C/ST File

Form C-122

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

RECEIVED

JUL 18 1983

O. C. D.
ARTESIA, OFFICE

Type Test [x] Initial [ ] Annual [ ] Special					Test Date 5/22/83			
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Company					
Pool Pecos Slope			Formation Abo				Unit	
Completion Date 4/15/82	Total Depth 4050.0'		Plug Back TD 3961.0'		Elevation 3786.8'		Farm or Lease Name Snakeweed SD State	
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4050.0'	Perforations: From 3538.0' To 3806.0'			Well No. 1	
Tbg Size 2.875"	Wt. 5.500#	d 2.441"	Set At 3488.0'	Perforations: From 0.0' To 0.0'			Unit Sec 36 Twp 7S Rge E	
Type Well Single				Packer Set At 3488.0'			County Eddy	
Producing Thru Tubing	Resv. Temp. °F 92 @ 3488'		Mean Temp. °F 62.0	Baro. Press. - Pa 13.2 psia.			State New Mexico	
L 3488.0'	H 3488.0'	Gg .663	%CO2 .31	%N2 8.96	%H2S 0.00	Prover 0.000"	Meter Run 2.000"	Taps 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	0.000	0	0.0	0	984	0	0	0	0 hrs.
1.	2.067	.625	120	22.0	70	925	62	0	0	24 hrs.
2.	2.067	.625	115	40.0	70	910	62	0	0	24 hrs.
3.	2.067	.625	160	46.0	70	890	62	0	0	24 hrs.
4.	2.067	.625	140	84.0	70	855	62	0	0	24 hrs.
5.	0.000	0.000	0	0.0	0	0	0	0	0	0 hrs.

RATE OF FLOW CALCULATIONS

NO	Coefficient (24 HOUR)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	1.366	54.13	133.20	.991	1.228	1.010	124
2.	1.366	71.61	128.20	.991	1.228	1.010	164
3.	1.366	89.26	173.20	.991	1.228	1.013	205
4.	1.366	113.44	153.20	.991	1.228	1.011	260
5.	0.300	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.20	530	1.51	.980
2.	.20	530	1.51	.981
3.	.26	530	1.51	.975
4.	.23	530	1.51	.977
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 .663 xxxxxxxxxxxx
Specific Gravity Flowing Fluid xxxxx .663
Critical Pressure 656.1 PSIA 656.1 PSIA
Critical Temperature 351.2°R 351.2°R

Pc 997.2 Pc^2 994.4

NO	Pt^2	Pw	Pw^2	Pc^2-Pw^2
1.	880.2	938.2	880.3	114.1
2.	852.3	923.3	852.4	142.0
3.	815.8	903.3	815.9	178.5
4.	753.8	868.4	754.1	240.4
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2-Pw^2} = 4.1688$ (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 3.4818$

$AOF = Q\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 907$ Mcfd

Absolute Open Flow	Angle of Slope, θ	Slope, n
907 Mcfd @ 15.025	41	.874

Remarks:

