

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

Form C-122

RECEIVED

dsf
File

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 05/06/87		SEP 08 '87	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		O. C. D. ARTESIA OFFICE	
Pool Wildcat				Formation Permo Penn		Unit	
Completion Date 03/07/85		Total Depth 8610.0'		Plug Back TD 6217.0'		Elevation 3833.0'	
Farm or Lease Name Triangle Ranch AAB				Well No. 1			
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 8610.0'	Perforations: From 6180.0' To 6199.0'		Unit Sec Twp Rge B 24 19S 23E	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 6115.0'	Perforations: From 6180.0' To 6199.0'		County Eddu	
Type Well Single				Packer Set At 6115.0'		State New Mexico	
Producing Thru Tubing		Resv. Temp. °F 146 @ 6185'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 6115.0'	H 6115.0'	Gg .611	%CO2 .49	%N2 .82	%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	76	1715	0	0	0	0 hrs.
1.	2.067 X 1.000	220	20.0	75	1200	62	0	0	24 hrs.
2.	2.067 X 1.000	280	21.6	75	1179	62	0	0	24 hrs.
3.	2.067 X 1.000	310	25.4	76	869	62	0	0	24 hrs.
4.	2.067 X 1.000	330	27.5	76	787	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)	1/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	4.947	68.29	233.20	.986	1.279	1.017	433
2.	4.947	79.58	293.20	.986	1.279	1.022	507
3.	4.947	90.61	323.20	.985	1.279	1.024	578
4.	4.947	97.15	343.20	.985	1.279	1.025	621
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.35	535	1.50	.967	101.000 Mcf/bbl.	59.200 Deg.	.611	xxxxxxx	672.4 PSIA	356.5°R
2.	.44	535	1.50	.958				xxxxxxx	671.4 PSIA	366.0°R
3.	.48	536	1.50	.954						
4.	.51	536	1.50	.951						
5.	0.00	0	0.00	0.000						

Pc 1728.2 Pc2 2986.7

NO	Pt2	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2}$	(2) $\left[\frac{Pc2}{Pc2-Pw2} \right]^n$
1.	1471.9	1213.7	1473.1	1513.6	1.2578	1.2023
2.	1421.3	1192.9	1423.0	1563.6		
3.	778.3	883.5	780.6	2206.1		
4.	640.3	801.9	643.0	2343.7		
5.	0.0	0.0	0.0	0.0		

$$AOF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 747 \text{ Mcfd}$$

Absolute Open Flow 747 Mcfd @ 15.025 Angle of Slope, 0 39 Slope, n .803
Remarks:

Approved By:	Conducted By: Tracy Richardson	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 09/04/87

COMPANY Yates Petroleum Corporation LEASE Triangle Ranch AAB WELL NO. 1

LOCATION: Unit B Section 24 Township 19S Range 23E

L 6115.0 H 6115.0 L/H 1.000 G .640 %CO₂ .49 %N₂ .82 %H₂S 0.00

d 2.441 Fr .010495 GH 3911.5 Pcr 671.4 Tcr 366.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.433	.507	.578	.621	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	606.0	606.0	606.0	606.0	0.0
4 T=(Tw+Ts)/2	564.0	564.0	564.0	564.0	0.0
5 Z(Est.)	.842	.844	.879	.889	0.000
6 TZ	474.9	476.1	495.8	501.5	0.0
7 GH/TZ	8.237	8.216	7.890	7.799	0.000
8 e ^s (Table XIV)	1.362	1.361	1.344	1.340	0.000
9 1-e ^{-s} (Table XIV)	.266	.265	.256	.254	0.000
10 Pt	1213.2	1192.2	882.2	800.2	0.0
11 Pt ² /1000	1471.9	1421.3	778.3	640.3	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	4.984	4.996	5.203	5.264	0.000
14 FcQm	2.159	2.535	3.009	3.269	0.000
15 L/H(FcQm) ²	4.663	6.424	9.053	10.685	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	1.239	1.703	2.319	2.709	0.000
17 Pw ² =Pt ² +Fw	1473.1	1423.0	780.6	643.0	0.0
18 Ps ² =e ^s Pw ²	2006.2	1936.5	1049.3	861.5	0.0
19 Ps	1416.4	1391.6	1024.4	928.2	0.0
20 P=(Pt+Ps)/2	1314.8	1291.9	953.3	864.2	0.0
21 Pr=(P/Pcr)	1.96	1.92	1.42	1.29	0.00
22 Tr=(T/Tcr)	1.54	1.54	1.54	1.54	0.00
23 Z(Table XI)	.842	.844	.879	.889	0.000

Company	Yates Petroleum Corporation
Well	Triangle Ranch AAB No. 1
Location	B, 24-19S-23E
County	Eddo
Date	09/04/87

