

Flare @ 345 psi. After 19 hrs, FTP = 66,

FCP = 206 on 64/64 choke.

10-16-85: SIP = 211 psi.

10-17-85: F/922 MCFPD.

Choke = 24/64. FTP = 151.

FCP = 189.

1-96: AMR = 10,000 MCFPH

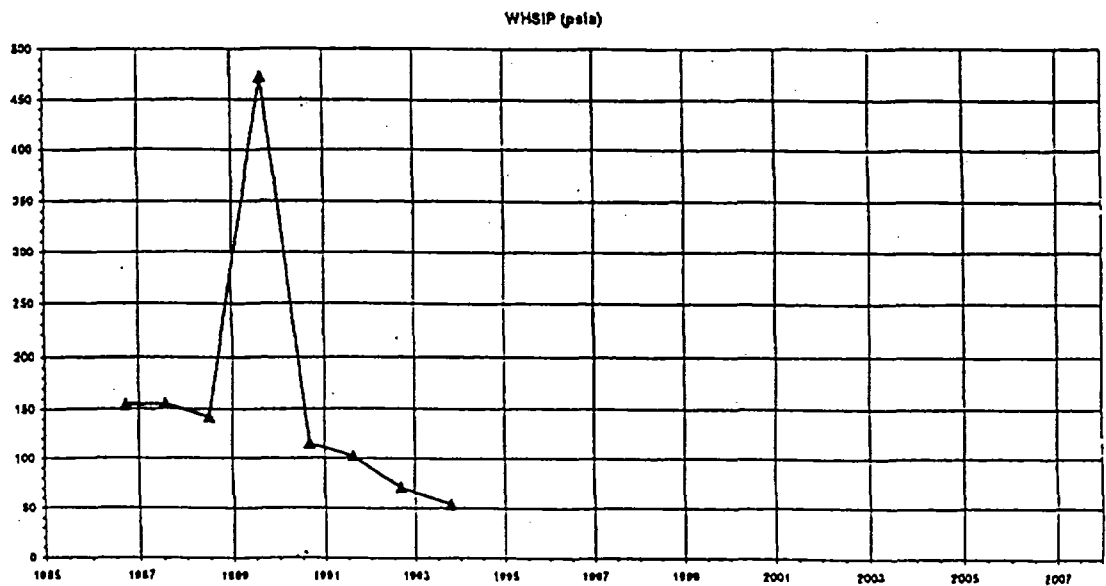
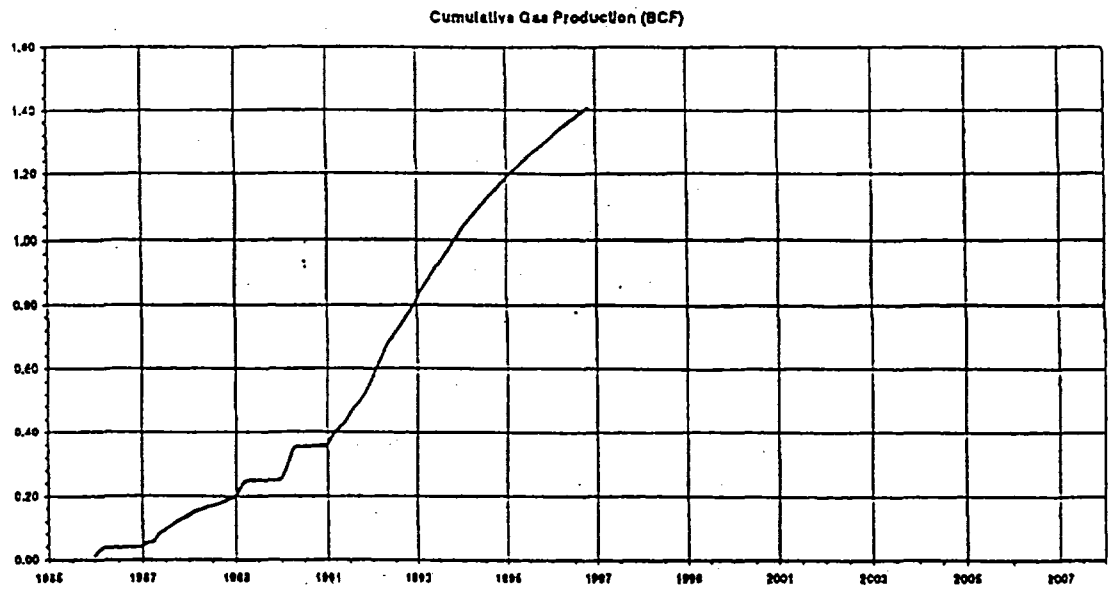
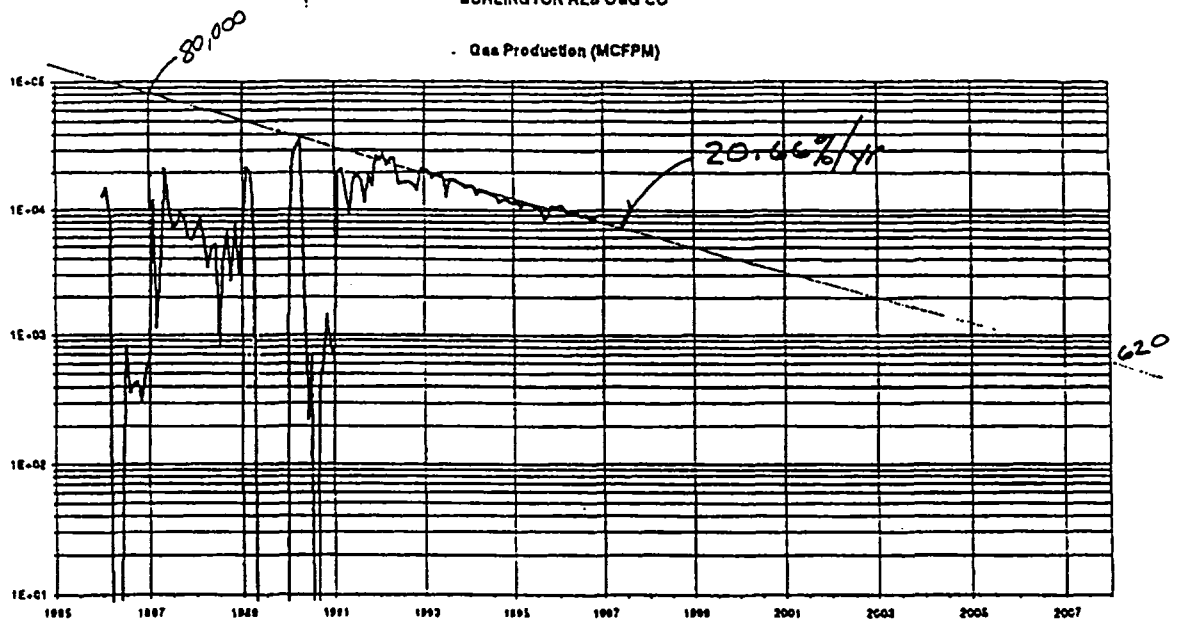
Cum. = 1300 MMCF

