

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

152 file
Form C-122
Revised 9-1-65
file

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12/15/76		RECEIVED	
Company Penroc Oil Corporation				Connection None				DEC 29 1976	
Pool Undesignated				Formation Morrow					
Completion Date 12/1/76		Total Depth 11248		Plug Back TD 10972		Elevation 10956		Unit O.C.C.	
Csg. Size 4 1/2		Wt. 11248		Perforations: From 10912 To 10956		Well No. 1			
Tbg. Size 2 3/8		Wt. 10770		Perforations: From open To end		Unit B		Sec. Twp. Rge. 33 19 28	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10770		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 183 @ 10934		Mean Annual Temp. °F 10934		Baro. Press. - P _a 10934		State New Mexico	
L		H		G _g		% CO ₂		% N ₂	
				.633					
								Prover	
								Meter Run 3"	
								Taps Flg.	

FLOW DATA						TUBING DATA		CASING DATA		Duration 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
SI							2662				72 hrs.
1.	3	x	1.500	500	9.0	84	2385				1 hr.
2.	3	x	1.500	500	16.0	70	2052				1 hr.
3.	3	x	1.500	500	40.0	68	1720				1 hr.
4.	3	x	1.500	500	60.0	68	1298				1 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	11.13	67.96	513.2	.9777	1.257	1.043	970
2.	11.13	90.62	513.2	.9905	1.257	1.047	1315
3.	11.13	143.28	513.2	.9924	1.257	1.048	2085
4.	11.13	175.48	513.2	.9924	1.257	1.048	2553
5.							

NO.	P _t	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
					28.846	
					54.4 @ 60°	
1.	.77	544	1.48	.919	Specific Gravity Separator Gas .633	XXXXXXX
2.	.77	530	1.44	.912	Specific Gravity Flowing Fluid XXXXX	.735
3.	.77	528	1.43	.910	Critical Pressure 670 P.S.I.A.	667 P.S.I.A.
4.	.77	528	1.43	.910	Critical Temperature 368 °R	405 °R
5.						

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1		2405.3	5785.5	1371.2	1.366	1.270
2		2079.6	4324.7	2832.0		
3		1770.4	3134.3	4022.4		
4		1384.6	1917.1	5239.6		
5						

Absolute Open Flow 3.242 Mcfd @ 15.025		Angle of Slope θ 52.5°		Slope, n .766	
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Remarks: Well produced 4 bbls. of distillate and 8 bbls. of water during the test.			
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Approved By Commission:	Conducted By: Rick Pagan	Calculated By: Rick Pagan	Checked By:
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