

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

Form C-122

clst
File

RECEIVED

Type Test [x] Initial [] Annual [] Special					Test Date 7/15/87		MAY 04 '88		
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company				
Pool Undesignated Four Ranch					Formation Pre-Permian Gas		Unit O.C.D. ANDREWS, OFFICE		
Completion Date 12/8/83		Total Depth 6025.0'		Plug Back TD 5956.0'		Elevation 3794.8'		Farm or Lease Name Ibis XU State	
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 6005.0'	Perforations: From 5896.0' To 5910.0'			Well No. 1		
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 5842.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge A 23 9S 26E		
Type Well Single					Packer Set At 5842.0'		County Chaves		
Producing Thru Tubing		Resv. Temp. °F 125 @ 5903'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico	
L 5842.0'	H 5842.0'	Gg .645	%CO2 .32	%N2 3.69	%H2S 0.00	Prover 0.000"	Meter Run 2.000"	Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Size	Orifice X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	
SI	0.000	X 0.000	0	0.0	98	980	0	0	0
1.	2.067	X .875	200	37.3	98	614	62	0	0
2.	2.067	X .875	200	43.0	98	567	62	0	0
3.	2.067	X .875	205	49.4	98	572	62	0	0
4.	2.067	X .875	210	52.0	98	460	62	0	0
5.	0.000	X 0.000	0	0.0	0	0	0	0	0

NO	Coefficient (24 HOUR)	1/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.729	89.18	213.20	.965	1.245	1.014	406
2.	3.729	95.75	213.20	.965	1.245	1.014	435
3.	3.729	103.82	218.20	.965	1.245	1.015	472
4.	3.729	107.73	223.20	.965	1.245	1.015	490
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.	.32	558	1.55	.972	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.32	558	1.55	.972	Specific Gravity Separator Gas	.645	xxxxxxxxxxxxxx
3.	.33	558	1.55	.971	Specific Gravity Flowing Fluid	xxxxxx	.645
4.	.34	558	1.55	.970	Critical Pressure	665.6 PSIA	665.6 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	360.0°R	360.0°R

NO	Pt2	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2}$	(2) $\left[\frac{Pc2}{Pc2-Pw2} \right]^n$
1.	393.4	629.8	396.6	589.8	1.3028	1.2214
2.	336.6	583.4	340.4	646.1		
3.	342.5	589.0	346.9	639.6		
4.	223.9	478.3	228.8	757.7		
5.	0.0	0.0	0.0	0.0		

$AOF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 599 \text{ Mcfd}$

Absolute Open Flow 599 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .756

Remarks:

