



STATE OF NEW MEXICO  
ENERGY, MINERALS and NATURAL RESOURCES DIVISION  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

DRUG FREE  
WORKPLACE

BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6176

Date: 9/21/95

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

RE: Proposed MC \_\_\_\_\_ Proposed DHC X \_\_\_\_\_  
Proposed NSL \_\_\_\_\_ Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_ Proposed PMX \_\_\_\_\_  
Proposed NSP \_\_\_\_\_ Proposed DD \_\_\_\_\_

Gentlemen:

I have examined the application received on 9/15/95  
for the Meridian Vanhook #3  
OPERATOR LEASE & WELL NO.

M-22-28N-9W and my recommendations are as follows:  
UL-S-T-R

Deny

Shut-in pressures are too far apart.

Yours truly,

[Signature]

September 14, 1995

Mr. William J. LeMay  
N. M. Oil Conservation Division  
P. O. Box 2088  
Santa Fe, N. M. 87501-2088

**RECEIVED**  
SEP 15 1995

**OIL CON. DIV.**  
**DIST. 3**

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

Dear Mr. LeMay:

Meridian Oil Inc. is applying for an administrative downhole commingling order for the referenced well in the Aztec Pictured Cliffs (PC) and the Blanco Mesaverde (MV) fields. The ownership of the zones to be commingled is common. The offset operators to both the Mesaverde and Pictured Cliffs are Amoco, Conoco, Marathon, R.H. Feuille Special, and Louis Dreyfus Gas Holdings Inc. The Bureau of Land Management and these offset operators will receive notification of this proposed downhole commingling.

This well has produced as a dual MV / PC well since 1959. The PC is a marginal producer with an average producing rate of 70 MCF/D. The MV's last producing rate was 35 MCF/D but is now logged off with fluid and unable to produce. The MV has had trouble producing for over a year due to a fluid loading problem. The addition of the PC gas to the producing stream should help lift the small amount of liquid (less than 1 BLPD). This would greatly enhance the MV producing efficiency thus preventing waste of the MV gas reserves. The cumulative production for the PC is 1,348 MMCF with 613 MMCF and 12,946 BO for the MV.

We believe that the MV production is currently being suppressed due to the presence of the well's production packer which limits the MV's ability to unload liquid with its small gas volume. We believe that the MV has the potential to initially produce 35 MCF/D. The PC should continue producing at its present rate of 70 MCF/D. The commingling of the subject well in the twilight of its producing life will result in better producing efficiency for both intervals. We believe that the combined gas volume will be sufficient to lift the produced liquids.

Granting this application will be in the best interest of conservation, the prevention of waste, and the protection of correlative rights.

We plan to commingle this well by pulling the PC tubing and the MV tubing, eliminate the production packer, and run a single string of 2-3/8" tubing.

The reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed downhole commingling. The fluids from each zone are compatible and no precipitates will be formed to cause damage to either reservoir. PC and MV wells have been successfully commingled in many areas of San Juan Basin with no detrimental effects. The daily production will not exceed the limit of Rule 303c, Section 1a, Part 1. The shut-in pressures for the PC and MV are 188 and 550 psi, respectively, however, we do not believe that there will be any significant crossflow.

To allocate the commingled production to each of the zones, the current PC rate of 70 MCF/D and the last MV rate of 35 MCF/D were utilized to obtain the following gas allocation: PC Gas = 66% and MV Gas = 33%. Since all of the well's oil has been produced by the MV, the oil allocation is: PC Oil = 0% and MV Oil = 100%.

Included with this letter are plats showing ownership of offsetting leases for both the PC and MV, a copy of letters to the offset operators and BLM, before and after wellbore diagrams, production curves, a pertinent data sheet, the proposed workover procedure, and maps indicating the offset PC and MV wells in the area.

Yours truly,

A handwritten signature in black ink, appearing to read 'P. M. Pippin', written in a cursive style.

