

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial FOUR POINT ☐ Annual ☐ Special		Test Date 7-18-81		Well No. 1880 FNL	
Company L. RAY DUNWOODY		Connection AIR		Unit 1980 FWL	
Pool WILDCAT		Formation ABO		Unit ---	
Completion Date 7-7-81		Total Depth 7750		Plug Back TD 5700-5650	
Casing Size 4 1/2		Set At 5700		Elevation 4013KB	
Perforations: From 4437 To 4474		Farm or Lease Name INNER NORTH State		Well No. 1	
Perforations: From --- To ---		Unit F		Sec. 32	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		County EDDY	
Producing Form TUBING		Reservoir Temp. °F 4454° 106		State NEW MEXICO	
Mean Annual Temp. °F 60		Base Press. - P _g 13.2		Prover 2" C.F.P.	
L 4454		H 4454		Meter Run ---	
G _g .6947		% CO ₂ .053		% H ₂ S 0	
Taps ---		%		%	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	B.H.P. p.s.i.g.	Temp. °F	
SI							905	79	1034		260
1.	2"	X	1/16	885		69	876	77	1004		1
2.	2"	X	3/32	835		79	835	79	958		1
3.	2"	X	1/8	775		76	776	81	891		1
4.	2"	X	5/32	687		78	688	81	792		1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	.0657	.00	898.2	.9915	1.1995	1.1036	77
2	.1146	.00	848.2	.9822	1.1995	1.0924	158
3	.2716	.00	788.2	.9850	1.1995	1.0885	275
4	.6237	.00	700.2	.9831	1.1995	1.0752	554
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/ubbl.
1	1.34	529	1.37	.821	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	1.27	539	1.39	.838	Specific Gravity Separator Gas	X X X X X X X X
3	1.18	536	1.38	.844	Specific Gravity Flowing Fluid	X X X X X
4	1.05	538	1.39	.865	Critical Pressure	669 P.S.I.A.
5					Critical Temperature	387 R

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	1047.2	1096.6				3.9306	3.1675
2							
3							
4							
5							

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²	AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1						871.1
2						
3						
4						
5						

Absolute Open Flow	871	Mcf/d @ 15.025	Angle of Slope θ	.8423	Slope, n	49.9
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Remarks: **BOTTOM HOLE PRESSURES TAKEN WITH AMERADA PRESSURE ELEMENT**

Approved By Division	Conducted By: DON BENNETT	Calculated By: WOHLFORD & JENKINS	Checked By:
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