

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

Form O-122

RECEIVED

c/SF
F./e

Type Test [X] Initial [] Annual [] Special					Test Date 11/7/82		JAN 20 1983	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		O. C. D.		
Pool Pecos Slope - Abo Gas				Formation Abo		Unit ARTESIA, OFFICE		
Completion Date 3/28/82		Total Depth 4400.0'		Plug Back TD 4333.0'		Elevation 4031.5'		Farm or Lease Name Monaghan "OY" Fed
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4382.0'	Perforations: From 3724.0' To 3877.0'		Well No. 2		
Tbg Size 3.375"	Wt. 4.700#	d 1.995"	Set At 3801.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge A 27 5S 24E		
Type Well Single					Packer Set At 0.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 98 @ 3801'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 3801.0'	H 3801.0'	Gg .671	%CO2 2.57	%N2 5.89	%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	72	950	0	0	0	0 hrs.
1.	2.067 X 1.250	150	69.4	72	915	62	0	0	24 hrs.
2.	2.067 X 1.250	155	82.2	72	910	62	0	0	24 hrs.
3.	2.067 X 1.250	160	87.6	72	907	62	0	0	24 hrs.
4.	2.067 X 1.250	165	96.5	72	903	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)	√hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	8.134	106.42	163.20	.989	1.221	1.012	1057
2.	8.134	117.58	168.20	.989	1.221	1.012	1168
3.	8.134	123.18	173.20	.989	1.221	1.012	1224
4.	8.134	131.13	178.20	.989	1.221	1.013	1304
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.	.24	532	1.48	.977	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
2.	.25	532	1.48	.976	Specific Gravity Separator Gas .671 xxxxxxxxxxxxxx
3.	.26	532	1.48	.976	Specific Gravity Flowing Fluid xxxxxx .671
4.	.27	532	1.48	.975	Critical Pressure 670.8 PSIA 670.8 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature 358.6°R 358.6°R

Pc	963.2	Pc²	927.8	
NO	Pt²	Pw	Pw²	Pc²-Pw² (1)
1.	861.6	935.8	875.8	52.0
2.	852.3	932.6	869.7	58.0
3.	846.8	930.5	865.9	61.8
4.	839.4	928.0	861.2	66.6
5.	0.0	0.0	0.0	0.0

$$\frac{Pc^2}{Pc^2 - Pw^2} = 13.9285 \quad (2) \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 9.2769$$

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 12097 \text{ Mcfd}$$

Absolute Open Flow 12097 Mcfd @ 15.025 Angle of Slope, 8 40 Slope, n .846
Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andie Alderson	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 1/19/83

COMPANY Yates Petroleum Corporation LEASE Monaghan "0Y" Fed WELL NO. 2

LOCATION: Unit A Section 27 Township 5S Range 24E

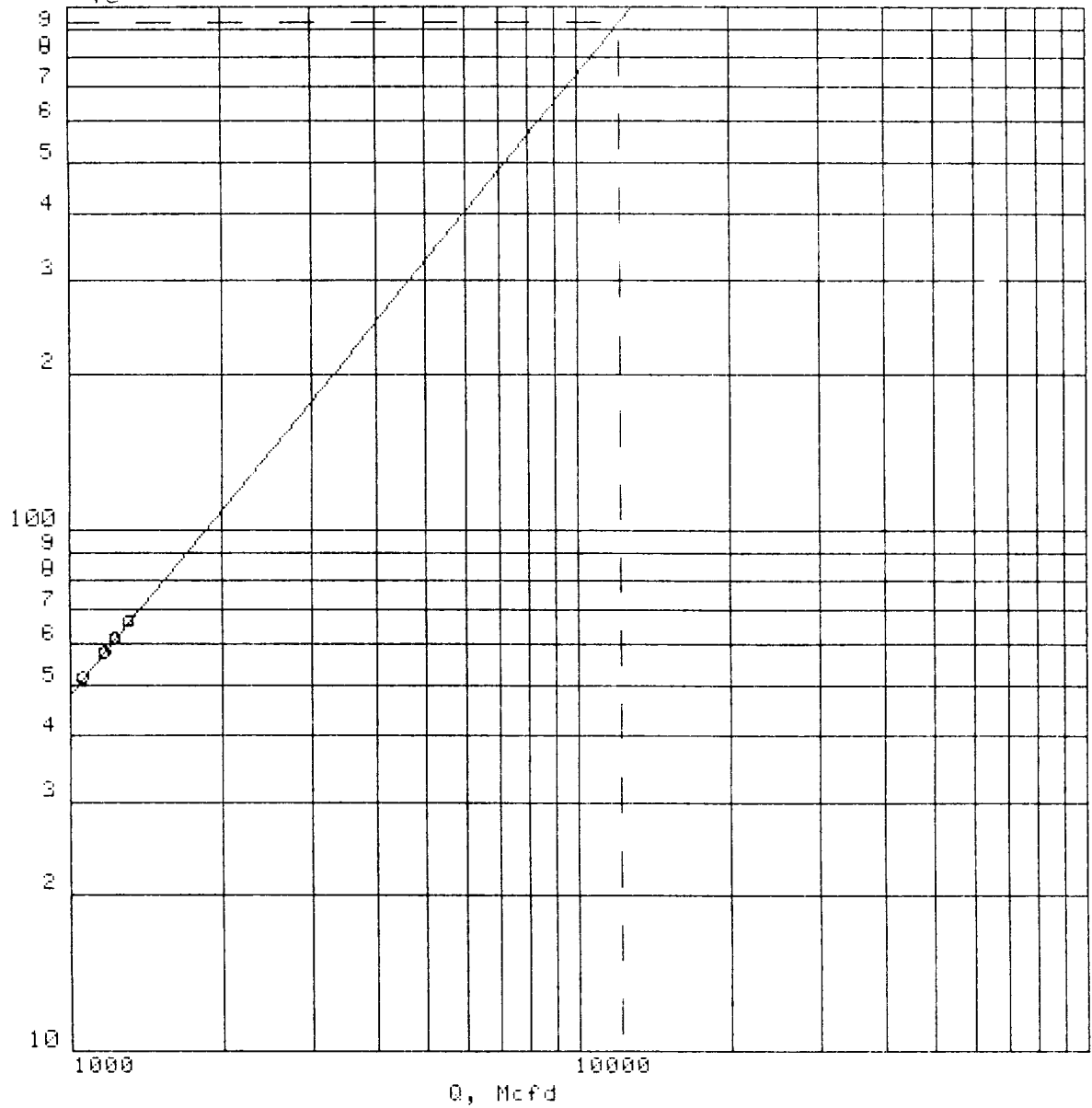
L 3801.0 H 3801.0 L/H 1.000 G .671 %O₂ 2.57 %N₂ 5.89 %H₂S 0.00

d 1.995 Fr .017777 GH 2550.5 Pcr 670.8 Tcr 358.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	1.057	1.160	1.224	1.304	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	558.0	558.0	558.0	558.0	0.0
4 T=(Tw+Ts)/2	540.0	540.0	540.0	540.0	0.0
5 Z(Est.)	.864	.865	.865	.866	0.000
6 TZ	466.7	467.0	467.2	467.4	0.0
7 GH/TZ	5.465	5.462	5.460	5.457	0.000
8 e ^s (Table XIV)	1.227	1.227	1.227	1.227	0.000
9 1-e ^{-s} (Table XIV)	.185	.185	.185	.185	0.000
10 Pt	928.2	923.2	920.2	916.2	0.0
11 Pt ² /1000	861.6	852.3	846.8	839.4	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.296	8.301	8.304	8.316	0.000
14 FcQm	8.768	9.698	10.167	10.843	0.000
15 L/H(FcQm) ²	76.885	94.051	103.376	117.578	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	14.247	17.418	19.139	21.742	0.000
17 Pw ² =Pt ² +Fw	875.8	869.7	865.9	861.2	0.0
18 Ps ² =e ^s Pw ²	1075.0	1067.4	1062.6	1056.5	0.0
19 Ps	1036.8	1033.2	1030.8	1027.9	0.0
20 P=(Pt+Ps)/2	982.5	978.2	975.5	972.0	0.0
21 Pr=(P/Pcr)	1.46	1.46	1.45	1.45	0.00
22 Tr=(T/Tcr)	1.51	1.51	1.51	1.51	0.00
23 Z(Table XI)	.864	.865	.865	.866	0.000

Company	Yates Petroleum Corporation
Well	Monaghan "0Y" Fed No. 2
Location	R, 27-5S-24E
County	Chaves
Date	1/19/83

$P_{c2} = 927.8$



ROF= 12097