

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special				Test Date 1-13-81											
Company El Paso Natural Gas Company			Connection Northwest Pipeline Corp.												
Pool So. Blanco			Formation Pictured Cliff		Unit San Juan 27-5										
Completion Date 12-15-80		Total Depth 5846		Plug Back TD 5828	Elevation 6504 GR.	Farm or Lease Name San Juan 27-5 Unit									
Csq. Size 7.000	Wt. 20.0	d 6.456	Set At 3506	Perforations: From 3228    To 3312		Well No. #35A									
Tbg. Size 1.660	Wt. 2.4	d 1.380	Set At 3309	Perforations: From                      To		Unit    Sec.    Twp.    Rye F      33    27    5									
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G. G. Dual				Packer Set At 3426		County Rio Arriba									
Producing Thru Tbg.		Reservoir Temp. °F θ	Mean Annual Temp. °F	Baro. Press. - P <sub>a</sub> 12		State New Mexico									
L	H	Cg 0.670	% CO <sub>2</sub>	% N <sub>2</sub>	% H <sub>2</sub> 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. hw	Temp. °F	Press. p.s.i.g.		Temp. °F	Press. p.s.i.g.	Temp. °F				
SI							780		782		29 Days				
1.	Choke		0.750	82		48			381						
2.															
3.															
4.															
5.															
RATE OF FLOW CALCULATIONS															
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd								
1	12,365		94	1.0117	0.9463	1.010	1124								
2.															
3.															
4.															
5.															
NO.	P <sub>t</sub>	Temp. °R	T <sub>f</sub>	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.										
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.										
2.					Specific Gravity Separator Gas _____ X X X X X X X X X										
3.					Specific Gravity Flowing Fluid _____ X X X X X										
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.										
5.					Critical Temperature _____ R _____ R										
$P_c = 794$ $P_c^2 = 630436$															
NO	P <sub>t</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3245$		(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2698$								
1		393	154449	475987											
2															
3															
4															
5															
$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1427$															
Absolute Open Flow _____ 1427 _____ Mcfd @ 15.025						Angle of Slope θ _____			Slope, n _____ 0.85						
Remarks: Gas Vented = 156 MCF. The Well Produced Dry Gas During The Test.															
Approved By Division				Conducted By: Lyle Nation				Calculated By: H. E. McAnally				Checked By:			