

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

Form C-122
Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 3-12-81	
Company Mesa Petroleum Co. ✓		Connection Unconnected	
Pool Undesignated Abo		Formation Abo	
Completion Date 3-12-81		Total Depth 4350	Plug Back TD 4289
Elevation 3848		Farm or Lease Name Coyote Federal	
Csg. Size 4 1/2	Wt. 10.5	Set At 4349	Perforations: From 3610 To 3867
Tbg. Size 2 3/8	Wt. 4.7	Set At 3779	Perforations: From Open Ended To
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single		Packer Set At None	County Chaves
Producing Thru Tbg	Reservoir Temp. °F 104 @ 4350	Mean Annual Temp. °F 60	Baro. Press. - P _g 13.2
State New Mexico		Prover 2" Orifice Well Tester	
L 3779	H 3779	G _g .62	% CO ₂
		% N ₂ 6	% H ₂ S
		Meter Run	Taps

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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	of Flow
SI							820		850		48 hr
1.	2" Orifice	1	1 1/4	4		50	800	80	820		1/2 hr
2.	Well	1	1 1/4	12		50	750	80	770		1 hr
3.	Tester	1	1 1/4	18		50	700	80	730		1/2 hr
4.		1	1 1/4	34		50	580	80	620		3/4 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	449	2" orifice well tester		1.0098	.9837		446
2	840			1.0098	.9837		834
3	1083			1.0098	.9837		1076
4	1780			1.0098	.9837		1768
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 850	P _c ² 723				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.5615$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.3813$
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²		
1		820	672	51		
2		770	593	130		
3		730	533	190		
4		620	384	339		
5						

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2900$

Absolute Open Flow 2900 Mcfd @ 15.025 Angle of Slope @ 54.6 Slope, n .71

Remarks:

Approved By Commission:	Conducted By: <u>ELB</u>	Calculated By: <u>ELB</u>	Checked By:
	E. L. Buttross, Jr.	E. L. Buttross, Jr.	