Est. Rem. = 476 MMCF

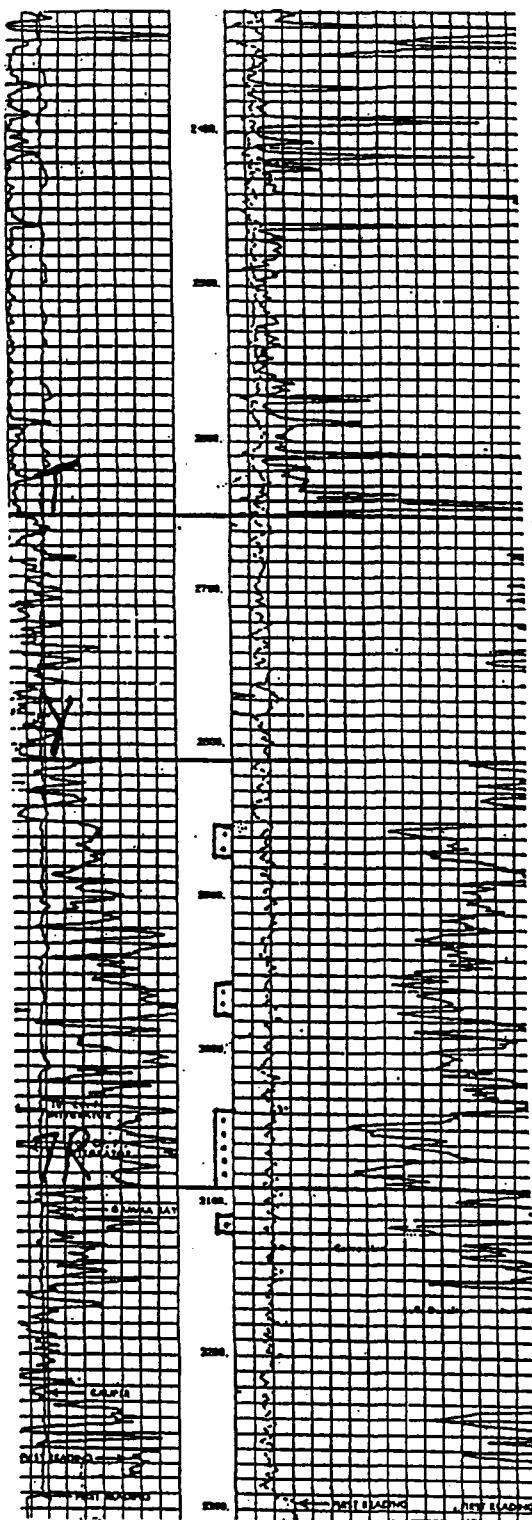
Est. Ult. = 1776 MMCF

b = 0.232

E E JACK #6
JALMAT (TANGILL YATES SEVEN RIVERS)YS
8D 24S 37E
BURLINGTON RES O&G CO



10/96: 1.407 BCF



J-17-24S-37E

COMPANY Meridian
 (Doyle Hartman)
 WELL Late-Thomas No. 3
 FIELD Jalnet (Gas)
 LOCATION 1980' FSL & 2080' FEL (J)
Sec. 17, T-24-S, R-37-E
 COUNTY Lee
 STATE New Mexico
 ELEVATIONS: KB 3277
 DF
 GL 3267

COMPLETION RECORD

SPUD DATE 9-15-81 COMP. DATE 10-4-81
 TD 3350 PBTD 3265

CASING RECORD:

9 5/8, 40# @ 426 w/225 (TOC @ Circ.)
7, 26# @ 3350 w/600 (TOC @ Circ.)
(DV Tool @ 2458') (TOC @)
 (TOC @)

COMP. INTERVAL Perf 2855-3117 w/20

STIMULATION A/4500 15% HCA

ATR = 5 BPH

ATP = 1850 psi ISIP = 150 psi

POT IPF = 70 MCFPD (Acid)