P. M. Pippin  
Senior Production Engineer

PMP:pmp  
attachments

cc: Frank Chavez - Aztec OCD

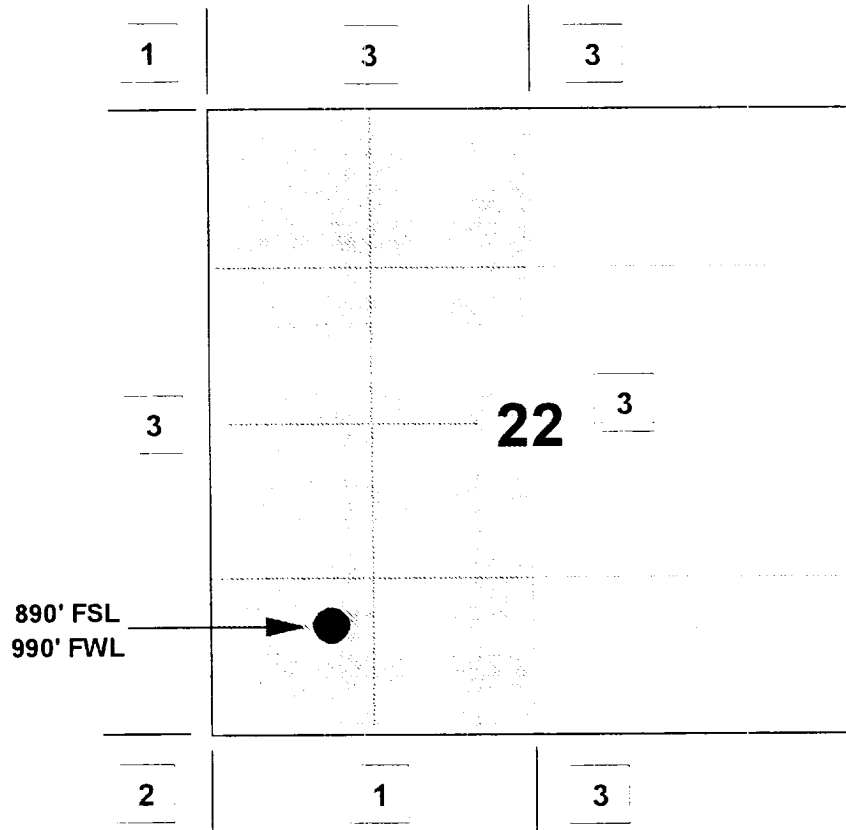
# MERIDIAN OIL INC

## HANCOCK #3

### OFFSET OPERATOR \ OWNER PLAT

#### Mesaverde / Pictured Cliffs Formations Commingle Well

Township 28 North, Range 9 West



1) Meridian Oil Inc

2) Meridian Oil Inc., &

Amoco Production Company

PO Box 800, Denver, CO 80201

3) Amoco Production Company

PO Box 800, Denver, CO 80201

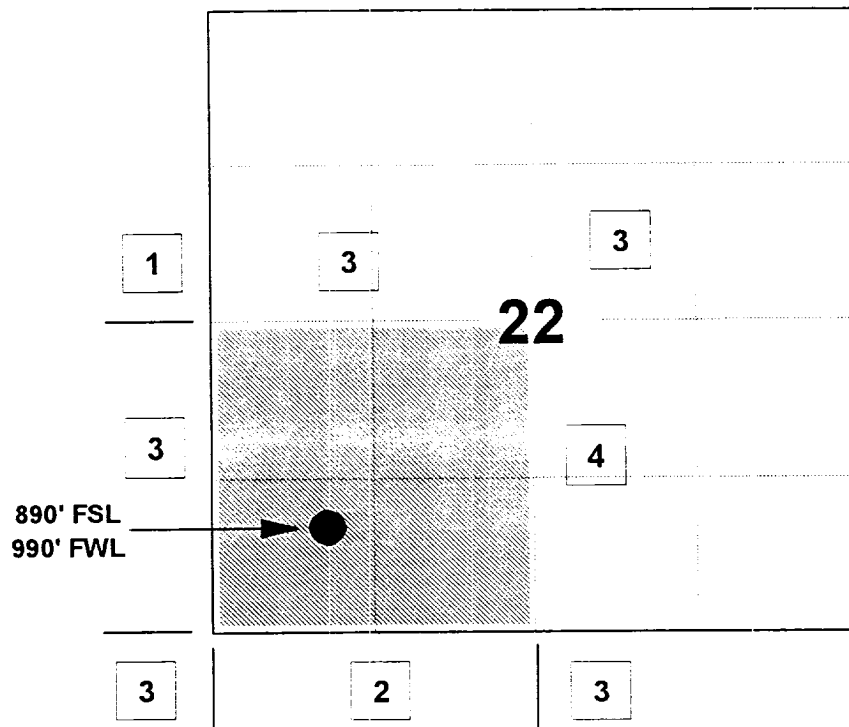
# MERIDIAN OIL INC

## HANCOCK #3

OFFSET OPERATOR \ OWNER PLAT

Mesaverde / Pictured Cliffs Formations Commingle Well

Township 28 North, Range 9 West



1) Meridian Oil Inc

2) Meridian Oil Inc., &

Louis Dreyfus Gas Holdings Inc. 1400 Quail Springs Parkway, Suite 600, Oklahoma City, OK 73134

