

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

d5E1e Form C-122

RECEIVED BY

JUN 08 1984

D. C. D.

ARTESIA, OFFICE

Type Test [x] Initial [] Annual [] Special						Test Date 4/10/84	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			
Pool Pecos Slope 260				Formation Abo			
Completion Date 3/27/83		Total Depth 4850.0'		Plug Back TD 4776.0'		Elevation 3767.8'	
Farm or Lease Name Witter "VW" Fed							
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4850.0'	Perforations: From 4196.0' To 4471.0'		Well No. 1	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 4130.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge J 34 7S 26E	
Type Well Single				Packer Set At 4130.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 104 @ 4125'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico							
L 4130.0'	H 4130.0'	Gg .640	%CO2 .03	%N2 4.76	%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	70	1010	0	0	0	0 hrs.
1.	2.067 X 1.250	170	13.0	70	955	62	0	0	24 hrs.
2.	2.067 X 1.250	170	17.2	70	938	62	0	0	24 hrs.
3.	2.067 X 1.250	180	27.0	70	915	62	0	0	24 hrs.
4.	2.067 X 1.250	185	41.1	70	878	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.	8.134	48.80	183.20	.991	1.250	1.013	498
2.	8.134	56.13	183.20	.991	1.250	1.013	573
3.	8.134	72.22	193.20	.991	1.250	1.014	738
4.	8.134	90.26	198.20	.991	1.250	1.015	922
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.	.28	530	1.49	.974	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.28	530	1.49	.974	Specific Gravity Separator Gas	.640
3.	.29	530	1.49	.972	Specific Gravity Flowing Fluid	xxxxxx .640
4.	.30	530	1.49	.972	Critical Pressure	662.8 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	355.8°R

Pc 1023.2 Pc2 1046.9				
NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)
1.	937.4	969.9	940.7	106.2
2.	904.8	953.5	909.1	137.8
3.	861.6	932.1	868.8	178.1
4.	794.2	897.6	805.6	241.3
5.	0.0	0.0	0.0	0.0

$$\frac{Pc^2}{Pc^2 - Pw^2} = \frac{4.3502}{(2)} \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 3.0214$$

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2786 \text{ Mcfd}$$

Absolute Open Flow 2786 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .752

Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andie Carpenter	Checked By:
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Adopted 9-1-65

