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appropriate district office.
See Rule 401 & Rule 1122

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

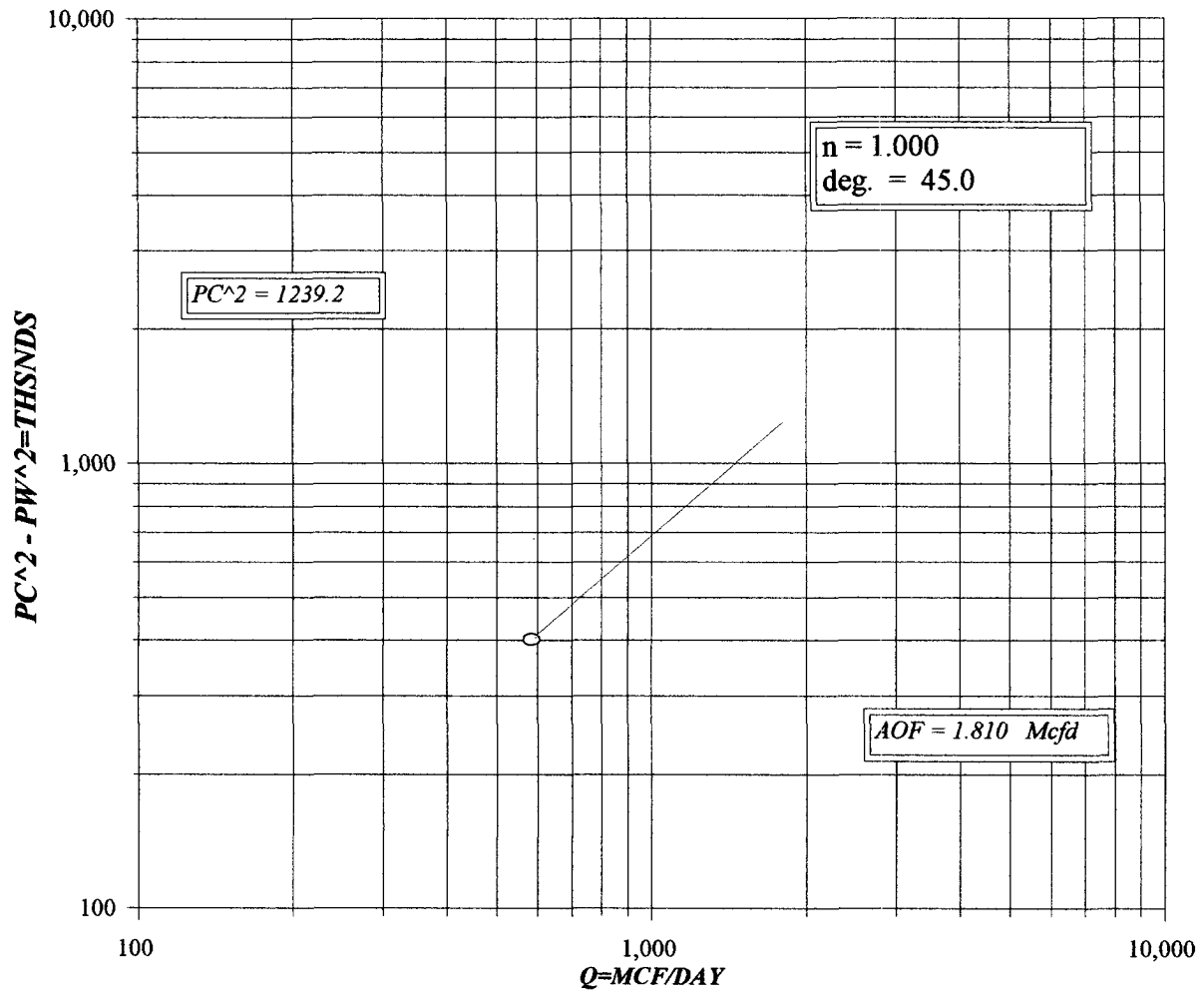
Form C-122
Revised October, 1999

RECEIVED
FEB 17 2006
PROWELL TESTS

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL 30-015-33494

Operator MEWBOURNE OIL COMPANY				Lease or Unit Name ESPERANZA 19 FED COM			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 1/5/2005	Well No. 2
Completion Date 10/3/2004		Total Depth 11890' MD		Plug Back TD 11838' MD		Elevation 3190'	Unit Ltr - Sec - TWP - Rge B 19 21S 27E
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11890'	Perforations: From: 11458 MD To: 11552 MD		County EDDY	
Tbg. Size 2 7/8	Wt. 6.5	d 2.44	Set At 11307	Perforations: From: To:		Pool BURTON FLAT	
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11266		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 181	Mean Annual Temp. 60	Baro. Press.-P _a 13.2		Connection SALES	
L 11307	H 11307	Gg 0.592	%CO ₂ 1.645	%N ₂ 0.503	%H ₂ S N/A	Prover N/A	Meter Run 3"
Taps FLG							
FLOW DATA				TUBING DATA		CASING DATA	
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.
SI	3.0 X 1.0					1100	
1	TOTAL FLOW		550.18	15.14	74	900	
2							
3							
4							
5							
RATE OF FLOW CALCULATIONS							
No.	COEFFICIENT (24 Hour)		$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress Factor F _{pv}
1	6.4						
2			TOTAL	FLOW	METER		
3							
4							
5							
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf bbl.		
1					A.P. I. Gravity of Liquid Hydrocarbons N/A Deg.		
2	TOTAL	FLOW			Specific Gravity Separator Gas 0.592 XXXXXXXX		
3					Specific Gravity Flowing Fluid XXXXXX		
4					Critical Pressure 675 P.S.I.A. N/A P.S.I.A.		
5					Critical Temperature 350 R N/A R		
P _c 1113.2 P _{c2} 1239.2							
No.	P _t ²	P _w	P _w ²	P _c ² -P _w ²	(1) $P_c^2 = 3.089$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.089$		
1		915.5	838.1	401.1			
2							
3							
4							
5					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.81$		
Absolute Open Flow 1,810				Mcf @ 15.025	Angle of Slope (°) 45	Slope, n: 1	
Remarks: * NO LIQUID MADE DURING TEST							
Approved By Division:		Conducted By: MEWBOURNE OIL		Calculated By: PRO WELL TESINT		Checked By: MB	

MEWBOURNE OIL
ESPERANZA 19 FED Com #2



COMPANY : MEWBOURNE OIL LEASE : ESPERANZA 19 FED WELL NO. : 2
 UNIT : B SECTION : 19 TOWNSHIP : 21S
 L : 11307 H : 11307 L/H : 1 G/GMIX : 0.592
 %CO2 : 1.645 %N2 : 0.509 H2S : DATE : 1/5/05
 d : 2.441 Fr : 0.010763 GH : 6693.7 RANGE : 27E

Pc = 1113.2 Pc2 = 1239.2
 Pl2 = 833.9 Pw = 915.5
 0.0 #DIV/0!
 0.0 #DIV/0!
 0.0 #DIV/0!

VOL 1 : 586 PSIA 1 : 913.2 RESV.TEMP 187.1
 VOL 2 : PSIA 2 :
 VOL 3 : PSIA 3 : SHUT-IN PRI = 1113.2
 VOL 4 : PSIA 4 :

Pc2-Pw2 = 401.1 Pw2 = 838.1
 #DIV/0! #DIV/0!
 #DIV/0! #DIV/0!
 #DIV/0! #DIV/0!

PCR : 675
 TCR : 350

n = 1.000

Pc2/(Pc2-Pw2) = 3.089

LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1	QM	0.586	0.586	0.000	0.000	0.000	0.000	0.000	0.000
2	TW	534	534	534	534	534	534	534	534
3	Ts	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1
4	T	590.5	590.5	590.5	590.5	590.5	590.5	590.5	590.5
	PR (est)	1.35		0.00		0.00		0.00	
5	Z(est)	0.895	0.886	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
6	TZ	528.3	523.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
7	GH/TZ	12.671	12.800	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
8	eS	1.608	1.616	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
9	I-e-S	0.378	0.381	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
10	Pt	913.2	913.2	0.0	0.0	0.0	0.0	0.0	0.0
11	Pt2/1000	833.9	833.9	0.0	0.0	0.0	0.0	0.0	0.0
12	Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763
13	Fc=FrTZ	5.686	5.629	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
14	FcQm	3.33	3.30	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
15	L/H(FcQm)2	11.1	10.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
16	Fw	4.198849	4.147301	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
17	Pw2	838.1	838.1	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
18	Ps2	1347.9	1354.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
19	Ps	1161.0	1163.8	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
20	P	1037.1	1038.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
21	Pr	1.54	1.54	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
22	Tr	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
23	Z	0.886	0.885	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

[Pc2/Pc2-Pw2]n = 3.089

AOF= Q 1.810

FORM C122-D