

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

Form C-122

APR 22 '88

Type Test [X] Initial [] Annual [] Special				Test Date 3/3/88	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool WILDCAT FUSSLEMAN				Formation ORDOVICIAN	
Completion Date 12/31/87				Total Depth 6371.0'	
Csg Size Wt. 5.500" 14.000#				Set At 5.012" 6348.0'	
Tbg Size Wt. 2.375" 4.700#				Set At 1.995" 5931.0'	
Type Well Single				Packer Set At 5931.0'	
Producing Thru Tubing				Baro. Press. - Pa 13.2 psia.	
L 5931.0'				H 5931.0'	
Gg .648				%CO2 1.08	
%N2 4.06				%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	0	1804	0	0	0	0 hrs.
1.	2.067 X 1.375	200	4.1	72	1083	62	0	0	24 hrs.
2.	2.067 X 1.375	200	6.2	72	841	62	0	0	24 hrs.
3.	2.067 X 1.375	200	6.9	72	616	62	0	0	24 hrs.
4.	2.067 X 1.375	200	8.0	72	240	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)	/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpu	Rate of Flow Q, Mcfd
1.	10.204	29.57	213.20	.989	1.242	1.016	376
2.	10.204	36.36	213.20	.989	1.242	1.016	463
3.	10.204	38.35	213.20	.989	1.242	1.016	488
4.	10.204	41.30	213.20	.989	1.242	1.016	526
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.	.32	532	1.48	.969	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
2.	.32	532	1.48	.969	Specific Gravity Separator Gas .648
3.	.32	532	1.48	.969	Specific Gravity Flowing Fluid .648
4.	.32	532	1.48	.969	Critical Pressure 668.2 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature 358.7°R

Pc 1817.2	Pc2 3302.2				
NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	Pc2-Pw2 (2)
1.	1201.7	1097.4	1204.2	2098.0	1.0274
2.	729.7	856.6	733.7	2568.5	1.0213
3.	395.9	632.9	400.6	2901.6	
4.	64.1	264.5	70.0	3232.3	
5.	0.0	0.0	0.0	0.0	

$$ROF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 537 \text{ Mcfd}$$

Post ID-2
5-6-88
comp + BK

Absolute Open Flow 537 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .780

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 4/21/88

COMPANY Yates Petroleum Corporation LEASE DRAGONFLY ST UT WELL NO. 1

LOCATION: Unit D Section 30 Township 9S Range 27E

L 5931.0 H 5931.0 L/H 1.000 G .648 %CO2 1.08 %N2 4.06 %H2S 0.00

d 1.995 Fr .017777 GH 3843.3 Pcr 668.2 Tcr 358.7

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.376	.463	.488	.526	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	578.0	578.0	578.0	578.0	0.0
4 T=(Tw+Ts)/2	550.0	550.0	550.0	550.0	0.0
5 Z(Est.)	.851	.880	.909	.963	0.000
6 TZ	467.9	483.8	500.2	529.8	0.0
7 GH/TZ	8.215	7.944	7.684	7.255	0.000
8 e ^s (Table XIV)	1.361	1.347	1.334	1.313	0.000
9 1-e ^{-s} (Table XIV)	.265	.258	.250	.238	0.000
10 Pt	1096.2	854.2	629.2	253.2	0.0
11 Pt ² /1000	1201.7	729.7	395.9	64.1	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.317	8.600	8.892	9.418	0.000
14 FcQm	3.131	3.981	4.342	4.952	0.000
15 L/H(FcQm) ²	9.802	15.849	18.854	24.524	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	2.599	4.083	4.720	5.841	0.000
17 Pw ² =Pt ² +Fw	1204.2	733.7	400.6	70.0	0.0
18 Ps ² =e ^s Pw ²	1638.7	988.4	534.4	91.8	0.0
19 Ps	1280.1	994.2	731.0	303.0	0.0
20 P=(Pt+Ps)/2	1188.2	924.2	680.1	278.1	0.0
21 Pr=(P/Pcr)	1.78	1.38	1.02	.42	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.851	.880	.909	.963	0.000

Company	Yates Petroleum Corporation
Well	DRAGONFLY ST UT No. 1
Location	D, 30-9S-27E
County	CHAVES
Date	4/21/88

$P_c^2 - P_w^2$, THOUSANDS

