

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

9/31
 Form C-122
 Revised 9-1-80

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11-18-82		DEC 20 1982 O.C.D. ARTESIA OFFICE	
Company Yates Petroleum Corporation		Connection Transwestern Pipeline Company			
Pool Boyd Permo Penn Gas Pool		Formation Wolfcamp		Unit Rio Penasco RT Com	
Completion Date 6-5-82		Total Depth 9226 KB		Elevation 6150 KB 6'5" 2429' 6"	
Case Size 5 1/2	Wt. 15.5 (17#)	d 4.950	Set At 9222	Perforations: From 6072 To 6108 KB	
Reg. Size 2 3/8	Wt. 4.7#	d 1.997	Set At 6628	Perforations: From To	
Type well - Single - Prodenhead - G.G. or G.O. Multiple Single				Packer Set At 6628	
Producing thru Tubing		Reservoir Temp. °F 127 @ 6090		Mean Annual Temp. °F 62	
L 6080		H 6080		Baro. Press. - P _g 13.2	
Gg 0.759		% CO ₂ 0.19		% H ₂ S N.7	
Prover -		Meter Run 2"		Type Flanged	

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	
51							1970	84			Week
1.	2.067	X	1.125	302	22	57	1708	82			18 hrs.
2.	2.067	X	1.125	310	35	58	1608	82			24 hrs.
3.	2.067	X	1.125	303	52	58	1246	83			24 hrs.
4.	2.067	X	1.125	304	66	65	1009	83			24 hrs.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, MCFD
1	6.393	83.27	315.2	1.003	1.192	1.038	661
2	6.393	106.36	323.2	1.002	1.192	1.039	844
3	6.393	128.23	316.2	1.002	1.192	1.038	1016
4	6.393	144.69	317.2	.9952	1.192	1.037	1138
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	54.485	Mcf/Day
1	0.473	517	1.336	.928	A.P.L. Gravity of Liquid Hydrocarbons	51.2	Day
2	0.485	518	1.338	.927	Specific Gravity Separator Gas	0.704	X X X X X X X X
3	0.474	518	1.339	.928	Specific Gravity Flowing Fluid	X X X X X	.759
4	0.476	525	1.356	.930	Critical Pressure	667	P.S.I.A. 665
5					Critical Temperature	387	R 404

P _f 2466.2 P _w 6082				$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.3480$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1678$	
NO.	P _f	P _w	P _c ²	P _c ² - P _w ²			
1			4582	1500			
2			4056	2026			
3			2406	3676			
4			1570	4512			
5							

Absolute Gas Flow				1329	Mcf/Day 15.825	Angle of Slope	62.5 deg	Slope, n	0.5194
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Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Danny Mathews	Eddie Mahfood	