

NEW MEXICO OIL CONSERVATION COMM: IN MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-63

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-15-80		SEP 16 1980			
Company Yates Petroleum Corp.		Connection Transwestern Pipeline Co.		O. C. D. ARTESIA, OFFICE			
Pool Wildcat Abo <u>Pecos Slope - Abo Gas</u>		Formation Abo		Unit NM 36400			
Completion Date 1-26-80		Total Depth 4650'		Plug Back TD 4174' KB			
Elevation 3867' KB		Farm or Lease Name McClellan "MB" Fed		Well No. 1			
Csg. Size 5-1/2"	Wt. 14#	d 5.012	Set At 4214'	Perforations: From 3930 to 3960' KB	Unit L		
Thq. Size 2-7/8"	Wt. 6.5#	d 2.441	Set At 3914'	Perforations: To	Soc. 31		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 3914' KB	Twp. 5S		
Producing Thru Tubing				Baro. Press. - P _a 13.2	Age. 25E		
Reservoir Temp. °F 98 @ 3945				Mean Annual Temp. °F 62	County Chaves		
Gg 0.650				% CO ₂ 0.83	State New Mexico		
% N ₂ 5.13				% H ₂ S Nil	Meter Run 2"		
Prover Flange				Taps			
L 3940		H 3940		Duration of Flow			
FLOW DATA							
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw		
1.	2.067 x 0.875			700	13		
2.				700	25		
3.				699	48		
4.				699	93		
5.							
TUBING DATA							
	Press. p.s.i.g.	Temp. °F					
	992	98					
	970	87					
	944	88					
	910	89					
	847	90					
CASING DATA							
	Press. p.s.i.g.	Temp. °F					
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, Fpv	Rate of Flow Q, Mcfd
1.	3.729	96.29	713.2	.9859	1.240	1.0595	465
2.	3.729	133.53	713.2	.9859	1.240	1.0595	645
3.	3.729	184.89	712.2	.9859	1.240	1.0594	893
4.	3.729	257.36	712.2	.9859	1.240	1.0594	1243
5.							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.	1.074	535	1.486	.8908	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.	1.074	535	1.486	.8908	Specific Gravity Separator Gas _____		
3.	1.073	535	1.486	.8910	Specific Gravity Flowing Fluid _____		
4.	1.073	535	1.486	.8910	Critical Pressure _____ P.S.I.A.		
5.					Critical Temperature _____ R		
P _c 1113.2 P _c ² 1239					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.7545$		
					(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.2841$		
NO.	P _r ²	P _w ²	P _r ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2839$			
1.			1183				
2.			1122				
3.			1044				
4.			909				
5.							
Absolute Open Flow 2839 Mcfd @ 15.025					Angle of Slope 58 degrees		
					Slope, n 0.6243		
Remarks: Static pressures by Bennett Wireline; Flowing pressures by DWT.							
Calculations worksheet C-122D attached.							
Approved By Continuation:		Conducted By: Don Weaver		Calculated By: Eddie Mahfood		Checked By:	

YPC- McClellan MB Federal No.1
 L-31-Ss-3SE, Wildcat Abo, Chaves Co, N. Mex.



