

NEW MEXICO CONSOLIDATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form 5-1-12
Revised 9-1-63

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 12/10/73		DEC 19 1973					
Company Atlantic Richfield				Connection Southern Union Gas Company							
Pool Undesignated				Formation Cisco		Unit B.E.C. ARTESIA, OFFICE					
Completion Date 07/01/73		Total Depth 11,150		Plug Back TD 9586		Elevation 3185 DF					
Casing Size 4-1/2"		Set At 11.6		Perforations: From 9280 To 9455		Well No. 1					
Tubg. Size 2-3/8"		Set At 4.7		Perforations: From Open To Ended		Unit Sec. Twp. Rge. G 15 21S 26E					
Type Well - Single - Brdenhead - G.C. or G.O. Multiple Single				Packer Set At 9217		County Eddy					
Producing Thru Tbg.		Reservoir Temp. °F 140° @ 9290		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2					
L 9217		H 9217		G _g 0.5984		Prover 4"					
				% CO ₂ Trace		% H ₂ S 0					
				% N ₂ 0.04		Meter Run 4"					
						Taps Flg.					
FLOW DATA				TUBING DATA		CASING DATA					
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	Duration of Flow
SI							1466				72hr. S.I.
1.	4 x 1.000			659.2	16	64.34	1398	64	Packer		3.5 hr.
2.	4 x 1.000			667.4	36	68.34	1366	64			2.0
3.	4 x 1.000			675.7	47.61	72.45	1310	66			2.25
4.	4 x 1.000			675.7	63	71.42	1240	63			2.75
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	4.753	103.7	672.4	.9962	1.293	1.059	672.5				
2	4.753	156.5	680.6	.9921	1.293	1.057	1008.8				
3	4.753	181.1	688.9	.9882	1.293	1.056	1161.5				
4	4.753	209.9	688.9	.9892	1.293	1.058	1350.5				
5											
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 132 Mcf/bbl.						
1	1.000	524	1.46	.892	A.P.I. Gravity of Liquid Hydrocarbons 56.3 Deg.						
2	1.010	528	1.48	.896	Specific Gravity Separator Gas .5984			XXXXXXXXXX			
3	1.030	533	1.49	.897	Specific Gravity Flowing Fluid XXXXX						
4	1.030	531	1.48	.894	Critical Pressure 671 P.S.I.A.			671 P.S.I.A.			
5					Critical Temperature 358 °R			365 °R			
P _c 1479.2 P _c ² 2188.03					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.471$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.063$						
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²							
1	1991.50		2003.8	184.22							
2	1902.20		1930.4	257.63							
3	1750.85		1788.1	399.93							
4	1570.50		1621.2	566.16							
5											
Absolute Open Flow 2396 Mcfd @ 15.025					Angle of Slope @		Slope, n .426				
Remarks: 30 to 60 days after connection											
Approved By Commission:			Conducted By: G. Feist-J. Guy			Calculated By: G. Feist-J. Guy		Checked By: <i>[Signature]</i>			

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