R H Feuille Special 11th Floor, Texas Commerce Bank Bldg, El Paso, TX 79901

Marathon Oil Company PO Box 552, Midland, TX 79702

3) Amoco Production Company

PO Box 800, Denver, CO 80201

4) Amoco Production Company &

Conoco, Inc.

10 Desta Drive, Suite 100W, Midland, TX 79705

Pictured Cliffs Formation

September 14, 1995

Amoco Production Company  
PO Box 800  
Denver, CO 80201

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

Gentlemen:

Meridian Oil Inc. is in the process of applying for a downhole commingling order for their Hancock #3 PC/MV located 890' FSL, 990' FWL, Section 22 T28N R9W, N.M.P.M., San Juan County, New Mexico, in the Blanco Mesaverde and Aztec Pictured Cliffs.

The purpose of this letter is to notify you of such action.

Yours truly,



P. M. Pippin  
Senior Production Engineer

PMP:pmp

September 14, 1995

Marathon Oil Company  
PO Box 552  
Midland, TX 79702

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

Gentlemen:

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Yours truly,



P. M. Pippin  
Senior Production Engineer

PMP:pmp

September 14, 1995

Conoco, Inc.  
10 Desta Drive, Suite 100W  
Midland, TX 79705

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

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Yours truly,



P. M. Pippin  
Senior Production Engineer

PMP:pmp



September 14, 1995

R. H. Feuille Special  
11th Floor  
Texas Commerce Bank Bldg  
El Paso, TX 79901

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

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Yours truly,



P. M. Pippin  
Senior Production Engineer

PMP:pmp

September 14, 1995

Louis Dreyfus Gas Holdings Inc.  
1400 Quail Springs Parkway  
Suite 600  
Oklahoma City, OK 73134

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

Gentlemen:

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The purpose of this letter is to notify you of such action.

Yours truly,



P. M. Pippin  
Senior Production Engineer

PMP:pmp

September 14, 1995

Bureau of Land Management  
1235 La Plata Hwy.  
Farmington, N. M. 87401

Re: Hancock #3 PC/MV  
890' FSL; 990' FWL  
Section 22, T28N R9W  
San Juan County, N. M.

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The purpose of this letter is to notify you of such action.

