

WELL POINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL xc/ T. L. Slife Div Files T. Yoakam L. Carnes C. James D & M W.I. OWNERS

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-10-82		L. Carnes C. James D & M W.I. OWNERS							
Company MESA PETROLEUM CO.		Connection NOT DEDICATED		Unit K							
Pool BASIN DAKOTA		Formation DAKOTA		Farm or Lease Name SCOTT FEDERAL							
Completion Date 2-20-82		Total Depth 7594.		Plug Back TD 7553.							
Elevation 6698.		Well No. 6		Unit Sec. Twp. Rge. 17, 26N, 6W							
Csg. Size 5.500	Wt. 15.5	d 4.653	Set At 7594.	Perforations: From 7376. To 7386.							
Thg. Size 2.063	Wt. 3.2	d 1.750	Set At 7198.	Perforations: From 7492. To 7518.							
Type Well - Single - Bradenhead - G.C. or G.O. Multiple FLOWING				Packer Set At 7198.							
Producing Thru TUBING		Reservoir Temp. °F 174.° 7443.		Mean Annual Temp. °F 60.0							
Baro. Press. - P _a 13.2		State NEW MEXICO									
L 7443.	H 7443.	G _g 0.650	% CO ₂ 0.	% N ₂ 0.	% H ₂ S 0.						
Prover 0.		Meter Run 0.		Taps							
FLOW DATA			TUBING DATA		CASING DATA						
NO.	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	Duration of Flow
SI							2210.	66.			168.0
1.	2.00 X 0.750			325.	0.	59.	325.	59.	0.	0.	3.0
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	10.94	0.	338.2	1.0010	1.2403	1.0354	4758.				
2											
3											
4											
5											
NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio 0. Mcf/bbl.						
1	0.50	519.	1.39	0.933	A.P.I. Gravity of Liquid Hydrocarbons 0. Deg.						
2					Specific Gravity Separator Gas 0.650 XXXXXXXXXX						
3					Specific Gravity Flowing Fluid XXXXX 0.650						
4					Critical Pressure 670. P.S.I.A. 670. P.S.I.A.						
5					Critical Temperature 374. R 374. R						
P _c 2219.2 P _c ² 4925.					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2972$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2155$						
NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5783.$						
1	114.	1062.	1128.	3796.							
2											
3											
4											
5											
Absolute Open Flow 5783. Mcfd @ 15.025					Angle of Slope e 53.1			Slope, n 0.750			
Remarks: 2221300											
Approved By Commission:				Conducted By: C. James				Calculated By: J. Benton			
								Checked By: G. Dixon			