

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5/27/81	
Company Kimbell Oil Company		Connection	
Pool Ballard		Formation Pictured Cliffs	
Completion Date 5/19/81		Total Depth 2683	Perforations From 2514 To 2571
Casing Size 2.875		WT. 6.5	Elevation 6679 G
Perforations From 2514 To 2571		Form of Lease Name Warren	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single		Unit O-35-25N-6W	
Producing Thru Casing		County Rio Arriba	
Reservoir Temp. °F A		State New Mexico	
Mean Annual Temp. °F A		Baro. Press. - P _a	
L		H	
G _g est. .695		% CO ₂	
% N ₂		% H ₂ S	
Prover		Meter Run	
Tops			

FLOW DATA						TUBING DATA		CASING DATA		Duration	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
1.			.750	246		62			688		8 days
2.									246	62	3 Hrs.
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mhd
1	12.3650		258	.9981	.9292	1.0000	2959
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1										
2.										
3.										
4.										
5.										

P _c 700	P _c 490000
NO. 1	NO. 2
P _r 66264	P _r 314
P _w 98699	P _w 391331
(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.2521$	
(2) $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 1.2106$	
ACF = Q $\left[\frac{P_c^2}{P_r^2 - P_w^2} \right]^n = 3582$	

Absolute Open Flow	3582	Mhd @ 15.025	Angle of Slope @	Slope, n .85
Remarks:				

Approved By Division	Conducted By: A.R. Kendrick	Calculated By: AR Kendrick	Checked By:
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