

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

Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 10-10-73		OCT 23 1973	
Company Monsanto Company				Connection Transwestern Pipeline Company		D. C. C.	
Pool Burton Flat Morrow				Formation Morrow		Unit ARTESIA, OFFICE F	
Completion Date 1-22-73		Total Depth 11,600		Plug Back TD 10,549		Elevation 3208 KB	
Csg. Size 5 1/2		Wt. 17#		Set At 10,595		Perforations: From 11,275 To 11,476	
Trq. Size 2 7/8 EUE		Wt. 6.5		Set At 11,016		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 11,010		Farm or Lease Name Burton Flat Deep Unit	
Producing Thru Tuging		Reservoir Temp. °F 8		Mean Annual Temp. °F 8		Baro. Press. - P _a New Mexico	
L 11346		H 11346		G _g .593		% CO ₂ 0 % N ₂ 0 % H ₂ S 0	
				Prover		Meter Run X	
						Taps	

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							3438	75			
1.	4"		2.25"	815	6	80	2440	78			2 Hrs
2.	4"		2.25	815	11	75	2160	83			2 Hrs
3.	4"		2.25	825	26	75	1818	83			2 Hrs
4.	4"		2.25	835	36	72	1608	82			2 Hrs
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	25.64	69.928	828.2	.9813	1.0059	1.064	1898
2	25.64	95.447	828.2	.9859	1.0059	1.061	2575
3	25.64	147.625	838.2	.9859	1.0059	1.062	3986
4	25.64	173.710	838.2	.9887	1.0059	1.062	4704
5.							

NO. P _r Temp. °R T _r Z					Gas Liquid Hydrocarbon Ratio <u>101.56</u> Mcf/bbl.		
1. 1.23 538 1.52 .883					A.P.I. Gravity of Liquid Hydrocarbons <u>55</u> Deg.		
2. 1.23 543 1.53 .889					Specific Gravity Separator Gas <u>XXXXXXX</u>		
3. 1.25 543 1.53 .887					Specific Gravity Flowing Fluid <u>XXXXX</u>		
4. 1.26 542 1.53 .886					Critical Pressure <u>672</u> P.S.I.A.		
					Critical Temperature <u>354</u> °R		

P _r 3451.2 P _c ² 11911				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{11911}{8837}$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.348$	
NO.	P _w ²	P _w	P _w ²	P _c ² - P _w ²			
1	2473.6	6119	5792				
2	2189.3	4793	7118				
3	1886.5	3559	8352				
4	1753.4	3074	8837				
5							

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 6340$			
Absolute Open Flow <u>6340</u> Mcfd @ 15.025		Angle of Slope <u>45°</u>	
		Slope, n <u>1.0</u>	

Approved by Commission:		Conducted By: <u>W. L. Hagler</u>		Calculated By: <u>H. L. Hagler</u>		Checked By:	
		WEST TEXAS ENGINEERING SERVICE, INC.					