

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-85

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-12-84		RECEIVED BY SEP 18 1984 O. C. D. ARTESIA, OFFICE			
Company <i>John H. Hamon</i> Hamon Oil Co.				Connection To Air					
Pool Dublin Ranch, Atoka				Formation Atoka					
Completion Date 7-10-84		Total Depth 12,950'		Plug Back TD 11,900		Elevation 3066 Gr.		Farm or Lease Name Union 35 Fed.	
Casing 7" Wt. 26# Liner 4 1/2" 13.5		d 6.276 Set At 10,923 // 324 12,950		Perforations: From 11,514' to 11,661'		Well No. 1			
Tub. Size 2 7/8"		Wt. 6.4# d 2.441 Set At 11,436		Perforations: From Open to - Ended		Unit Sec. Twp. Rge. E 35 22S 28E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,400		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 188° 11,430		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 11,430		H 11,430		G _g .580		% CO ₂ .388		% N ₂ .638	
						% H ₂ S		Prover	
								Meter Run 2,900	
								Taps Flange	

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							4960		PKR	CHOKE	72 Hrs
1.	2.900	X	1.500	615	4	77°	4664	77°		4/64	1 Hr
2.	2.900	X	1.500	620	14	72	4250	78		6.5/64	1 Hr
3.	2.900	X	1.500	610	26	73	3970	78		9/64	1 Hr
4.	2.900	X	1.500	615	44	70	3485	78		11/64	1 Hr
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	11.23	50.13	628.2	.9840	1.313	1.046	761
2	11.23	94.15	633.2	.9887	1.313	1.048	1438
3	11.23	127.29	623.2	.9877	1.313	1.047	1941
4	11.23	166.26	628.2	.9905	1.313	1.048	2545
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio TSTM	Mcf/bbl.
1	.93	537	1.53	.914	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	.94	532	1.52	.911	Specific Gravity Separator Gas .580	XXXXXXX
3	.93	533	1.52	.912	Specific Gravity Flowing Fluid XXXXX	
4	.93	530	1.51	.910	Critical Pressure 672	P.S.I.A.
5					Critical Temperature 350	R

P _r 4973.2 P _c ² 24732.7				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.992$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.7645$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.491$ Post ID-2 9-21-84 Kemp & BK		
1		4678.2	21885.6	2847.1			
2		4268.5	18220.1	6512.6			
3		3989.9	15919.3	8813.4			
4		3509.5	12316.6	12416.1			
5							

Absolute Open Flow 4,491 Mcfd @ 15.025		Angle of Slope θ 50.5		Slope, n .824	
Remarks:					
Approved By Commission:		Conducted By: W.S.		Calculated By: R.R.	
				Checked By: R.R.	