

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

3F
File
122
gate
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 11-5-79	
Company Yates Petroleum Corp.				Connection Transwestern Pipeline Co.		
Pool Red Lake Penn				Formation Morrow		Unit
Completion Date 6-16-79		Total Depth 9250' KB		Plug Back TD 9118' KB		Elevation 3325' KB
Csg. Size 4-1/2"		Wt. 11.6#	d 4.000	Set At 9160 KB	Perforations: From 8989 To 8994	
Tbg. Size 2-3/8"		Wt. 4.7#	d 1.995	Set At 8956 KB	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At 8956' KB		County Eddy
Producing Thru Tubing		Reservoir Temp. °F 146 @ 8992 KB		Mean Annual Temp. °F 62		State New Mexico
L 8985	H 8985	Gg 0.691	% CO ₂ 3.68	% N ₂ 0.68	% H ₂ S Nil	Prover Meter Run 2" Taps Flange

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							2750	40			Days
1.	2.076 x 0.375			550	11	60	2632	46			1 hour
2.				550	21	60	2566	51			1 hour
3.				550	42	60	2441	57			1 hour
4.				550	82	60	2233	64			1 hour
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, Fpv	Rate of Flow Q, Mcfd
1	0.6689	78.71	563.2	1.000	1.252	1.054	69
2	0.6689	108.75	563.2	1.000	1.252	1.054	96
3	0.6689	153.80	563.2	1.000	1.252	1.054	136
4	0.6689	214.90	563.2	1.000	1.252	1.054	190
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.822	520	1.4325	.900	546.8	
2.	.822	520	1.4325	.900	56.3	
3.	.822	520	1.4325	.900	0.638	
4.	.822	520	1.4325	.900	0.691	
5.						

NO.	P _r	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1			11788	1009	2.8775	2.1124
2			11187	1710		
3			10087	2810		
4			8415	4482		
5						

Absolute Open Flow 401 Mcfd @ 15.025				Angle of Slope 54.78 deg		Slope, n 0.7058	
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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 Mahfood	Checked By: