

N MEXICO OIL CONSERVATION COM. ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

File ✓
C-122 Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-30-79		JUN 15 1979	
Company Hondo Oil & Gas Company				Connection Not Connected			
Pool <i>Wildcat Morrow Sand</i> Undesignated				Formation Morrow Sand		Unit O. C. C. ARTEGIA, OFFICE	
Completion Date 5-30-79		Total Depth 10,610		Plug Back TD 10,568		Elevation 3632 GR	
Csg. Size 4.5		Wt. 11.6		Set At 10,610		Perforations: From 10,322 To 10,435	
Tbg. Size 2.375		Wt. 4.7		Set At 10,312		Perforations: From Open To Ended	
Type Well - Single - Production - G.G. or G.O. Multiple Single				Packer Set At 10,272		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 158 @ 10378		Mean Annual Temp. °F 60°F		Baro. Press. - P _a 13.2	
L 10312		H 10312		Gg .650		% CO ₂ .657	
				% N ₂ .632		% H ₂ S -0-	
				Prover		Meter Run 4"	
						FLG	

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							2805		PKR		SI 187 Hrs
1.	4" x 1"			338	3.5	101	2603	75			1 Hr
2.	4" x 1"			358	9.5	102	2479	77			1 Hr
3.	4" x 1"			380	28.0	85	2105	78			1 Hr
4.	4" x 1"			410	46.0	73	1747	79			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, Mgd
1	4.753	35.06	351.2	.9628	1.240	1.027	204
2	4.753	59.38	371.2	.9619	1.240	1.029	346
3	4.753	104.93	393.2	.9768	1.240	1.034	625
4	4.753	139.52	423.2	.9877	1.240	1.139	925
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.52	561	1.51	.948	12.5	56.2	.650	X X X X X X X X	673	371
2	.55	562	1.51	.945				X X X X X		
3	.58	545	1.47	.936						
4	.63	533	1.44	.926						
5										

P _c 3800.2 P _c ² 14441.5				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7055$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6865$	
NO.	P _f ²	P _w ²	P _c ² - P _w ²				
1	3553.2	12625.2	1816.3				
2	3358.2	11277.5	3164.0				
3	2930.2	8586.1	5855.4				
4	2444.2	5974.1	8467.4				
5							

Absolute Open Flow 1560 Mgd @ 15.025				Angle of Slope @ 45.6		Slope, n 0.979	
Remarks: BHP measured at mid-point of perms							
Produced 7 Bbls. distillate during test							
Approved By Commission:		Conducted By:		Calculated By:		Checked By:	
		C. Johnson		J. Cogburn		L. C. Hudry	