GOR GR

TP 35 CP 105 (SICP = 162)

CHOKE 16/64 TUBING 2 3/8 @ 3195

REMARKS

10-6-81: SWF/70,800 + 158,000

ATR = 20 BPH

ATP = 1000 psi

ISIP = 600 psi

1-hr. SIP = 525 psi

10-26-81: P/548 MCFPD

Choke = 29/64

PCP = 103 psi

RPA = 8 % x 54 x 1 %

C = 31.9 @ SIP = 162 psi

1/96: AMR = 3500 MCFPH

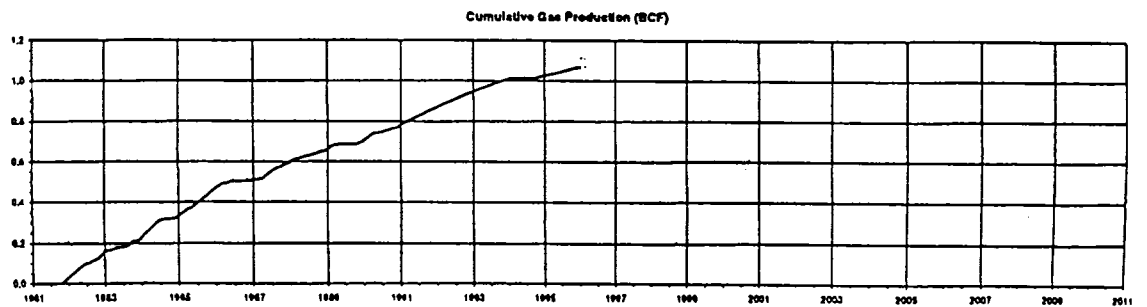
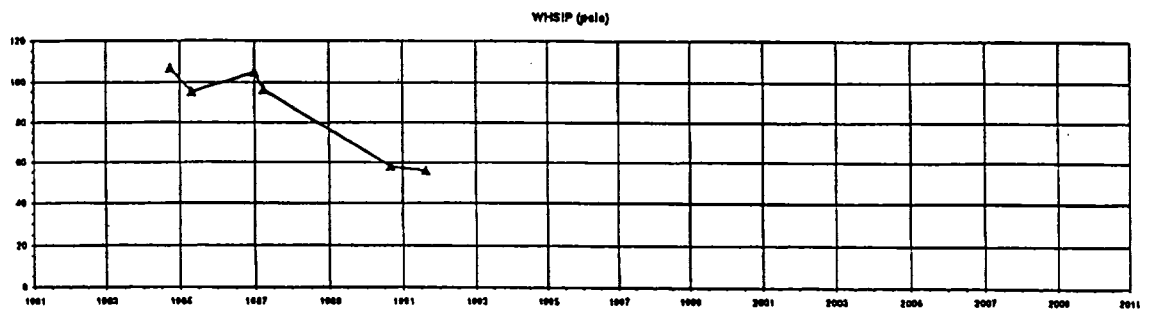
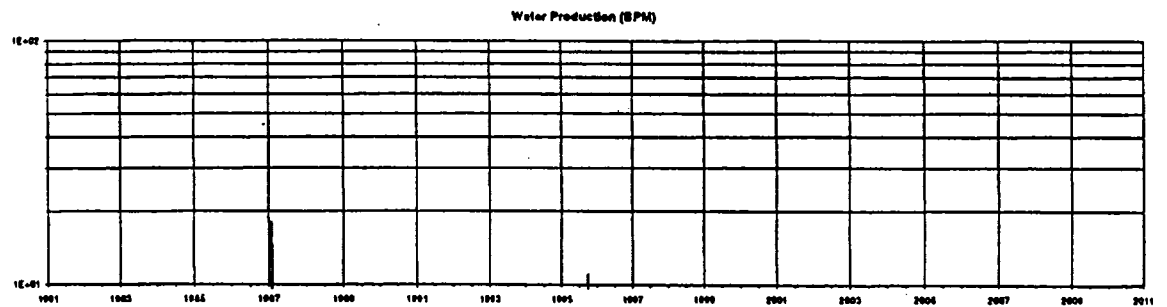
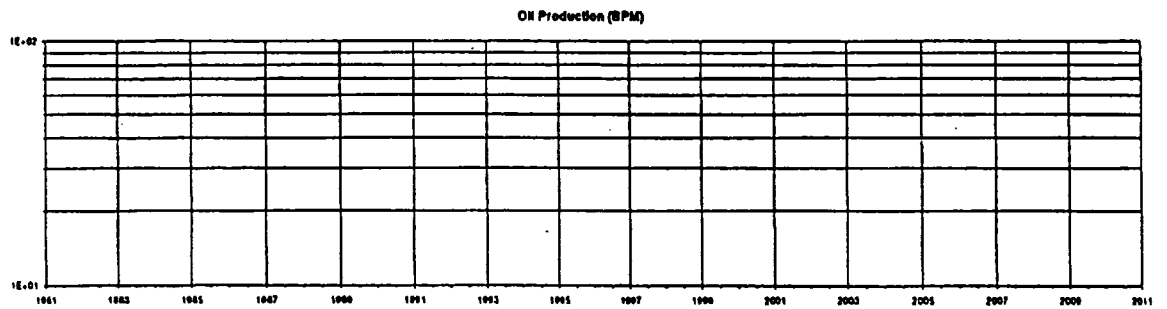
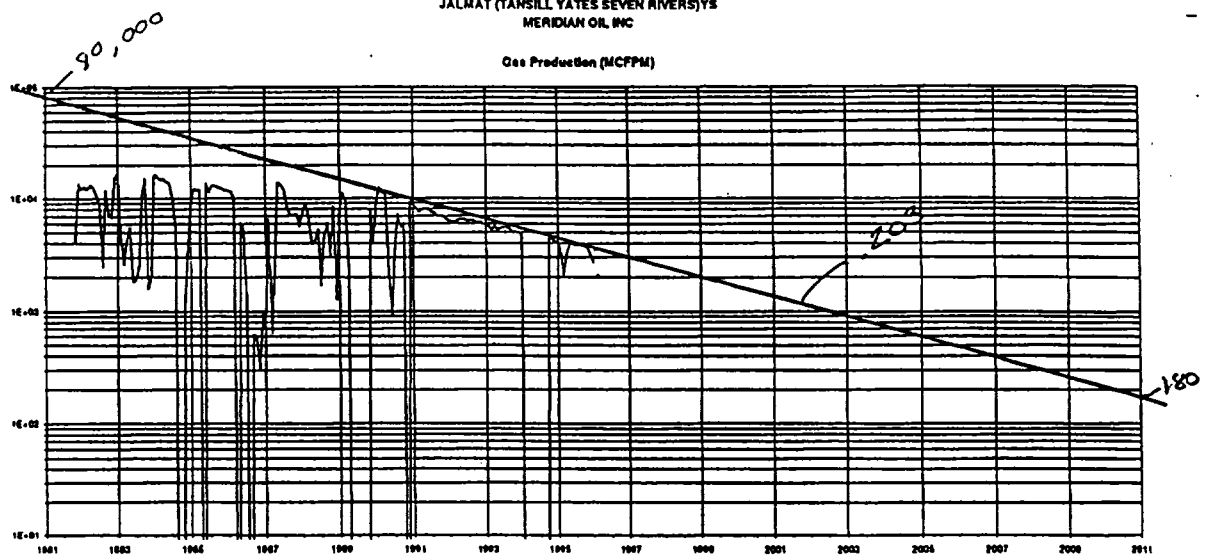
Cum = 1070 MMCF

