RELEIVED OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK-PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

MAY 11 1977

O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special | Test Date: 3-21-77

Company: Yates Petroleum Corp.	Connection: Transwestern Pipeline Co.			
Pool: Hoag Tank Morrow Gas	Formation: Morrow & Strawn			Unit
Completion Date: 3-17-77	Total Depth: 9152'KB	Plug Back TD: 8950'KB	Elevation: 3649'KB	Farm or Lease Name: Roden Fed. "GD"
Csg. Size: 4½" / Wt.: 11.6 / d: 4.000 / Set At: 8969'KB		Perforations: From 8357-97' & 8883-87'		Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: 1.995 / Set At: 8382'KB		Perforations: From 8305' To 8307'		Unit: I Sec.: 23 Twp.: 19S Rge.: 24E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single - Commingled		Packer Set At: 8300' KB		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 144 @ 8650	Mean Annual Temp. °F: 62	Baro. Press. – P_a: 13.2	State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8650	8650		0.59	0.72	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					2645	66			24 hrs.
1.	2.067 X 0.750	475	14	64	2507	67			1 hr.
2.		480	32	64	2225	68			1 hr.
3.		483	66	64	1946	69			1 hr.
4.		485	91	64	1760	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	2.709	82.67	488.2	.9962	1.293	1.0412	300
2.	2.709	125.63	493.2	.9962	1.293	1.0414	456
3.	2.709	180.97	496.2	.9962	1.293	1.0417	658
4.	2.709	212.92	498.2	.9962	1.293	1.0420	774
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.724	524	1.472	.9225
2.	.732	524	1.472	.9220
3.	.736	524	1.472	.9215
4.	.739	524	1.472	.9210
5.				

Gas Liquid Hydrocarbon Ratio: 1230 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 49.0 Deg.
Specific Gravity Separator Gas: 0.598 / xxxxxxxxx
Specific Gravity Flowing Fluid: xxxxx / 0.601
Critical Pressure: 674 P.S.I.A. / 673 P.S.I.A.
Critical Temperature: 356 R / 355.5 R

P_c 3279 P_c^2 10752

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			8929	1823
2			7671	3081
3			5873	4879
4			4800	5952
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.806$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.600$

AOF = $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1238$

Absolute Open Flow: 1238 Mcfd @ 15.025 | Angle of Slope θ: 51.5° | Slope, n: 0.7951

Remarks: Pressures by DWT. Calculations Worksheet C-122D attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Ronnie Willis	Eddie Mahfood	