

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

Form C-122

APR 10 '89

Type Test [x] Initial [] Annual [] Special				Test Date 2/11/88		APR 10 '89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		C. C. D.	
Pool <u>BUFFALO VALLEY</u> Penn				Formation Buffalo Valley		Unit <u>W. 134.0 WGS</u>	
Completion Date 4/13/83		Total Depth 8460.0'		Plug Back TD 8220.0'		Elevation 3444.0'	
Farm or Lease Name Salt Grass WS Fed.				Well No. 1			
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 8460.0'	Perforations: From 8127.0' To 8148.0'		Unit Sec Twp Rge I 26 14S 27E	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 8090.0'	Perforations: From 0.0' To 0.0'		County Chaves	
Type Well Single				Packer Set At 8090.0'		State New Mexico	
Producing Thru Tubing		Resv. Temp. °F 164 @ 8080'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 8090.0'	H 8090.0'	Gg .641	%CO2 .34	%N2 .46	%H2S 0.00	Prover 0.000"	Meter Run 2.000"
Taps Flange							

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	52	1520	0	0	0	0 hrs.
1.	2.067 X 1.000	570	10.2	48	1399	62	0	0	24 hrs.
2.	2.067 X 1.000	560	13.6	49	1346	62	0	0	24 hrs.
3.	2.067 X 1.000	540	31.4	52	1260	62	0	0	24 hrs.
4.	2.067 X 1.000	390	60.0	51	1200	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 F _t	Gravity Factor F _g	Super Compress. Fact. F _{pv}	Rate of Flow Q, Mcfd
1.	4.947	77.13	583.20	1.012	1.249	1.062	512
2.	4.947	88.29	573.20	1.011	1.249	1.060	585
3.	4.947	131.80	553.20	1.008	1.249	1.056	867
4.	4.947	155.54	403.20	1.009	1.249	1.040	1009
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	210.140 Mcf/bbl.
1.	.87	508	1.38	.887	A.P.I. Gravity of Liquid Hydrocarbons	61.100 Deg.
2.	.85	509	1.38	.890	Specific Gravity Separator Gas	.641
3.	.82	512	1.39	.896	Specific Gravity Flowing Fluid	xxxxxxx
4.	.60	511	1.39	.924	Critical Pressure	671.3 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	367.7°R

Pc	1533.2	Pc ²	2350.7
NO	Pt ²	Pw	Pw ²
1.	1994.3	1413.0	1996.5
2.	1847.4	1360.3	1850.3
3.	1621.0	1275.7	1627.5
4.	1471.9	1216.8	1480.6
5.	0.0	0.0	0.0

(1)	$\frac{P_c^2}{P_c^2 - P_w^2} = \frac{2.6816}{}$	(2)	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.0955}{}$
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2114 \text{ Mcfd}}{}$			

Absolute Open Flow 2114 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .750
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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