

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5/25/77	
Company Petroleum Development Corp.				Connection None			
Pool North Lusk Morrow				Formation Morrow			
Completion Date 5/25/77		Total Depth 13,086		Plug Back TD 12,673		Elevation 3715 KB	
Csg. Size 5½		Wt. 17#		Set At 4.892" 12,919		Perforations: From 12634 To 44	
Tbg. Size 2-3/8		Wt. 4.7#		Set At 1.995" 12,617		Perforations: From 12583 To 85	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12577	
Producing Thru tubing		Reservoir Temp. °F 17 @ 13086		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2	
L 12639		H 12639		Gg .660		% CO ₂ .35	
				% N ₂ 0.40		% H ₂ S --	
				Prover --		Meter Run 4"	
						Taps flange	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
SI							
1.	4"		2"	600	82	67	17 hrs.
2.	4"		2"	600	61	71	1 hr.
3.	4"		2"	600	43	78	1 hr.
4.	4"		2"	600	25	84	1 hr.
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	19.81	224.24	613.2	0.9933	1.231	1.065	5785
2.	19.81	193.40	613.2	0.9896	1.231	1.063	4961
3.	19.81	162.38	613.2	0.9831	1.231	1.059	4123
4.	19.81	123.81	613.2	0.9777	1.231	1.057	3120
5.							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 14.7 Mcf/bbl.		
					A.P.I. Gravity of Liquid Hydrocarbons 53° @ 60° F.		
1.	0.92	527	1.39	0.881	Specific Gravity Separator Gas 0.660		
2.	0.92	531	1.40	0.885	Specific Gravity Flowing Fluid X X X X X		
3.	0.92	540	1.43	0.892	Critical Pressure P.S.I.A.		
4.	0.92	544	1.44	0.895	Critical Temperature R		
5.							
P _c 6553.2		P _c ² 42.944					
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.770$		
1	8.840	5238.2	27.439	15.505	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.977$		
2	10.714	5525.2	30.527	12.417			
3	12.911	5799.2	33.631	9.313			
4	14.924	6060.2	36.726	6.218			
5							
Absolute Open Flow 11436 Mcfd @ 15.025				Angle of Slope @		Slope, 0.669	
Remarks:							
Approved By Commission:		Conducted By: JC Johnson		Calculated By: JC Johnson		Checked By: LGW	

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JUL 17 1977

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FEDERAL BUREAU OF INVESTIGATION