

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

Form C-122

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SEP 08 '87

Type Test [x] Initial [] Annual [] Special				Test Date 05/07/87			
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		O. C. D. ARTESIA, OFFICE	
Pool South Pecos Slope				Formation ?Abo		Unit	
Completion Date 03/21/84		Total Depth 4350.0'		Plug Back TD 4270.0'		Elevation 3531.0'	
Farm or Lease Name River Bridge UX St							
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4342.0'	Perforations: From 3822.0' To 4078.0'		Well No. 2	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3795.0'	Perforations: From 3822.0' To 4078.0'		Unit Sec Twp Rge L 2 9S 25E	
Type Well Single				Packer Set At 3795.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 95 @ 3790'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico							
L 3795.0'	H 3795.0'	Gg .661	%CO2 .02	%N2 9.94	%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	82	914	0	0	0	0 hrs.
1.	2.067 X 1.375	285	5.3	82	795	62	0	0	24 hrs.
2.	2.067 X 1.375	290	7.0	82	765	62	0	0	24 hrs.
3.	2.067 X 1.375	300	8.1	82	728	62	0	0	24 hrs.
4.	2.067 X 1.375	310	10.0	82	710	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.	10.204	39.75	298.20	.979	1.230	1.020	498
2.	10.204	46.07	303.20	.979	1.230	1.020	578
3.	10.204	50.37	313.20	.979	1.230	1.021	632
4.	10.204	56.85	323.20	.979	1.230	1.022	714
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.	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.	Specific Gravity Separator Gas .661	Specific Gravity Flowing Fluid xxxxxx
1.	.46	542	1.56	.961				
2.	.46	542	1.56	.961				
3.	.48	542	1.56	.959				
4.	.49	542	1.56	.958				
5.	0.00	0	0.00	0.000				

Pc 927.2 Pc2 859.7			
NO	Pt2	Pw	Pw2
1.	653.2	810.2	656.4
2.	605.6	781.0	609.9
3.	549.4	744.7	554.6
4.	523.0	727.8	529.7
5.	0.0	0.0	0.0

$$(1) \frac{Pc2}{Pc2-Pw2} = \frac{2.6002}{2.6002} \quad (2) \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 2.0342$$

$$ROF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 1453 \text{ Mcfd}$$

Absolute Open Flow 1453 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .743

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 09/07/87

COMPANY Yates Petroleum Corporation LEASE River Bridge UX St WELL NO. 2

LOCATION: Unit L Section 2 Township 9S Range 25E

L 3795.0 H 3795.0 L/H 1.000 G .661 %CO₂ .02 %N₂ 9.94 %H₂S 0.00

d 1.995 Fr .017777 GH 2508.5 Pcr 653.3 Tcr 348.3

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.498	.578	.632	.714	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	555.0	555.0	555.0	555.0	0.0
4 T=(Tw+Ts)/2	538.5	538.5	538.5	538.5	0.0
5 Z(Est.)	.889	.893	.898	.900	0.000
6 TZ	479.0	481.0	483.5	484.7	0.0
7 GH/TZ	5.237	5.216	5.189	5.176	0.000
8 es(Table XIV)	1.217	1.216	1.215	1.214	0.000
9 1-e-s(Table XIV)	.178	.178	.177	.176	0.000
10 Pt	808.2	778.2	741.2	723.2	0.0
11 Pt ² /1000	653.2	605.6	549.4	523.0	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.514	8.550	8.599	8.620	0.000
14 FcQm	4.244	4.940	5.436	6.155	0.000
15 L/H(FcQm) ²	18.010	24.405	29.548	37.883	0.000
16 Fw=L/H(FcQm) ² (1-e-s)	3.212	4.336	5.222	6.680	0.000
17 Pw ² =Pt ² +Fw	656.4	609.9	554.6	529.7	0.0
18 Ps ² =esPw ²	798.8	741.7	673.7	643.1	0.0
19 Ps	893.8	861.2	820.8	801.9	0.0
20 P=(Pt+Ps)/2	851.0	819.7	781.0	762.6	0.0
21 Pr=(P/Pcr)	1.30	1.25	1.20	1.17	0.00
22 Tr=(T/Tcr)	1.55	1.55	1.55	1.55	0.00
23 Z(Table XI)	.889	.893	.898	.900	0.000

Company	Yates Petroleum Corporation
Well	River Bridge UX St No. 2
Location	L, 2-9S-25E
County	Chaves
Date	09/07/87

