

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-15-81		MAY 27 1981							
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Company								
Pool Boyd Morrow			Formation Morrow		Unit ARTESIA, OFFICE						
Completion Date 2-27-81		Total Depth 9140' KB		Plug Back TD 8875 KB							
				Elevation 3498 KB							
Form or Lease Name Rio Penasco CJ Com			Well No. 1								
Cat. Size 5 1/2"	Wt. 17#	d 4.892"	Set At 9140 KB	Perforations: From 8850 To 8855 KB							
Fig. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 8848 KB	Perforations: From 8831 To 8834							
Type Well - Single - Draddenhead - G.C. or G.O. Multiple single				Packer Set At 8828 KB							
Producing Thru Tubing		Reservoir Temp. °F 145 8852		Mean Annual Temp. °F 62							
L 8845		H 8845		Baro. Press. - P _a 13.2							
Cq 0.6		% CO ₂ 0.88		% N ₂ 0.75							
		% H ₂ S N.7		Prover ---							
				Meter Run 4"							
				Taps Flanged							
FLOW DATA											
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. w.	Temp. °F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI											
1.	4.026	X	1.750	430	15	64	2890	64			Days
2.	4.026	X	1.750	440	27	64	2772	73			13 hrs.
3.	4.026	X	1.750	450	49	68	2688	76			24 hrs.
4.	4.026	X	1.750	460	68	68	2503	79			24 hrs.
5.							2337	81			24 hrs.
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 _{sp}	Rate of Flow Q, Mcfd				
1	14.93	81.54	443.2	.9962	1.291	1.037	1624				
2	14.93	110.62	453.2	.9962	1.291	1.038	2205				
3	14.93	150.65	463.2	.9924	1.291	1.038	2991				
4	14.93	179.38	473.2	.9924	1.291	1.038	3562				
5											
P ₁		Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio 1.075						
1	0.658	524	1.476	.9299	A.P.I. Gravity of Liquid Hydrocarbons 66.5 Mcl/bbl.						
2	0.672	524	1.476	.9285	Specific Gravity Separator Gas 0.600 Deg.						
3	0.687	528	1.487	.9290	Specific Gravity Flowing Fluid XXXXX 0.6025						
4	0.702	528	1.487	.9275	Critical Pressure 674 P.S.I.A.						
5					Critical Temperature 355 P.S.I.A.						
P _c 3621.2		P _c 13113									
NO.	P ₁ ²	P _w ²	P _c ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.1735$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.8682$					
1			12103	1010							
2			11467	1646							
3			10111	3002							
4			8981	4132							
5											
Absolute Open Flow 6655 Mcl @ 15.025				Angle of Slope 61.58 deg.		Slope, n 5412					
Remarks: BHP extrapolated from pressure build up by Bennett Wireline. All surface pressures by dead weight tester. Calculations worksheet C122D attached.											
Approved By Commission:		Conducted By:		Calculated By:		Checked By:					
				Eddie Mahfood							