

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

RECEIVED

Form C-122
Revised October, 1999

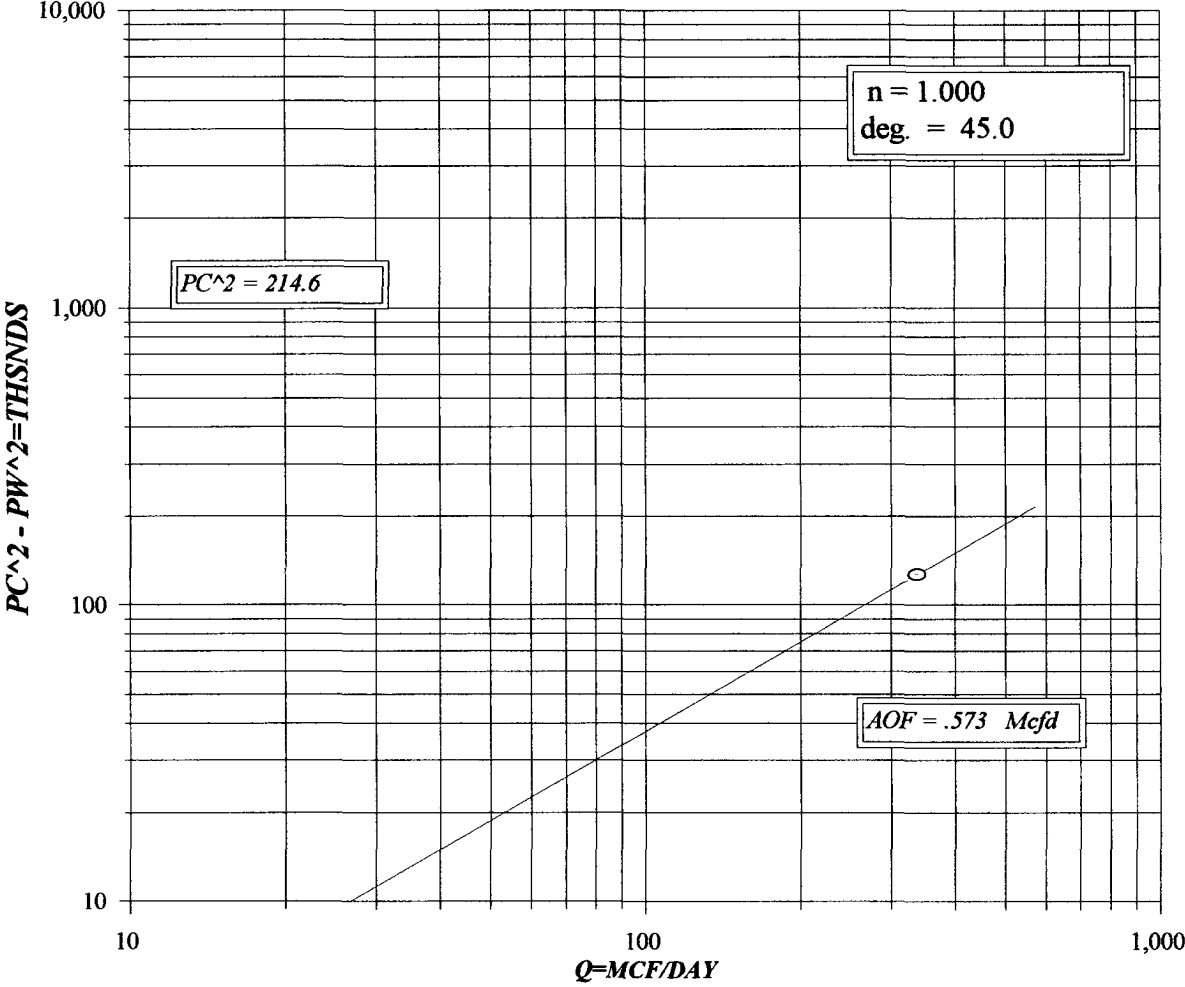
OCD-ARTESIA

30-015-32845

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL				Lease or Unit Name WINCHESTER "36" ST			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10/28/03		Well No. 1	
Completion Date 9/3/03		Total Depth 11530		Plug Back TD 11426		Elevation 3294	
Unit Ltr - Sec - TWP - Rge 36 19S 28E		County EDDY		Pool WINCHESTER MORROW			
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11523	Perforations: From: 11010 To: 11104			
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10945	Perforations: From: To:			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 10926		Formation MORROW	
Producing Thru TUBING		Reservoir Temp. 168		Mean Annual Temp. 60		Baro. Press.-P _a 13.2	
Connection SALES							
L 10945	H 10945	Gg 0.64	%CO ₂ 3.26	%N ₂ 1.65	%H ₂ S	Prover	Meter Run 3.068
Taps FLG							
FLOW DATA				TUBING DATA			
CASING DATA				Duration of Flow			
No.	Prover Line Size	Orifice x Size	Press p.s.i.g.	Diff. h _w	Temp.	Press p.s.i.g.	Temp.
SI							
1	3.068 X 1.000		280	10	70	280	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	6.4	54.14	293.2	0.9905	1.25	1.044	339
2							
3							
4							
5							
No.	P _r	Temp. R	T _r	Z	Gas Liquid Hydrocarbon Ratio N/A Mcf bbl.		
1	0.77	530	1.47	0.918	A.P. I. Gravity of Liquid Hydrocarbons N/A Deg.		
2					Specific Gravity Separator Gas 0.64 XXXXXXXX		
3					Specific Gravity Flowing Fluid XXXXXX		
4					Critical Pressure 680 P.S.I.A. P.S.I.A.		
5					Critical Temperature 362 R. R		
P _c 463.2 P _{c2} 214.6							
No.	P _t ²	P _w	P _w ²	P _c ² -P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.69$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.69$		
1	86	296.1	87.1	126.9			
2							
3							
4							
5							
Absolute Open Flow 0.573 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.
WINCHESTER "36" ST. # 1



COMPANY : MEWBOURNE OIL		LEASE : WINCHESTER "36" STATEWELL NO. : 1		Pc = 463.2		Pc2 = 214.6		*	
