

3e-c15-33171

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See Rule 401 & Rule 1122

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

JUN 04 2004

Form C-122
Revised October, 1999

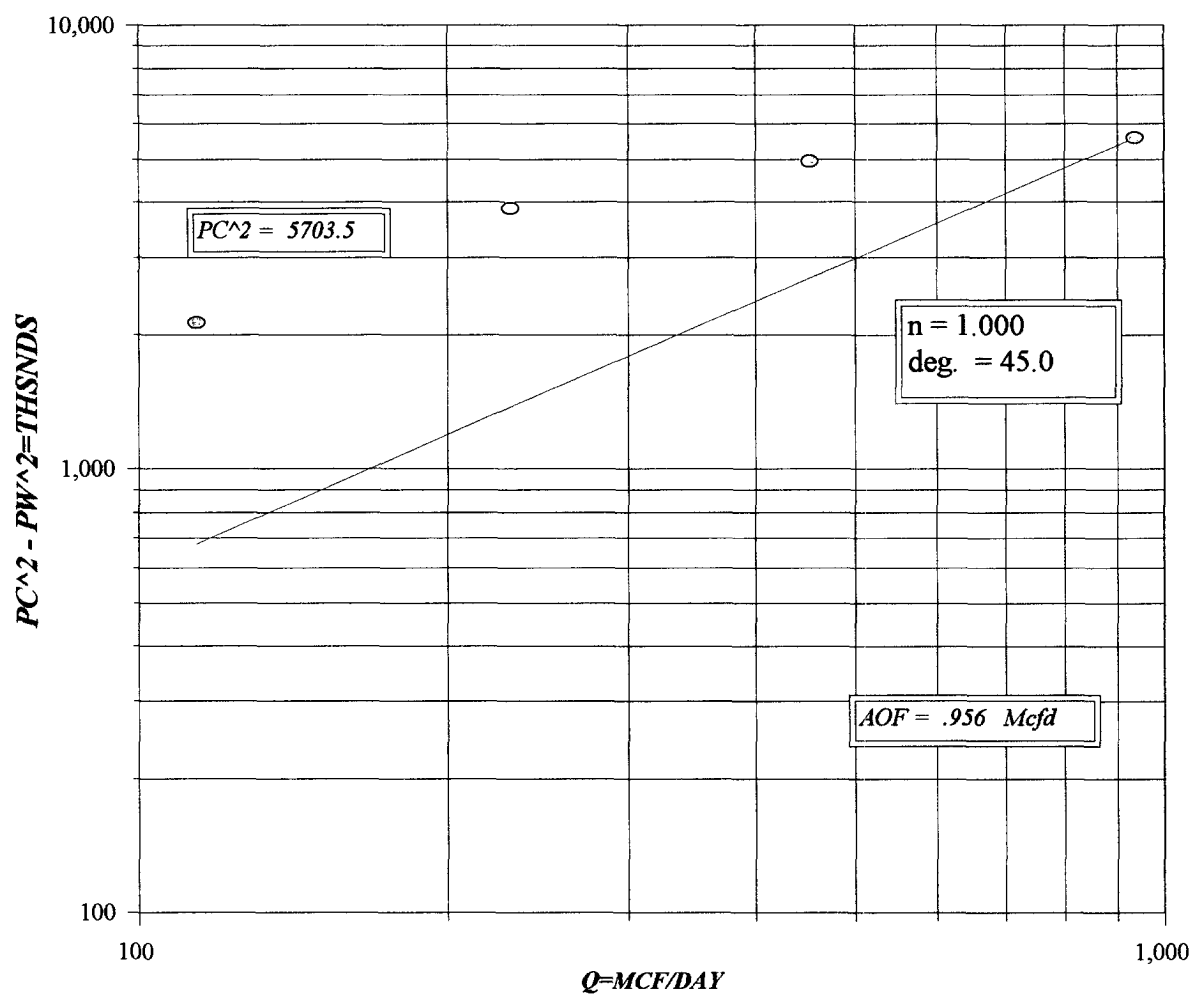
OCC-ARTESIA

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Tombstone

Operator MEWBOURNE OIL				Lease or Unit Name TOMSTONE 5 FEE COM			
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5/1/04	Well No. 1
Completion Date 4/17/04		Total Depth		Plug Back TD 9596		Elevation 3511 GL	Unit Ltr - Sec - TWP - Rge M 5 20S 25E
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 9596	Perforations: From: 9256 To: 9457			County EDDY
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 9151	Perforations: From: To:			Pool CEMETARY
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 9139		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 181		Mean Annual Temp. 60		Baro. Press.-P _a 13.2	
Connection SALES							
L 9151	H 9151	Gg 0.645	%CO ₂ 6.039	%N ₂ 2.87	%H ₂ S	Prover 3.067	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.
SI						2375	
1	3.067 X .875		300	2	104	1340	
2	3.067 X .875		308	8	98	860	
3	3.067 X .875		315	30	96	300	
4	3.067 X .875		322	123	90	1152	
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							114
2	TOTAL	FLOW	METER				231
3							452
4							937
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 0.645 XXXXXXXX		
3	TOTAL	FLOW	METER		Specific Gravity Flowing Fluid XXXXXX		
4					Critical Pressure 691 P.S.I.A. P.S.I.A.		
5					Critical Temperature 354 R. R.		
P _c 2388.2 P _{c2} 5703.5							
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.02$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.02$		
1		1888.2	3565.5	2138			
2		1353.5	1831.9	3871.6			
3		874.8	765.3	4938.2			
4		333.6	111.3	5592.2			
5							
Absolute Open Flow 0.956 Mcfd @ 15.025				Angle of Slope (°): 45 Slope n: 1			
Remarks: * NO LIQUID MADE DURING TEST.							
Approved By Division:		Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM	

MEWBOURNE OIL CO.
TOMBSTONE "5" FEE COM #1



COMPANY : MEWBOURNE OIL		LEASE : TOMBSTONE 5 FEE CONWELL NO.		1		Pc = 2388.2		Pc2 = 5703.5		*	
UNIT : M		SECTION : 15		TOWNSHIP : 20S		P12 = 3565.3		Pw = 1888.2		*	
