

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 8-2-82		AUG 1 1982			
Company Hondo Oil and Gas Company		Connection Not Connected		O. C. D.			
Pool N. Turkey Track Morrow		Formation Morrow Gas		ARTESIA, OFFICE			
Completion Date 8-2-82		Total Depth 11425		Plug Back TD 11326			
Elevation 3421.4 GR		Farm or Lease Name Turkey 4 State					
Csg. Size 5.5	Wt. 17	d 4.892	Set At 11425	Perforations: From 11136 To 11167			
Well No. 1							
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 11001	Perforations: From Open To Ended			
Unit F	Sec. 4	Twp. 19S	Rge. 29E				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single			Packer Set At 11001		County Eddy		
Producing Thru Tbg.		Reservoir Temp. °F 175° 11152'		Mean Annual Temp. °F 60			
Baro. Press. - P _c 13.2		State New Mexico					
L 11001	H 11001	Gg .7167	% CO ₂ 6.893	% N ₂ 1.180	% H ₂ S -0-		
Prover		Meter Run 4"		Taps Flg.			
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w		
1	4 x 1			317	8.5		
2	4 x 1			319	16		
3	4 x 1			317	15		
4	4 x 1			343	48		
5	4 x 1			564	43		
TUBING DATA							
				Press. p.s.i.g.	Temp. °F		
				3132			
				3012	73		
				2957	73		
				2903	73		
				2725	73		
				2570	73		
CASING DATA							
				Press. p.s.i.g.	Temp. °F		
				Pkr.			
					66 Hrs.		
					1 Hr.		
					1 Hr.		
					1 Hr.		
					1 Hr.		
					1 Hr.		
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	52.98	330.2	.9723	1.181	1.029	298
2	4.753	72.91	332.2	.9741	1.181	1.030	411
3	4.753	70.38	330.2	.9786	1.181	1.030	398
4	4.753	130.76	356.2	.9706	1.181	1.031	734
5	4.753	157.54	577.2	.9768	1.181	1.054	910
NO.	R _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1	.47	550	1.44	.945	A.P.I. Gravity of Liquid Hydrocarbons 54.8° @ 60° F _____ Deg.		
2	.48	548	1.43	.942	Specific Gravity Separator Gas .717 _____ XXXXXXXXXX		
3	.47	543	1.42	.943	Specific Gravity Flowing Fluid XXXXXX		
4	.51	552	1.44	.940	Critical Pressure 697 _____ P.S.I.A. _____ P.S.I.A.		
5	.83	545	1.42	.900	Critical Temperature 383 _____ R _____ R		
P _c 4422.2 P _c ² 19555.85							
NO.	P _t ²	* P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.24$		
1		4289.2	18397.24	1158.61	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.24$		
2		4199.2	17633.28	1922.57			
3		4140.2	17141.26	2414.59			
4		3891.2	15141.44	4414.41			
5		3678.2	13529.16	6026.69			
AOR = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2049$							
Absolute Open Flow 2049 Mcfd @ 15.025					Angle of Slope @ 55° 39'		Slope, n .684
Remarks: *BHP measured at mid point of perforations 11152'. Produced 2 bbls. of distillate and 0 bbls. water.							
Approved By Division		Conducted By: L. Ray Sutton		Calculated By: J. Cogburn		Checked By: S. D. Smith	