Yours truly,

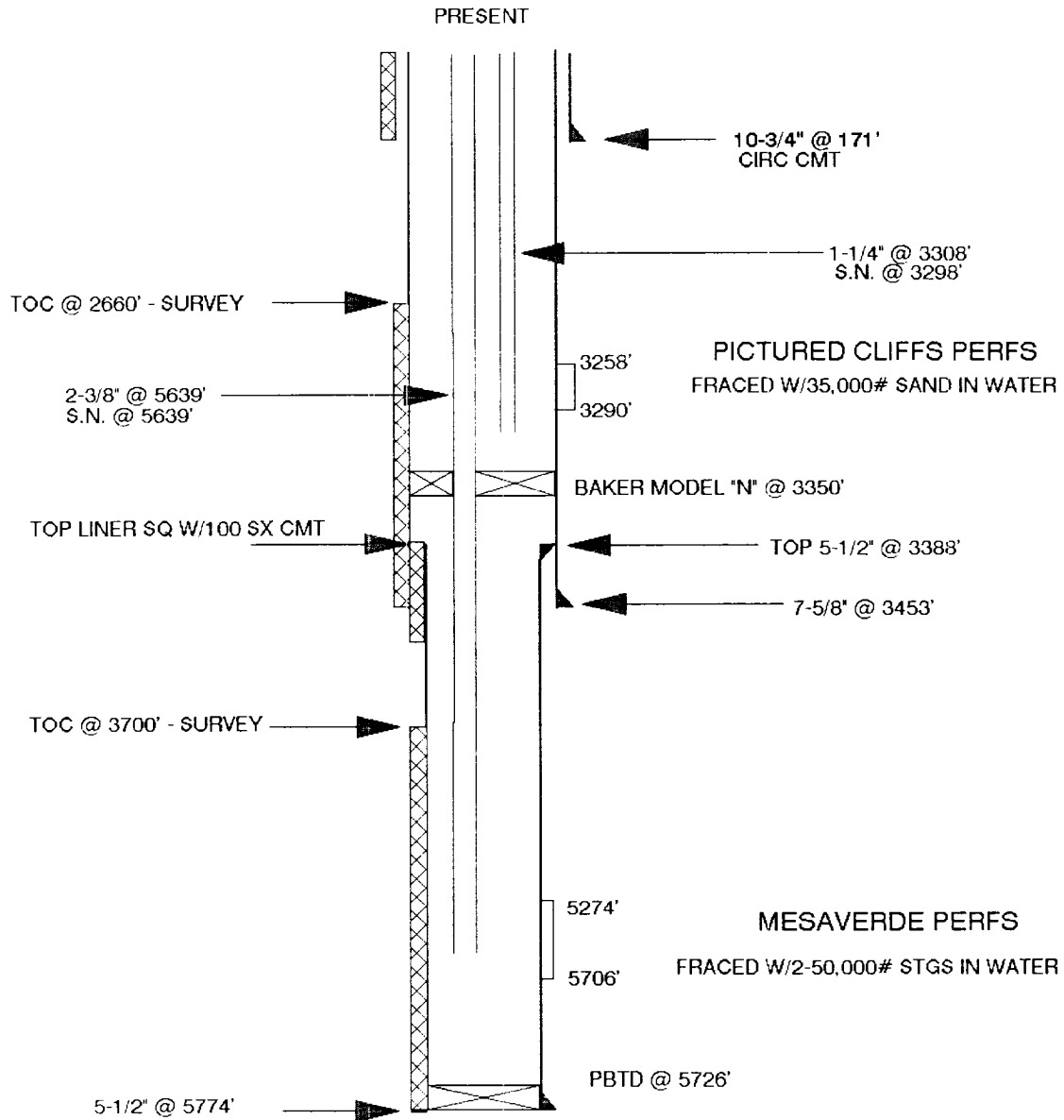


P. M. Pippin  
Senior Production Engineer

PMP:pmp

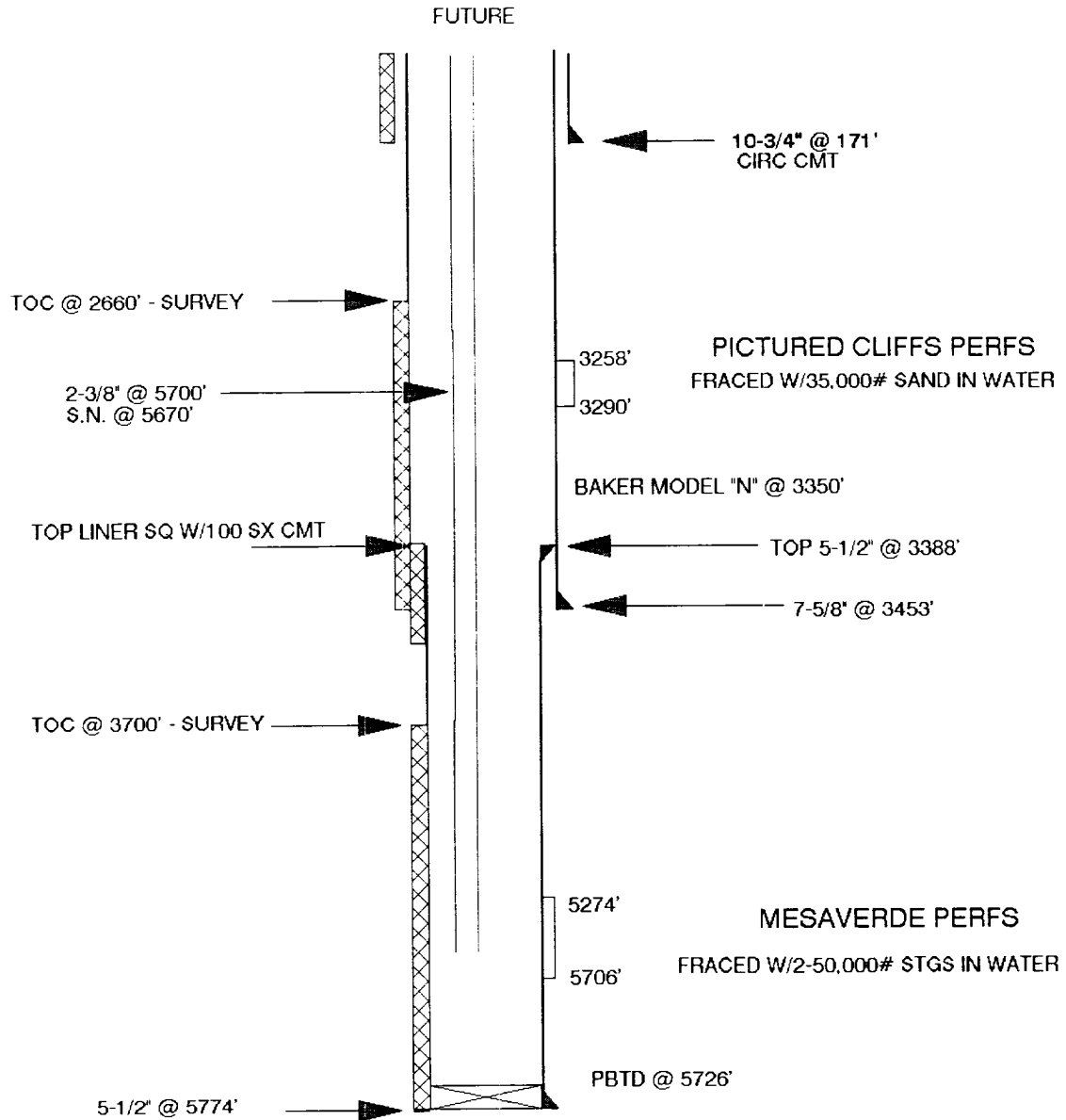
# HANCOCK #3 PC/MV

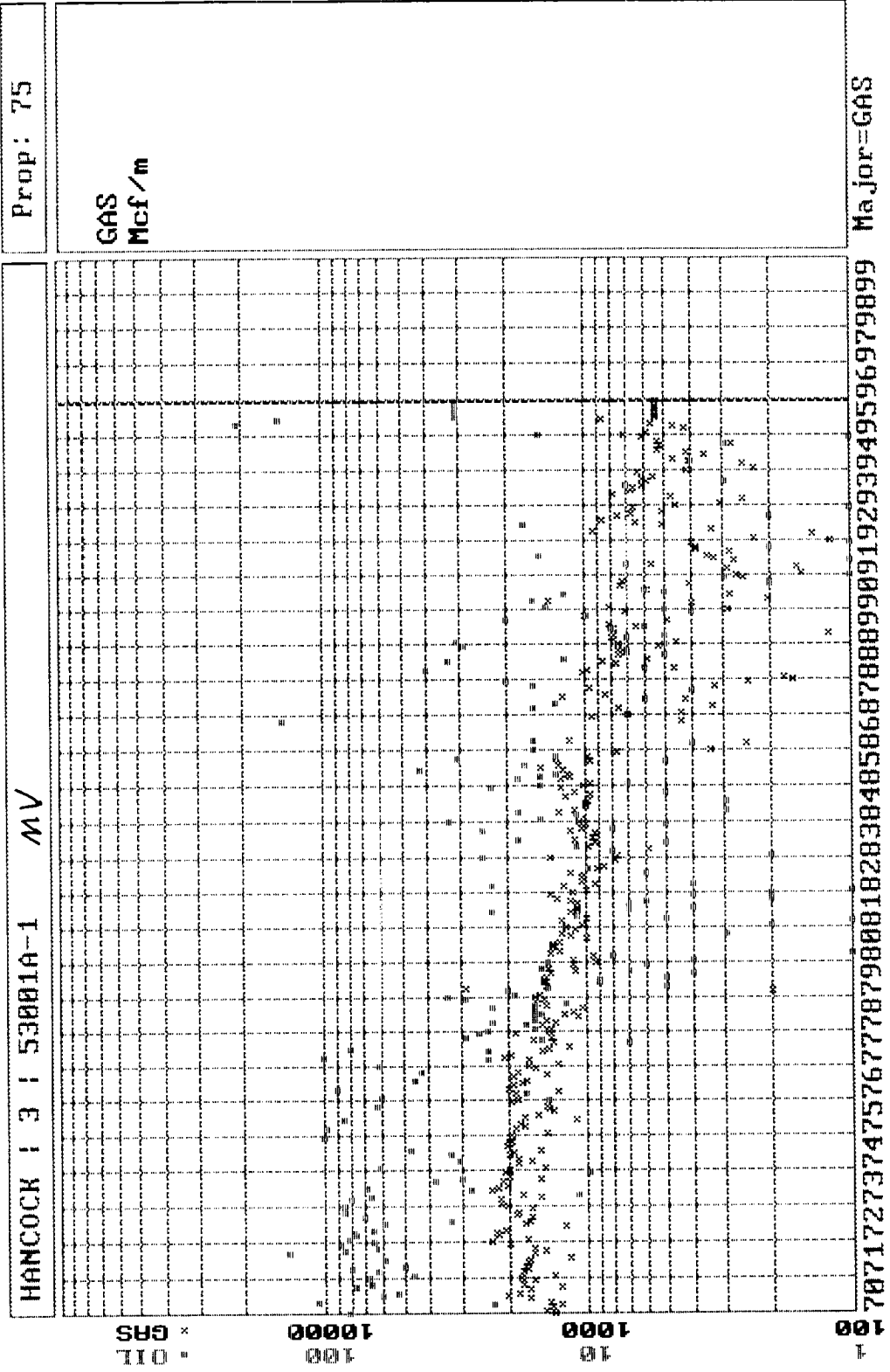
UNIT M SECTION 22 T28N R9W  
SAN JUAN COUNTY, NEW MEXICO

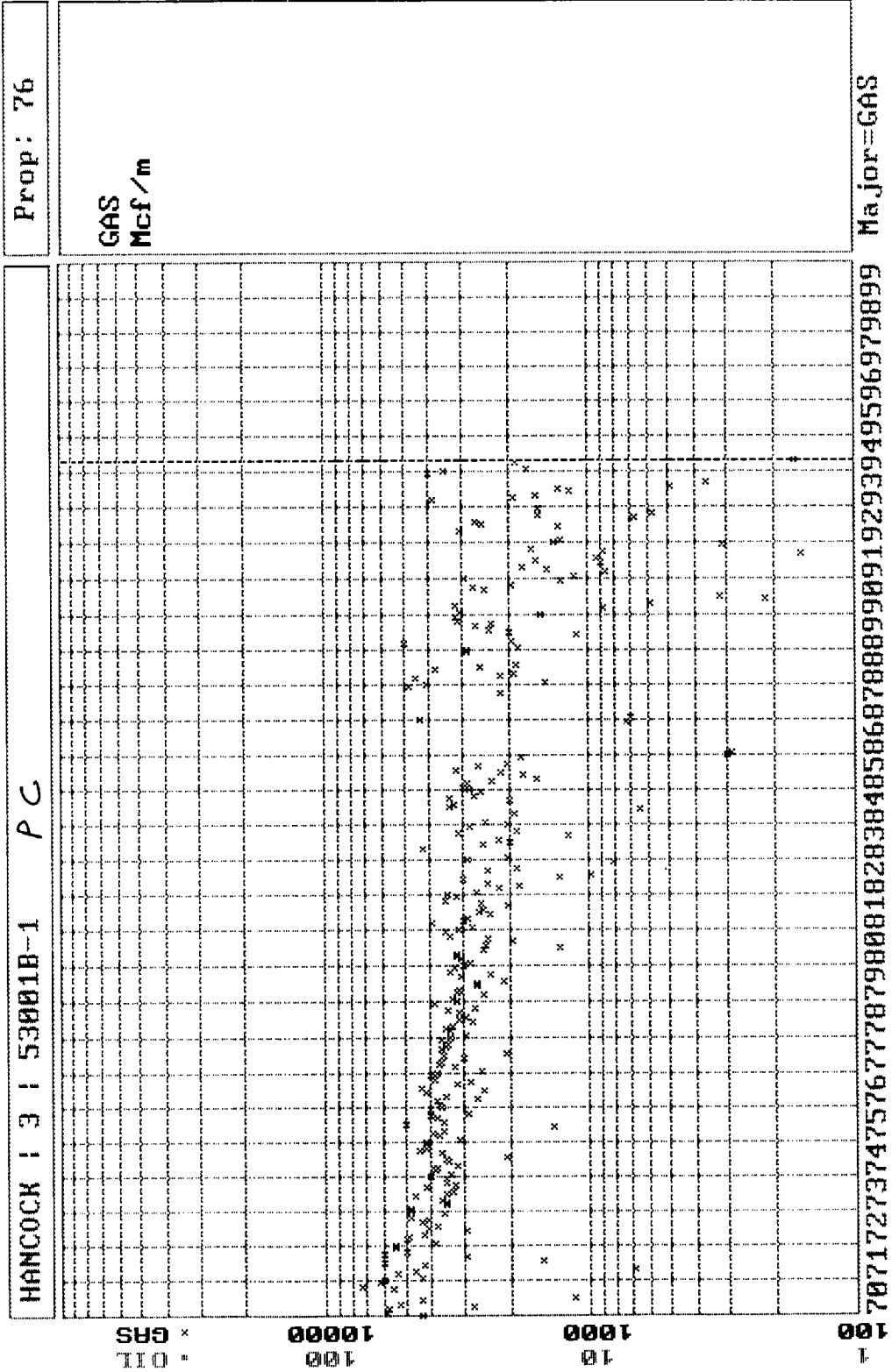


# HANCOCK #3 PC/MV

UNIT M SECTION 22 T28N R9W  
SAN JUAN COUNTY, NEW MEXICO







**Pertinent Data Sheet - HANCOCK #3 PC/MV**

**Location:** 890' FSL & 990' FWL, Unit M, Section 22, T28N, R09W, San Juan County, New Mexico

**Field:** Aztec PC/Blanco MV      **Elevation:** 7024' GL  
9' KB      **TD:** 5774'  