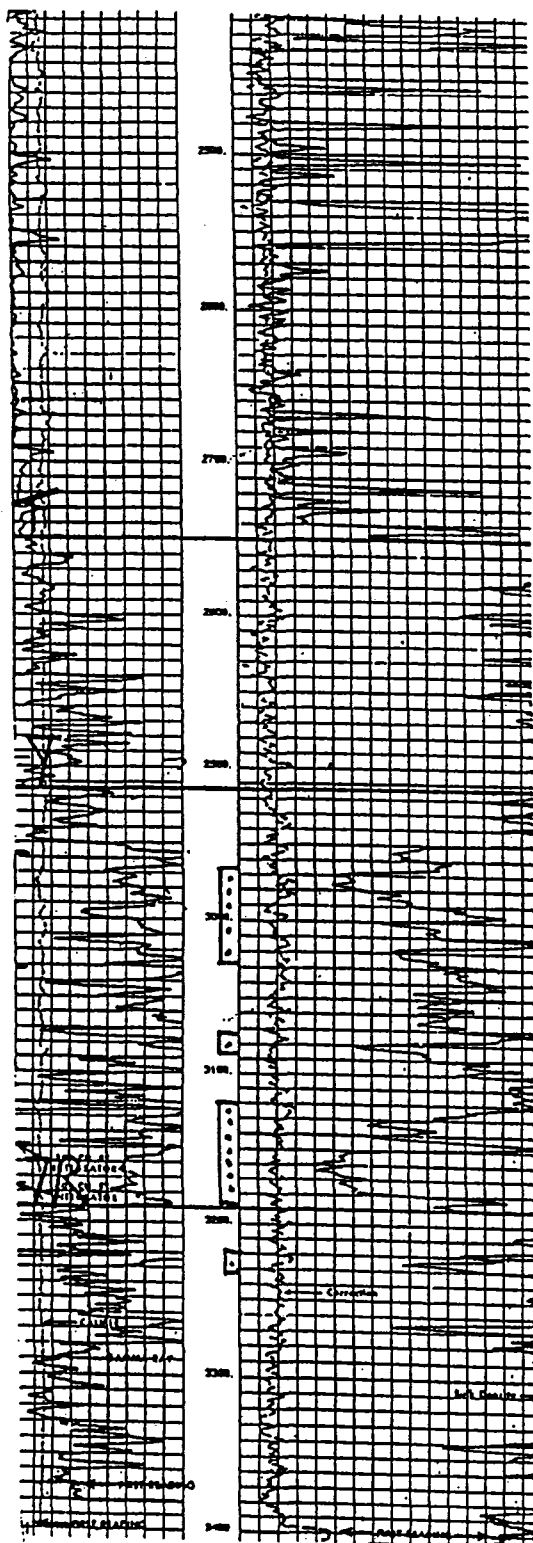
Est. Rem. = 160 MMCF

Est. Ult. = 1230 MMCF

b = 0.203

LATE THOMAS #3
17J 24S 37E
JALMAT (TANSILL, YATES SEVEN RIVERS)YS
MERIDIAN OIL, INC





L-17-24S-37E

COMPANY Meridian
 (Doyle Hartman)
 WELL Late-Thomas No. 2
 FIELD Jalmet (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 PBD 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% HCA
ATR = 4.4 BPH
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

