

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRE-TURE TEST FOR GAS WELL

Form O-11
 Rev. 6-1-66

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-16-77	
Company Cleary Petroleum Corporation				Connection			
Well 14080				Formation Morrow			
Completion Date		Total Depth 14080		Plug back TD 14032		Elevation 3735 D. F.	
Casing Size 5.50"		WT. 20.00#		Set At 14080		Perforations From 13688 To 14027	
Casing Size 2.875EUE		WT. 6.50#		Set At 13565		Perforations From To	
Type Well - Single - Bronthead - G.C. or G.O. Multiple Single Completion						Form or Lease Name New Mexico Federal	
Producing Thru Tubing		Reservoir Temp. °F 285		Mean Annual Temp. °F 60		Base Press. - P ₀ 13.2	
L 13796		H 13796		G _g 0.722		Prover 4"	
				% CO ₂ 0.71		% N ₂ 0.32	
				% H ₂ S 0.00		Meter Run 4"	
						Flange	

FLOW DATA						TUBING DATA		CASING DATA		Direction 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	Direction of Flow
SI							4470	75	Packer		72 Hrs.
1.	4.00		1.50	475	88.00"	88	2800	72			1.00 Hr.
2.	4.00		1.50	466	52.50"	106	2780	68			1.00 Hr.
3.	4.00		1.50	477	41.50"	118	3220	68			1.00 Hr.
4.	4.00		1.50	479	38.00"	118	3285	68			1.00 Hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mgd
1.	10.84	207.272	488.20	0.9741	1.1769	1.0520	2710
2.	10.84	158.613	479.20	0.9585	1.1769	1.0440	2025
3.	10.84	142.630	490.20	0.9485	1.1769	1.0410	1797
4.	10.84	136.761	492.20	0.9485	1.1769	1.0410	1723
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	198836	Mcf/Std.
1.	0.73	549	1.39	0.893	A.P.I. Gravity of Liquid Hydrocarbons	46.30	Deg.
2.	0.71	566	1.44	0.910	Specific Gravity Separator Gas	0.722	X X X X X X X X
3.	0.73	578	1.47	0.918	Specific Gravity Flowing Fluid	X X X X X	0.738
4.	0.73	578	1.47	0.918	Critical Pressure	671	P.S.I.A. 665
5.					Critical Temperature	394	R 424

P _t	4483.2	P _w	20099
NO.	P _t ²	P _w ²	P _t ² - P _w ²
1.	3690.7	13621	6478
2.	4016.1	16129	3970
3.	4123.9	17007	3093
4.	4153.7	17253	2846
5.			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.10266$

ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8408$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.10266$

Absolute Open Flow	8408	Mgd @ 15.025	Angle of Slope	45.0°	Slope, n	1.00
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Remarks: Bottom Hole Pressure measured with Amerada Type RPG-3 Instrument No. 34764.
 Wellhead Pressure measured with Dead Weight Gauge.