

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

Form C-122
Revised 9-1-65

RECEIVED

C:SF

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-25-80		JUN 17 1980	
Company Yates Petroleum Corp. ✓				Connection Transwestern Pipeline Company		O. C. D. ARTESIA, OFFICE	
Pool Penasco Draw Permo Penn				Formation Cisco		Unit LG 1270	
Completion Date 4-15-80		Total Depth 9016' KB		Plug Back TD 6636' KB		Elevation 3681' KB	
Casing Size 4-1/2"		Set At 10.5# 4.052		Perforations: From 6520 To 6592' KB		Form or Lease Name State "JM" Com	
Tubing Size 2-3/8"		Set At 4.7# 1.995		Perforations: From To		Well No. 1	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 6480' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 122 # 6556		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
L 6556		H 6556		G _g 0.669		% CO ₂ 0.05	
				% N ₂ 1.14		% H ₂ S Nil	
				Provor		Meter Run 2"	
						Tag Flange	

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							1715	44			Days
1.	2.067 x 1.375			330	12	76	1570	50			1 hour
2.				330	23	77	1499	55			1 hour
3.				331	46	78	1393	59			1 hour
4.				331	79	78	1245	62			1 hour
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	10.20	64.17	343.2	.9850	1.252	1.0306	832
2	10.20	88.85	343.2	.9840	1.252	1.0303	1150
3	10.20	125.83	344.2	.9831	1.252	1.0302	1627
4	10.20	164.90	344.2	.9831	1.252	1.0302	2133
5.							

NO.	P _r	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.	0.513	536	1.456	.9415	135.2 Mcf/bbl.	51.9 Deg.	0.638	XXXXXX	669.5 P.S.I.A.	368 R
2.	0.513	537	1.459	.9420				XXXXXX	669 P.S.I.A.	375 R
3.	0.514	538	1.462	.9423						
4.	0.514	538	1.462	.9423						
5.										

P _c 21212 P _c ² 4500				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1357$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.0228$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4315$		
1			3734	766			
2			3400	1100			
3			2948	1552			
4			2393	2107			
5							

Absolute Open Flow 4315 Mcfd @ 15.025		Angle of Slope @ 42.4 degrees		Slope, n 0.9284	
Remarks: Static pressures by Bennett Wireline; Flowing pressures by DWT.					
Calculations worksheet C-122D attached.					

Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie M. Mahfood	Checked By:
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