NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT D ONE POINT BACK PRESSURE T T FOR GAS WELL

Form C-122
Revised 9-1-65

C-5F

RECEIVED

JUL 21 1980

O. C. D.

ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 5/23/80	
Company: Yates Petroleum Corporation			Connection: Transwestern Pipeline Company		
Pool: East Eagle Creek (Atoka-Morrow)			Formation: Morrow		Unit
Completion Date: 3/9/80	Total Depth: 8610 KB		Plug Back TD: 8490 KB	Elevation: 3426 KB	Farm or Lease Name: Goat Roper LP Com
Csg. Size: 5½" / Wt.: 17# / d: 4.892 / Set At: 8499 KB			Perforations: From 8365 To 8373 KB		Well No.: 1
Tbg. Size: 2-7/8" / Wt.: 6.5# / d: 2.441 / Set At: 8322 KB			Perforations: From To		Unit: P / Sec.: 30 / Twp.: 17S / Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 8322 KB		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 140 @ 8369 KB	Mean Annual Temp. °F: 62	Baro. Press. – P_a: 13.2		State: N. Mex.

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8362	.8362	0.650	0.55	0.60	Nil	-	2"	Flange

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					2763	48			Weeks
1.	2.067 x 1.375	390	8	70	2139	62			1 hr
2.	2.067 x 1.375	390	17	70	1808	65			1 hr
3.	2.067 x 1.375	390	32	70	1300	68			1 hr
4.	2.067 x 1.375	390	47	70	591	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	10.20	56.79	403.2	.9905	1.265	1.036	752
2.	10.20	82.79	403.2	.9905	1.265	1.036	1096
3.	10.20	113.59	403.2	.9905	1.265	1.036	1504
4.	10.20	137.66	403.2	.9905	1.265	1.036	1822
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.600	530	1.456	.932
2.	0.600	530	1.456	.932
3.	0.600	530	1.456	.932
4.	0.600	530	1.456	.932
5.				

Gas Liquid Hydrocarbon Ratio 116.67 Mcf/bbl.

A.P.I. Gravity of Liquid Hydrocarbons 58.1 Deg.

Specific Gravity Separator Gas 0.625 XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX 0.650

Critical Pressure 672 P.S.I.A. 710 P.S.I.A.

Critical Temperature 364 R 387 R

P_c 3547.2 P_c^2 12587

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			7579	5008
2			5390	7197
3			2743	9844
4			587	12000
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0489$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0489$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1911$

Absolute Open Flow 1911 Mcfd @ 15.025 Angle of Slope θ 45 deg. Slope, n 1.0000

Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT.
Calculations worksheet C-122D attached.

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