

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

Form C-122

RECEIVED

clsr
File

SEP 08 '81

Type Test [x] Initial [] Annual [] Special				Test Date 05/06/87	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Undesignated				Formation Gisco	
Completion Date 06/29/82				Unit	
Total Depth 8632.0'		Plug Back TD 6471.0'		Elevation 3907.0'	
Farm or Lease Name Triangle Ranch RA					
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 8632.0'	Perforations: From 6341.0' To 6447.0'	
Well No. 2					
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 6307.0'	Perforations: From 6341.0' To 6447.0'	
Unit Sec Twp Rge G 14 19S 23E					
Type Well Single				Packer Set At 6307.0'	
Producing Thru Tubing				County Eddy	
Resv. Temp. °F 130 @ 6300'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
State New Mexico					
L 6307.0'	H 6307.0'	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	
S1	0.000 X 0.000	0	0.0	76	1875	0	0	0	0 hrs.
1.	2.067 X .750	200	44.0	75	1600	62	0	0	24 hrs.
2.	2.067 X .750	220	56.1	75	1520	62	0	0	24 hrs.
3.	2.067 X .750	230	59.5	76	1468	62	0	0	24 hrs.
4.	2.067 X .750	250	61.9	76	1449	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.	2.709	96.85	213.20	.986	1.279	1.015	336
2.	2.709	114.38	233.20	.986	1.279	1.017	397
3.	2.709	120.29	243.20	.985	1.279	1.017	418
4.	2.709	127.64	263.20	.985	1.279	1.019	444
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.	.32	535	1.50	.970	101.000 Mcf/bbl.	59.200 Deg.	.611	.640	672.4 PSIA	356.5°R
2.	.35	535	1.50	.967					671.4 PSIA	366.0°R
3.	.36	536	1.50	.966						
4.	.39	536	1.50	.963						
5.	0.00	0	0.00	0.000						

Pc 1888.2 Pc2 3565.3

NO	Pt2	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc2}{Pc2-Pw2}$	(2) $\left[\frac{Pc2}{Pc2-Pw2} \right]^n$
1.	2602.4	1613.4	2603.1	962.2	2.5048	1.9191
2.	2350.7	1533.5	2351.7	1213.6		
3.	2194.0	1481.6	2195.0	1370.3		
4.	2138.0	1462.6	2139.3	1426.0		
5.	0.0	0.0	0.0	0.0		

$$AOF = Q \left[\frac{Pc2}{Pc2-Pw2} \right]^n = 852 \text{ Mcfd}$$

Absolute Open Flow 852 Mcfd @ 15.025 Angle of Slope, 0 35 Slope, n .710

Approved By: Conducted By: Tracy Richardson Calculated By: Andrea Carpenter Checked By:

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 RA WELL NO. 2

LOCATION: Unit G Section 14 Township 19S Range 23E

L 6307.0 H 6307.0 L/H 1.000 G .640 %CO₂ .49 %N₂ .82 %H₂S 0.00

d 2.441 Fr .010495 GH 4034.3 Pcr 671.4 Tcr 366.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.336	.397	.418	.444	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	590.0	590.0	590.0	590.0	0.0
4 T=(Tw+Ts)/2	556.0	556.0	556.0	556.0	0.0
5 Z(Est.)	.798	.803	.807	.809	0.000
6 TZ	443.7	446.7	448.9	449.7	0.0
7 GH/TZ	9.092	9.031	8.987	8.970	0.000
8 e ^s (Table XIV)	1.406	1.403	1.401	1.400	0.000
9 1-e ^{-s} (Table XIV)	.289	.287	.286	.286	0.000
10 Pt	1613.2	1533.2	1481.2	1462.2	0.0
11 Pt ² /1000	2602.4	2350.7	2194.0	2138.0	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	4.657	4.688	4.711	4.720	0.000
14 FcQm	1.565	1.863	1.968	2.096	0.000
15 L/H(FcQm) ²	2.448	3.471	3.875	4.393	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.707	.997	1.109	1.255	0.000
17 Pw ² =Pt ² +Fw	2603.1	2351.7	2195.0	2139.3	0.0
18 Ps ² =e ^s Pw ²	3660.7	3299.6	3074.7	2994.7	0.0
19 Ps	1913.3	1816.5	1753.5	1730.5	0.0
20 P=(Pt+Ps)/2	1763.3	1674.8	1617.4	1596.4	0.0
21 Pr=(P/Pcr)	2.63	2.49	2.41	2.38	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.798	.803	.807	.809	0.000

Company	Yates Petroleum Corporation
Well	Triangle Ranch RA No. 2
Location	G, 14-19S-23E
County	Eddy
Date	09/04/87

