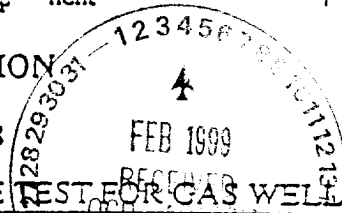


Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

C/S Form C-122
Revised 4-1-91

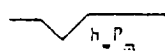
OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088



MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBORNE OIL				Lease or Well Name NE AMALON HILLS 36 ST.			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1/30/99		Well No. 1	
Completion Date		Total Depth 11400		Plug Back TD 11352		Elevation 6212	
Log Size 5 1/2		Wt. 17#		d 4.892		Set At 11,202	
Log Size 2-7/8		Wt. 6.5		d 2.441		Set At 10972	
Type Well - Single - Bradenhead - G.G. or G.C. Multiple SINGLE				Packer Set At 10972		Formation MORROW	
Producing Thru TBG		Reservoir Temp. °F 178.8		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2	
L 10992		H 10992		G _g .607		% CO ₂ .854	
				% N ₂ .276		% H ₂ S -0-	
				Prover -0-		Meter Run 4.027	
						Taps FLG	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
Si							2000			
1.	4.027	x	2.000	443.2	.7	54.9	1727			60 min
2.	4.027	x	2.000	441.9	1.0	55.0	1572			60 min
3.	4.027	x	2.000	425.0	1.5	61.3	1485			60 min
4.	4.027	x	2.000	445.6	1.9	58.8	1400			60 min
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.							476
2.							588
3.	MEASURED WITH TOTAL FLOW METER						702
4.							798
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	N/A	Moist.
1.					A.P. I. Gravity of Liquid Hydrocarbons	N/A	°Deg
2.					Specific Gravity Separator Gas	.607	XXXXXXXXXX
3.	TOTAL FLOW				Specific Gravity Flowing Fluid	N/A	XXXXXX
4.					Critical Pressure	674	P.S.I.A.
5.					Critical Temperature	354	R