**PBTD:** 5726'

**Completed:** 5/4/59      **Spud Date:** 4/18/59      **DP #:** MV: 53001A  
PC: 53001B  
**Lease:** Fed: SF 077107  
**GWl:** 86.50%  
**NRI:** 71.36%  
**Prop#:** 012576000

**Initial Potential:** MV: AOF = 2496 MCF/D; Q = 2199 MCF/D. SICP = 961 psi  
PC: AOF = 3300 MCF/D; Q = 2956 MCF/D; SICP = 726 psi

**Casing Record:**

<u>Hole Size</u>	<u>Csq Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>	<u>Cement</u>	<u>Cement (Top)</u>
13-3/8"	10-3/4"	32.75# S.W.	171'	72 sx	Circ Cmt
9-5/8"	7-5/8"	26.4# J-55	3453'	110 sx	2660' - Survey
6-3/4"	5-1/2"	15.5# J-55	3388'-5774'	213 sx	3700' - Survey **
				** Sq top liner w/100 sx cmt	

**Tubing Record:**

<u>Tbg. Size</u>	<u>Wt. &amp; Grade</u>	<u>Depth Set</u>
2-3/8"	4.7# J-55	5639' (183 Jts; all but top 5 w/slimhole collars)
	S.N. @ 5639'	
	Baker Model N @ 3350'	
1-1/4"	2.4# "A"	3308' 106 Jts
	S.N. @ 3298'	

**Formation Tops:**

Ojo Alamo:	2230'	Cliff House	4905'
Kirtland Shale:	2358'	Menefee	4937'
Fruitland:	3020'	Point Lookout	5542'
Pictured Cliffs:	3252'	Moncos	5664'
Lewis	3370'		

**Logging Record:** E-Log, GRN, Temp.

**Stimulation:** Perfed MV (Point Lookout) @ 5546'-56', 5604'-18', 5654'-64', 5696'-5706'. w/2 spf & fraced w/50,000# sand in water. Perfed MV (Menefee) @ 5274'-84', 5322'-38', 5428'-38', 5444'-54', w/2 spf & fraced w/50,000# sand in water. Perfed PC @ 3258'-66', 3270'-90' w/2 spf & fraced w/35,000# sand in water.

**Workover History:** 9/24/66: TOH w/1-1/4" tbg. TIH w/2-3/8" tbg. Found holes in 2-3/8" (3050'-3488'). Ran 2-3/8" w/Baker Model "N" pkr @ 3350'. All 2-3/8" w/turned down collars except top 5 jts. Reran 1-1/4".

