

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

Form C-122
Revised 9-1-65

RECEIVED

APR 11 1977

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-5-77																																																																															
Company Yates Petroleum Corp.			Connection Transwestern Pipeline Co.																																																																																
Pool <i>Eagle Creek Strawn</i> Undesignated			Formation Strawn																																																																																
Completion Date 9-29-76		Total Depth 8400' KB	Plug Back TD 8166	Elevation 3604' KB	Unit NM 3603																																																																														
Csg. Size 5 1/2"			Wt. 17#	Set At 4.000	Perforations: From 7854 To 7864																																																																														
Tbg. Size 2-3/8"			Wt. 4.7#	Set At 1.995	Perforations: From 7805 KB To																																																																														
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 7802 KB	Well No. 1																																																																														
Producing Thru tubing		Reservoir Temp. °F 132	Mean Annual Temp. °F 62	Baro. Press. - P _a 13.2	Unit Sec. Twp. Rge. P 32 17S 25E																																																																														
L 7844	H 7844	Gg	% CO ₂ 0.84	% N ₂ 0.64	% H ₂ S N.I.																																																																														
			Prover	Meter Run 2"	Taps Flange																																																																														
<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="4">FLOW DATA</th> <th colspan="2">TUBING DATA</th> <th colspan="2">CASING DATA</th> <th rowspan="2">Duration of Flow</th> </tr> <tr> <th>NO.</th> <th>Prover Line Size</th> <th>X</th> <th>Orifice Size</th> <th>Press. p.s.i.g.</th> <th>Diff. hw</th> <th>Temp. °F</th> <th>Press. p.s.i.g.</th> <th>Temp. °F</th> </tr> <tr> <td>SI</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2319</td> <td>51</td> <td>Months</td> </tr> <tr> <td>1.</td> <td>2.067 x 0.875</td> <td></td> <td></td> <td>340</td> <td>8</td> <td>58</td> <td>1812</td> <td>58</td> <td>1 hour</td> </tr> <tr> <td>2.</td> <td></td> <td></td> <td></td> <td>340</td> <td>16</td> <td>58</td> <td>1540</td> <td>63</td> <td>1 hour</td> </tr> <tr> <td>3.</td> <td></td> <td></td> <td></td> <td>340</td> <td>25</td> <td>58</td> <td>1349</td> <td>66</td> <td>1 hour</td> </tr> <tr> <td>4.</td> <td></td> <td></td> <td></td> <td>340</td> <td>35</td> <td>58</td> <td>1198</td> <td>68</td> <td>1 hour</td> </tr> <tr> <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						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	SI							2319	51	Months	1.	2.067 x 0.875			340	8	58	1812	58	1 hour	2.				340	16	58	1540	63	1 hour	3.				340	25	58	1349	66	1 hour	4.				340	35	58	1198	68	1 hour	5.									
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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	3.729	53.16	353.2	1.002	1.262	1.0342	259																																																																												
2.		75.17		1.002			367																																																																												
3.		93.96		1.002			458																																																																												
4.		111.18		1.002			542																																																																												
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NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 454.3 Mcf/bbl.																																																																														
1.	.524	518	1.415	.935	A.P.I. Gravity of Liquid Hydrocarbons 62 Deg.																																																																														
2.	.524	518	1.415	.935	Specific Gravity Separator Gas .628 XXXXXXXXXX																																																																														
3.	.524	518	1.415	.935	Specific Gravity Flowing Fluid XXXXX 0.6342																																																																														
4.	.524	518	1.415	.935	Critical Pressure 674 P.S.I.A. 673 P.S.I.A.																																																																														
5.					Critical Temperature 366 R 367 R																																																																														
P _c 2899.2 P _c 8404					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.3548 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3548$																																																																														
NO.	P _t	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 734$																																																																														
1			5130	3274																																																																															
2			3675	4729																																																																															
3			2804	5600																																																																															
4			2201	6203																																																																															
Absolute Open Flow 734 Mcfd @ 15.025					Angle of Slope 45	Slope, n 1.000																																																																													
Remarks: Static pressures by Bennett Wireline prior to pipeline connections. Flowing pressures by DWT. Calculation worksheet C-122D attached.																																																																																			
Approved By Commission:		Conducted By: Don Weaver		Calculated By: Eddie M. Mahfood		Checked By:																																																																													