

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-7-78		MAY - 4 1978	
Company Yates Petroleum Corp. ✓				Connection El Paso Natural Gas Company				D. C. C.	
Pool Bot Canyon Reno-Penn Wildcat				Formation Cisco				Unit ARTESIA, OFFSHORE	
Completion Date 1-13-78		Total Depth 9089'		Plug Back TD 6299'		Elevation 4612' KB		Farm or Lease Name Brainerd "IO" Fed	
Csg. Size 4 1/2"	Wt. 10.5#	d 4.052	Set At 6483' KB	Perforations: From 6212 To 6230'		Well No. 1			
Tbg. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 6140' KB	Perforations: From To		Unit Sec. Twp. Rge. B 1 22S 21E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 6140' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 119 @ 6200		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 6212	H 6212	Gg 0.785	% CO ₂ 1.34	% N ₂ 1.41	% H ₂ S Nil	Prover	Meter Run 4"	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
SI							1439	45			weeks
1.	4.026 x 0.750			96	7.5	58	1295	58			1 hour
2.				98	16	56	1225	63			1 hour
3.				100	36	55	1125	68			1 hour
4.				102	79	55	980	72			1 hour
5.											

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	2.661	28.62	109.2	1.002	1.131	1.0138	87
2		42.18	111.2	1.004	1.131	1.0143	129
3		63.84	113.2	1.005	1.131	1.0146	196
4		95.40	115.2	1.005	1.131	1.0148	295
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
					93.210 Mcf/bbl.	52.0 Deg.	0.753	XXXXXX	671 P.S.I.A.	404 R
1.	.163	518	1.282	.973						
2.	.166	516	1.277	.972						
3.	.169	515	1.275	.9715						
4.	.172	515	1.275	.971						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1			2786	1002
2			2464	1324
3			2043	1745
4			1523	2265
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6724$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 493 \text{ MCFPD}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6724$

Absolute Open Flow	493 Mcfd @ 15.025	Angle of Slope @ 45 degrees	Slope, n 1.000
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Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet attached.

Approved By Commission:	Conducted By: Don Weaver	Calculated By: Eddie M. Mahfood	Checked By:
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