

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

State - 4
Northwest Pipeline C-122
GAS WELL
Kyle Stanley

RECEIVED
JAN 22 1982
OIL CON. COM.
DIST. 3

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-18-82	
Company MESA PETROLEUM CO.				Connection NORTHWEST PIPELINE	
Pool BASIN DAKOTA				Formation DAKOTA	
Completion Date 1-2-82		Total Depth 6950.		Plug Back TD 6910.	
				Elevation 5912.	
Form or Lease Name BRUINGTON					
Csg. Size 5.500	Wt. 15.5	d 4.950	Set At 6946.	Perforations: From 6750. To 6794.	
Thq. Size 2.063	Wt. 3.2	d 1.751	Set At 6605.	Perforations: From 6794. To 6878.	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple FLOWING				Packer Set At 6590.	
Producing Thru TUBING		Reservoir Temp. °F 177.8 6805.		Mean Annual Temp. °F 60.0	
				Baro. Press. - P _a 13.2	
State NEW MEXICO					
L 6805.	H 6805.	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		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
SI							2041.	35.			168.0
1.	2.00 X 0.750			168.	0.	61.	168.	61.	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 F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	10.94	0.	181.2	0.9990	1.2403	1.0182	2502.
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.27	521.	1.39	0.965	0.	0.
2.					0.	0.
3.					0.650	XXXXXXX
4.					0.650	XXXXXXX
5.					670.	670. P.S.I.A.
					374.	374. P.S.I.A.

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	33.	562.	316.	4000.
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0789$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2649.$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0504$

Absolute Open Flow	2649	Mcf/d @ 15.025	Angle of Slope @	52.1	Slope, n @	750
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Remarks:			
Approved By Commission:	Conducted By: Charlie James	Calculated By: Shirley Wetrosky	Checked By: John Benton