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NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 4-1-65

RECEIVED
JUN 4 1975
O. C. C.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 5-29-75

Company: Yates Petroleum Corp.	Connection: Transwestern Pipeline	Unit:	
Pool: Eddy & Eagle Creek-Atoka Undesignated Morrow	Formation: Morrow		
Completion Date: 5-15-75	Total Depth: 8678	Plug Back TD: 8610	Elevation: 3453' GR
Farm or Lease Name: ARCO "EC" State			
Csg. Size: 5½" / Wt.: 17 / d: 3.958 / Set At: 8678	Perforations: From 8338 To 8365	Well No.: 1	
Tbg. Size: 2-7/8 / Wt.: 6.5 / d: 2.441 / Set At: 8338	Perforations: From To	Unit: B / Sec.: 36 / Twp.: 17S / Rge.: 25E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single	Packer Set At: 8293'	County: Eddy	
Producing Thru: Tubing	Reservoir Temp. °F: @ 140	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: New Mexico			

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
	8335	.628	0.34	0.34	0		X	X

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	4		2.750	–	–		2481	60			1 hr
1.	4		2.750	523	60 ÷ 50	81	1003	64			1 hr
2.				470	34 ÷ 29	73.3	1776	69			1 hr
3.				480	14 ÷ 12	79	2106	74			1 hr
4.				500	8 + 6	80	2215	76			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	343.10	536.2	.9804	1.262	1.046	18,250
2.		246.55	483.2	.9875		1.043	13,171
3.		160.03	493.2	.9822		1.042	8,495
4.		119.57	513.2	.9813		1.044	6,354
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	.797	541	1.470	.914
2.	.718	533.3	1.449	.919
3.	.733	539	1.465	.921
4.	.763	540	1.467	.918
5.				

Gas Liquid Hydrocarbon Ratio 154.13 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 50.7 Deg.
Specific Gravity Separator Gas .628 xxxxxxxxx
Specific Gravity Flowing Fluid xxxxx .646
Critical Pressure 673 P.S.I.A. 671 P.S.I.A.
Critical Temperature R 373 R

P_c 3142.1 P_c^2 9873

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			5965	3908
2			7044	2829
3			8056	1817
4			8384	1489
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.526$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.526$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 46,106$

Absolute Open Flow 46,106 Mcfd @ 15.025 Angle of Slope θ Slope, n 1.000

Remarks: Witnessed by Brent Linebarrier w/Transwestern Pipeline. Flow thru 2 meter runs, each 4-in.x 2.75 in. Orifice.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Don Weaver	Eddie M. Mahfood	5-23-75