

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

Form O-122

clsf.
File

Type Test [x] Initial [] Annual [] Special				Test Date 3/3/88	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool South Millman <i>(Moresu)</i>				Formation Morrow	
Completion Date 4/3/84		Total Depth 11296.0'		Plug Back TD 11197.0'	
				Elevation 3499.0'	
Csg Size 4.500"		Wt. 9.500#	d 4.090"	Set At 11296.0'	Perforations: From 10966.0' To 11015.0'
Tbg Size 2.375"		Wt. 4.700#	d 1.995"	Set At 10906.0'	Perforations: From 0.0' To 0.0'
Type Well Single				Packer Set At 10906.0'	
Producing Thru Tubing		Resv. Temp. °F 174 @ 10990'		Baro. Press. - Pa 13.2 psia.	
L 10906.0'		H 10906.0'	Gg .608	%CO2 .80	%N2 .21
				%H2S 0.00	Prover 0.000"
				Meter Run 2.000"	Taps Flange
Farm or Lease Name Millman SB State				Well No. 2	
Unit Sec K 16				Twp Rge 19S 28E	
County Eddy				State New Mexico	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
SI	0.000 X 0.000	0	0.0	40	2300	0	0	0	0 hrs.
1.	2.067 X 1.000	440	7.2	40	1352	62	0	0	24 hrs.
2.	2.067 X 1.000	440	9.2	40	1239	62	0	0	24 hrs.
3.	2.067 X 1.000	440	10.3	40	960	62	0	0	24 hrs.
4.	2.067 X 1.000	440	12.0	40	700	62	0	0	24 hrs.
5.	0.000 X 0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	$\sqrt{hwP_m}$	Pressure P _m	Flow Temp Factor Ft.	Gravity Factor F _g	Super Compress. Fact. F _{pv}	Rate of Flow Q, Mcfd
1.	4.947	57.12	453.20	1.020	1.282	1.044	386
2.	4.947	64.57	453.20	1.020	1.282	1.044	436
3.	4.947	68.32	453.20	1.020	1.282	1.044	462
4.	4.947	73.75	453.20	1.020	1.282	1.044	498
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio
1.	.67	500	1.40	.917	344.110 Mcf/bbl.
2.	.67	500	1.40	.917	A.P.I. Gravity of Liquid Hydrocarbons 52.200 Deg.
3.	.67	500	1.40	.917	Specific Gravity Separator Gas .608
4.	.67	500	1.40	.917	Specific Gravity Flowing Fluid .617
5.	0.00	0	0.00	0.000	Critical Pressure 674.8 PSIA
					Critical Temperature 356.7°R

Pc	2313.2	Pc ²	5350.9			
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²	(1) $\frac{Pc^2}{Pc^2-Pw^2} = 1.1053$	(2) $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = 1.0809$
1.	1863.8	1366.9	1868.3	3482.6		
2.	1568.0	1254.6	1573.9	3777.0		
3.	947.1	976.7	954.0	4396.9		
4.	508.7	719.0	516.9	4834.0		
5.	0.0	0.0	0.0	0.0		

ROF = Q $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \underline{539 \text{ Mcfd}}$

$$AOF = Q \left[\frac{P_{c2}}{P_{c2}-P_{w2}} \right]^n = 539 \text{ Mcfd}$$

Absolute Open Flow 539 Mcfd @ 15.025 Angle of Slope, θ 38 Slope, n .777

Approved By:	Conducted By: Tracy Richardson	Calculated By: Andrea Carpenter	Checked By:
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