

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-24-82	
Company Robert L. Bayless		Connection Gas Company of New Mexico	
Pool Ballard Pictured Cliffs		Formation Pictured Cliffs	
Completion Date 05-17-82		Total Depth 2599 ft.	
Plug back TD 2504 ft.		Elevation 7001' GL	
Farm or Lease Name AXI Apache		Well No. P-5	
Csq. Size 2.875	Wt. 6.5#	d 2.441	Set At 2583
Perforations: From 2470 To 2482		Well No. P-5	
Tng. Size	Wt.	d slim hole	Set At
Perforations: From To		Unit Sec. Twp. Rge. F 20 23N 4W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At none	
County Sandoval		State N.M.	
Producing Thru casing		Reservoir Temp. °F #	
Mean Annual Temp. °F		Baro. Press. - P _a est. 12 psia	
L	H	Gg .650	% 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. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI	7 days								664		
1.	2 inch			14					14	60°	3 hrs.
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.3650		26	1.00	.9608	1.005	310
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	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
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

NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²
1		31	988	455988
2				
3		calculated		
4				
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{1.00217}{1.00217 - 0.988} = 1.00217$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 311$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{1.00183}{1.00183 - 0.988} = 1.00183$$

Absolute Open Flow	311	Mcf/d @ 15.025	Angle of Slope θ	Slope, n .75
Remarks:				

Approved By Division	Conducted By: Joe Elledge	Calculated By: Joe Elledge	Checked By: Kevin H. McCord
----------------------	------------------------------	-------------------------------	--------------------------------