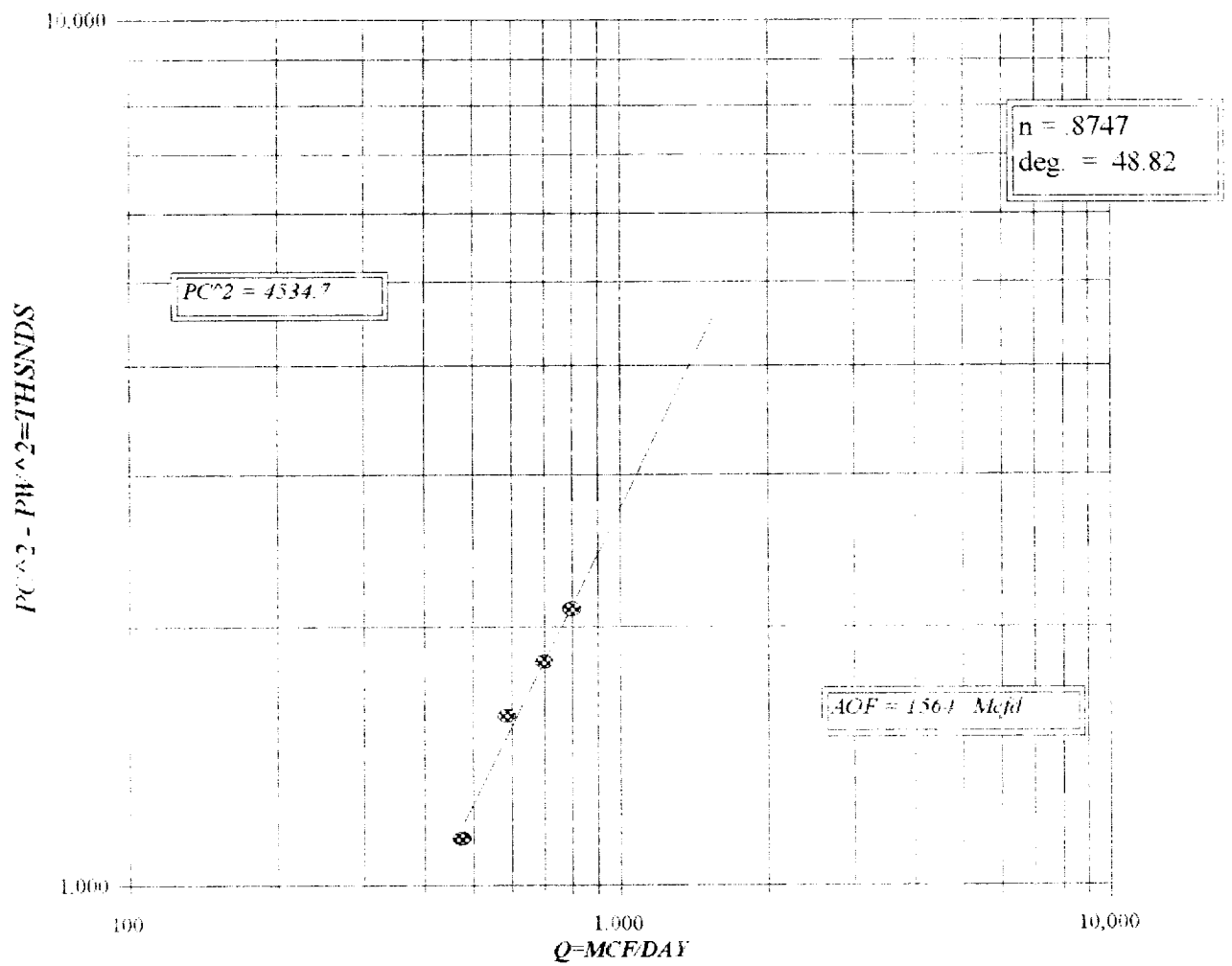
P _e 2129.5	P _w 4534.7						
NO.	P _e ²	P _w ²	P _e ² - P _w ²	P _e ² - P _w ²	1) $\frac{P_e^2}{P_e^2 - P_w^2} = 2.16$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.96$	
1.	1844.1	3400.7	1134.0				
2.	1721.7	2964.2	1570.5				
3.	1649.0	2719.2	1815.5				
4.	1563.2	2443.6	2091.1				
5.							

Absolute Open Flow	1564	Mcfd @ 15.025	Angle of Slope θ	48.82	Slope, n	.8747
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Remarks: * CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES.
* NO FLUID MADE DURING TEST

Approved By Division	Conducted By: PRO WELL TESTING	Calculated By: MB	Checked By: BM
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MEWBORNE OIL CO.
NE. AVALON HILLS 36 ST. #1



WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

FORM C-122F

COMPANY MENBORNE OIL LEASE : AVI. HILLSWELL NO. : 1 DATE 1/30/99
UNIT SECTION : TOWNSHIP : RANGE :
L 10992 H : 10992 L/H : 1 G/GMIX : 0.6070
CO2 : 0.854 N2 : 0.276 H2S :
GH : 6672.1 PCR : 674 TCR : 354

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9
3	T=(Tw+Ts/2)	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0
4	Z (EST.)	0.890	0.830	0.829	0.833	0.830	0.835	0.832	0.839
5	TZ	524	489	488	491	489	492	490	494
6	GA/TZ	12.735	13.643	13.660	13.595	13.642	13.560	13.611	13.509
7	eS(TABLE XIV)	1.612	1.668	1.669	1.663	1.668	1.663	1.665	1.660
8	Pf or Ps	2381.7	2381.7	2221.6	2221.6	2126.4	2126.4	2013.8	2013.8
9	Pf2 or Ps2	5672.5	5672.5	4935.5	4935.5	4521.6	4521.6	4055.4	4055.4
10	Pc2=Pf/eS or Pw2=Ps2/eS	3518.6	3400.8	2957.1	2964.3	2710.9	2719.3	2434.3	2443.5
11	Pc or Pw	1876	1844	1720	1722	1646	1649	1560	1563
12	P=(Pw-Ps/2) or (Pc+Pf/2)	2129	2113	1971	1972	1836	1888	1787	1788
13	Pf=P/Pcr	3.16	3.13	2.92	2.93	2.80	2.80	2.65	2.65
14	Tr(T/TCr)	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
15	Z (TABLE XI)	0.830	0.831	0.833	0.833	0.835	0.835	0.839	0.839