**Production history:** PC 1st delivered 1959. Current capacity: PC=70 MCF/D, MV=0 MCF/D. Cumulative: PC=1348 MMCF, MV=613 MMCF & 12,946 BO.

**Pipeline:** EPNG



HANCOCK #3 PC/MV  
Workover Procedure  
M 22 28 9  
San Juan County, N.M.  
Lat-Long: 36.642624 - 107.781067

1. Comply to all NMOCD, BLM, & MOI rules & regulations. MOL and RU completion rig. NU 7-1/16" 900 series BOP w/flow tee and stripping head. NU blooie line & 2-7/8" relief line.
2. Blow down well. TOH w/ 3308' 1-1/4" tbg & lay down.
3. Set blanking plug in S.N. @ 5639' & pressure test tbg to 2000 psi. TOH w/ 5639' 2-3/8" tbg w/Baker Model "N" seal assembly @ 3350'. TIH w/Baker CJ nmilling tool. Mill w/air/mist & retrieve Model "N" pkr. TOH.
4. TIH w/4-3/4" bit on 2-3/8" tbg & clean out to 5726' w/ air/mist. Blow on bottom for at least 4 hrs. TOH.
5. TIH w/2-3/8" tbg w/S.N. one jt off open ended bottom & land @ 5700'. **Take final water & gas samples & rates.**
6. ND BOP & NU wellhead & tree. Rig down & release rig.

Approve: \_\_\_\_\_  
Drilling Superintendent

VENDORS:

Pkr & Mill: Baker 325-0216

PMP

DATE: September 11, 1995

NAME: HANCOCK #3

FORM: MESAVERDE

LOCATION UNIT: M  
SEC: 22  
TWN: 28N  
RING: 09W

T  
28  
N

<div>State Com A 2E</div> <div>[18]</div> <div>State Com 1A</div> <div>*</div>	<div>Michener 1</div> <div>*</div> <div>[15]</div> <div>McCulley Johnston LS 1</div> <div>*</div>	<div>McCulley LS 2</div> <div>*</div> <div>[14]</div> <div>Warren LS 4</div> <div>*</div>
<div>Lackey B LS 12E</div> <div>*</div> <div>Lackey B LS 10</div> <div>*</div> <div>[21]</div> <div>Lackey B LS 12A</div> <div>*</div>	<div>Hancock #3</div> <div>*</div> <div>Hancock 3A</div> <div>*</div> <div>[22]</div> <div>Storey C LS 6</div> <div>*</div>	<div>Hancock 4</div> <div>*</div> <div>[23]</div> <div>Hancock 4A</div> <div>*</div> <div>Warren A LS 2</div> <div>*</div>
<div>Hancock B 1</div> <div>*</div> <div>[28]</div> <div>Michener A LS 4</div> <div>*</div> <div>Hancock B 1A</div> <div>*</div> <div>Sheets 1</div> <div>*</div>	<div>Hancock 5</div> <div>*</div> <div>Hancock 5A</div> <div>*</div> <div>[27]</div> <div>Storey C LS 7</div> <div>*</div>	<div>Lackey 1A</div> <div>*</div> <div>Hancock A 2</div> <div>*</div> <div>[26]</div> <div>Lackey 1</div> <div>*</div> <div>Hancock A 2A</div> <div>*</div>

LEGEND

\*  
WELL NAME

R-09-W

DATE: September 11, 1995  
 NAME: HANCOCK #3  
 FORM: PICTURED CLIFFS  
 LOCATION UNIT: M  
 SEC: 22  
 TWN: 28N  
 RNG: 09W

T  
27  
N

Sanchez A Com 2 [16] Sanchez A Com 1 Wright A Com 1 Wright Com 1R Wright Com 1X	Michener LS 2 [15] McCulley LS 6 Michener LS 5 Michener LS 4	McCulley LS 8 [14] McCulley 2 Warren LS 4 McCulley LS 7
Lackey B LS 6 Lackey B LS 10 [21] Lackey B LS 7	Hancock B 4 [22] Storey C LS 6 Storey C LS 1 Hancock #3	Hancock 8 [23] Warren A LS 2 Warren A LS 6 Hancock 4
Michener A LS 3 [28] Hancock B 10 Michener A LS 4 Hancock B 9 Sheets 3 [28N]	Hancock B 8 [27] Storey C LS 7 Storey C LS 2 Hancock 5	[26]

LEGEND

WELL NAME