

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7/12/84		JUL 18 1984							
Company Bolack Minerals Co.		Connection		OIL CON. DIV.							
Pool Bullock		Formation Pictured Cliffs		Unit DIST. 9							
Completion Date 7-12-84		Total Depth 2250'		Plug Back TD 2219'							
Elevation 6753' KB		Well No. 4-R		Farm or Lease Name Bolack "E"							
Csg. Size 2 7/8"		Wt. 6.5#		Set At 2249'							
Perforations: From 2132' To 2143'		Well No. 4-R		Unit I							
Tbg. Size 1 1/4"		Wt. 2.4#		Set At 2113'							
Perforations: From 2164' To 2170'		Unit I		Sec. 1							
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At None		County Rio Arriba							
Producing Thru Tubing		Reservoir Temp. *F 8		Mean Annual Temp. *F							
Baro. Press. - P _a 12 psia(est.)		State New Mexico		Prover							
L		H		G _g .650							
% CO ₂		% N ₂		% H ₂ S							
Meter Run		Taps		Prover							
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	Duration of Flow
SI	7 days						390		390		
1.	2 inch	1/2	5				5	60°	50		3 hours
2.											
3.											
4.											
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	5.4315		17	1.000	.9608	1.000	89				
2.											
3.											
4.											
5.											
NO.	P _r	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						
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 402 P _c ² 161604											
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.02437$						
1		62	3844	157760	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.02067$						
2											
3					AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 91$						
4											
5											
Absolute Open Flow 91 Mcfd @ 15.025 Angle of Slope 85 Slope, n .85											
Remarks: Dry gas											
Approved By Division			Conducted By: Bill Speer			Calculated By: Bill Speer			Checked By: Bill Speer		