

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

Form C-122

APR 22 '88

Type Test [X] Initial [] Annual [] Special				Test Date 2/28/88	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool PECOS SLOPE ABO				Formation ABO	
Completion Date 8-27-84				Total Depth 4000.0'	
Csg Size Wt. 4.500" 9.500#				Plug Back TD 3930.0'	
Tbg Size Wt. 2.375" 4.700#				Elevation 3878.2'	
Type Well Single				Packer Set At 3584.0'	
Producing Thru Tubing				Baro. Press. - Pa 13.2 psia.	
L 3584.0'				H 3584.0'	
Gg .658				%CO2 .03	
				%N2 8.65	
				%H2S 0.00	
				Proven 0.000"	
				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	
SI	0.000 X 0.000	0	0.0	60	873	0	0	0	0 hrs.
1.	2.067 X 1.375	115	17.0	60	650	62	0	0	24 hrs.
2.	2.067 X 1.375	120	21.1	60	624	62	0	0	24 hrs.
3.	2.067 X 1.375	125	25.4	60	544	62	0	0	24 hrs.
4.	2.067 X 1.375	130	28.2	60	496	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. Fpu	Rate of Flow Q, Mcfd
1.	10.204	46.68	128.20	1.000	1.233	1.009	592
2.	10.204	53.01	133.20	1.000	1.233	1.009	673
3.	10.204	59.25	138.20	1.000	1.233	1.010	753
4.	10.204	63.55	143.20	1.000	1.233	1.010	808
5.	0.000	0.30	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcf/bbl.
1.	.20	520	1.48	.983	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.20	520	1.48	.982	Specific Gravity Separator Gas	.658	xxxxxxx
3.	.21	520	1.48	.981	Specific Gravity Flowing Fluid	xxxxxxx	.658
4.	.22	520	1.48	.980	Critical Pressure	655.6 PSIA	655.6 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	350.9°R	350.9°R

Pc 886.2 Pc2 785.4

NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2	Pc2-Pw2	(2)	Pc2	Pc2-Pw2	n
1.	439.8	666.6	444.3	341.1	1.5220	1.3682				
2.	406.0	641.7	411.8	373.6						
3.	310.5	563.7	317.8	467.6						
4.	259.3	517.5	267.8	517.6						
5.	0.0	0.0	0.0	0.0						

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1105 \text{ Mcfd}$$

Absolute Open Flow 1105 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .746

Approved By: _____ Conducted By: DAVID WEAVER Calculated By: ANDREA CARPENTER Checked By: _____

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 4/21/88

COMPANY Yates Petroleum Corporation LEASE SNELL 02 WELL NO. 1

LOCATION: Unit C Section 31 Township 6S Range 25E

L 3584.0 H 3584.0 L/H 1.000 G .658 %CO2 .03 %N2 8.65 %H2S 0.00

d 1.995 Fr .017777 GH 2358.3 Pcr 655.6 Tcr 350.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.592	.673	.753	.808	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	568.0	568.0	568.0	568.0	0.0
4 T=(Tw+Ts)/2	545.0	545.0	545.0	545.0	0.0
5 Z(Est.)	.910	.913	.924	.930	0.000
6 TZ	496.0	497.7	503.4	506.8	0.0
7 GH/TZ	4.755	4.738	4.685	4.654	0.000
8 e ^s (Table XIV)	1.195	1.194	1.192	1.191	0.000
9 1-e ^{-s} (Table XIV)	.163	.163	.161	.160	0.000
10 Pt	663.2	637.2	557.2	509.2	0.0
11 Pt ² /1000	439.8	406.0	310.5	259.3	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.820	8.848	8.950	9.010	0.000
14 FcQm	5.225	5.956	6.736	7.276	0.000
15 L/H(FcQm) ²	27.304	35.470	45.370	52.945	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	4.458	5.774	7.308	8.477	0.000
17 Pw ² =Pt ² +Fw	444.3	411.8	317.8	267.8	0.0
18 Ps ² =e ^s Pw ²	531.0	491.9	378.8	318.8	0.0
19 Ps	728.7	701.3	615.5	564.6	0.0
20 P=(Pt+Ps)/2	695.9	669.3	586.3	536.9	0.0
21 Pr=(P/Pcr)	1.06	1.02	.89	.82	0.00
22 Tr=(T/Tcr)	1.55	1.55	1.55	1.55	0.00
23 Z(Table XI)	.910	.913	.924	.930	0.000

Company	Yates Petroleum Corporation
Well	SNELL 02 No. 1
Location	C, 31-6S-25E
County	CHAVES
Date	4/21/88

