N MEXICO OIL CONSERVATION COMM ON
MULTIPOINT ND ONE POINT BACK PRESSURE TE FOR GAS WELL

Form C-122 – Revised 9-1-65

JT file File USGS

RECEIVED
JAN 25 1977
O. C. C.
ARTESIA, OFFICE

R-181 5781 8-18-78

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 12-21-76	
Company: Yates Petroleum Corp.	Connection: Transwestern Pipeline Co.			
Pool: ~~Undesignated~~ Cemetary Morrow	Formation: Morrow			Unit: K
Completion Date: 6-7-75	Total Depth: 9450'KB	Plug Back TD: 9369'	Elevation: 3563'KB	Farm or Lease Name: Ross "EG" Federal Com
Csg. Size: 4½" / Wt.: 11.6# / d: / Set At: 9441'KB	Perforations: From 9128-38 To 9226-32			Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7# / d: / Set At: 9098'KB	Perforations: From To			Unit: K / Sec.: 20 / Twp.: 19S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 9098'		County: Eddy
Producing Thru: tubing	Reservoir Temp. °F: 156 @ 9190'	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
9168	9168	0.6175	2.02	0.40	Nil		2.069	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					2636	48			months
1.	2 X 1.125	360	9	52	2313	58			1½ hrs.
2.	2 X 1.125	362	36	52	1858	58			1 hr.
3.	2 X 1.125	365	73	53	1360	56			1 hr.
4.	2 X 1.125	370	94	54	1025	54			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	6.393	64.24	373.2	1.008	1.288	1.034	499
2.	6.393	116.22	375.2	1.008	1.288	1.034	997
3.	6.393	166.16	378.2	1.007	1.288	1.035	1426
4.	6.393	189.79	383.2	1.006	1.288	1.035	1627
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.549	512	1.434	.935
2.	.552	512	1.434	.935
3.	.556	513	1.437	.934
4.	.564	514	1.440	.9335
5.				

Gas Liquid Hydrocarbon Ratio 212.1 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 52.6 Deg.
Specific Gravity Separator Gas 0.603 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx 0.6175
Critical Pressure 680 P.S.I.A. 678 P.S.I.A.
Critical Temperature 357 R 360 R

P_c 3343.9 P_c^2 11182

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			8633	2549
2			5615	5567
3			3050	8132
4			1786	9396
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1901$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1795$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1919$

Absolute Open Flow 1919 Mcfd @ 15.025 Angle of Slope θ 43.5° Slope, n 0.9485

Remarks: Form C-122D attached. Tubing pressures by Dead Weight Tester.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Weaver	Eddie Mahfood	