

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

Form C-122

RECEIVED

clsf
File

Type Test [x] Initial [] Annual [] Special					Test Date 12/18/88		JAN 23 '90	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			O. C. D.	
Pool Pecos Slope				Formation Abo			Unit ARTESIA, OFFICE	
Completion Date 8/9/85		Total Depth 4650.0'		Plug Back TD 4599.0'		Elevation 3802.5'		Farm or Lease Name Mariola ACR Fed Com
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4650.0'	Perforations: From 4128.0' To 4536.0'			Well No. 1	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 4088.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge D 35 6S 26E	
Type Well Single					Packer Set At 4088.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 108 @ 4332'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 4088.0'	H 4088.0'	Gg .660	%CO2 .03	%N2 6.01	%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	59	1000	0	0	0	0 hrs.
1.	2.067 X 1.125	220	16.3	57	742	62	0	0	24 hrs.
2.	2.067 X 1.125	275	18.0	56	653	62	0	0	24 hrs.
3.	2.067 X 1.125	290	19.4	59	582	62	0	0	24 hrs.
4.	2.067 X 1.125	300	22.0	55	555	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)	$\sqrt{hwP_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	6.397	61.65	233.20	1.003	1.231	1.020	497
2.	6.397	72.02	288.20	1.004	1.231	1.025	584
3.	6.397	76.69	303.20	1.001	1.231	1.026	620
4.	6.397	83.01	313.20	1.005	1.231	1.028	675
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.	.35	517	1.44	.961	A.P.I. Gravity of Liquid Hydrocarbons _____ 0.000 Deg.
2.	.44	516	1.44	.951	Specific Gravity Separator Gas .660 xxxxxxxxxxxxxxxx
3.	.46	519	1.45	.950	Specific Gravity Flowing Fluid xxxxxx .660
4.	.47	515	1.43	.947	Critical Pressure _____ 660.0 PSIA _____ 660.0 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature _____ 358.9°R _____ 358.9°R

Pc 1013.2 Pc² 1026.6

NO	Pt²	Pw	Pw²	Pc²-Pw² (1)	$\frac{Pc²}{Pc²-Pw²} = 1.4633$	(2) $\left[\frac{Pc²}{Pc²-Pw²} \right]^n = 1.3099$
1.	570.3	757.5	573.8	452.8		
2.	443.8	669.8	448.7	577.9		
3.	354.3	599.8	359.8	666.8		
4.	322.9	574.0	329.4	697.1		
5.	0.0	0.0	0.0	0.0		

$$ROF = Q \left[\frac{Pc²}{Pc²-Pw²} \right]^n = 884 \text{ Mcfd}$$

Absolute Open Flow 884 Mcfd @ 15.025 Angle of Slope, 0 35 Slope, n .709
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
--------------	-------------------------------	------------------------------------	-------------

