OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
DEC 22 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 8-20-81	
Company: Yates Petroleum Corporarion		Connection: Transwestern Pipeline Co.			
Pool: ~~Undesignated Abo~~		Formation: ~~Abo~~		Unit: ARTESIA, OFFICE	
Completion Date: 5-15-81	Total Depth: 4450' KB	Plug Back TD: 4449'	Elevation: 3814'	Farm or Lease Name: Paulette PV State	
Csg. Size: 4-1/2" / Wt.: 9.5# / d: 4.090" / Set At: 4450'		Perforations: From 4058 To 4066		Well No.: 1	
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 4034		Perforations: From To		Unit: K / Sec.: 16 / Twp.: 5S / Rge.: 25E	
Type Well – Single – Bradenhead – G.C. or G.O. Multiple: Single		Packer Set At: -		County: Chaves	
Producing Thru: Tubing	Reservoir Temp. °F: 98 @	Mean Annual Temp. °F: 3864'	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
4060	4060	.663	1.54	0.8	0	-	2	Flanged

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					1080				days
1.	2.067 x 1.125	340	97	70	910	74			24 hrs
2.	2.067 x 1.125	340	72.3	70	954	74			24 hrs
3.	2.067 x 1.125	335	51.6	69	986	74			24 hrs
4.	2.067 x 1.125	330	45.9	69	998	74			24 hrs
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	6.393	185.1	353.2	.9905	1.228	1.034	1488
2	6.393	159.8	353.2	.9905	1.228	1.034	1285
3	6.393	134.1	348.2	.9915	1.228	1.033	1078
4	6.393	125.5	343.2	.9915	1.228	1.033	1009
5							

NO.	P_r	Temp. °R	T_r	Z
1	.52	530	1.42	.936
2	.52	530	1.42	.936
3	.51	529	1.42	.938
4	.51	529	1.42	.938
5				

Gas Liquid Hydrocarbon Ratio: Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: .663 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX .663
Critical Pressure: 677 P.S.I.A. 677 P.S.I.A.
Critical Temperature: 372 R 372 R

P_c 1093.2 P_c^2 1195.1

NO	P_w	P_w^2	$P_c^2 - P_w^2$
1	852.3	883.4	311.7
2	935.5	958.4	236.7
3	998.4	1014.5	180.6
4	1022.5	1036.6	158.5
5			

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 6.053$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3.0482$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3286$

Absolute Open Flow: 3286 Mcfd @ 15.025 Angle of Slope θ: Slope, n: .619

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	David Weaver	Al Springer	