L : 9151		H : 9151		L/H : 1		G/GMIX : 0.645		1831.2		1353.5	
%CO2 : 6.039		%N2 : 2.87		H2S : 8197.0		DATE : 5/1/04		762.5		874.8	
d : 2.441		Fr : 0.010763		GH : 8197.0		RANGE : 25E		98.1		333.6	
=====											
VOL 1 : 114		PSIA 1 : 1888.2		RESV.TEMP : 181.0		Pc2-Pw2 = 2138.0		Pw2 = 3565.5		*	
VOL 2 : 231		PSIA 2 : 1353.2		SHUT-IN PRESS = 2388.2		3871.6		1831.9		*	
VOL 3 : 452		PSIA 3 : 873.2				4938.2		765.3		*	
VOL 4 : 937		PSIA 4 : 313.2				5592.2		111.3		*	
=====											
PCR : 691		TCR : 354				n = 1.000				*	
Pc2/(Pc2-Pw2) =						2.668				*	
						1.473				*	
						1.155				*	
						1.020				*	
=====											
LINE	RATE 1		RATE 2		RATE 3		RATE 4				
	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND			
1 QM	0.114	0.114	0.231	0.231	0.452	0.452	0.937	0.937			
2 TW	534	534	534	534	534	534	534	534			
3 Ts	641.0	641.0	641.0	641.0	641.0	641.0	641.0	641.0			
4 T	587.5	587.5	587.5	587.5	587.5	587.5	587.5	587.5			
PR (est)	2.73		1.96		1.26		0.45				
5 Z(est)	0.835	0.828	0.860	0.847	0.894	0.883	0.944	0.938			
6 TZ	490.8	486.6	505.2	497.6	525.4	518.5	554.9	551.3			
7 GH/TZ	16.702	16.846	16.224	16.474	15.602	15.809	14.773	14.869			
8 eS	1.871	1.881	1.837	1.855	1.795	1.809	1.740	1.746			
9 i-e-S	0.465	0.468	0.456	0.461	0.443	0.447	0.425	0.427			
10 Pt	1888.2	1888.2	1353.2	1353.2	873.2	873.2	313.2	313.2			
11 P12 /1000	3565.3	3565.3	1831.2	1831.2	762.5	762.5	98.1	98.1			
12 Fr	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763	0.010763			
13 Fc=FrTZ	5.282	5.237	5.438	5.355	5.655	5.581	5.972	5.933			
14 FcQm	0.60	0.60	1.26	1.24	2.56	2.52	5.60	5.56			
15 L/H(FcQm)2	0.4	0.4	1.6	1.5	6.5	6.4	31.3	30.9			
16 Fw	0.1687747	0.1669266	0.7191744	0.7052822	2.8935617	2.8456394	13.318399	13.2109134			
17 Pw2	3565.5	3565.5	1831.9	1831.9	765.4	765.3	111.4	111.3			
18 Ps2	6670.1	6706.2	3366.1	3397.7	1373.9	1384.6	193.9	194.4			
19 Ps	2582.7	2589.6	1834.7	1843.3	1172.2	1176.7	440.3	440.9			
20 P	2235.4	2238.9	1593.9	1598.2	1022.7	1024.9	376.8	377.0			
21 Pr	3.24	3.24	2.31	2.31	1.48	1.48	0.55	0.55			
22 Tr	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66			
23 Z	0.828	0.828	0.847	0.847	0.883	0.882	0.938	0.938			
=====											
										FORM C122-D	