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

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

Adopted 9-1-65

DATE 7/15/83

COMPANY Yates Petroleum Corporation LEASE Snakeweed SD State WELL NO. 1

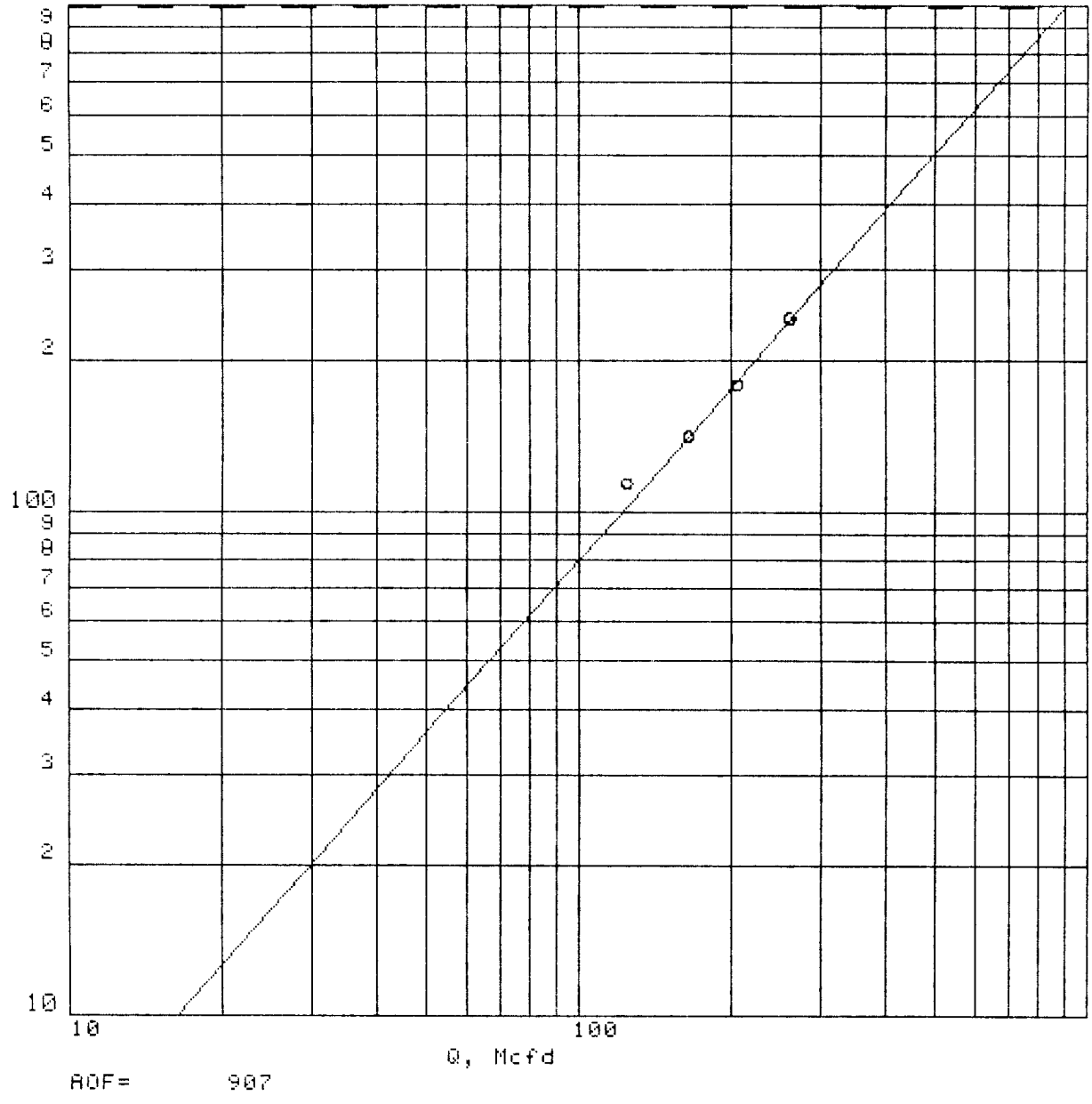
LOCATION: Jnit F Section 36 Township 7S Range 34E

L 3488.0 H 3488.0 L/H 1.000 G .663 %CO2 .31 %N2 8.96 %H2S 0.00

d 2.441 Fr .010495 GH 2312.5 Pcr 656.1 Tcr 351.2

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.124	.164	.205	.260	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	552.0	552.0	552.0	552.0	0.0
4 T=(Tw+Ts)/2	537.0	537.0	537.0	537.0	0.0
5 Z(Est.)	.869	.871	.874	.878	0.000
6 TZ	466.8	467.8	469.1	471.5	0.0
7 GH/TZ	4.954	4.944	4.929	4.905	0.000
8 e^s(Table XIV)	1.204	1.204	1.203	1.202	0.000
9 $1-e^{-s}$(Table XIV)	.170	.169	.169	.168	0.000
10 Pt	938.2	923.2	903.2	868.2	0.0
11 $Pt^2/1000$	880.2	852.3	815.8	753.8	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	4.899	4.909	4.927	4.948	0.000
14 FcQm	.608	.806	1.011	1.289	0.000
15 $L/H(FcQm)^2$	.370	.649	1.023	1.661	0.000
16 $Fw=L/H(FcQm)^2(1-e^{-s})$	.063	.110	.173	.279	0.000
17 $Pw^2=Pt^2+Fw$	880.3	852.4	815.9	754.1	0.0
18 $Ps^2=e^s Pw^2$	1060.0	1026.0	981.5	906.3	0.0
19 Ps	1029.6	1012.9	990.7	952.0	0.0
20 P=(Pt+Ps)/2	983.9	968.1	946.9	910.1	0.0
21 Pr=(P/Pcr)	1.50	1.48	1.44	1.39	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.869	.871	.874	.878	0.000

Company	Yates Petroleum Corporation
Well	Snakeweed SD State No. 1
Location	F, 36-7S-34E
County	Eddy
Date	7/15/83



AOF= 907