

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

Form C-122
Revised 9-1-65

MAY 7 1984

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5/1/84		O. C. D. ARTESIA, OFFICE	
Company HNG Oil Company			Connection Transwestern Pipeline		
Pool 6-24-84 wildcat			Formation Atoka		
Completion Date 3-1-83		Total Length 12,820'		Plug Back TD 11670	
Elevation 3121.4 GL		Turn of Lease Line Loving 36 State		Well No. 1	
Csg. Size 7"	Wt. 23#	Set At 10500'	Perforations: From 11409 To 11456		Unit N 36 23s 27e
Tub. Size 2 3/8	Wt. 4.7	Set At 10278	Perforations: From open To ended		Sec. 36
Type Well - Single - Brokenhead - G.G. or G.O. Multiple Single Gas			Packer Set At 10278		County Eddy
Producing Thru Tbg.		Reservoir Temp. °F 188 @ 11433	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State New Mexico
L 11433	H 11433	G _g .6133	% CO ₂ .514	% N ₂ 1.257	% H ₂ S Prover
				Meter Run 4"	Flag Flg.
FLOW DATA					
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw
SI					
1.	4	x	1.250	510	3
2.	4	x	1.250	510	6
3.	4	x	1.250	530	12
4.	4	x	1.250	530	23
5.					
TUBING DATA					
				Press. p.s.i.g.	Temp. °F
				2500	63
				2390	62
				2285	62
				2130	62
				1895	62
CASING DATA					
				Press. p.s.i.g.	Temp. °F
				PKR	
				PKR	
				PKR	
				PKR	
				PKR	
RATE OF FLOW CALCULATIONS					
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g
1	7.469	39.62	523.2	.9840	1.277
2	7.469	56.03	523.2	.9840	1.277
3	7.469	80.74	543.2	.9840	1.277
4	7.469	111.77	543.2	.9840	1.277
5					
Super Compress. Factor, F _{pv}					
					1.044
					1.044
					1.045
					1.045
Rate of Flow Q, Mcd					
					388
					549
					792
					1096
Dry					
NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio
1.	.78	537	1.48	.918	A.P.L. Gravity of Liquid Hydrocarbons
2.	.78	537	1.48	.918	Specific Gravity Separator Gas
3.	.81	537	1.48	.915	Specific Gravity Flowing Fluid
4.	.81	537	1.48	.915	Critical Pressure
5.					Critical Temperature
P _c * 2606.8 P _c ² 6795.5					
NO.	BHP	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.540$
1	3269.2	2495.7	6228.5	567.0	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.010$
2	3147.2	2400.2	5760.9	1034.6	
3	2946.2	2243.2	5031.8	1763.7	
4	2665.2	2029.9	4120.5	2675.0	
5	3409.2	SIP			
Absolute Open Flow 2,203 Mcd @ 15.025					
Angle of Slope 53.25°					
Slope, n .749					
Remarks: * Calculated from bottom-hole pressures.					
Approved By Commission:		Conducted By:		Checked By:	
		Jarrel Well Testing		Rick Pagan	