

Submit in duplicate to
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

JAN 07 1994

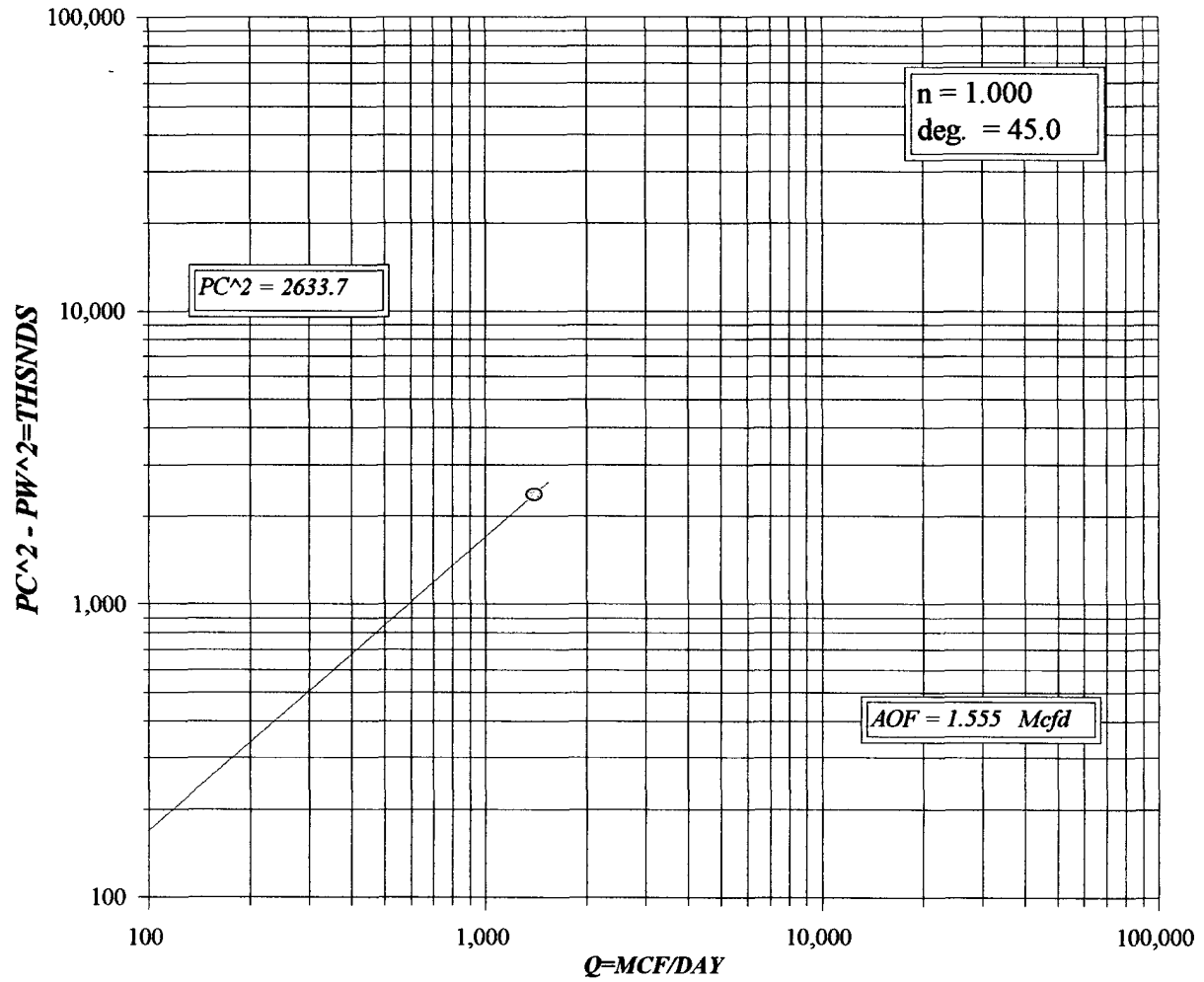
OCD-ARTESIA

30-015-32718

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL				Lease or Unit Name ESPERONIA "15" ST. COM.					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date		Well No. 2	
Completion Date 8/30/03		Total Depth 11835		Plug Back TD 11517		Elevation 3302		Unit Ltr - Sec - TWP - Rge B 15 21S 27E	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11835	Perforations: From: 11307 To: 11460			County EDDY		
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11213	Perforations: From: To:			Pool MORROW		
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 11190			Formation MORROW		
Producing Thru TUBING		Reservoir Temp. 168		Mean Annual Temp. 60		Baro. Press.-P _a 13.2		Connection SALES	
L 11213	H 11213	Gg 0.623	%CO ₂ 3.375	%N ₂ 1.463	%H ₂ S	Prover	Meter Run 3.067	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.	Press p.s.i.g.	Temp.
SI						500			
1	3.067 X 1.250		460	30	74	460			24 HRS
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}	Rate of Flow Q. Mcfd	
1								1400	
2	TOTAL		FLOW	METER					
3									
4									
5									
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio N/A Mcf bbl.				
1					A.P. I. Gravity of Liquid Hydrocarbons N/A Deg.				
2					Specific Gravity Separator Gas 0.623 XXXXXXXX				
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid XXXXXX				
4					Critical Pressure 681 P.S.I.A. P.S.I.A.				
5					Critical Temperature 356 R. R.				
P _c 513.2 P _{w2} 2633.7									
No.	P _t ²	P _w	P _w ²	P _c ² -P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.111$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.111$				
1		512.3	262.4	2371.3	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.555$				
2									
3									
4									
5									
Absolute Open Flow 1.555 Mcfd @ 15.025					Angle of Slope (°): 45		Slope n: 1		
Remarks:									
Approved By Division:			Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM		

MEWBOURNE OIL
ESPERONIA "15" ST. COM. #2



COMPANY : MEWBOURNE OIL CO.				LEASE : ESPERONIA '15' ST. COMWELL NO. : 2				Pc = 513.2		Pc2 = 2633.7	
UNIT : B				SECTION : 15				TOWNSHIP : 21S			
L : 11213		H : 11213		L/H : 1		G/GMIX : 0.623		Pt2 = 233.5		Pw = 512.3	
%CO2 : 3.375		%N2 : 1.463		H2S : 8197.0		DATE :		0.0		#DIV/0!	
d : 2.441		Fr : 0.010763		GH :		RANGE : 27E		0.0		#DIV/0!	
								0.0		#DIV/0!	
VOL 1 : 1400		PSIA 1 : 483.2		RESV.TEMP : 188.0				Pc2-Pw2 = 2371.3		Pw2 = 262.4	
VOL 2 :		PSIA 2 :						#DIV/0!		#DIV/0!	
VOL 3 :		PSIA 3 :		SHUT-IN PRE! = 513.2				#DIV/0!		#DIV/0!	
VOL 4 :		PSIA 4 :						#DIV/0!		#DIV/0!	
PCR : 681								n = 1.000			
TCR : 356											
LINE	RATE 1		RATE 2		RATE 3		RATE 4		Pc2/(Pc2-Pw2) = 1.111		
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND	#DIV/0!		
1 QM	1.400	1.400	0.000	0.000	0.000	0.000	0.000	0.000	#DIV/0!		
2 TW	534	534	534	534	534	534	534	534	#DIV/0!		
3 Ts	648.0	648.0	648.0	648.0	648.0	648.0	648.0	648.0	#DIV/0!		
4 T	591.0	591.0	591.0	591.0	591.0	591.0	591.0	591.0	#DIV/0!		
PR (est)	0.71		0.00		0.00		0.00		#DIV/0!		
5 Z(est)	0.928	0.919	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
6 TZ	548.3	542.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
7 GH/TZ	14.950	15.097	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
8 eS	1.752	1.761	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
9 I-e-S	0.429	0.432	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
10 Pt	483.2	483.2	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!		
11 Pt2 /1000	233.5	233.5	0.0	0.0	0.0	0.0	0.0	0.0	#DIV/0!		
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	#DIV/0!		
13 FrTZ	5.901	5.844	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
14 FcQm	8.26	8.18	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
15 L/H(FcQm)2	68.3	66.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
16 Fw	29.292171	28.934303	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
17 Pw2	262.8	262.4	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
18 Ps2	460.3	462.2	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
19 Ps	678.5	679.9	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
20 P	580.8	581.5	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
21 Pr	0.85	0.85	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
22 Tr	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	#DIV/0!		
23 Z	0.919	0.919	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
									FORM C122-D		