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

Adopted 9-1-65

DATE 1/22/90

COMPANY Yates Petroleum Corporation LEASE Mariola ACR Fed Com WELL NO. 1

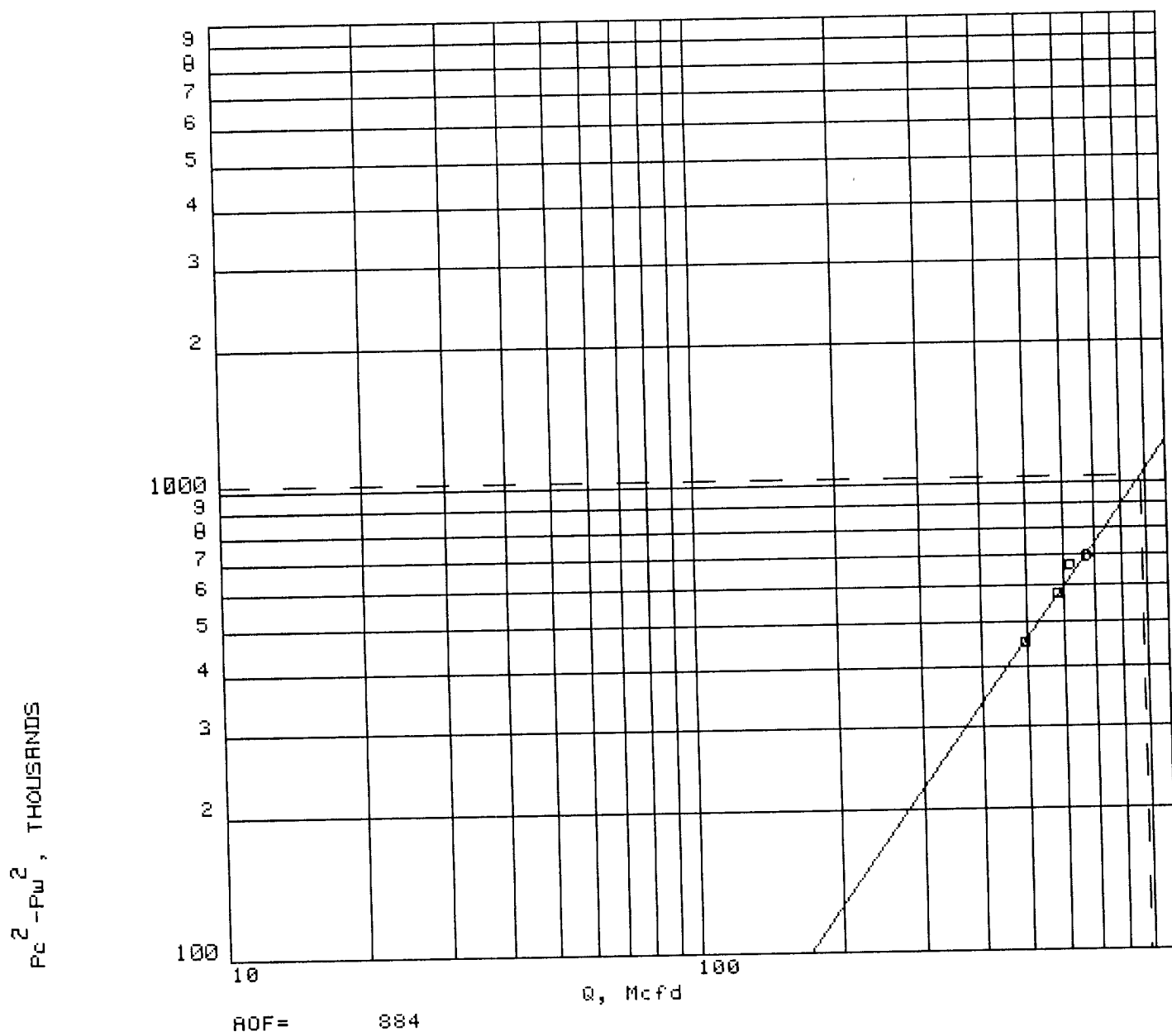
LOCATION: Unit D Section 35 Township 6S Range 26E

L 4088.0 H 4088.0 L/H 1.000 G .660 %CO2 .03 %N2 6.01 %H2S 0.00

d 1.995 Fr .017777 GH 2698.1 Pcr 660.0 Tcr 358.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.497	.584	.620	.675	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	568.0	568.0	568.0	568.0	0.0
4 T=(Tw+Ts)/2	545.0	545.0	545.0	545.0	0.0
5 Z(Est.)	.890	.902	.912	.916	0.000
6 TZ	484.8	491.5	496.9	499.0	0.0
7 GH/TZ	5.565	5.490	5.430	5.407	0.000
8 e ^s (Table XIV)	1.232	1.228	1.226	1.225	0.000
9 1-e ^{-s} (Table XIV)	.188	.186	.184	.183	0.000
10 Pt	755.2	666.2	595.2	568.2	0.0
11 Pt ² /1000	570.3	443.8	354.3	322.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.624	8.741	8.837	8.874	0.000
14 FcQm	4.283	5.102	5.481	5.990	0.000
15 L/H(FcQm) ²	18.340	26.034	30.046	35.881	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.452	4.842	5.533	6.583	0.000
17 Pw ² =Pt ² +Fw	573.8	448.7	359.8	329.4	0.0
18 Ps ² =e ^s Pw ²	706.8	551.2	441.0	403.5	0.0
19 Ps	840.7	742.4	664.1	635.2	0.0
20 P=(Pt+Ps)/2	798.0	704.3	629.6	601.7	0.0
21 Pr=(P/Pcr)	1.21	1.07	.95	.91	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.890	.902	.912	.916	0.000

Company	Yates Petroleum Corporation
Well	Mariola ACR Fed Com no. 1
Location	D, 35-6S-26E
County	Chaves
Date	1/22/90





STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
ARTESIA DISTRICT OFFICE

GARREY CARRUTHERS
GOVERNOR

P.O. DRAWER DD
ARTESIA, NEW MEXICO 88210
(505) 748-1283

December 7, 1988

C-122 NOTICE

Multi Point Back Pressure Test for Gas Wells listed below are due as indicated.

Ibis XU State Com #3-G-25-9-26	Due: February 2, 1989
Marshall XG Com #1-N-22-8-26	" February 2, 1989
Galetta YT State #1-L-2-7-26	" February 2, 1989
Mariola ACR Federal Com #1-D-35-6-26 ✓	" February 2, 1989
Charlie ZA Federal #1-O-22-8-26	" February 2, 1989