UNIT : 10945		SECTION : 36		TOWNSHIP : 19S		P12 = 86.0		Pw = 296.1	
L : 10945		H : 10945		L/H : 1		G/GMIX : 0.640		DATE : 10/28/03	
%CO2 : 3.264		%N2 : 1.658		H2S : 8197.0		RANGE : 28E		0.0	
d : 2.441		Fr : 0.010763						0.0	
VOL 1 : 339		PSIA 1 : 293.2		RESV.TEMP : 168.0		Pc2-Pw2 = 126.9		Pw2 = 87.7	
VOL 2 :		PSIA 2 :		SHUT-IN PRE! = 463.2		#DIV/O!		#DIV/O!	
VOL 3 :		PSIA 3 :				#DIV/O!		#DIV/O!	
VOL 4 :		PSIA 4 :				#DIV/O!		#DIV/O!	
PCR : 680		TCR : 362		n = 1.000		Pc2/(Pc2-Pw2) = 1.691		#DIV/O!	
LINE		RATE 1		RATE 2		RATE 3		RATE 4	
		1ST		2ND		1ST		2ND	
1	QM	0.339	0.339	0.000	0.000	0.000	0.000	0.000	0.000
2	TW	534	534	534	534	534	534	534	534
3	Ts	628.0	628.0	628.0	628.0	628.0	628.0	628.0	628.0
4	T	581.0	581.0	581.0	581.0	581.0	581.0	581.0	581.0
	PR (est)	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	Z(est)	0.942	0.937	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
6	TZ	547.5	544.3	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
7	GH/TZ	14.972	15.059	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
8	eS	1.753	1.759	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
9	I-e-S	0.430	0.431	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
10	Pt	293.2	293.2	0.0	0.0	0.0	0.0	0.0	0.0
11	Pt2 /1000	86.0	86.0	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	5.893	5.858	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
14	FcQm	2.00	1.99	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
15	L/H(FcQm)2	4.0	3.9	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
16	Fw	1.7143309	1.7018705	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
17	Pw2	87.7	87.7	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
18	Ps2	153.7	154.2	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
19	Ps	392.1	392.7	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
20	P	342.6	342.9	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
21	Pr	0.50	0.50	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
22	Tr	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
23	Z	0.937	0.937	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!	#DIV/O!
FORM C122-D									