CISF File

NEW MEXICO OIL CONSERVATION COMMISSION — Form C-122
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JUL 22'88
O. C. D.
ARTESIA, OFFICE

Type Test: [y] Initial [ ] Annual [ ] Special				Test Date: 6/3/88
Company: Yates Petroleum Corporation		Connection: Transwestern Pipeline Company		
Pool: Pecos Slope (A?)		Formation: Abo South		Unit
Completion Date: 4/8/82	Total Depth: 4745.0'	Plug Back TD: 4679.0'	Elevation: 3724.0'	Farm or Lease Name: Rolla TC
Csg Size: 4.500" / Wt.: 9.500# / d: 4.090" / Set At: 4740.0'		Perforations: From 4158.0' To 4530.0'		Well No.: 1
Tbg Size: 2.875" / Wt.: 6.500# / d: 2.441" / Set At: 4119.0'		Perforations: From 0.0' To 0.0'		Unit: O / Sec: 30 / Twp: 9S / Rge: 26E
Type Well: Single		Packer Set At: 4119.0'		County: Chaves
Producing Thru: Tubing	Resv. Temp. °F: 122 @ 4118'	Mean Temp. °F: 62.0	Baro. Press. - Pa: 13.2 psia.	State: New Mexico

L	H	Gg	%CO2	%N2	%H2S	Prover	Meter Run	Taps
4119.0'	4119.0'	.645	.05	5.78	0.00	0.000"	2.000"	Flange

	FLOW DATA				TUBING DATA		CASING DATA		
NO	Prover Size	Orifice X 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	0	1002	0	0	0	0 hrs.
1.	3.068	X .750	145	3.4	87	903	62	0	0	24 hrs.
2.	3.068	X .750	145	9.6	88	764	62	0	0	24 hrs.
3.	3.068	X .750	160	22.0	88	560	62	0	0	24 hrs.
4.	3.068	X .750	160	30.1	87	379	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)	$\sqrt{hwPm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	2.672	23.19	158.20	.975	1.245	1.011	76
2.	2.672	38.97	158.20	.974	1.245	1.011	128
3.	2.672	61.73	173.20	.974	1.245	1.012	202
4.	2.672	72.20	173.20	.975	1.245	1.012	237
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z
1.	.24	547	1.54	.979
2.	.24	548	1.55	.979
3.	.26	548	1.55	.977
4.	.26	547	1.54	.976
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 .645 xxxxxxxxxxxx
Specific Gravity Flowing Fluid xxxxx .645
Critical Pressure 661.0 PSIA 661.0 PSIA
Critical Temperature 354.6°R 354.6°R

Pc 1015.2 Pc^2 1030.6

NO	Pt^2	Pw	Pw^2	Pc^2-Pw^2
1.	839.4	916.2	839.4	191.2
2.	604.0	777.3	604.1	426.5
3.	328.6	573.4	328.8	701.9
4.	153.8	392.6	154.1	876.5
5.	0.0	0.0	0.0	0.0

(1) $\frac{Pc^2}{Pc^2-Pw^2} = 1.1821$ (2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 1.1334$

$AOF = Q\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 269$ Mcfd

Absolute Open Flow 269 Mcfd @ 15.025 | Angle of Slope, θ 37 | Slope, n .749

Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Theresa Sloan	Checked By:

