

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST

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FOR GAS WELL
APR 9 1986

Form C-122
Revised 9-1-65

clsf. file

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 3/27/86					O.C.D. ARTESIA, OFFICE							
Company Hondo Oil and Gas Company					Connection none												
Pool Red Lake Penn <i>WIC Packer</i>					Formation Morrow Gas <i>Packer</i>					Unit							
Completion Date 10/14/85			Total Depth 9811		Plug Back TD 9480		Elevation 3563 GL		Farm or Lease Name Mann Federal								
Csg. Size 5 1/2"	Wt. 17/15.5	d 4.653	Set At 9811'	Perforations: From 9251 To 9256				Well No. #1									
Thq. Size 2 3/8"	Wt. 4.7	d 1.901	Set At 9811'	Perforations: From 9251 To 9256				Unit F	Sec. 9	Twp. 18S	Rge. 27E						
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 9178'					County Eddy							
Producing Thru Tubing		Reservoir Temp. °F 144 @ 9480		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2		State New Mexico									
L	H	Gg	% CO ₂	% N ₂	% H ₂ S	Prover		Meter Run 4.026	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							2340		pkc		97 hrs						
1.	4" X .750"			408	13	88	2165	70	pkc		1 hr						
2.	4" X .750"			418	24	94	2080	70	pkc		1 hr						
3.	4" X .750"			420	39.5	98	1985	72	pkc		1 hr						
4.	4" X .750"			420	56	101	1905	72	pkc		1 hr						
5.																	
RATE OF FLOW CALCULATIONS																	
NO.	F _b	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd									
1		2.661	74.00	421.2	.9741	1.2394	1.036	246.3									
2		2.661	101.73	431.2	.9688	1.2394	1.034	336.1									
3		2.661	130.81	433.2	.9653	1.2394	1.034	430.6									
4		2.661	155.75	433.2	.9628	1.2394	1.033	510.9									
5																	
NO.		P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 43.39 Mcf/bbl.											
1.		.623	548	1.471	.932	A.P.I. Gravity of Liquid Hydrocarbons 57 Deg.											
2.		.637	554	1.487	.935	Specific Gravity Separator Gas .651		XXXXXXXXXX									
3.		.640	558	1.498	.936	Specific Gravity Flowing Fluid XXXXX											
4.		.640	561	1.506	.937	Critical Pressure 676.5 P.S.I.A.		P.S.I.A.									
5.						Critical Temperature 372.6 R		R									
P _c 3194.2		P _c ² 10202.9															
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 11.5824$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.7955$										
1	3053.2	9322.0	880.9						Post FD-2								
2	2966.2	8798.3	1404.6						5-16-86								
3	2847.2	8106.5	2096.4						Camp & BK								
4	2709.2	7339.8	2863.1		AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1181$												
5																	
Absolute Open Flow 1181 Mcfd @ 15.025					Angle of Slope @		Slope, n .640										
Remarks: BHP recorded at 9253' (mid point of perforations)																	
Well produced 1.46 bbls of condensate, 0 bbls of water during test.																	
Approved By Commission:			Conducted By: L. Malone			Calculated By: L. Malone			Checked By: L. Briley								