

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special										Test Date 7-30-81				
Company Jerome P. McHugh						Connection								
Pool Basin Dakota						Formation Dakota						Unit		
Completion Date 5-29-81				Total Depth 7557		Plug Back TD 7508		Elevation 6389		Farm or Lease Name Hardie				
Csg. Size 4 1/2		V.L. 11.6, 10.5		d 4.052		Set At 7557		Perforations From 7224 To 7475		Well No. 1E				
Tub. Size 1 1/4		W.L. 2.4		d 1.380		Set At 7372		Perforations From Open To End		Unit Sec. Twp. Rge. K 26 29 8				
Type No 1 - Single - Perforated - G.G. or G.O. Multiple Single- Gas								Packer Set At		County San Juan				
Producing thru tubing				Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico				
L		H		G _v .55		% CO ₂		% N ₂		% H ₂ S		Prover	Meter Run	Taps
FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow			
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow			
1							1575		2340					
2														
3	3/4 positive choke						52	60°	690		3 Hours			
4														
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. Compres. Factor, Fpv	Rate of Flow Q, Mscf							
1														
2														
3	12.365		64	1.000	.9608	1.007	766							
4														
5														
NO.	P _f	Temp. °F	T _f	Z	Gas Liquid Hydrocarbon Factor		Mscf/bbl.							
1					A.P.I. Gravity of Liquid		Deg.							
2					Specific Gravity Separator		XXXXXX.XXXX							
3					Specific Gravity Flowing Fluid		X X							
4					Critical Pressure		P.S.I.A. P.S.I.A.							
5					Critical Temperature		R R							
P _f 2352		P _w 5531904												
NO.	P _f	P _w	P _f ²	P _w ²	(1) $\frac{P_f^2}{P_f^2 - P_w^2} = 1.0978$		(2) $\left[\frac{P_f^2}{P_f^2 - P_w^2} \right]^{.85} = 1.0825$							
1														
2		702	492804	5039100										
3					AOF = Q $\left[\frac{P_f^2}{P_f^2 - P_w^2} \right]^n = 829$									
4														
5														
Absolute Open Flow 829				Mscf @ 15.025				Angle of Slope θ		Slope, n .85				
Remarks:														
Approved by Division					Conducted by Hall			Calculated by Hall			Checked			

