

X ☐ Normal		☐ Special 7-25-73									
Brunson & McKnight, Inc.		None									
Hat Mesa		Morrow									
7-25-73		14,476		14,132							
				3924 DF							
5 1/2		17.0		14,127							
				From 14,058 To 14,127							
2 7/8		6.4		13,985							
				From 13,838 To 14,127							
Single				13,985							
Producing Thru TBG.				Baro. Press. = P _a 13.2							
Reservoir Temp. °F 214				Mean Annual Temp. °F 60							
13,985				Prover							
.606				Meter Run 4"							
				FLG.							
FLOW DATA											
NO.	Flow Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. in. H ₂ O	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.	4 x 1.500			675	4.0	92	4692	71°			26 hr
2.	4 x 1.500			700	8.0	92	4332	75°			1 hr
3.	4 x 1.500			760	16.5	89	4125	76°			1 hr
4.	4 x 1.500			810	25.0	87	3695	76°			1 hr
5.							3229	80°			1 hr
RATE OF FLOW CALCULATIONS											
NO.	Coefficient (24 Hour)	$\sqrt{h_v P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd				
1	10.84	52.47	688.2	.9706	1.285	1.049	744				
2	10.84	75.54	713.2	.9706	1.285	1.051	1073				
3	10.84	112.95	773.2	.9732	1.285	1.056	1617				
4	10.84	143.46	823.2	.9750	1.285	1.060	2065				
5											
NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio <u>229.0</u> Mcf/bbl.						
1	1.03	552	1.54	.908	A.P.I. Gravity of Liquid Hydrocarbons <u>51.4 @ 60</u> Deg.						
2	1.06	552	1.54	.905	Specific Gravity Separator Gas <u>.606</u> X X X X X X X X						
3	1.15	549	1.53	.896	Specific Gravity Flowing Fluid <u>.698</u> X X X X X						
4	1.23	547	1.53	.890	Critical Pressure <u>671</u> P.S.I.A. <u>669</u> P.S.I.A.						
5					Critical Temperature <u>358</u> R <u>388</u> R						
P _c 4705.2 P _c ² 22138.9											
NO.	P _f	P _w	P _f ²	P _w ²	(1) $\frac{P_c^2}{P_f^2 - P_w^2} = 1.917$ (2) $\left[\frac{P_c^2}{P_f^2 - P_w^2} \right]^n = 1.647$						
1	18880.8	4345.2	18880.8	3258.1							
2	17124.7	4141.7	17153.7	4985.2							
3	13,750.7	3715.9	13807.9	8331.0							
4	10511.9	3254.5	10591.8	11547.1	AOF = Q $\left[\frac{P_c^2}{P_f^2 - P_w^2} \right]^n = 3.401$						
5											
Absolute Open Flow <u>3,401</u> Mcfd @ 15.025					Angle of Slope <u>52.5°</u>		Slope, n <u>.767</u>				
Remarks: <u>Made 6.9 BBL. of Dis. API 51.4 @ 60°.</u>											
Approved By (Commission):		Conducted By:		Calculated By:		Checked By:					
		Reggie Reston		Reggie Reston							

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APR 26 1976

THE CONSERVATION COMMISSION

NEWTON, MASS.