

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

Form C-102
Revised 9-1-65

*Alden
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Tooley File*

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-19-79	
Company Petro-Lewis Corporation				Connection	
Pool Blanco				Formation Mesaverde	
Completion Date 2-12-79		Total Depth 7750		Plug Back TD 6650	
				Elevation 7355	
Casing Size 5.500		Wt. 15.5		Perforations: From 5984 To 6170	
Tub. Size 2.375		Wt. 4.7		Perforations: From Open To Ended	
d 4.950		Set At 7750		Well No. 7	
d 1.995		Set At 5966		Unit Soc. Twp. Rge. #E 4 25N 3W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Facker Set At 5925	
Producing Thru Tubing				Baro. Press. - P _a 12 psia (est)	
Reservoir Temp. °F 8				Mean Annual Temp. °F	
L H Gg .650 est				% CO ₂ % N ₂ % H ₂ S	
Prover				Meter Run Taps	
County Rio Arriba				State New Mexico	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	7 days						1164				
1.	2 inch	.750	610				610	42			30 min
2.		.750	415				415	44			1-hr
3.		.750	316				316	46			2-hr
4.		.750	238				238	48			3-hr
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	12.3650		622	1.0178	.9608	1.082	8138
2	12.3650		427	1.0158	.9608	1.050	5411
3	12.3650		328	1.0137	.9608	1.036	4092
4	12.3650		250	1.0117	.9608	1.027	3086
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

$P_c = 1176$ $P_c^2 = 1,382,976$				
NO.	P ₁ ²	P _w ²	P _c ²	P _c ² - P _w ²
1	62,500	519	269,594	1,113,382
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.242.1$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3631$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.17659$

Absolute Open Flow	3631	Mcfd @ 15.025	Angle of Slope θ	Slope, n	.75
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Remarks: $P_t^2 = 62,500$, $P_w^2 = 269,594$ (calculated)

Approved By Commission	Conducted By Joe E. Elledge	Calculated By Joe E. Elledge	Checked By <i>Don Murphy</i>
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