DATE 6/7/84

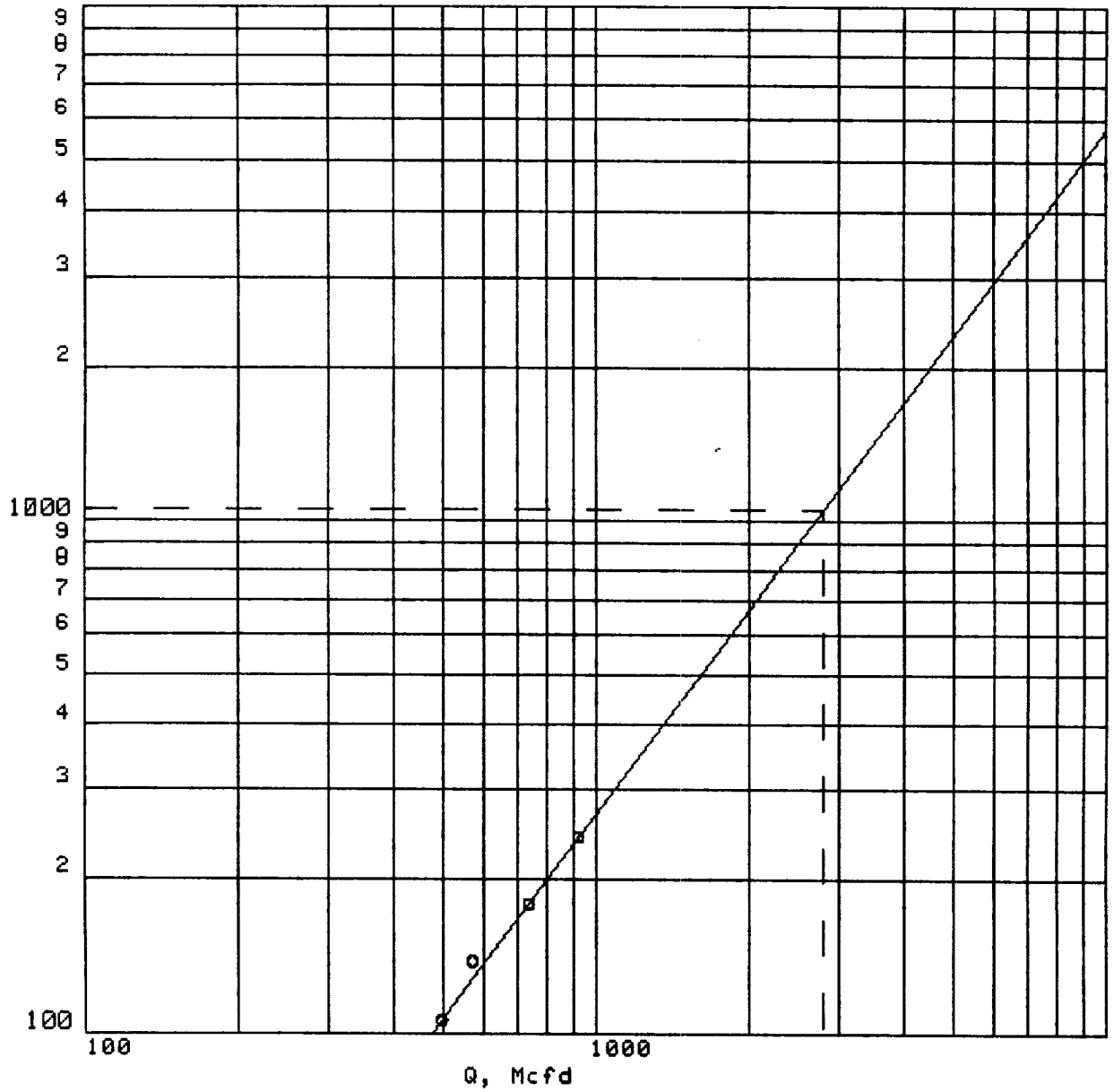
COMPANY Yates Petroleum Corporation LEASE Witter "VW" Fed WELL NO. 1LOCATION: Unit J Section 34 Township 7S Range 26EL 4130.0 H 4130.0 L/H 1.000 G .640 %CO₂ .03 %N₂ 4.76 %H₂S 0.00d 1.995 Fr .017777 GH 2643.2 Pcr 662.8 Tcr 355.8

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.498	.573	.738	.922	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	564.0	564.0	564.0	564.0	0.0
4 T=(Tw+Ts)/2	543.0	543.0	543.0	543.0	0.0
5 Z(Est.)	.865	.867	.870	.874	0.000
6 TZ	469.6	470.7	472.2	474.7	0.0
7 GH/TZ	5.628	5.615	5.597	5.569	0.000
8 e ^s (Table XIV)	1.235	1.234	1.233	1.232	0.000
9 1-e ^{-s} (Table XIV)	.190	.190	.189	.188	0.000
10 Pt	968.2	951.2	928.2	891.2	0.0
11 Pt ² /1000	937.4	904.8	861.6	794.2	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.349	8.368	8.402	8.438	0.000
14 FcQm	4.158	4.794	6.198	7.782	0.000
15 L/H(FcQm) ²	17.288	22.981	38.417	60.554	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.289	4.363	7.268	11.412	0.000
17 Pw ² =Pt ² +Fw	940.7	909.1	868.8	805.6	0.0
18 Ps ² =e ^s Pw ²	1161.7	1122.2	1071.5	992.7	0.0
19 Ps	1077.8	1059.4	1035.2	996.4	0.0
20 P=(Pt+Ps)/2	1023.0	1005.3	981.7	943.8	0.0
21 Pr=(P/Pcr)	1.54	1.52	1.48	1.42	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.865	.867	.870	.874	0.000

Company
Well
Location
County
Date

Yates Petroleum Corporation
Witter "VW" Fed No. 1
J, 34-7S-26E
Chaves
6/7/84

$P_c^2 - P_w^2$, THOUSANDS



ROF= 2786