C/-

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

Form C-1[illegible]
Revised [illegible]

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1-21-81	
Company: Yates Petroleum Corporation		Connection: Transwestern Pipeline Co.			
Pool: Undesignated Abo		Formation: Abo		Unit	
Completion Date: 10-23-80	Total Depth: 4300'	Plug Back TD: 3865' KB	Elevation	Farm or Lease Name: Rattlesnake NZ St. Com.	
Csg. Size: 5½ / Wt.: 14# / d: 5.012' / Set At: 4036 KB		Perforations: From 3764 To 3806 KB		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: 1.995" / Set At: 3941 KB		Perforations: From To		Unit: D / Sec.: 7 / Twp.: 5s / Rge.:	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: single		Packer Set At: 3741		County: Chaves	
Producing Thru: Tubing	Reservoir Temp. °F: 97 @ 3785	Mean Annual Temp. °F: 62	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3785	3785	0.653	5.64	0.67	N.7		2"	flanged

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							1003	46			Days
1.	2.067	X	1.000	492	12	57	978	62			8
2.	2.067	X	1.000	490	23	57	953	65			16
3.	2.067	X	1.000	490	44	57	915	67			24
4.	2.067	X	1.000	490	94	60	748	68			24
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	4.946	77.86	505.2	1.003	1.246	1.0494	505
2	4.946	107.58	503.2	1.003	1.246	1.0496	698
3	4.946	148.80	503.2	1.003	1.246	1.0496	965
4.	4.946	217.49	503.2	1.000	1.246	1.0487	1405
5							

NO.	P_t	Temp. °R	T_f	Z
1	0.739	517	1.409	0.9081
2.	0.736	517	1.409	0.9078
3.	0.736	517	1.409	0.9078
4.	0.736	520	1.417	0.9093
5				

Gas Liquid Hydrocarbon Ratio -- Mcf/bbl
A.P.I. Gravity of Liquid Hydrocarbons -- Deg.
Specific Gravity Separator Gas 0.655 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.653
Critical Pressure 684 P.S.I.A. 843 P.S.I.A.
Critical Temperature 367 R 414 R

P_c 1136.2 P_c^2 1291

NO	P_t^2	P_w	R_w^2	$P_c^2 - R_w^2$
1			1221	70
2			1161	130
3			1074	217
4			732	559
5				

(1) $\frac{P_c^2}{P_c^2 - R_w^2} = 2.3095$ (2) $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 1.5201$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - R_w^2}\right]^n = 2135$

Absolute Open Flow 2135 Mcfd @ 15.025 Angle of Slope θ 60.47 deg. Slope, n 0.500

Remarks: BHP by Bennett Wireline Tubing Pressures by DWT . Calculations worksheet C-122D attached

Approved By Commission:	Conducted By:	Calculated By:	Checked By: