

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

Form C-122
 Revised 9-1-63

Type Test: ☒ Initial 4 POINT ☐ Annual ☐ Special						Test Date: 2-14-83	
Company: W.A. MONCRIEF, JR.				Connection: TRANSWESTERN			
Pool: South Kemnitz Atoka-Morrow				Formation: MORR DETRIAL			
Completion Date: 2-2-83		Total Depth: 13,178		Plug Hole: 13,130		Elevation: 4,150	
Perforations: From 13,114 To 13,124		Well No.: 1					
Perforations: From 0 To 0		Unit: 18		Sec.: 165		Twp.: 34E	
Type Well - Single - (Wardenhead - G.O. or G.O. Multiple)						County: LEA	
Producing thru: TUBING		Reservoir Temp. °F: 205		Mean Annual Temp. °F: 60		State: NEW MEXICO	
L: 13,119		H: 13,119		Q _g : 0.671		Prover: 4.0	
CO ₂ : 0.56		N ₂ : 1.08		H ₂ S: 0		Tape: 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							3213	60			72 HRS.
1	4.03	X	1.750	447	1.6	67	2843	67	0	4/64	1 HR.
2	4.03	X	1.750	458	4.0	72	2560	69	0	5.25/64	1 HRS.
3	4.03	X	1.750	435	5.0	77	2445	69	0	8/64	1 HR.
4	4.03	X	1.750	430	8.5	78	2420	69	0	9.5/64	1 HR.

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 _{sp}	Rate of Flow Q, Mcfd
1	14.93	27.14	460.2	0.9933	1.2208	1.0467	514
2	14.93	43.41	471.2	0.9887	1.2208	1.0464	818
3	14.93	47.34	448.2	0.9840	1.2208	1.0429	885
4	14.93	61.38	443.2	0.9831	1.2208	1.0422	1146

NO.	R	Temp. °R	T _g	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	0.69	527	1.40	0.913		0.671			670	377
2	0.70	532	1.41	0.913						
3	0.67	537	1.43	0.919						
4	0.66	538	1.43	0.921						

NO.	P ₁ ²	P _w ²	R ₁ ²	R ₁ ² - R _w ²
1	8158	2846	8099	2309
2	6621	2565	6577	3831
3	6043	2453	6017	4392
4	5920	2443	5968	4441

(1) $\frac{P_g^2}{R^2 - R_w^2} = 2.3698$

AOF = 0 $\left[\frac{R^2}{R^2 - R_w^2} \right]^n = 2097.$

(2) $\left[\frac{R^2}{R^2 - R_w^2} \right]^n = 2.3698$

Absolute Open Flow: 2097 Mcfd @ 15.025	Angle of Slope: 45.0	Slope, n: 1.000
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Approved By Commission:	Conducted By: DON BENNETT	Calculated By: BENNETT-CATHEY	Checked By:
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RECEIVED

FEB 18 1967

O.C.D.
HOBBS OFFICE