Copy to SF C-122

N MEXICO OIL CONSERVATION COMM. ON

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
NOV 5 1973
O. C. C.
ARTESIA, OFFICE

Type Test: ☐ Initial ☐ Annual ☒ Special				Test Date: 11-26-73	
Company: Yates Petroleum Corp.			Connection: Transwestern Pipeline Co.		Unit
Pool: West Atoka			Formation: Morrow		
Completion Date: 8-3-73	Total Depth: 8900		Plug Back TD: 8890	Elevation: 3442 KB	Farm or Lease Name: Vandiver "CN"
Csg. Size: 5½	Wt.: 17.0 / 15.5	d: 4.892 / 4.950	Set At: 8900	Perforations: From 8666 To 8735	Well No.: 1
Tbg. Size: 2-7/8	Wt.: 6.5	d: 2.441	Set At: 8665	Perforations: From To	Unit: E; Sec.: 18; Twp.: 18S; Rge.: 26E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 8623		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 139 @ 8600	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: N.Mex.

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
8701		0.635	0.54	0.18	0.00		X	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						1934				24 hr SI
1.	4	2.750	490	7.5	75	1897				1 hr
2.	4	2.750	480	25	71	1824				1 hr
3.	4	2.750	510	42	68	1739				1 hr
4.	4	2.750	480	85	65	1546				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	41.10	62.03	513	.9859	1.255	1.043	3290
2.	41.10	111.02	493	.9896	1.255	1.043	5911
3.	41.10	148.21	523	.9924	1.255	1.047	7943
4.	41.10	204.71	493	.9952	1.255	1.045	10981
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	0.762	535	1.470	.919
2.	0.732	531	1.459	.920
3.	0.777	528	1.451	.913
4.	0.732	525	1.442	.916
5.				

Gas Liquid Hydrocarbon Ratio 118.8 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 55.6 Deg.
Specific Gravity Separator Gas 0.635 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 673 P.S.I.A. P.S.I.A.
Critical Temperature 364 R R

P_c * 2471 P_c^2 6106

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		2461	6057	49
2		2447	5988	118
3		2434	5924	182
4		2410	5808	298
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{6106}{2000}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.108$

$AOF = Q_2 \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n =$ 83900 mcfpd

Absolute Open Flow 83900 Mcfd @ 15.025 Angle of Slope θ Slope, n 0.668

Remarks: * BHP @ 8701' used for pressure calculations. Test witnessed by Transwestern Pipeline Company representative, Jack Moore.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Weaver; J. Moore	Eddie Mahfood	