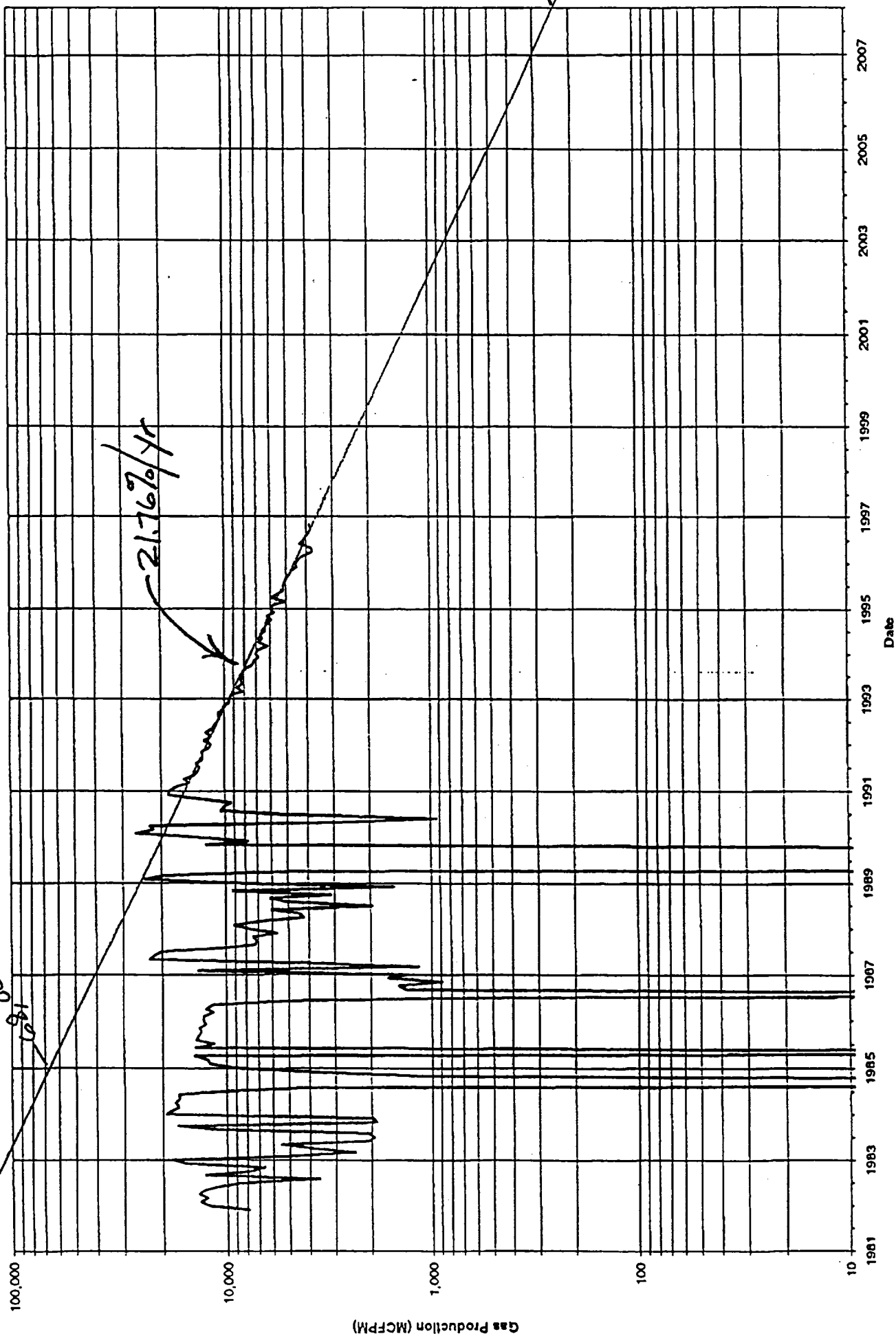
REMARKS
10-27-81: SWF/72,000 + 175,000
ATR = 25 BPH
ATP = 1300 psi
ISIP = 900 psi
1.33-hr. SIP = 550 psi
60/64: FCP = 64, FTP = 108

