

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date: 10-3-75		00121 1975		
Company: Yates Petroleum Corp.				Connection: Transwestern Pipeline			O. C. C. ARTESIA, OFFICE		
Pool: Eagle Creek				Formation: Morrow			Unit:		
Completion Date: 7-19-75		Total Depth: 8530		Plug Back TD: 8512		Elevation: 3470 KB		Farm or Lease Name: Jackson "EM" Com	
Csg. Size: 5 1/2"	Wt.: 17#	Set At: 8512'	Perforations: From 8282 To 8370			Well No.: 1			
Thq. Size: 2-7/8"	Wt.: 6.5#	Set At: 8167	Perforations: To			Unit: 0 Sec: 25 Twp: 17S Rge: 25E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single					Packer Set At: 8167 KB		County: Eddy		
Producing Thru: Tubing		Reservoir Temp. °F: 140		Mean Annual Temp. °F: 62		Baro. Press. - P _a : 13.2		State: New Mexico	
L: 8310	H: 0.628	G _g : 0.34	% CO ₂ : 0.35	% N ₂ : nil	% H ₂ S: nil	Prover:	Meter Run: 4"x2.5"	Taps: 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
1.	4" x 2.500			475	26 +0	65	1722	77			1 hr.
2.				500	58 +0	77	1641	78			1 hr.
3.				530	24 +24	83	1535	79			1 hr.
4.				579	38 +40	85	1276	78			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.	32.64	112.66+0	488.2	.9952	1.262	1.046	4831
2.	32.64	172.53+0	513.2	.9840	1.262	1.044	7301
3.	32.64	114.18+114.18	543.2	.9831	1.262	1.045	9664
4.	32.64	150.01+153.91	592.2	.9840	1.262	1.112	13698
5.							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio: 213.838 Mcf/bbl.
1.	.7254	525	1.431	.914	A.P.I. Gravity of Liquid Hydrocarbons: 55.8 Deg.
2.	.7626	537	1.463	.917	Specific Gravity Separator Gas: 0.628 XXXXXXXXXX 0.644
3.	.8071	543	1.480	.915	Specific Gravity Flowing Fluid: XXXXXX
4.	.8799	545	1.485	.909	Critical Pressure: 673 P.S.I.A. 671 P.S.I.A.
5.					Critical Temperature: 367 R 372 R

P _c 2290.1 P _c ² 5244.6				
NO.	P _c ²	P _w	P _w ²	P _c ² - P _w ²
1.			5137.5	107.1
2.			5079.3	165.3
3.			5021.5	223.1
4.			4942.5	302.1
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 31.73$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 31.73$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 231.660$

Absolute Open Flow: 231.660 Mcfd @ 15.025		Angle of Slope θ: _____		Slope, n: _____	
Remarks: Witnessed by Brent Lineherrier, Transwestern Pipeline Company					
Approved By Commission:		Conducted By: Don Weaver		Calculated By: Eddie Mahfood	
				Checked By:	