

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date	
Company Atlantic Richfield Company				Connection None			
Pool Jalmat				Formation Yates		Unit	
Completion Date 04/01/74		Total Depth 3600		Plug Back TD 3550		Elevation 3474	
Farm or Lease Name McDonald State WN							
Csg. Size 4.5	Wt. 9.5	d 4.090	Set At 3599	Perforations: From 3172 To 3300		Well No. 22	
Tbg. Size 2.375	Wt. 4.7	d 1.995	Set At 3120	Perforations: From Open To End		Unit Sec. Twp. Rge. A 26 22S 36E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 3120		County Lea	
Producing Thru Tbg.		Reservoir Temp. °F 90°		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2	
State New Mexico							
L 3120	H 3120	Gg 0.695	% CO ₂ -0-	% N ₂ -0-	% H ₂ S -0-	Prover 2"	Meter Run Vent Recorder
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
SI							
1.	2 x 1			-0-	54.4	59	49 hr.
2.	2 x 1			-0-	170.0	65	1 hr.
3.	2 x 1			-0-	279.0	68	1 hr.
4.	2 x 1			-0-	455.9	76	1 hr.
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	181.5	---	13.2	1.0010	1.200	1.001	218.0
2	335.1	---	13.2	0.9952	1.200	1.001	401.0
3	445.7	---	13.2	0.9924	1.200	1.001	531.0
4	602.5	---	13.2	0.9850	1.200	1.001	713.3
5							
NO.	P _r	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio -0- Mcf/bbl.		
1	0.02	519	1.34	0.997	A.P.I. Gravity of Liquid Hydrocarbons -0- Deg.		
2	0.02	525	1.35	0.997	Specific Gravity Separator Gas 0.695 XXXXXXX		
3	0.02	528	1.36	0.997	Specific Gravity Flowing Fluid XXXXX 0.695		
4	0.02	536	1.38	0.997	Critical Pressure 669.0 P.S.I.A. 669.0 P.S.I.A.		
5					Critical Temperature 388.0 °R 388.0 °R		
P_c 313.2 P_c^2 98.1							
NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.204$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2035$		
1	76.3		76.9	21.2			
2	50.7		52.8	45.3			
3	33.2		36.9	61.2			
4	9.8		16.6	81.5			
5							
Absolute Open Flow 858 Mcfd @ 15.025					Angle of Slope 45°		Slope, n 0.998
Remarks: The flow rate on this low pressure well that is not connected was obtained with a vent recorder. The flow values for a 24 hour period were obtained from the NMOCC Manual for GOR determination and then corrected.							
Approved By Commission:		Conducted By: C. Johnson		Calculated By: J. Cogburn		Checked By: L. C. Hudry	