

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

JUL 30 1979

File #
 12 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special O.C.C. ARTESIA, OFFICE				Test Date 5-21-79		SPUD DATE: N/A	
Company Ralph Mix				Connection None			
Pool Undesignated <i>Atoka Perm</i>				Formation Morrow		Unit N	
Completion Date 5-15-79		Total Depth 9385		Plug Back TD 9385		Elevation N/A	
Csg. Size 5 1/2		Wt. 17.0		Set At 9385		Perforations: From 9120 To 9256	
Tub. Size 2 1/2		Wt. 6.5		Set At 9003		Perforations: From open To ended	
Type Well - Single - Prodenhead - G.C. or G.O. Multiple Single				Packer Set At 9003		Well No. 1	
Producing Thru Tubing		Reservoir Temp. °F 159 @ 9188		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 9188		H 9188		Gg .629		% CO ₂ .73	
				% N ₂ 6.03		% H ₂ S 0	
				Prover		Meter Run	
				Type		County Eddy	
						State New Mexico	

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	Positive Chokes						2535				
1.		8/64		1720		65	1720				1 hr.
2.		9/64		1295		66	1295				1 hr.
3.		10/64		887		66	887				1 hr.
4.		11/64		521		65	521				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 Compens. Factor F _{sp}	Rate of Flow Q, Mhd
1	.2618		1733.2	.9952	1.261	1.146	653
2	.3346		1308.2	.9943	1.261	1.116	612
3	.4173		900.2	.9943	1.261	1.081	509
4	.5090		534.2	.9952	1.261	1.048	358
5							

NO.	P _t	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.	2.58	525	1.44	.761	None		.629			
2.	1.95	526	1.44	.803						
3.	1.34	526	1.44	.856						
4.	.80	525	1.44	.910						
5.										

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1	2210.2	1760.9	3100.8	3297.5
2	1640.2	1315.2	1729.8	4763.5
3	1120.2	905.5	821.7	5671.6
4	750.2	611.8	374.3	6119.0
5	3256.2			

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 1.061$

(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.030$

$A \cdot B = 0 \left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = .369$

absolute Open Flow 369

Mhd @ 14.025

Angle of Slope @ 63.5

Slope, n .500

Remarks: Well plotted backwards due to decreasing pressure and volume. Bottom hole bomb set at 9000'. Made no fluid during test. * Bottom Hole shut-in pressure.

Approved By Commission:	Conducted By: Marshall Morris	Calculated By: Rob McMurrafin	Checked By:
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