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

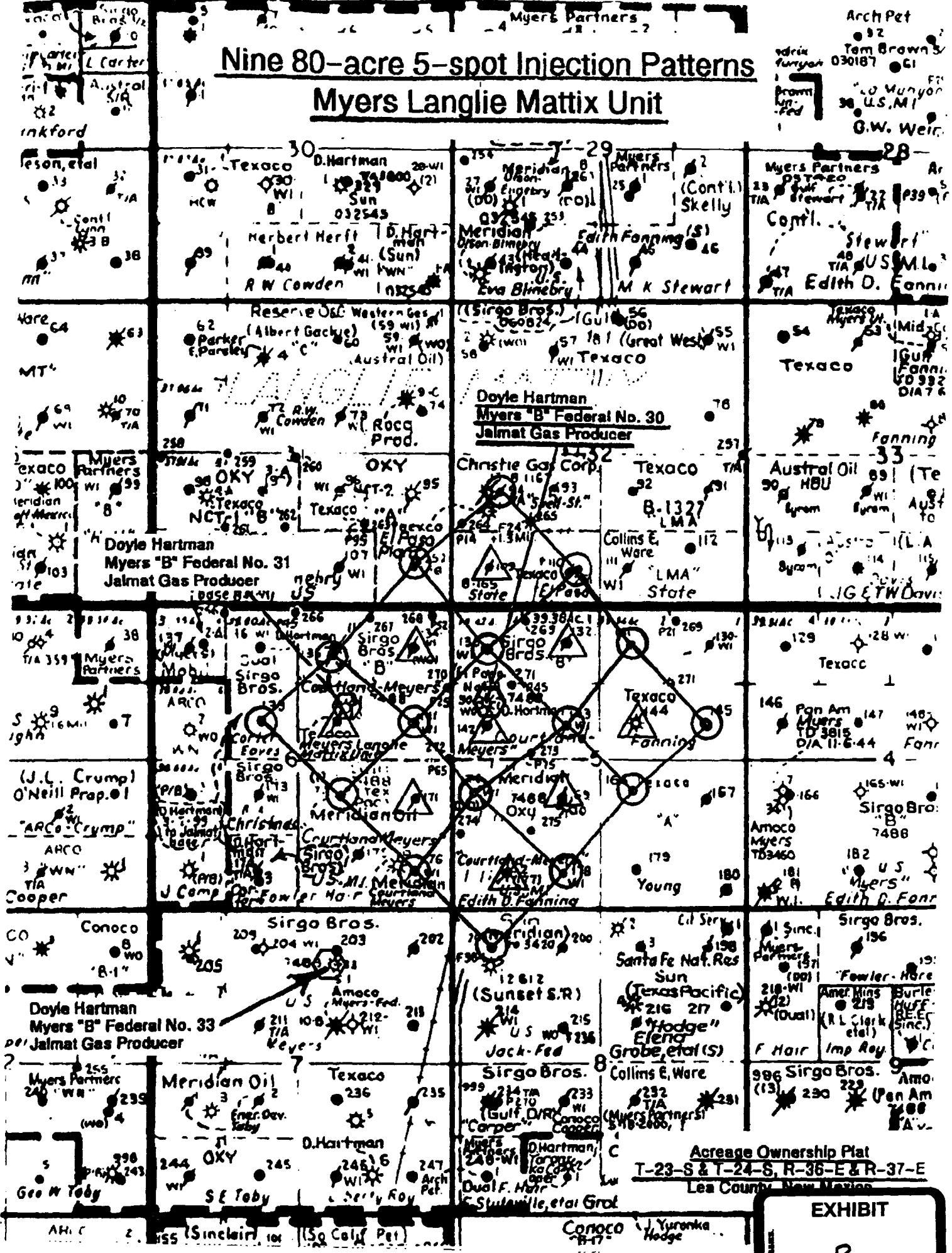
1/96: AMR = 4500 MCFPM
Cum. = 1500 MMCF
Est. Rem. = 159 MMCF
Est. Ult. = 1659 MMCF
b = 0.279

LATE THOMAS #2
JALMAT (TANSILL YATES SEVEN RIVERS)YS
17L 24S 37E
BURKINGTON RES O&G CO₂

10/1996: 1.55261 BCF



Nine 80-acre 5-spot Injection Patterns Myers Langlie Mattix Unit



Acreage Ownership Plat
T-23-S & T-24-S, R-36-E & R-37-E
Lea County, New Mexico

EXHIBIT
B



Joe E King
District Manager

Texaco USA

PO Box 728
Hobbs NM 88240
505 393 7191

April 28, 1987

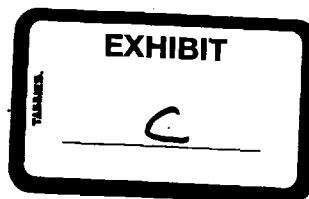
003371-03-MYERS LANGLIE MATTIX UNIT
LEA COUNTY, NEW MEXICO
WELL NO. 199
660' FNL & 1980' FEL
SEC. 8, T-24-S, R-37-E

TO WORKING INTEREST OWNERS:

Texaco Producing Inc. recommends the subject well be plugged, salvaged and abandoned. Well No. 199 was shut-in on April 8, 1986 due to uneconomical production. Prior to shut-in, the well tested 3 BOPD and 331 BWPD from the open hole interval 3390'-3650'.

Waterflows were evidenced during TRO operations in May, 1986. Casing repairs to alleviate the waterflows will not payout given the current production. The well is completed in all potential unitized intervals, and all zones have been adequately stimulated. Therefore, no potential for increased production exists. The price of oil would have to increase from \$17.67 per barrel to \$93.78 per barrel to break even. The well is not needed for salt water disposal. Continued secondary operations on Well No. 199 are not economical for the above reasons.

The estimated cost to plug and abandon the subject well is \$14,000 with \$0 worth of salvable equipment, for a net plug and abandonment cost of \$14,000. Sun Oil Company has the option to purchase the well at salvage value.



MAY 4 1987

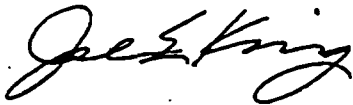
TO WORKING INTEREST OWNERS:

-2-

April 28, 1987

Indicate your approval to plug and abandon this well by signing and returning the extra copy of this letter, Attention: Laura Skinner, Texaco Producing Inc., P. O. Box 728, Hobbs, New Mexico 88240. The option to take over and own this well is forfeited by consenting to this proposal.

Yours very truly,



Joe E. King
District Manager

DBW:JRB

APPROVED PLUGGING AND ABANDONMENT
(MYERS LANGLIE MATTIX UNIT WELL NO. 199)

BY:

(Type Name)

DATE:

NO. OF COPIES REQUIRED	
DISTRICT	
SANTA FE	
FILE	
U.S.D.B.	
LAND OFFICE	
OPERATOR	

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form O-1
Revised

50. Indicate Type of Lease
State ☐ F.
5. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPLY OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT TO DRILL" FORM C-101 FOR SUCH PROPOSALS.)

