

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

C-132 file
Form C-121
Revised 5-1-66

Well No. <u>1-18-79</u>		☐ Annual ☐ Special		Test Date <u>1-18-79</u>	
Operator <u>ELM COMPANY</u>		Connection <u>PIPELINE (EL PASO)</u>			
Well Name <u>PERIN</u>		Formation <u>MORROW</u>		Skin <u>0</u>	
Total Depth <u>12007</u>		Plug Isolation <u>11963</u>		Elevation <u>3384</u>	
Well No. <u>1</u>		Perforations: <u>From 11874 To 11966</u>		Owner or Lease Name <u>WHITE OILY FED. 10 CO.</u>	
Set At <u>11775</u>		Perforations: <u>From To</u>		Well No. <u>1</u>	
Cased Section - G.C. or G.O. Multiple		Packer Set At <u>11775</u>		County <u>RODNEY</u>	
Reservoir Temp. °F <u>192 @ 11775</u>		Mean Annual Temp. °F <u>60°</u>		Baro. Press. - P _b <u>13.2</u>	
Q _g <u>775</u>		% CO ₂ <u>1.615</u>		% H ₂ S <u>0.375</u>	
Prover		Meter Run <u>A H</u>		Taps <u>FLG.</u>	

FLOW DATA						TUBING DATA		GAS LOG DATA		Duration of Flow
NO.	Packer Setting	Orifice Size	Press. psid	D.H. in	Temp. °F	Press. psid	Temp. °F	Press. psid	Temp. °F	
1.						3260				24 HRS.
2.		1/50	520	12.96	58	3095				1 HR.
3.		1/50	520	26.01	10	2960				1 HR.
4.		1/50	520	50.41	32	2620				1 HR.
5.		1/50	534	100.0	26	1980				1 HR.
6.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Factor C ₁	Rate of Flow Q, Mscf/d
1.	43.3	83.13	533.2	1.002	1.313	1.000	308
2.	43.3	117.76	533.2	1.020	1.313	1.000	441
3.	43.3	163.95	533.2	1.028	1.313	1.000	621
4.	43.3	233.92	547.2	1.034	1.313	1.000	893
5.							

NO.	T	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.	1	518	1.18	.917	DM		.580		672	550
2.	2	520	1.13	.907						
3.	3	522	1.12	.901						
4.	4	536	1.39	.895						
5.										

NO.	P _w	P ₂	P ₂ ²	P _w ² - P ₂ ²	(1) $\frac{P_w^2}{P_w^2 - P_2^2} = 1.596$	(2) $\left[\frac{P_w^2}{P_w^2 - P_2^2} \right]^n = 1.311$
1.	7409.1	9668.4	1045.5			
2.	1075.0	3350.6	1263.2			
3.	2635.2	6948.0	3765.9			
4.	1000.2	4000.8	6713.0			
5.						

Absolute Permeability 1.171 Modulus 15.025 Angle of Slope 23.12° Slope 550

Remarks _____