

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

Form C-122
Revised 9-1-65

RECEIVED

JUL 20 1973

☐ Initial ☐ Annual ☒ Special		Test Date 7-17-73	
Property Atlantic Richfield		Connection Southern Union	
Loc. Catchlaw Draw - Morrow		Unit Morrow	
Completion Date 12-27-65		Total Depth 11,372	
Ring Back TD 10,367		Elevation 3332 KB	
Farm or Lease Name Pure Federal			
Csg. Size 7"	Wt. 26	a 6.276	Set At 10,720
Perforations: From 9995 To 10367		Well No. 1	
Tbg. Size 2	Wt. 4.7	a 1.995	Set At 9915
Perforations: From Open To Ended		Unit Sec. Twp. Rge. K 11 21S 25E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 9873	
Producing Thru Tbg.		County Eddy	
Reservoir Temp. °F 162		State New Mexico	
Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
9915	H 9915	Gg 0.591	% CO ₂ 0.7
% N ₂ 0.6	% H ₂ S 0	Prover 4"	Meter Run Flg.

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
1.	4 x 1-1/8			632	9.0	64	1981		Pkr		92 hr. S.I.
2.	4 x 1-1/8			643	17.6	63	1792	75			1 hr.
3.	4 x 1-1/8			647	29.2	60	1679	78			1.5 hr.
4.	4 x 1-1/8			632	39.7	56	1524	80			1.5 hr.
5.							1389	78			1.25 hr.

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	6.031	76.20	645.2	0.9962	1.301	1.051	626
2	6.031	107.47	656.2	0.9971	1.301	1.053	885
3	6.031	138.85	660.2	1.0000	1.301	1.054	1148
4	6.031	160.05	645.2	1.004	1.301	1.055	1330
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	0.96	524	1.50	0.905	0	
2.	0.97	523	1.49	0.902	0	
3.	0.98	520	1.49	0.901	0.591	
4.	0.96	516	1.47	0.898		
5.						

Specific Gravity Separator Gas 0.591				Specific Gravity Flowing Fluid XXXXXX			
Critical Pressure 674 P.S.I.A.				Critical Temperature 350 R			

P _c 1994.2 P _c ² 3976.8	$(1) \frac{P_c^2}{P_c^2 - R_w^2} = 3.641$	$(2) \left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n = 2.448$
NO P _t ² P _w F _w ² P _c ² - R _w ²		
1 3258.7 3261.3 715.5		
2 2863.5 2884.6 1092.2		
3 2363.0 2400.3 1576.5		
4 1966.2 2017.5 1959.3		
5		

Absolute Open Flow 2,166 Mcfd @ 15.025	Angle of Slope θ	Slope, n .693
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Remarks:			
Approved By Commission:	Conducted By: J. Guy	Calculated By: L. C. Hudry	Checked By: L. C. Hudry

Witness: Sonny Neeld, Southern Union