

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

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122
Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-17-79		DEC 20 1979	
Company MESA PETROLEUM				Direction AIR		O. C. O.	
Well WHITE CITY, N.M.				Formation ATOKA		Unit ARTESIA, OFFICE	
Completion Date 5-17-79		Total Depth 11730		Perforations 11530-11310		Elevation 3342 GL	
Casing Size 2 3/8		Set At 10,443		Perforations From 10,496 To 10,581		Well No. # 2	
Type Well - Single - Portthead - G.G. or G.O. Multiple SINGLE		Packer Set At 10,443		County EDDY		State NEW MEXICO	
Producing thru TBG.		Reservoir Temp. °F 188 @ 10443		Mean Annual Temp. °F 60 *		Baro. Press. - P _a 13.2	
L 10443		H 10443		G _g .627		% CO ₂ .26	
				% H ₂ .78		% H ₂ S 0	
				Prover		Meter Run 4"	
						FLG.	

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
1.	4 X 1.375			500	2.	117	2250				72 HR.
2.	4 X 1.375			510	4.5	118	2125				1 HR.
3.	4 X 1.375			515	10.0	93	2095				1 HR.
4.	4 X 1.375			520	24.0	78	2060				1 HR.
5.							2030				1 HR.

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{spv}	Rate of Flow Q, Mgd
1.	9.071	32.04	513.2	.9493	1.263	1.034	360
2.	9.071	48.52	523.2	.9485	1.263	1.034	545
3.	9.071	72.68	528.2	.9697	1.263	1.042	841
4.	9.071	113.12	533.2	.9831	1.263	1.047	1334
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	dry	Mcf/Dal.
1.	77	577	1.57	.935	A.P.L. Gravity of Liquid Hydrocarbons		Dep.
2.	73	578	1.57	.935	Specific Gravity Separator Gas	.627	X X X X X X X X
3.	75	583	1.50	.921	Specific Gravity Flowing Fluid	X X X X X	
4.	80	588	1.46	.912	Critical Pressure	670	P.S.I.A.
5.					Critical Temperature	368	°R

NO.	P _r ²	P _w ²	P _w ² - P _r ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 5.734$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 5.734$
1.	2132.4	4577.0	545.1		
2.	2110.6	4454.6	667.5		
3.	2078.2	4318.9	803.2		
4.	2056.4	4228.8	893.3		
5.					

Absolute Open Flow		Mcf/D 15.025		Angle of Slope 45°		Slope, n 1.000	
7,649							

Approved by: _____	Conducted by: JOHN DAVIS	Calculated by: LARRY DAVIS	Checked by: _____
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