

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

Form C-122
Revised 9-1-65

N. M. O. C. C. COPY

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-27-76		RECEIVED	
Company N.R.M. Petroleum Corporation				Connection To AIR			
Pool Golden Lane				Formation Strawn		MAR 11 1976 U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO Form of Lease No. 10000 Golden Federal	
Completion Date 1-23-76		Total Depth 12,646'		Plug Back TD 11,150'			
Csg. Size 5 1/2"	Wt. 17# 20#	d	Set At 12,642'	Perforations: From 11117' To 11133'		Well No. 1	
Tbg. Size 2 3/8"	Wt. N-80	d	Set At 10998'	Perforations: From Open To Ended		Unit D 33 20S 30E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,956.85'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 176° @ 11 135'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
State New Mexico							
L 11135	H 11135	Gg 0.6754	% CO ₂ 0.147	% N ₂ 1.537	% H ₂ S -0-	Prover -0-	Meter Run 4"
						Taps Flange	

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							1585.0		Packer	Choke	66.25 Hrs.
1.	4" X 1.125"			320.0	75.0	71	1055.0	76		20/64	150 min.
2.	4" X 1.125"			400.0	55.0	74	1045.0	76		18/64	60 min.
3.	4" X 1.125"			400.0	21.0	78	990.0	75		14/64	60 min.
4.	4" X 1.125"			400.0	9.0	84	997.0	75		10/64	60 min.
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	6.031	158.08	333.2	.9896	1.217	1.033	1186
2	6.031	150.75	413.2	.9868	1.217	1.041	1137
3	6.031	93.15	413.2	.9831	1.217	1.040	699
4	6.031	60.98	413.2	.9777	1.217	1.039	455
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.	0.50	531	1.40	.937	54.750 Mcf/bbl.	54.0 Deg.	0.729	XXXXXXX	668 P.S.I.A.	379 R
2.	0.62	534	1.41	.923				XXXXXXX		
3.	0.62	538	1.42	.924						
4.	0.62	544	1.44	.927						
5.										

NO.	P _f ²	P _s ²	P _s ²	P _f ² - P _s ²
1	3495.2	12216		
1		2802.2	7852	4364
2		2693.2	7253	4963
3		2731.2	7459	4757
4		2823.2	7970	4246
5				

$$(1) \frac{P_f^2}{P_f^2 - P_s^2} = 2.4614$$

$$AOF = Q \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 2799$$

$$(2) \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 2.4614$$

Absolute Open Flow 2799 Mcfd @ 15.025		Angle of Slope θ 45.0°		Slope, n 1.000 Ltd	
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Remarks: Bottom hole pressures measured with amerada gauge @ 11,135 Feet Test conducted in reverse sequence - no point alignment 1.000 limited slope drawn through second rate of flow (of reverse sequence)	
Approved By Commission:	Conducted By: Don Tyson
Calculated By: R. West	Checked By: J.W.W.