NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

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Form C-122
Revised 9-1-65

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122 file

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 1-24-77	
Company: Yates Petroleum Corp.	Connection: Transwestern Pipeline Co.			
Pool: ~~Undesignated~~ Eagle Creek Penn. Penn.	Formation: ~~Lower~~ Wolfcamp		Unit	
Completion Date: 12-15-76	Total Depth: 8420' KB	Plug Back TD	Elevation: 3513'KB	Farm or Lease Name: Gossett "EU"
Csg. Size: 4½" / Wt.: 10.5/11.6 / d: 4.000 / Set At: 6852/7979'KB	Perforations: From 6624 To 6644'KB			Well No.: 1
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: 1.995 / Set At: 7760'KB	Perforations: From To			Unit: K / Sec.: 26 / Twp.: 17S / Rge.: 25E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: G. G. Multiple w/tubing shut in.		Packer Set At: 7760'KB		County: Eddy
Producing Thru: Csg.Annulus	Reservoir Temp. °F: @ 132	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
6621	6621		1.37	0.99	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					2130		1840	50	9 days
1.	2.067 X 1.000	275	8	55	2130		1747	51	1 hr.
2.		275	28	55	2130		1630	52	1 "
3.		276	58	56	2130		1502	53	1 "
4.		277	78	56	2130		1425	54	1 "
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	4.946	48.017	288.2	1.005	1.216	1.0325	300
2.		89.831	288.2	1.005	1.216	1.0325	562
3.		129.513	289.2	1.004	1.216	1.0325	810
4.		150.451	290.2	1.004	1.216	1.0325	940
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.429	515	1.355	.938
2.	.429	515	1.355	.938
3.	.430	516	1.358	.938
4.	.432	516	1.358	.938
5.				

Gas Liquid Hydrocarbon Ratio 310 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 51.3 Deg.
Specific Gravity Separator Gas 0.676 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.686
Critical Pressure 672 P.S.I.A. 673.5 P.S.I.A.
Critical Temperature 380 R 382.5 R

P_c 2286.2 P_c^2 5227

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1			4705	522
2			4083	1144
3			3454	1773
4			3100	2127
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4575$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.098$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1972$

Absolute Open Flow 1972 Mcfd @ 15.025 Angle of Slope θ 50.5 deg. Slope, n 0.8240

Remarks: Pressures by DWT. Calculation worksheet C-122D attached hereto.

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