N MEXICO OIL CONSERVATION COMM N

MULTIPOINT AND ONE POINT BACK PRESSURE TES, FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
DEC 11 1978
O. C. C.
ARTESIA, OFFICE

Type Test: XX Initial ☐ Annual ☐ Special				Test Date: 11-3-78
Company: Yates Petroleum Corp. ✓		Connection: Transwestern Pipeline Co.		Unit
Pool: Cemetary Morrow		Formation: Morrow		
Completion Date: 4-27-78	Total Depth: 9460' KB	Plug Back TD: 9254' KB	Elevation: 3502' KB	Farm or Lease Name: Ross "IZ" Com
Csg. Size: 5-1/2" / Wt.: 17# / d: 4.892 / Set At: 9297'		Perforations: From 9166 To 9178' KB		Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: 1.995 / Set At: 9135'		Perforations: From To		Unit: F / Sec.: 28 / Twp.: 19S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 9135' KB		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 150 @ 9173	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
9166	9166	.611	2.40	0.50	Nil		2"	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					539	64			Weeks
1.	2.067 x 0.375	245	11	54	410	65			1 hour
2.		245	20	54	336	66			1 hour
3.		245	34	54	291	67			1 hour
4.		245	43	54	265	68			1 hour
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	.6689	53.29	258.2	1.006	1.279	1.023	47
2.	.6689	71.86	258.2	1.006	1.279	1.023	63
3.	.6689	93.70	258.2	1.006	1.279	1.023	82
4.	.6689	105.37	258.2	1.006	1.279	1.023	93
5.							

NO.	P_t	Temp. °R	T_t	Z
1.	.38	514	1.436	.956
2.	.38	514	1.436	.956
3.	.38	514	1.436	.956
4.	.38	514	1.436	.956
5.				

Gas Liquid Hydrocarbon Ratio ----- Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons ----- Deg.
Specific Gravity Separator Gas 0.611 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx
Critical Pressure 680 P.S.I.A. ----- P.S.I.A.
Critical Temperature 358 R ----- R

P_c 889.2 P_c^2 790.7

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		730.3	533.3	257.4
2		639.5	409.0	381.7
3		584.6	341.8	448.9
4		465.2	216.4	574.3
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3768$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.313$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 122$

Absolute Open Flow 122 Mcfd @ 15.025 Angle of Slope θ 49.6 deg. Slope, n 0.8516

Remarks: Static pressures by Bennett Wireline. Flowing pressures by DWT.
NOTE: Approx 480' load water in hole; gas flow too small to unload fluid.
Calculations worksheet C-122D attached.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Bill Trembley, Jr.	Eddie M. Mahfood	