

well file

ORIGINAL

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
Form O-122
Revised 9-1-65

MAY 8 1973

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5-1-73		O. C. C. ARTESIA OFFICE	
Company Monsanto Company		Connection None			
Pool Burton Flat (Morrow)		Formation Morrow		Unit G	
Completion Date 5-1-73		Total Depth 11,510		Plug Back TD 11,432	
		Elevation 3199 DF		Farm or Lease Name Miller Federal	
Csg. Size 5 1/2	Wt. 17	d 4.892	Set At 11,510	Perforations: From 11,304 To 11,310	
Thg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 11,137	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual				Packer Set At 11,126	
Producing Thru Tubing		Reservoir Temp. °F 161° @ 11,307		Mean Annual Temp. °F 60	
		Baro. Press. - P _a 13.2		State New Mexico	
L 11,307	H 11,307	G _g .594	% CO ₂	% N ₂	% H ₂ S
Prover			Meter Run X		
Taps					
FLOW DATA					
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw
1	4.026	1.5	300	20	73
2	4.026	1.5	420	46	75
3	4.026	1.5	650	55	73
4	4.026	1.5	810	70	74
5					
TUBING DATA					
				Press. p.s.i.g.	Temp. °F
				3668	68
				3244	57
				3036	59
				2730	61
				2368	62
CASING DATA					
				Press. p.s.i.g.	Temp. °F
				Packer	
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	10.84	79.14	313.2	.9877	1.298
2	10.84	141.16	433.2	.9859	1.298
3	10.84	190.98	663.2	.9877	1.298
4	10.84	240.04	823.2	.9868	1.298
5					
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio
1	.46	.953	533	1.50	171 Mcf/bbl.
2	.64	.954	535	1.51	A.P.I. Gravity of Liquid Hydrocarbons 50.2 @ 60°F
3	.99	.953	533	1.50	Specific Gravity Separator Gas .594
4	1.22	.954	534	1.51	Specific Gravity Flowing Fluid XXXXX
5					Critical Pressure 672 P.S.I.A.
					Critical Temperature 354 R
P _c 3681.2 P _c ² 13551					
NO.	P _t ²	P _w	R _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{P_t^2 - P_w^2} = \frac{13551}{7739}$
1		3263.3	10649	2902	(2) $\left[\frac{P_c^2}{P_t^2 - R_w^2} \right]^n = 1.5914$
2		3080.4	9488	4063	
3		2760.7	7621	5930	
4		2410.8	5812	7739	
5					
Absolute Open Flow 5431 Mcfd @ 15.025					
Angle of Slope @ 50° 20'					
Slope, n .829					
Remarks:					
Approved By Commission:					
Conducted By: D. Forrest Jones					
Calculated By: H. L. Hagler					
Checked By:					

WEST TEXAS ENGINEERING SERVICE, INC.