

NEW MEXICO OIL CONSERVATION COMMISSION MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-125
Revised 1-1-55

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 10-11-77				
Company W. E. Bakke, Jr.				Connection None					
Pool Wagon Mound (Morrison)				Formation Morrison				Unit F	
Completion Date 9-20-77		Total Depth 756		Plug Back TD 718		Elevation 6209 Gr.		Farm or Lease Name FLB Daniels	
Cas. Size 7"	Wt. 29#	d 6.875	Set At 558	Perforations: From To				Well No. 1	
Thp. Size None	Wt. None	d None	Set At None	XXXXXXXXXX OPEN HOLE From 558 To 756				Unit Sec. Twp. Rye. F 14 21N 21E	
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single					Packer Set At None			County Mora	
Producing Thru Casing		Reservoir Temp. °F 60 °		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 638	H 638	Gg .645	% CO ₂ .27	% N ₂ 21.45	% H ₂ S	Provor	Meter Run 50" Hg	Feps	

FLOW DATA						TUBING DATA		CASING DATA		Direction of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI									2.82	60°	
1.	2.0"		.25	2.79	5.95" Hg	60°			2.79	60°	1hr 14min
2.	2.0"		.50	2.45	5.6" Hg	60°			2.45	60°	58 min
3.	2.0"		1.00	1.65	3.8" Hg	60°			1.65	60°	58 min
4.	2.0"		1.25	1.05	2.3" Hg	60°			1.05	60°	62 min
5.											

RATE OF FLOW CALCULATIONS							
NO.	Volumes From Coefficient OWT (24 Hour) Tables	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	15.6		15.99	1.000	1.245	Negligible	19.42
2.	56.8		15.65	1.000	1.245	Negligible	70.72
3.	189.0		14.85	1.000	1.245	Negligible	235.31
4.	247.5		14.25	1.000	1.245	Negligible	308.13
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	None Produced	Mcf/bbl.
1.		Negligible			A.P.I. Gravity of Liquid Hydrocarbons		°deg.
2.		Negligible			Specific Gravity Separator Gas .645		XXXXXXX
3.		Negligible			Specific Gravity Flowing Fluid XXXXX		.645
4.		Negligible			Critical Pressure 634		P.S.I.A. 634
5.					Critical Temperature 317		R 317

NO.	P _t	P _w	P _c	P _c ² - P _w ²
1.	16.02	.256		
1.		15.99	.255	.001
2.		15.65	.245	.011
3.		14.85	.220	.036
4.		14.25	.203	.053
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.83019$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.0198$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 930$

Absolute Open Flow 930 Mcfd @ 15.025

Angle of Slope @ 54.94

Slope, n .70176

Remarks: Due to extremely low surface pressures, no attempt has been made to calculate flowing sub-surface pressures and static surface pressures, observed surface pressures have been used for plotting.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
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