

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

Form O-1122
Revised 6-1-77

RECEIVED

NOV 07 1980

☒ Initial ☐ Annual ☐ Special		Date: 10/20/80		NOV 07 1980 O. C. D. ARTESIA OFFICE	
Company: <u>Tenneco Oil Company</u>			Location: <u>Llano</u>		
Well: <u>CatClaw Draw</u> <i>Morrow</i>			Formation: <u>Morrow</u>		
Completion Date: <u>8/27/80</u>		Total Depth: <u>10869'</u>		Elevation: <u>3351'</u>	
Well Size: <u>5 1/2"</u>		Set At: <u>4.892</u>		Perforations: <u>Open Ended</u>	
Well Size: <u>2 3/8"</u>		Set At: <u>1.995</u>		Perforations: <u>Open Ended</u>	
Type Well - Single - Broadhead - G.G. or G.O. Multiple				Packer Set At: <u>10398'</u>	
Producing Thru: <u>Tubing</u>				Reservoir Temp. °F: <u>188 @ 10396'</u>	
Mean Annual Temp. °F: <u>60</u>				Baro. Press. - <u>13.2</u>	
L: <u>10457</u>		H: <u>-</u>		Gg: <u>0.585</u>	
% CO ₂ : <u>0.754</u>		% N ₂ : <u>0.223</u>		% H ₂ S: <u>-</u>	
Prover: <u>3 X 0.750</u>		Meter Run: <u>F</u>		County: <u>Eddy</u>	
State: <u>New Mexico</u>					

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	
1	3	0.750	560	5	69	1437	67	PACKER			30 Min
2	3	0.750	560	12	75	1423	68				30 Min
3	3	0.750	560	24	85	1401	68				45 Min
4	3	0.750	560	50	90	1367	67				30 Min
5	3	0.750	560	85	90	1327	67				60 Min

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, Fpv	Rate of Flow Q, Mscf/d
1	2.672	67.07	573.2	0.9915	1.307	1.041	241.58
2	2.672	103.59	573.2	0.9859	1.307	1.039	370.58
3	2.672	146.71	573.2	0.9768	1.307	1.036	518.49
4	2.672	211.68	573.2	0.9723	1.307	1.035	743.93
5	2.672	276.05	573.2	0.9723	1.307	1.035	970.15

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas
1	0.85	529	1.53	0.922	A.P.I. Gravity of Liquid Hydrocarbons	-
2	0.85	535	1.55	0.926	Specific Gravity Separator Gas	0.585
3	0.85	545	1.58	0.931	Specific Gravity Flowing Fluid	X X X X X
4	0.85	550	1.59	0.933	Critical Pressure	675 P.S.I.A.
5	0.85	550	1.59	0.933	Critical Temperature	346 °R

NO.	P _r	P _w *	P _w ²	P _r ² - P _w ²
1	1835.2	3368.0	114.7	
2	1818.2	3305.9	176.8	
3	1797.2	3229.9	252.8	
4	1755.2	3080.7	402.0	
5	1707.2	2914.5	568.2	

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 6.129$

ADP = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4166$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4.294$

Absolute Open Flow: <u>4166</u>	Field @ 15.025'	Angle of Slope: <u>51° 12'</u>	Slope: <u>0.804</u>
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Remarks: * BOTTOM HOLE PRESSURE @ (-7106) 10457' USED FOR PRESSURE CALCULATIONS

Approved By: _____	Conducted By: <u>JARREL SERVICES, INC.</u>	Calculated By: <u>Joe A. Coleman</u>	Checked By: <u>Joe A. Coleman</u>
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