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (PW) C-122D

Adopted 9-1-65

DATE 5/4/88

COMPANY Yates Petroleum Corporation LEASE Ibis XU State WELL NO. 1

LOCATION: Unit A Section 23 Township 9S Range 26E

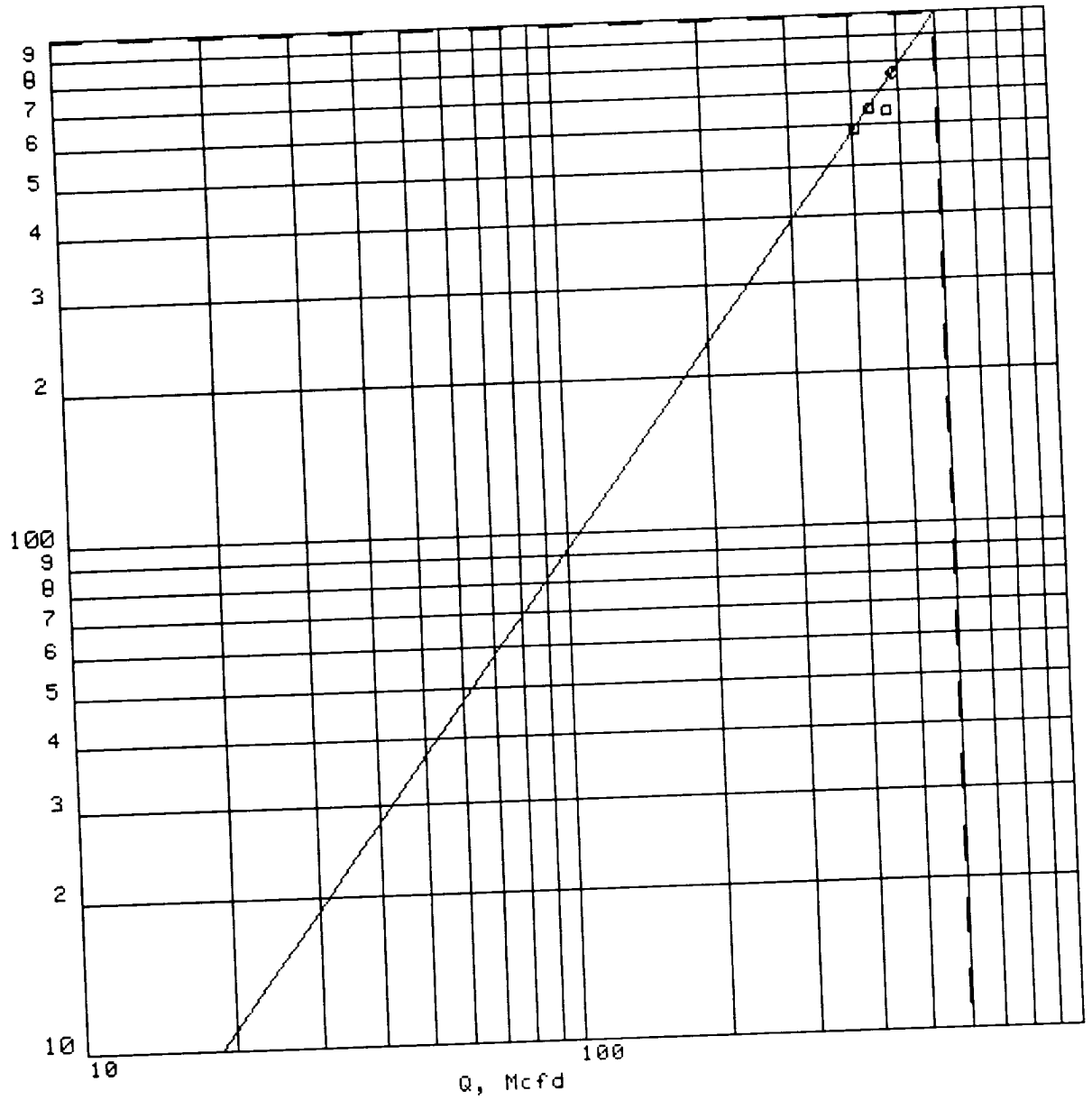
L 5842.0 H 5842.0 L/H 1.000 G .645 %CO₂ .32 %N₂ 3.69 %H₂S 0.00

d 1.995 Fr .017777 GH 3768.1 Pcr 665.6 Tcr 360.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.406	.435	.472	.490	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	585.0	585.0	585.0	585.0	0.0
4 T=(Tw+Ts)/2	553.5	553.5	553.5	553.5	0.0
5 Z(Est.)	.911	.917	.916	.932	0.000
6 TZ	504.0	507.5	507.1	515.7	0.0
7 GH/TZ	7.477	7.425	7.431	7.306	0.000
8 e ^s (Table XIV)	1.323	1.321	1.321	1.315	0.000
9 1-e ^{-s} (Table XIV)	.244	.243	.243	.240	0.000
10 Pt	627.2	580.2	585.2	473.2	0.0
11 Pt ² /1000	393.4	336.6	342.5	223.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.964	9.026	9.015	9.171	0.000
14 FcQm	3.635	3.930	4.257	4.496	0.000
15 L/H(FcQm) ²	13.214	15.446	18.126	20.214	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.229	3.752	4.408	4.843	0.000
17 Pw ² =Pt ² +Fw	396.6	340.4	346.9	228.8	0.0
18 Ps ² =e ^s Pw ²	524.9	449.6	458.3	300.8	0.0
19 Ps	724.5	670.5	677.0	548.5	0.0
20 P=(Pt+Ps)/2	675.8	625.4	631.1	510.8	0.0
21 Pr=(P/Pcr)	1.02	.94	.95	.77	0.00
22 Tr=(T/Tcr)	1.54	1.54	1.54	1.54	0.00
23 Z(Table XI)	.911	.917	.916	.932	0.000

Company	Yates Petroleum Corporation
Well	Ibis XU State No. 1
Location	A, 23-9S-26E
County	Chaves
Date	5/4/88

$P_c^2 - P_w^2$, THOUSANDS



AOF= 599