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Form C-122
Revised 9-1-65

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

Type Test: [x] Initial [ ] Annual [ ] Special				Test Date: 1-23-76	
Company: Yates Petroleum Corporation			Connection: None		
Pool: Kennedy Farms			Formation: Morrow		Unit
Completion Date: 1-19-76	Total Depth: 8596		Plug Back TD: 8550	Elevation: 3354'KB	Farm or Lease Name: Caffall FD
Csg. Size: 5 1/2 / Wt.: 17.0 / d: 4.892 / Set At: 8596			Perforations: From 8402 To 8416		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.70 / d: 1.995 / Set At: 8345			Perforations: From 8355 To 8398		Unit: O / Sec.: 15 / Twp.: 17s / Rge.: 26e
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At: 8346		County: Eddy
Producing Thru: Tubing	Reservoir Temp. °F: 147 @ 8386	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
8409	–	0.620	0.116	0.390	0.00		x	F

	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 DWT	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						2740				48.0
1.	3	10/64 2.00	400	5	86	2605	67	Packer		1.0
2.	3	17/64 2.00	420	17	88	2420	68			1.0
3.	3	22/64 2.00	420	40	85	2077	70			1.0
4.	3	28/64 2.00	410	69	88	1685	70			1.0
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	21.32	45.45	413.2	0.9759	1.270	1.030	1236.9
2.	21.32	85.81	433.2	0.9741	1.270	1.031	2333.4
3.	21.32	131.64	433.2	0.9768	1.270	1.031	3589.6
4.	21.32	170.89	423.2	0.9741	1.270	1.031	4647.0
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	0.61	546	1.52	0.942
2.	0.64	548	1.53	0.940
3.	0.64	545	1.52	0.940
4.	0.62	548	1.53	0.941
5.				

Gas Liquid Hydrocarbon Ratio 122.987 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 55 Deg.
Specific Gravity Separator Gas 0.620 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 678 P.S.I.A. – P.S.I.A.
Critical Temperature 359 R – R

P_c 3341.2 P_c^2 11163.6

NO	P_t^2	P_w*	P_w^2	$P_c^2 - P_w^2$
1		3269.2	10687.7	475.9
2		3091.2	9555.5	1608.1
3		2745.2	7536.1	3627.5
4		2345.2	5500.0	5663.6
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 23.458$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5.502$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6805$

Absolute Open Flow 6805 Mcfd @ 15.025 Angle of Slope θ 61°34' Slope, n 0.542

Remarks: * BHP @ (-5055) 8409' used for pressure Calculations

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Coleman Petr. Engr. Co.	Joe A. Coleman	Joe A. Coleman