

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

C/SF

30-015-30692

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MEWBOURNE OIL CO.				Lease or Unit Name EMPIRE "18" ST. COM					
Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special						Test Date 1/15/01	Well No. 1		
Completion Date 1/22/00		Total Depth 10,799'		Plug Back TD 10,704'		Elevation 3,644'	Unit Ltr - Sec - TWP - Rge T-18-17S-29E		
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 10,799'	Perforations: From: 10498 To: 10558		County EDDY			
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 10413	Perforations: From: To:		Pool South Empire Morrow			
Type Well-Single-Bradenhead-G.G. or G.O. Multiple SINGLE				Packer Set At 10413		Formation MORROW			
Producing Thru TUBING		Reservoir Temp. °F 178.1	Mean Annual Temp. °F 60	Baro. Press.-P ₁ 13.2		Connection SALES			
L 10413	H 10413	Gg 0.666	%CO ₂ 0.491	%N ₂ 0.674	%H ₂ S N/A	Prover N/A	Meter Run 3.067	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. °F	Press p.s.i.g.	Temp. °F		
SI						3200	N/A	PKR	N/A
1		3.067 X .750	260	22	62	310			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							1020		
2	GAS	VOLUMES	FROM	TOTAL	FLOW	METER			
3									
4									
5									
No.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		72.857 Mcf/bbl.		
1					A.P. I. Gravity of Liquid Hydrocarbons		52 Deg.		
2	TOTAL	FLOW	METER		Specific Gravity Separator Gas		.666 / G.MIX = .707 XXXXXXXX		
3					Specific Gravity Flowing Fluid		N/A XXXXXX		
4					Critical Pressure	673	P.S.I.A.	671 P.S.I.A.	
5					Critical Temperature	374	R.	388 R	
P _c 3213		P _{c2} 10324.7							
No.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.012}{\quad}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.012$				
1	104.5	343.4	117.9	10206.8					
2									
3					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1032$				
4									
5									
Absolute Open Flow		1032		Mcf/d @ 15.025		Angle of Slope (°):		45	Slope n: 1
Remarks: * WELL MADE 14 BBLS OF 52 API GRAVITY CONDENSATE DURING TEST.									
Approved By Division: <i>Jay Bl...</i>			Conducted By: PRO WELL TESTING		Calculated By: MERV BUECKER		Checked By: BM		