PW 1 : 1844.1 PW 2 : 1721.7 PW 3 : 1649.0 PW 4 : 1563.2

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURE (Pc or Pw)
FROM KNOWN BOTTOM HOLE PRESSURE (Pf or Ps)

FORM C-122F

COMPANY MEWBORNE OIL LEASE : AVI. HILLSWELL NO. : 1 DATE 1/30/99
UNIT SECTION : TWNSHP : RANGE :
L 10992 H : 10992 L/H : 1 G/GMIX : 0.6070
CO2 : 0.854 N2 : 0.276 H2S :
GH : 6672.1 PCR : 674 TCR : 354

LINE		1	2	3	4	5	6	7	8
1	TW(W.H. R)	534	534	534	534	534	534	534	534
2	Ts(B.H. R)	643.9	643.9	643.9	643.9	643.9	643.9	643.9	643.9
3	T=(Tw+Ts/2)	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0
4	Z (EST.)	0.894	0.829	ERR	ERR	ERR	ERR	ERR	ERR
5	TZ	526	483	ERR	ERR	ERR	ERR	ERR	ERR
6	GH/TZ	12.674	13.665	ERR	ERR	ERR	ERR	ERR	ERR
7	eS(TABLE XIV)	1.608	1.669	ERR	ERR	ERR	ERR	ERR	ERR
8	Pf or Ps	2751.4	2751.4	0	0	0	0	0	0
9	Pf2 or Ps2	7570.2	7570.2	0.0	0.0	0.0	0.0	0.0	0.0
10	Pc2=Pf/eS or Pw2=Ps2/eS	4706.6	4534.9	ERR	ERR	ERR	ERR	ERR	ERR
11	Pc or Pw	2169	2130	ERR	ERR	ERR	ERR	ERR	ERR
12	P=(Pw+Ps/2)or(Pc+Pf/2)	2460	2440	ERR	ERR	ERR	ERR	ERR	ERR
13	Pr=(P/Pcr)	3.65	3.62	ERR	ERR	ERR	ERR	ERR	ERR
14	Tr(T/Tcr)	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66
15	Z (TABLE XI)	0.829	0.829	ERR	ERR	ERR	ERR	ERR	ERR

PCA 1 : 2129.5 PW 2 : ERR PW 3 : ERR PW 4 : ERR



Laboratory Services, Inc.

4016 Fiesta Drive
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline
Attention: Mr. Merv Buecker
P. O. Box 791
Hobbs, New Mexico 88241

SAMPLE:
IDENTIFICATION: N.E. Avalon Hills 36 St. #1
COMPANY: Mewbourne Oil Co.
LEASE:
PLANT:

SAMPLE DATA: DATE SAMPLED: 1/29/99 9:30 AM
ANALYSIS DATE: 1/29/99
PRESSURE - PSIG 442
SAMPLE TEMP. °F 40
ATMOS. TEMP. °F 29

GAS (XX) LIQUID ()
SAMPLED BY: Ray Ables
ANALYSIS BY: Vickie Walker

REMARKS:

COMPONENT ANALYSIS

COMPONENT	MOL PERCENT	GPM
Hydrogen Sulfide (H2S)		
Nitrogen (N2)	0.276	
Carbon Dioxide (CO2)	0.854	
Methane (C1)	93.164	
Ethane (C2)	3.843	1.025
Propane (C3)	1.021	0.281
I-Butane (IC4)	0.213	0.070
N-Butane (NC4)	0.200	0.063
I-Pentane (IC5)	0.124	0.045
N-Pentane (NC5)	0.085	0.031
Hexane Plus (C6+)	0.220	0.090
	100.000	1.605
BTU/CU.FT. - DRY	1067	MOLECULAR WT. 17.5831
AT 14.650 DRY	1064	
AT 14.650 WET	1045	
AT 14.73 DRY	1069	
AT 14.73 WET	1051	

SPECIFIC GRAVITY -
CALCULATED 0.607
MEASURED