

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-29-81		AUG 11 1981	
Company MESA PETROLEUM CO. ✓			Connection UNCONNECTED		O. C. D. ARTESIA, OFFICE
Pool UNDESIGNATED ABO			Formation ABO		Unit
Completion Date 7-29-81		Total Depth 4300'	Plug Back TD 4259'	Elevation 4071'	Farm or Lease Name HOBBS FEDERAL
Csg. Size 4 1/2"	Wt. 10.5#	Set At 4299'	Perforations: From 3736' To 4087'		Well No. 1
Tbg. Size 2 3/3"	Wt. 4.7#	Set At 3640'	Perforations: From OPEN ENDED To		Unit Sec. Twp. Rge. G 8 6S 25E
Type Well -- Single -- Bradenhead -- G.G. or G.O. Multiple SINGLE			Packer Set At NONE		County CHAVES
Producing Thru TUBING		Reservoir Temp. °F 105° @ 4300'	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State NEW MEXICO
L 4087	H 4087	G _g .65	% CO ₂ 1	% N ₂ 2	% H ₂ S Prover 2" ORIFICE WELL TESTER

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							790		750		72 HR SI
1.	2" ORIFICE	1	1/4	6	-	80	725	80	700		1 HR
2.	WELL	1	1/4	16	-	80	640	80	630		1 HR
3.	TESTER	1	1/4	24	-	80	555	80	543		1 HR
4.		1	1/4	29	-	80	455	80	455		1 HR
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	561	2" ORIFICE WELL		.9813	.9608	-	529
2.	1004	TESTER		.9813	.9608	-	947
3.	1390			.9813	.9608	-	1311
4.	1578			.9813	.9608	-	1488
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
1.					Specific Gravity Separator Gas _____	X X X X X X X X
2.					Specific Gravity Flowing Fluid _____	X X X X X
3.					Critical Pressure _____ P.S.I.A.	_____ P.S.I.A.
4.					Critical Temperature _____ R	_____ R
5.						

P_c	750	P_c^2	563
NO	F_t^2	P_w	P_w^2
1		700	490
2		630	397
3		543	295
4		455	207
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \underline{1.5815}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{1.3595}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{2,000}$$

Absolute Open Flow 2,000 Mcfd @ 15.025 Angle of Slope θ 56.2° Slope, n .67

Remarks: _____

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: EUB F.I. BUTTROSS, JR.	Checked By:
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