1. ☒ OIL WELL ☐ GAS WELL ☐ OTHER	7. Unit Agreement Name
2. Name of Operator Texaco Producing Inc.	8. Farm or Lease Name Myers Langlie Mattix Unit
3. Address of Operator P. O. Box 728, Hobbs, New Mexico 88240	9. Well No. 199
4. Location of Well WELL LETTER <u>B</u> <u>660</u> FEET FROM THE <u>North</u> LINE AND <u>1980</u> FEET FROM THE <u>East</u> LINE, SECTION <u>8</u> TOWNSHIP <u>24-S</u> RANGE <u>37-E</u> MAP.	10. Field and Pool, or Wildcat Langlie Mattix
11. Elevation (Show whether DF, RT, CR, etc.) 3297' DF	12. County Lea

16. Check Appropriate Box To Indicate Nature of Notice, Report or Other Data
NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐
TEMPORARILY ABANDON ☐
PULL OR ALTER CASING ☐

PLUG AND ABANDON ☐
CHANGE PLANS ☐

OTHER Shut-In ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐
COMMENCE DRILLING OPER. ☐
CASING TEST AND CEMENT JOBS ☐
OTHER

ALTERING CASING
PLUG AND ABANDON

17. Describe Fenced or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any plugging) SEE RULE 1103.

REMARKS

1. WELL STATUS - Shut-In.
2. TEMPORARY ABANDONMENT DATE - 4-8-86
3. REASON FOR ABANDONMENT - Uneconomical to produce.
4. FUTURE PLANS - Hold for possible remedial work.
5. DATE OF FUTURE WORKOVER OR PLUGGING - 2nd Quarter 1986

TEMPORARY ABANDON Exp 4-8-86

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

SIGNED L. J. Seeman TITLE Dist. Petr. Engr. DATE 5-13-86

ORIGINAL SIGNED BY JERRY SEXTON
DISTRICT 1 SUPERVISOR

APPROVED BY _____ TITLE _____ DATE MAY 15 1986

CONDITIONS OF APPROVAL, IF ANY:

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

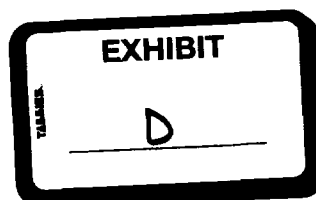
**CASE NO. 6987
CASE NO. 11792**

**AMENDED APPLICATION OF DOYLE HARTMAN
TO GIVE FULL FORCE AND EFFECT TO
COMMISSION ORDER R-6447, TO REVOKE
OR MODIFY ORDER 4-4680-A, TO 2
ALTERNATIVELY TERMINATE THE
MYERS LANGLIE-MATTIX UNIT,
LEA COUNTY, NEW MEXICO**

SUBPOENA DUCES TECUM

**TO: Oxy USA Inc.
c/o W. Thomas Kellahin
Kellahin & Kellahin
Post Office Box 2265
Santa Fe, New Mexico 87504-2265**

Pursuant to Section 70-2-8, NMSA (1978) and Rule 1211 of the New Mexico Oil Conservation Division's Rules of Procedure, you are hereby ORDERED to appear at 9:00 a.m., June 23, 1997, at the offices of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505 and to produce the documents and items specified in attached Exhibit A and to make available to Doyle Hartman, Oil Operator and their attorneys, J.E. Gallegos and Michael J. Condon, for copying, all of said documents.



This subpoena is issued on application of Doyle Hartman through their attorneys,
Gallegos Law Firm, 460 St. Michael's Drive, Building 300, Santa Fe, New Mexico 87505.

Dated this ____ day of June, 1997.

NEW MEXICO OIL CONSERVATION DIVISION

By: _____
WILLIAM J. LEMAY, DIRECTOR

EXHIBIT A
TO SUBPOENA DUCES TECUM TO OXY USA, INC.

DEFINITIONS

As used in this Exhibit A, certain terms are defined as follows:

A. "Oxy" means Oxy USA Inc. and includes any and all predecessors, successors, and their present or former officers, directors, agents, employees and all other persons or entities acting or purporting to act on behalf of any of them.

B. "Document(s)" has the same meaning as in SCRA 1986, 1-034 including, inter alia, (1) all written, printed, typed, recorded or graphic matter, (2) all firm, videographic and photographic matter, (3) all tapes or other reproductions of sound or auditory material, (4) computer files, disks, databases, tapes, inputs or outputs, however stored, generated, produced or reproduced, (5) any other matter or medium from which or on which information or images may be or is transcribed, stored, and/or retrieved; and (6) all non-identical copies of a "document." "Document(s)" also includes, inter alia, any code, software, index, key or other information or material necessary or helpful to retrieve, interpret, and/or understand such documents or the information, images, and/or representatives contained therein. "Document(s)" further includes, inter alia, all such materials whether or not such materials were intended or planned for distribution or dissemination to persons outside of the organization generated, creating or storing the materials. "Non-identical copies" means, inter alia, all reproductions or other versions of a "document," however made, of the original "document," and which have notations, markings, interlineations, comments, images, or other material not appearing on the original.

C. "Communication" means any contact or transfer of information between two or more persons or organizations and shall include, inter alia, (1) written contact by such means as letter, memorandum, telegram, telecopier, or by any other document, (2) oral contact by such means as face-to-face meetings, voice mail, or telephone conversations, (3) electronic contact by such means as electronic mail, E-mail, modem or computer, or (4) any form of actual or attempted transmittal or transfer of information or images.

