

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

Form C-122
Revised 5-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-21-82		MAY - 7 1982	
Company Mesa Petroleum Co.		Connection UNCONNECTED		Unit O. C. D.	
Pool PECOS SLOPE ABO		Formation ABO		ARTESIA, OFFICE	
Completion Date 4-21-82		Total Depth 4150'		Plug Back TD 4'02'	
Elevation 3906'		Farm or Lease Name HORSE CREEK COM		Well No. 2	
Csg. Size 4 1/2"	Wt. 10.5#	Set At 4140'	Perforations: From 3525' To 3797'		Unit E
Tng. Size 2 3/8"	Wt. 4.7#	Set At 3420'	Perforations: From OPEN ENDED To		Sec. 11
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 101 @ 4150		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State NEW MEXICO		Prover 2" ORIFICE WELL TESTER	
L	H	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S

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.	2" ORIFICE	1"	9.5			51	150	64	245		72 HR SI
2.	WELL										1 HR
3.	TESTER										
4.											
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _{re}	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	431	2" ORIFICE WELL		1.0088	.9608		418
2.		TESTER					
3.							
4.							
5.							

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

P _c 943	P _c ² 889	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0815$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0815$
NO. 1	P _w ² 258	P _w ² 67	P _c ² - P _w ² 822
2			
3			
4			
5			

$$ACF = C \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 450$$

Absolute Open Flow 450 Mcfd @ 15.025 Angle of Slope @ 45° Slope, n 1

Remarks: UNABLE TO RUN FOUR FLOW RATES DUE TO LOW DELIVERY OF WELL.
ASSUMED n = 1 AND BASED CALCULATIONS ON ONE POINT TEST.

Approved By Commission: _____ Conducted By: _____ Calculated By: ECR 5-4-82 _____ Checked By: _____

MESA PETROLEUM CO.
HORSE CREEK COM. NO. 2
CHAVES CO., NM
4-21-82

