

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR 5 WELL

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-25-78	
Company Amoco Production Company				Connection Northern Natural Gas Com	
Pool Langlie Mattix				Formation Queen	
Completion Date 1-30-78		Total Depth 3600		Plug Back TD 3570	
Elevation 3259		Form or Lease Name Myers A Federal			
Log. Size 5.500	Wt. 14.0	d 5.012	Set At 3600.	Perforations: From 3236. To 3300.	
Log. Size 2.375	Wt. 4.7	d 1.995	Set At 3255.	Perforations: From 0 To 0	
Type Well - Single - Bradenhead - G.C. or G.O. Multiple Single				Packer Set At 0.	
Producing Thru Casing				Reservoir Temp. °F 86 @ 3268	
Mean Annual Temp. °F 60.0				Boro. Press. - P _g 13.2	
State New Mexico				County Lea	
L 3268.	H 3268.	G _g 0.692	% CO ₂ 0.16	% N ₂ 2.21	% H ₂ S 0
Prover 0				Meter Run 4.0	
Taps Flange					

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
O.	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
51							336	49			24.0
1.	4.03 x 0.750			61	3.0	54	315	57	0	0	1.0
2.	4.03 x 0.750			62	9.0	62	292	60	0	0	1.0
3.	4.03 x 0.750			62	12.0	68	240	65	0	0	1.0
4.	4.03 x 0.750			62	16.0	66	165	67	0	0	1.0
5.											

RATE OF FLOW CALCULATIONS							
O.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.	2.66	14.92	74.2	1.0058	1.2021	1.0084	48
2.	2.66	26.02	75.2	0.9981	1.2021	1.0080	84
3.	2.66	30.04	75.2	0.9924	1.2021	1.0076	96
4.	2.66	34.69	75.2	0.9943	1.2021	1.0078	111

O.	P _g	Temp. °F	T _g	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	0.11	514	1.35	0.983	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	0.11	522	1.37	0.984	Specific Gravity Separator Gas _____ 0.692
3.	0.11	528	1.39	0.985	Specific Gravity Flowing Fluid _____ 0.692
4.	0.11	526	1.38	0.985	Critical Pressure _____ 665 P.S.I.A.
					Critical Temperature _____ 381 °F

P _g 349.5	P _w 122	
O.	P _c ²	P _w ²
1.	1.08	328
2.	93	305
3.	64	253
4.	32	178

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.3504$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 129$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1629$$

Absolute Open Flow _____ 129 Mcfd @ 15.025		Angle of Slope _____ 63.3		Slope, n _____ 0.503	
Remarks:					
Approved by Commission:		Conducted by: John West Engineering		Calculated by: CCW	
				Checked by: RMB	