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

Adopted 9-1-65

DATE 7/19/88

COMPANY Yates Petroleum Corporation LEASE Rolla TC WELL NO. 1

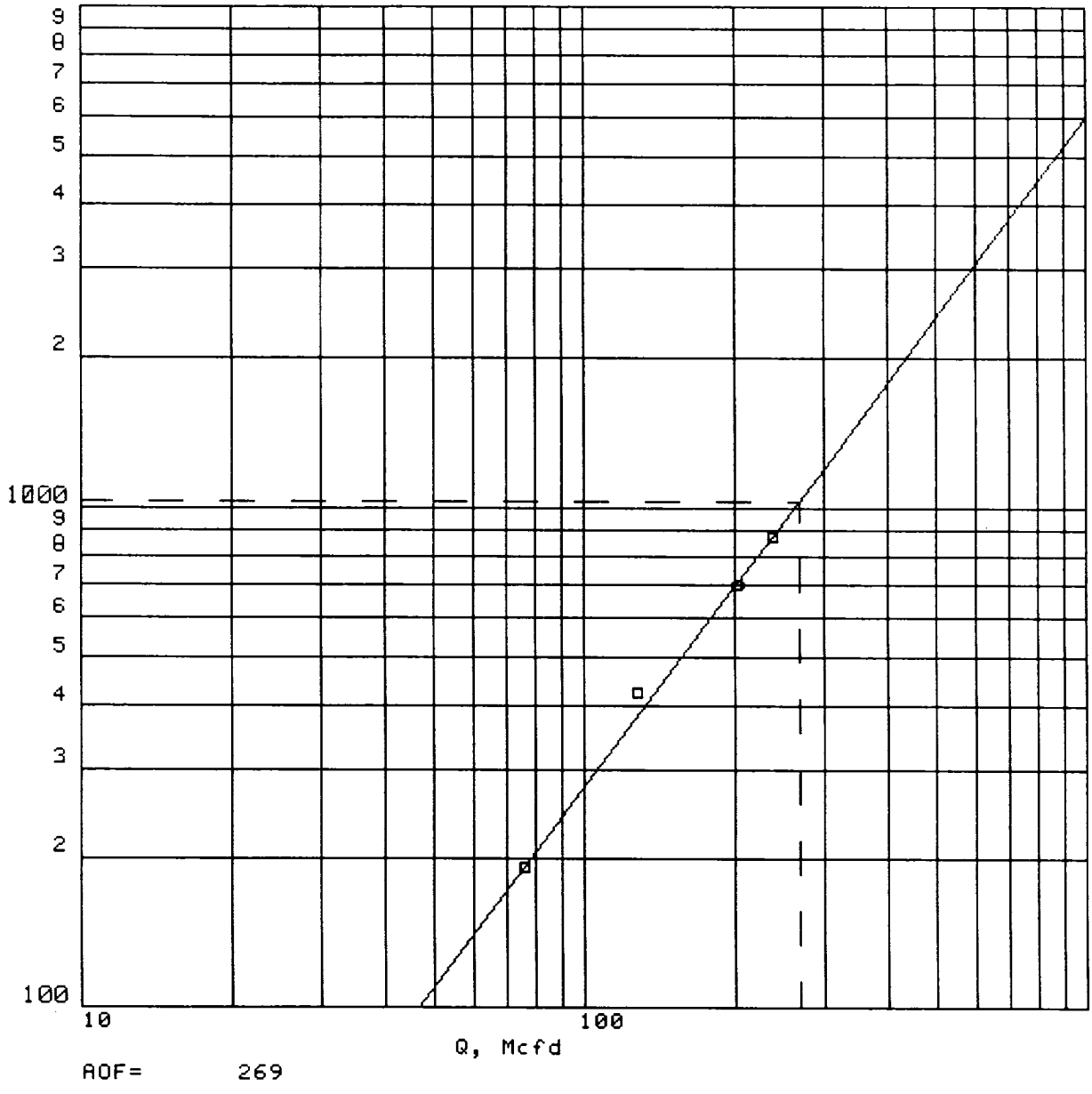
LOCATION: Unit O Section 30 Township 9S Range 26E

L 4119.0 H 4119.0 L/H 1.000 G .645 %CO2 .05 %N2 5.78 %H2S 0.00

d 2.441 Fr .010495 GH 2656.8 Pcr 661.0 Tcr 354.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.076	.128	.202	.237	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	582.0	582.0	582.0	582.0	0.0
4 T=(Tw+Ts)/2	552.0	552.0	552.0	552.0	0.0
5 Z(Est.)	.881	.897	.923	.947	0.000
6 TZ	486.1	495.2	509.4	522.7	0.0
7 GH/TZ	5.465	5.365	5.216	5.083	0.000
8 e^{s}(Table XIV)	1.227	1.223	1.216	1.210	0.000
9 $1-e^{-s}$(Table XIV)	.185	.182	.178	.174	0.000
10 Pt	916.2	777.2	573.2	392.2	0.0
11 $Pt^2/1000$	839.4	604.0	328.6	153.8	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	5.105	5.197	5.347	5.486	0.000
14 FcQm	.388	.663	1.082	1.300	0.000
15 $L/H(FcQm)^2$	.151	.440	1.172	1.691	0.000
16 $Fw=L/H(FcQm)^2(1-e^{-s})$	.028	.080	.208	.293	0.000
17 $Pw^2=Pt^2+Fw$	839.4	604.1	328.8	154.1	0.0
18 $Ps^2=e^{s}Pw^2$	1030.2	738.8	399.8	186.5	0.0
19 Ps	1015.0	859.5	632.3	431.8	0.0
20 P=(Pt+Ps)/2	965.6	818.4	602.7	412.0	0.0
21 Pr=(P/Pcr)	1.46	1.24	.91	.62	0.00
22 Tr=(T/Tcr)	1.56	1.56	1.56	1.56	0.00
23 Z(Table XI)	.881	.897	.923	.947	0.000

Company	Yates Petroleum Corporation
Well	Rolla TC No. 1
Location	O, 30-9S-26E
County	Chaves
Date	7/19/88



AOF= 269