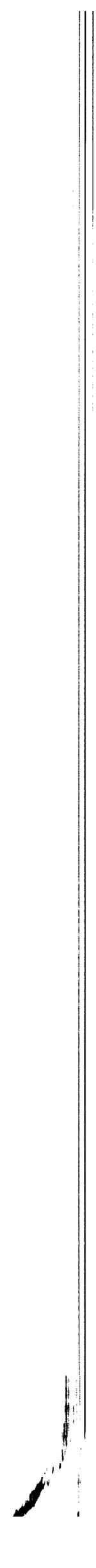

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NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT BACK PRESSURE TEST FOR GAS WELL

Form C-122

RECEIVED BY
JUL 09 1984
O. C. D.
ARTESIA, OFFICE

Type Test			Test Date
[x] Initial [ ] Annual [ ] Special			5/10/84
Company		Connection	
Yates Petroleum Corporation		Transwestern Pipeline Company	
Pool		Formation	Unit
Pecos Slope		Abo	

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
10/22/83	4900.0'	4800.0'	3773.1'	Nortex "WN" State

Csg Size	Wt.	d	Set At	Perforations:	Well No.
4.500"	9.500#	4.090"	4877.0'	From 4508.0' To 4719.0'	1

Tbg Size	Wt.	d	Set At	Perforations:	Unit	Sec	Twp	Rge
2.375"	4.700#	1.995"	4478.0'	From 0.0' To 0.0'	C	22	9S	25E

Type Well	Packer Set At	County
Single	4478.0'	Chaves

Producing Thru	Reser. Temp. °F	Mean Temp. °F	Baro. Press. - Pa	State
Tubing	102 @ 4475'	62.0	13.2 psia	New Mexico

L	H	Gg	%CO2	%N2	%H2S	Prover	Meter Run	Taps
4478.0'	4478.0'	.643	.03	5.32	0.00	0.000"	2.000'	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO	Prover Size	Orifice Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	Duration of Flow
SI	0.000	X 0.000	0	0.0	59	1015	0	0	0	0 hrs.
1.	2.067	X 1.250	230	10.1	59	942	62	0	0	24 hrs.
2.	2.067	X 1.250	275	13.7	69	919	62	0	0	24 hrs.
3.	2.067	X 1.250	265	26.7	69	875	62	0	0	24 hrs.
4.	2.067	X 1.250	258	42.0	69	810	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)	$\sqrt{h_w P_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	8.134	54.42	292.20	.991	1.247	1.023	560
2.	8.134	62.84	288.20	.991	1.247	1.022	645
3.	8.134	86.13	278.20	.991	1.247	1.021	885
4.	8.134	111.69	271.20	.991	1.247	1.021	1147
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.44	529	1.49	.956
2.	.44	529	1.49	.957
3.	.42	529	1.49	.959
4.	.41	529	1.49	.960
5.	0.00	0	0.00	0.000

Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
Specific Gravity Separator Gas .643 XXXXXXXXXXXXXX
Specific Gravity Flowing Fluid XXXXXX .643
Critical Pressure 661.7 PSIA 661.7 PSIA
Critical Temperature 355.2°R 355.2°R

Pc 1028.2 Pc^2 1057.2

NO	P_t^2	Pw	P_w^2	$P_c^2 - P_w^2$
1.	912.4	957.5	916.9	140.3
2.	869.0	935.4	875.0	182.2
3.	738.9	894.6	800.2	257.0
4.	677.7	884.8	696.9	360.3
5.	0.0	0.0	0.0	0.0

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.9014$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.2649$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2597 Mcfd

Absolute Open Flow	Angle of Slope, θ	Slope, n
2597 Mcfd @ 15.025	37	.700

Remarks:

Approved By:	Conducted By:	Calculated By:	Checked By:
	David Weaver	Andie Carpenter	

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-1220

Adopted 9-1-65

DATE 7/5/84

COMPANY Yates Petroleum Corporation LEASE Vortex "WN" State WELL NO. 1

LOCATION: Unit C Section 22 Township 9S Range 26E

L 4473.0 H 4473.0 L/H 1.000 G .643 %CO2 .00 %N2 5.32 %H2S 0.00

d 1.99% Pr .017777 GH 2879.4 Pcr 661.7 Tcr 355.2

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.360	.646	.803	1.147	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	562.0	562.0	562.0	562.0	0.0
4 T=(Tw+Ts)/2	542.0	542.0	542.0	542.0	0.0
5 Z(Est.)	.866	.868	.874	.882	0.000
6 TZ	469.1	470.6	473.5	477.9	0.0
7 GH/TZ	6.138	6.118	6.081	6.025	0.000
8 e^s(Table XIV)	1.258	1.258	1.256	1.253	0.000
9 $1-e^{-s}$(Table XIV)	.205	.205	.204	.202	0.000
10 Pt	955.2	902.2	888.2	823.2	0.0
11 $Pt^2/1000$	912.4	809.8	788.9	677.7	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.348	8.367	8.425	8.501	0.000
14 FcQm	4.672	5.401	7.459	9.748	0.000
15 $L/H(FcQm)^2$	21.829	29.207	55.638	95.020	0.000
16 $Fw=L/H(FcQm)^2(1-e^{-s})$	4.484	5.988	11.384	19.204	0.000
17 $Pw^2=Pt^2+Fw$	916.9	875.0	800.2	696.9	0.0
18 $Ps^2=e^sPw^2$	1153.9	1100.6	1003.0	873.4	0.0
19 Ps	1074.2	1049.1	1002.5	934.5	0.0
20 P=(Pt+Ps)/2	1014.7	990.7	945.3	878.9	0.0
21 Pr=(P/Pcr)	1.53	1.50	1.43	1.33	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.866	.868	.874	.882	0.000

Company	Yates Petroleum Corporation
Well	Nortex "WN" State No. 1
Location	S. 22-9S-26E
County	Chaves
Date	7/5/84