

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

98
File
122 Form C-122
Revised 9-1-68

RECEIVED

☒ Initial ☐ Annual ☐ Special				Date: 01-06-80		JAN 23 1980	
Company: MESA PETROLEUM				Location: AIR		O. C. D.	
Well: UNDESIGNATED <i>Diamond</i> <i>mountain</i>				Formation: ATOKA		Artesia, Office	
Completion Date: 01-03-80		Total Depth: 9351		Perforation: 9268		Elevation: 3635 GL	
Casing Size: 4 1/2 Wt: 11.6		Set At: 9351		Perforation: From 8925 To 9079		Well No. # 1	
Tubing Size: 2 3/8 Wt: 4.7		Set At: 8872		Perforation: From open To end		Unit: 5 Sec: 16s Twp: 28e	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Factor Set At: 8856		County: EDDY	
Producing Thru: TBG.		Reservoir Temp. °F: 162° 8872		Mean Annual Temp. °F: 60		State: NEW MEXICO	
L: 8872		H: 8872		Gg: .673		% CO ₂ : .40	
				% N ₂ : 1.15		% H ₂ S:	
				Prover:		Meter Run: 4	
						Type: ELC.	

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
51							2517				72 HRS.
1.	4 X	1.375		555	2.	72	2350				1 HR.
2.	4 X	1.375		570	4.	112	2240				1 HR.
3.	4 X	1.375		550	9.	102	2150				1 HR.
4.	4 X	1.375		560	16.	80	1840				1 HR.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super. Comp. Factor, Fpv	Rate of Flow Q, Mgd
1	9.071	33.71	568.2	.9887	1.219	1.060	391
2	9.071	48.30	583.2	.9535	1.219	1.046	533
3	9.071	71.20	563.2	.9619	1.219	1.048	794
4	9.071	95.77	573.2	.9813	1.219	1.058	1099
5.							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.85	532	1.39	.890	39.125	50.16 @ 60	.673		669	382
2	.87	572	1.50	.914						
3	.84	562	1.47	.910						
4	.86	540	1.41	.894						
5.										

NO.	P _f	P _w	P _w ²	P _f ² - P _w ²
1	2530.2	6401.9		
1		2364.5	5590.9	811.0
2		2255.1	5085.5	1316.4
3		2167.0	4695.9	1706.0
4		1861.2	3464.1	2937.8
5				

$$(1) \frac{P_f^2}{P_f^2 - P_w^2} = 2.1791$$

$$ADP = Q \left[\frac{P_f^2}{P_f^2 - P_w^2} \right]^n = 2.065$$

$$(2) \left[\frac{P_f^2}{P_f^2 - P_w^2} \right]^n = 1.8793$$

Absolute Open Flow: 2,065	Field @ 15,025	Angle of Slope: 51.0	Slope, n: .810
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Remarks: WELL MADE 3 BBLS COND.

Approved By Commission:	Conducted By: JOHN DAVIS	Calculated By: LARRY DAVIS	Checked By:
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