

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

Form O-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date JAN 12 1977	
Company Roger C. Hanks				Connection None		O. C. C.	
Pool Undesignated				Formation Morrow		ARTESIA, OFFICE	
Completion Date 12-11-76		Total Depth 9360'		Plug Back TD 9285'		Elevation 3601' GL	
Csg. Size 5 1/2"		Wt. 17.0		Set At 4.892		Perforations: From 9126' To 9148'	
Tbg. Size 2 7/8"		Wt. 6.5		Set At 2.441		Perforations: From None To None	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 9068'		Unit Eddy	
Producing Thru Tubing		Reservoir Temp. °F 188 @ 9000'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 9137		H ---		G _g 0.5945		% CO ₂ 0.730	
				% N ₂ 0.158		% H ₂ S 0.000	
				Prover X		Meter Run X	
				Taps F			

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. DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2857		PACKER		72.0
1.	4	10/64	1.000	1050	64	130	2637	-			2.0
2.	4	9/64	1.000	990	54	130	2667	-			1.0
3.	4	8/64	1.000	930	38	130	2712	-			1.0
4.	4	7/64	1.000	840	23	130	2750	-			1.0
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.	4.753	260.85	1063.2	0.9388	1.296	1.049	1582.39
2.	4.753	234.89	1003.2	0.9388	1.296	1.047	1422.19
3.	4.753	189.31	943.2	0.9388	1.296	1.044	1142.93
4.	4.753	143.10	853.2	0.9388	1.296	1.040	860.63
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	1.58	590	1.69	.908	Dry Gas		
2.	1.49	590	1.69	.913	A.P.I. Gravity of Liquid Hydrocarbons ---		
3.	1.40	590	1.69	.918	Specific Gravity Separator Gas 0.5945		X X X X X X X X
4.	1.26	590	1.69	.925	Specific Gravity Flowing Fluid X X X X X		
5.					Critical Pressure 675	P.S.I.A.	P.S.I.A.
					Critical Temperature 350	R	R

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1		3380.2	11425.8	1478.1
2		3415.2	11663.6	1240.3
3		3462.2	11986.8	917.1
4		3508.2	12307.5	596.4
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 8.730$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 6804$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4.30$

POSTED ID-2

Absolute Open Flow 6804 Mcfd @ 15.025	Angle of Slope 56° 6'	Slope, n 0.672
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Remarks: *** BHP @ (-5536') 9137' used for Pressure Calculations**

Approved By Commission:	Conducted By: Jarrel Services, Inc.	Calculated By: Joe A. Coleman	Checked By: Joe A. Coleman
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