

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

Form C-122

ASF
File

RECEIVED

Type Test [x] Initial [] Annual [] Special					Test Date 12/21/88			
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company		APR 10 '89	
Pool Abbo Pecos Slope AGO					Formation Pecos Slope		Unit	
Completion Date 10/10/82		Total Depth 4575.0'		Plug Back TD 4524.0'		Elevation 3577.0'		Farm on Lease Name Leeman OC Federal
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4575.0'	Perforations: From 3832.0' To 3865.0'		Well No. 4		
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 3772.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge D 20 7S 26E		
Type Well Single					Packer Set At 3774.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 96 @ 3772'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia		State New Mexico
L 3772.0'	H 3772.0'	Gg .641	%CO2 .03	%N2 6.08	%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	48	890	0	0	0	0 hrs.
1.	2.067 X 1.000	290	19.7	47	715	62	0	0	24 hrs.
2.	2.067 X 1.000	350	36.1	49	563	62	0	0	24 hrs.
3.	2.067 X 1.000	380	43.9	48	540	62	0	0	24 hrs.
4.	2.067 X 1.000	390	49.0	47	400	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 Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	4.947	77.29	303.20	1.013	1.249	1.027	497
2.	4.947	114.51	363.20	1.011	1.249	1.032	738
3.	4.947	131.38	393.20	1.012	1.249	1.035	850
4.	4.947	140.56	403.20	1.013	1.249	1.036	911
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio Dry	Mcf/bbl.
1.	.46	507	1.44	.949	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.55	509	1.44	.939	Specific Gravity Separator Gas	.641
3.	.60	508	1.44	.934	Specific Gravity Flowing Fluid	.641
4.	.61	507	1.44	.931	Critical Pressure	660.5 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	352.5°R

Pc	903.2	Pc ²	815.8	
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²
1.	530.3	728.9	531.4	284.4
2.	332.0	578.3	334.5	481.3
3.	306.0	556.2	309.3	506.5
4.	170.7	417.8	174.6	641.2
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2 - Pw^2} = \frac{1.2745}{}$

(2) $\left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = \frac{1.1989}{}$

ROF = $Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = \frac{1093 \text{ Mcfd}}{}$

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.2745 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1989$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1093 \text{ Mcfd}$$

Absolute Open Flow 1093 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .748
Remarks:

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