D. "Concerning" includes, inter alia, referring to, alluding to, responding to, relating to, connected with, commenting on, in reference of, about, regarding, discussing, noting, showing, describing, mentioning, reflecting, analyzing, constituting, evidencing, or pertaining to.

E. "MLMU" means the Myers Langlie-Mattix Unit, a secondary recovery waterflood project in Lea County, New Mexico.

F. "NMOCD" means the New Mexico Oil Conservation Division.

G. "1994 Application" means the Application you filed with the NMOCD on or about November 22, 1994, assigned Case No. 11168 and resulting in the entry of NMOCD Order R-4680-A, and all subsequent proceedings related thereto.

DOCUMENTS TO BE PRODUCED

1. All the operator files and documents concerning New Mexico Oil Conservation Commission Case No. 6987 and Order R-6447, including but not limited to, all preparation for that proceeding and all documents related to communications, internal memoranda or other documents related to that order and its provisions.

2. All files and documents concerning or relating in any way to reserve calculations, or economic evaluations, studies, engineering analyses, budgets, schedules of future production, revenues, anticipated cash flows, and projected pricing for unitized substances from or related to the MLMU.

3. Any and all documents, data, results, notes, and conclusions related to those certain step-rate tests performed in 1991 or 1992 by Texaco Exploration and Production Inc. ("Texaco") at the request of Sirgo Operating Inc., (or any related entity), to determine if Texaco's injection practices had fractured any MLMU injection wells.

4. Any and all exhibits referenced in, enclosed with, attached to, or made a part of that certain "chronology of events between Texaco and Sirgo" dated June 16, 1992 and provided to MLMU working interest owners, including but not limited to any and all other information referenced or discussed in or related to the subject chronology.

5. Any documents which relate in any way to improved oil recovery efficiency or reduced production rate decline achieved as a result of the operation of the MLMU, including analyses, evaluations and results from the Oxy Redevelopment Project which was referenced in your 1994 Application, from January 1, 1994 to the present.

6. The well files, test results and all other documents concerning MLMU injector and producer wells in the section where the Myers "B" Federal No. 30 well is located (Section 5, T-24-S, R-37-E) and in every adjoining section (Sections 31, 32, and 33 of T-23-S, R-37-E and Sections 4, 6, 7, 8, and 9, T-24-S, R-37-E).

7. Any documents which relate in any way to any comparison or study of the amounts of water injected and the amount of water and oil/gas recovered as a result of the twenty-two years of secondary or the Enhanced Oil Recovery ("EOR") operations in the MLMU, including, without limitation, any evidence of migration outside the waterflood unit boundaries and/or outside of the authorized MLMU injection interval and studies, analyses, and/or reports that have compared the projected or computed volumes of water necessary to effectively waterflood the MLMU to the volumes that have actually been utilized.

8. Any and all studies, reports, and/or analyses that have been performed and which in whole or part compute or estimate those volumes of MLMU injection water that are unaccounted for, may have migrated outside of the MLMU unit boundaries and/or outside of the authorized injection interval, including any estimation of unit costs and/or expenses that have resulted due to any water losses.

9. All records and reports called for under Rule 706 of the NMOCC and/or NMOCD Rules and Regulations, or any comparable predecessor rule, related to your operation of the MLMU.

10. Any and all documents and studies which relate to chemical scaling problems, bacterial plugging problems, and/or any other mechanical or plugging problems which affect or have affected the efficient injection or withdrawal of fluids from the approved MLMU injection interval and any and all steps that have been taken by MLMU operators to properly enhance injection rates and fluid withdrawals, including all management decisions and economic evaluations pertaining to such activities.

11. All documents which reference or relate in any way to any waterflows, subsurface crossflow to other than the injection interval, or crossflows encountered in wells within a one (1) mile radius of the MLMU, including any waterflows or out-of-zone water invasion of non-unitized strata reported or experienced in wells within the physical limits of the MLMU unit.

12. All documents relating to casing leak repairs, water channeling repairs or to water injection operations at pressures above authorized or recognized and measured frac-pressure limits for all injection and producing wells in the MLMU.

13. All documents, including well files and administrative files pertaining to the seventeen injector wells referenced in your 1994 Application.

14. Any and all documents which identify any working interest or royalty interest within the MLMU who is entitled to go or has gone non-consent and become carried interests with respect to unit operations as specified by New Mexico Oil Conservation Commission Order R-6447, including but not limited to any documents which reflect Oxy's recognition or denial of the right of any working interest or royalty interest owner in the MLMU to go non-consent and become a carried interest with respect to unit operations.

15. Any and all documents concerning the Central Corbin Queen Unit as established by Order No. R-9336 in Case NO. 10062, and specifically any and all documents which identify any working interest or royalty interest owner within the Central Corbin Queen Unit who is entitled to go or has gone non-consent and become a carried interest with respect to unit operations since October, 1990, including but not limited to any documents which reflect Oxy's recognition or denial of the right of any

working interest or royalty interest owner in the Central Corbin Queen Unit to go non-consent and become a carried interest with respect to unit operations.

16. All water samples collected and results of water analyses performed with respect to injection and producer waters from the MLMU.

17. All documents reviewed, relied upon or generated by Cawley, Gillespie & Associates which relate to the MLMU and any evaluation of the MLMU by Cawley, Gillespie.