

N MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

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C-122 file*

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-12-79		FEB 15 1979	
Company Hondo Oil & Gas Company ✓					Connection Not Connected		O. C. C. ARTERIA OFFICE	
Pool <i>Winchester morrow</i> Undesignated					Formation Morrow		Unit	
Completion Date 1-29-79		Total Depth 11140		Plug Back TD 11081		Elevation 3382.05 GR		Farm or Lease Name State CB Com
Csg. Size 4.500	Wt. 11.6	d 4.000	Set At 11140	Perforations: From 11025 To 11029			Well No. 1	
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 11008	Perforations: From Perf To Nipple			Unit Sec. Twp. Rye. O 29 19S 28E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 11008		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 179 @ 11027		Mean Annual Temp. °F 60°F		Baro. Press. - P _a 13.2		State New Mexico
L 11008	H 11008	Cg 0.675	% CO ₂ 0.887	% N ₂ 0.326	% H ₂ S ----	Prover ----	Mater Run 4"	Taps Flg

FLOW DATA						TUBING DATA		CASING DATA		Duration	
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	of Flow
SI							4915		Pkr		64 Hr
1.	4	x	0.750	240	2.5	63	4841	53			1 Hr
2.	4	x	0.750	260	13.0	78	4416	63			1 Hr
3.	4	x	0.750	265	28.0	87	4221	67			1 Hr
4.	4	x	0.750	245	57.0	94	3916	68			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	2.661	25.16	253.2	0.9971	1.217	1.027	83
2	2.661	59.60	273.2	0.9831	1.217	1.026	195
3	2.661	88.26	278.2	0.9750	1.217	1.025	286
4	2.661	121.32	258.2	0.9688	1.217	1.022	389
5							

NO.	P _r	Temp. °R	T _r	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	0.38	523	1.38	0.949	39.708	54	0.675	XXXXXX	672	378
2	0.41	538	1.42	0.950				0.749		
3	0.41	547	1.45	0.952						
4	0.38	554	1.47	0.957						
5										

P _c 4928.2 P _c 24287.2				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.74475$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.74475$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²			
1		4854.2	23563.3	723.9			
2		4429.2	19617.8	4669.4			
3		4234.2	17928.5	6358.7			
4		3929.2	15438.6	8848.6			
5							

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1067.7$

1067.7

Absolute Open Flow <u>1067.7</u> Mcfd @ 15.025		Angle of Slope ϕ <u>45°</u>	Slope, n <u>1.000</u>
Remarks:			
Approved By Commission:		Conducted By: R. Dailey	Calculated By: J. Cogburn
		Checked By: L. C. Hudry	