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MAY 13 1991

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

Form C-122

Type Test [x] Initial [] Annual [] Special						Test Date 10/25/90	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Rbo				Formation Pecos Slope		Unit	
Completion Date 3/7/83		Total Depth 4100.0'		Plug Back TD 4060.0'		Elevation 3524.0'	
Csg Size 4.500"		Wt. 9.500#		Set At 4100.0'		Perforations: From 3560.0' To 3764.0'	
Tbg Size 2.875"		Wt. 6.500#		Set At 3540.0'		Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3540.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 98 @ 3540'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 3540.0'		H 3540.0'		Gg .660		Proven 0.000"	
				%CO2 .37		%N2 8.77	
				%H2S 0.00		Meter Run 2.000"	
						Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Proven Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
0.	0.000 X 0.000	0	0.0	61	1015	0	0	0	0 hrs.
1.	2.067 X .750	140	13.0	64	963	62	0	0	24 hrs.
2.	2.067 X .750	140	15.6	65	957	62	0	0	24 hrs.
3.	2.067 X .750	115	24.3	61	930	62	0	0	24 hrs.
4.	2.067 X .750	115	38.0	60	920	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)	1/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	2.709	44.63	153.20	.996	1.231	1.012	150
2.	2.709	48.89	153.20	.995	1.231	1.012	164
3.	2.709	55.81	128.20	.999	1.231	1.009	188
4.	2.709	69.80	128.20	1.000	1.231	1.009	235
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.	.23	524	1.49	.977	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.23	525	1.50	.977	Specific Gravity Separator Gas	.660	xxxxxxx
3.	.20	521	1.49	.983	Specific Gravity Flowing Fluid	xxxxx	.660
4.	.20	520	1.48	.983	Critical Pressure	656.8	PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	350.6	°R

Pc 1028.2 Pc² 1057.2					$ROF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{890 \text{ Mcfd}}{\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n}$
NO	Pt²	Pw	Pw²	Pc²-Pw² (1)	
1.	953.0	976.2	953.1	104.1	
2.	941.3	970.3	941.4	115.8	
3.	889.6	943.3	889.8	167.4	
4.	870.9	933.3	871.1	186.1	
5.	0.0	0.0	0.0	0.0	

Absolute Open Flow 890 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .766
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 5/13/91

COMPANY Yates Petroleum Corporation LEASE Mountain VR Fed WELL NO. 2

LOCATION: Unit F Section 8 Township 10S Range 25E

L 3540.0 H 3540.0 L/H 1.000 G .660 %CO₂ .37 %N₂ 8.77 %H₂S 0.00

d 2.441 Fr .010495 GH 2336.4 Pcr 656.8 Tcr 350.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.150	.164	.188	.235	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	558.0	558.0	558.0	558.0	0.0
4 T=(Tw+Ts)/2	540.0	540.0	540.0	540.0	0.0
5 Z(Est.)	.868	.869	.872	.873	0.000
6 TZ	468.9	469.3	471.0	471.7	0.0
7 GH/TZ	4.982	4.978	4.960	4.953	0.000
8 e ^s (Table XIV)	1.205	1.205	1.204	1.204	0.000
9 1-e ^{-s} (Table XIV)	.170	.170	.170	.170	0.000
10 Pt	976.2	970.2	943.2	933.2	0.0
11 Pt ² /1000	953.0	941.3	889.6	870.9	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	4.921	4.925	4.943	4.950	0.000
14 FcQm	.738	.809	.927	1.162	0.000
15 L/H(FcQm) ²	.545	.654	.860	1.351	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.093	.111	.146	.229	0.000
17 Pw ² =Pt ² +Fw	953.1	941.4	889.8	871.1	0.0
18 Ps ² =e ^s Pw ²	1148.8	1134.6	1071.7	1048.9	0.0
19 Ps	1071.8	1065.2	1035.2	1024.2	0.0
20 P=(Pt+Ps)/2	1024.0	1017.7	989.2	978.7	0.0
21 Pr=(P/Pcr)	1.56	1.55	1.51	1.49	0.00
22 Tr=(T/Tcr)	1.54	1.54	1.54	1.54	0.00
	0.00	0.00	0.00	0.00	0.0000

Company	Yates Petroleum Corporation
Well	Mountain VR Fed No. 2
Location	F, 8-10S-25E
County	Chaves
Date	5/13/91

