

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
AUG 30 1982

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

O. C. D.

ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-16-82		ARTESIA, OFFICE	
Company Yates Petroleum Corporation				Connection El Paso Natural Gas Co.			
Pool Wildcat Atoka				Formation Atoka		Unit	
Completion Date 6-10-82		Total Depth 11300' KB		Plug Back TD 11220' KB		Elevation 3528 KB	
Casing Size 5 1/2"		Wt. 20.0		Set At 11275'		Perforations: From 10492 To 10498	
Tub. Size 2 3/8		Wt. 4.7		Set At 10442'		Perforations: From To	
Type Well - Single - Broadhead - G.G. or G.O. Multiple Single				Packer Set At 10442' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 160 @ 10495		Mean Annual Temp. °F 62		State New Mexico	
L 10487		H 10487		Gg 0.650		% CO ₂ 0.83	
				% N ₂ 1.42		% H ₂ S Nil	
				Prover --		Meter Run 4"	
						Taps Flanged	
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Location of Flow
SI							Weeks
1.	4.067 x 0.625			412	16	80	24
2.	4.067 x 0.625			659	4	85	48
3.							
4.							
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.845	82.46	425	0.9813	1.240	1.037	192
2	1.845	51.85	672	0.9768	1.240	1.057	122
3							
4							
5							
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1	0.632	540	1.460	0.9296	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2	1.000	545	1.473	0.8950	Specific Gravity Separator Gas 0.650 XXXXXXXXXX		
3					Specific Gravity Flowing Fluid XXXXX 0.650		
4					Critical Pressure 672 P.S.I.A. 756 P.S.I.A.		
5					Critical Temperature 370 °R 400.5 °R		
P _i 3323.2 P _c 11044					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0963$		
NO.	P _i	P _w	P _w ²	P _c ² - P _w ²	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0963$		
1			3746	7298			
2			970	10074			
3							
4							
5							
Absolute Open Flow 134 Mcfd @ 15.025					Angle of Slope 45 deg.		Slope, n 1.000
Remarks: Static pressure by Bennett Wireline, flowing pressure by DWT. Calculations worksheet C-122D attached.							
Approved By Division		Conducted By: Bill Trembley Jr.		Calculated By: Eddie Mahfood		Checked By:	