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

Form C-122
Revised 9-1-65

SEP 14 1982

File

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 8-23-82	
ARTESIA OFFICE MC KAY OIL COMPANY				Connection AIR NEW WELL	
Pool <u>Pecos Slope</u> UNDESIGNATED				Formation ABO	
Completion Date 8-23-82		Total Depth 4770-4800		Plug Hole 1 4740-4730	
Elevation 0		Farm or Lease Name HUSKEY MC KAY FEDERAL			
Well Size 4.5000	Wt. 10.50	d 4.052	Set At 4730	Perforations: From 4036 To 4046	
Well No. 1					
Fig. Size 2.3750	Wt. 4.70	d 1.995	Set At 3995	Perforations: From 4368 To 4379	
Unit Ø	Sec. 18	Top. 85	Adj. 265		
Type Well - Single - Packerhead - G.O. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing thru TUBING				County CHAVES	
Reservoir Temp. °F 118@4207		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
State N.M.					
L 4207	H 4207	Og 0.702	% CO ₂ 4.80	% N ₂ 9.39	% H ₂ S 0
Prover 2.0		Meter Run 0.		Type FLANGE	

FLOW DATA						TUBING DATA		B.H.P. 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.		CHOKE
51									1007.		74 HRS.
1.	2.00	X	0.188	455	.00	79	.00	.00	970	8/64	1 HR
2.	2.00	X	0.313	320	.00	66	.00	.00	903	12/64	1 HR
3.	2.00	X	0.313	510	.00	78	.00	.00	815	11/64	1 HR
4.	2.00	X	0.313	610	.00	77	.00	.00	732	29/64	1 HR
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_1 - P_2}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{sp}	Rate of Flow Q, Mcfd
1	0.61	.00	468.2	0.9822	1.1937	1.0357	345.
2	1.67	.00	333.2	0.9943	1.1937	1.0284	678.
3	1.67	.00	523.2	0.9831	1.1937	1.0401	1065.
4	1.67	.00	623.2	0.9840	1.1937	1.0483	1280.
5							

NO.	P ₁	Temp. °R	T ₁	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	0.70	539	1.51	0.932			0.702	XXXXXX	672	357
2	0.50	526	1.47	0.945				XXXXXX		
3	0.78	538	1.51	0.924						
4	0.93	537	1.51	0.910						
5										

P ₁ 909.3		P ₂ 827.	
NO.	P ₁ ²	P ₂ ²	P ₁ ² - P ₂ ²
1		877	769
2		818	669
3		740	548
4		667	445
5			

(1) $\frac{P_0^2}{P_1^2 - P_2^2} = 2.1632$

AOF = 0 $\left[\frac{P_1^2}{P_1^2 - P_2^2} \right]^n = 2187.$

(2) $\left[\frac{P_1^2}{P_1^2 - P_2^2} \right]^n = 1.7088$

Absolute Open Flow	2187	Mcfd @ 15.025	Angle of Slope °	55.2	Slope, n	0.694
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Remarks: BOTTOM HOLE PRESSURE MEASURED WITH AMERADA PRESSURE ELEMENTS

Approved By Commission	Conducted By: DON BENNETT	Calculated By: BENNETT- CATHEY	Checked By:
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