

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

1-57
1-File
1-0-122
Form C-122
Revised 1-1-63
RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 6-30-78		JUL 12 1978		
Company Monsanto Company ✓				Connection Llanó			O. C. C. ARTESIA OFFICE		
Pool Revelation-Morrow				Formation lower Morrow			Unit G		
Completion Date 1-13-78		Total Depth 11038		Plug Back TD 10825		Elevation RKB 3609		Farm or Lease Name Catclaw Federal	
Cnc. Size 5.50"		Wt. 17#		Set At 4.892		Perforations From 10782 To 776		Well No. 1	
Pkg. Size 2.875" EUE		Wt. 6.5#		Set At 2.441		Perforations From 10660 To 654		Unit Sec. Twp. Rge. G 10 22S 25E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 10333		County Eddy		
Producing Thru Tubing		Reservoir Temp. °F 163 @ 11038		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 10718		H 10718		G _g .600		% CO ₂ 0.00		% N ₂ 0.00	
						% H ₂ S 0.00		Provor Meter Run X	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Provor 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							3300	80	0		2160 hr
1.	2.00"	x	1.50"	550	14	90	670	93	0		2 hr
2.	2.00"	x	1.50"	487	16	91	640	95	0		2 hr
3.	2.00"	x	1.50"	461	18	93	610	95	0		2 hr
4.	2.00"	x	1.50"	426	20	95	570	98	0		2 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	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, Mcf/d
1	12.76	88.796	550.2	.9723	1.291	1.040	1461
2	12.76	89.460	500.2	.9715	1.291	1.040	1489
3	12.76	92.388	474.2	.9697	1.291	1.040	1535
4	12.76	93.723	439.2	.9680	1.291	1.039	1554
5							

NO.	P _r	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.	.84	550	1.54	.925	730	47.0	.600	X X X X X	671	358
2.	.84	551	1.54	.925						
3.	.84	553	1.54	.925						
4.	.84	555	1.55	.926						
5.										

P _r 3313.2 P _c ² 10977				
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		878.4	772	10205
2		842.5	710	10267
3		806.6	651	10326
4		758.6	575	10402
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.07565$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1671$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.07565$$

Absolute Open Flow	1671	Mcf/d @ 15.025	Angle of Slope @	45°	Slope, n	1.00
Remarks:						
Approved By Commission: Conducted By: WEST TEXAS Calculated By: Checked By:						