

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special										Test Date	
Company JAKE L. HAMON ✓					Connection LLANO					RECEIVED APR 19 1983 O. C. D. ARTESIA OFFICE	
Pool CARLSBAD-MORROW-SOUTH					Formation MORROW						
Completion Date 3/8/83			Total Depth 12,007		Plug Back TD 11,966		Elevation 3240 K B		Farm or Lease Name State K 3328		
Coq. Size 5 1/2"	Wt. 20	d 4.653	Set At 12,007		Perforations: From 11,852 To 11,966		Well No. #1		Unit Sec. Twp. Rge. C 36 23S-26E		
Thq. Size 2-3/8"	Wt. 4.7	d 1.995	Set At 11,750		Perforations: From To		County EDDY		State NEW MEXICO		
Type Well - Single - Bradenhead - G.C. or G.O. Multiple SINGLE					Packer Set At 11,750		Prover Meter Run Taps 2.0 Flg				
Producing Thru TUBING		Reservoir Temp. °F 190 11,852		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO			
L 11,852	H 11,852	G _g .5805	% CO ₂ 1.411		% N ₂ .165		% H ₂ S		Prover		
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	Duration of Flow
SI							2655				24 hr.
1.	2.0 X 1.50			555	9.0"	50/75°	2470		PKR		1 hr.
2.	2.0 X 1.50			580	15.0"	52/78°	2365		PKR		1 hr.
3.	2.0 X 1.50			630	21.0"	47/71°	2417		PKR		1 hr.
4.	2.0 X 1.50			710	31.0"	41/62°	1860		PKR		1 hr.
5.											
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _h	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	12.76	71.51	568.2	.9859	1.312	1.041	1229				
2	12.76	94.33	593.2	.9831	1.312	1.043	1619				
3	12.76	116.49	646.2	.9896	1.312	1.028	1984				
4	12.76	149.73	723.2	.9981	1.312	1.057	2644				
5											
NO.	I _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf/bbl.						
1	.85	535	1.53	.922	A.P.I. Gravity of Liquid Hydrocarbons DRY GAS Deg.						
2	.89	538	1.54	.920	Specific Gravity Separator Gas .5805 XXXXXXXXXX						
3	.97	531	1.52	.946	Specific Gravity Flowing Fluid XXXXXX						
4	1.08	522	1.50	.895	Critical Pressure 668 P.S.I.A. --- P.S.I.A.						
5					Critical Temperature 349 R --- R						
$P_c = 2668.2$ $P_c^2 = 7119.3$											
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.100$						
1		2501.4	6251.0	862.3	$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.515$						
2		2397.0	5745.6	1373.7							
3		2457.6	6039.8	1079.5							
4		1933.9	3730.0	3389.3	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.006$						
5											
Absolute Open Flow 4,006 Mcfd @ 15.025					Angle of Slope 60.75°			Slope, 560			
Remarks: MADE NO FLUID DURING TEST											
Approved By Division			Conducted By: BABER WELL SER. CO.			Calculated By: B.R.			Checked By: MARK ROWLAND		