

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND G.C. POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-24-78	
Company AMOCO PRODUCTION CO			Corporation NORTHERN NATURAL GAS CO		
Pool LANGLIE MATTIX			Formation QUEEN		Unit
Completion Date		Total Depth 3500.	Plug Back TD 3500.	Elevation 3260.	Farm or Lease Name MYERS B FEDERAL
Csg. Size 7.000	Wt. 20.0	d 6.456	Set At 3500.	Perforations: From 3163. To 3199.	Well No. 29
Tbg. Size 2.375	Wt. 4.6	d 1.995	Set At 3144.	Perforations: From 3210. To 3235.	Unit Sec. Twp. Rge. K 15 24S 37E
Type Well - Single - Brodenhead - G.C. or G.O. Multiple SINGLE				Procter Set At 0.	County LEA
Producing Time TUBING		Reservoir Temp. °F 87.6 3200.	Mean Annual Temp. °F 60.0	Boro. Press. - P _g 13.2	State NEW MEXICO
L 3200.	H 3200.	G _g 0.696	% CO ₂ 12.00	% N ₂ 1.00	% H ₂ S 78.00
Prover 0.		Meter Run 4.0	Taps PIPE		

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI						249.	48.		
1.	4.03 X 1.750		64.	4.0	47.	245.	51.	0.	0.
2.	4.03 X 1.750		78.	8.0	49.	240.	56.	0.	0.
3.	4.03 X 1.750		72.	12.0	62.	236.	60.	0.	0.
4.	4.03 X 1.750		77.	16.0	63.	230.	62.	0.	0.
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. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	16.80	17.57	77.2	1.0127	1.1985	1.0103	362.
2	16.80	27.01	91.2	1.0107	1.1985	1.0120	556.
3	16.80	31.97	85.2	0.9981	1.1985	1.0103	649.
4	16.80	37.99	90.2	0.9971	1.1985	1.0108	771.
5.							

NO.	P _g	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	0.07	507.	1.08	0.980	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	0.08	509.	1.08	0.976	Specific Gravity Separator Gas _____ 0.696
3.	0.07	522.	1.11	0.980	Specific Gravity Flowing Fluid _____ 0.696
4.	0.08	523.	1.11	0.979	Critical Pressure _____ 1187. P.S.I.A.
5.					Critical Temperature _____ 469. °R

P _c 262.5	P _c ² 69.	
NO.	P _w ²	P _w
1	67.	261.
2	64.	260.
3	62.	259.
4	59.	257.
5		

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 24.1780$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3822.$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4.9566$$

Absolute Open Flow _____ 3822. _____ Mcfd @ 15.025	Angle of Slope ft. _____ 63.3	Slope, n _____ 0.503
Remarks: _____		
Approved by Commission: _____		
Conducted by: John West Engineering	Calculated by: CJT (Amoco)	Checked by: RMB (Amoco)