SI well file
C-122 file

NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 18 1973
O. C. C.
ARTESIA, OFFICE

Type Test: [x] Initial 60-day [ ] Annual [ ] Special				Test Date: 1-14-73	
Company: Yates Petroleum Corp.			Connection: Transwestern Pipeline Co.		Unit:
Pool: Eagle Creek Atoka Gas			Formation: Atoka		
Completion Date: 12-30-71	Total Depth: 8099		Plug Back TD: 8064	Elevation: 3524 KB	Farm or Lease Name: Artesia Airport CF
Csg. Size: 4½ / Wt.: 10.5 11.6 / d: 4.000 / Set At: 8090			Perforations: From 7860 To 7877		Well No.: 1
Tbg. Size: 2-3/8 / Wt.: 4.7 / d: 1.995 / Set At: 7783			Perforations: From To		Unit: N / Sec.: 11 / Twp.: 17 / Rge.: 25
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 7783		County: Eddy
Producing Thru: Tbg	Reservoir Temp. °F: 140@ 7840	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
7869		0.639	0.28	0.13	0.0		X	Flange

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI						1669	--	--	--	8 days
1.	3	1.250	510	5.0	48	1645	68	--	--	1½ hrs
2.	3	1.250	516	12.0	65	1617	69	--	--	1 hr
3.	3	1.250	525	26.5	72	1578	69	--	--	1 hr
4.	3	1.250	528	47.0	73	1528	70	--	--	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 Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1.	7.615	50.50	510	1.012	1.251	1.052	512
2.	7.615	78.69	516	0.9952	1.251	1.046	780
3.	7.615	117.95	525	0.9887	1.251	1.046	1062
4.	7.615	157.53	528	0.9877	1.251	1.046	1417
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.758	508	1.396	.9032
2.	.767	525	1.442	.9123
3.	.780	532	1.462	.9142
4.	.785	533	1.464	.9144
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 57.8 Deg.
Specific Gravity Separator Gas 0.639 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx
Critical Pressure 673 P.S.I.A. _____ P.S.I.A.
Critical Temperature 364 R _____ R

P_c 2130 P_c^2 4537

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2114	4469	68
2		2095	4389	148
3		2068	4277	260
4		2028	4113	424
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{4537}{424}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.907$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.536$

Absolute Open Flow 5536 Mcfd @ 15.025 Angle of Slope θ 56.4 Slope, n 0.5750

Remarks: Witnessed by Jack Moore, Transwestern Pipeline, BHP bomb by Bennett Wireline, bomb at 7925 corrected to 7868 datum.

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