

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

c/s file Form C-122

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JUN 08 1984

O. C. D.

ARTESIA, OFFICE

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4/17/84	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Pecos Slope				Formation Abo	
Completion Date 12/11/82		Total Depth 4225.0'		Plug Back TD 4222.0'	
				Elevation 3611.9'	
Farm or Lease Name Bernice "RP" Fed					
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4225.0'	Perforations: From 3844.0' To 3974.0'	
Well No. 1					
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3790.0'	Perforations: From 0.0' To 0.0'	
Unit Sec Twp Rge G 3 8S 25E					
Type Well Single				Packer Set At 3790.0'	
Producing Thru Tubing				Baro. Press. - Pa 13.2 psia.	
Resv. Temp. °F 102 @ 3909'				Mean Temp. °F 62.0	
L 3790.0'		H 3790.0'	Gg .656	%CO2 .03	%N2 6.42
				%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	0	786	0	0	0	0 hrs.
1.	2.067 X 1.375	130	22.5	69	683	62	0	0	24 hrs.
2.	2.067 X 1.375	125	25.8	69	664	62	0	0	24 hrs.
3.	2.067 X 1.375	120	52.3	69	607	62	0	0	24 hrs.
4.	2.067 X 1.375	115	74.0	69	550	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	56.76	143.20	.991	1.235	1.010	716
2.	10.204	59.71	138.20	.991	1.235	1.010	753
3.	10.204	83.46	133.20	.991	1.235	1.009	1052
4.	10.204	97.40	128.20	.991	1.235	1.009	1227
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.	.22	529	1.48	.980	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.21	529	1.48	.981	Specific Gravity Separator Gas	.656	xxxxxxxxxxxxxx
3.	.20	529	1.48	.982	Specific Gravity Flowing Fluid	xxxxxx	.656
4.	.19	529	1.48	.983	Critical Pressure	659.4 PSIA	659.4 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	356.5°R	356.5°R

Pc	799.2	Pc ²	638.7						
NO	Pt ²	Pw	Pw ²	Pc ² -Pw ²	(1)	$\frac{Pc^2}{Pc^2-Pw^2} = \frac{2.1424}{}$	(2)	$\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = \frac{1.7823}{}$	
1.	484.7	701.0	491.4	147.3					
2.	458.6	682.7	466.0	172.7					
3.	384.6	631.9	399.3	239.4					
4.	317.2	580.8	337.3	301.4					
5.	0.0	0.0	0.0	0.0					

$$ROF = Q \left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \frac{2187 \text{ Mcfd}}{}$$

$$AOF = Q \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 2187 \text{ Mcfd}$$

Absolute Open Flow 2187 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .759
Remarks: _____

Approved By:	Conducted By: David Weaver	Calculated By: Andie Carpenter	Checked By:
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Adopted 9-1-65

DATE 6/6/84

COMPANY Yates Petroleum Corporation LEASE Bernice "RP" Fed WELL NO. 1

LOCATION: Unit G Section 3 Township 8S Range 25E

L 3790.0 H 3790.0 L/H 1.000 G .656 %CO₂ .03 %N₂ 6.42 %H₂S 0.00

d 1.995 Fr .017777 GH 2486.2 Pcr 659.4 Tcr 356.5

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.716	.753	1.052	1.227	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	562.0	562.0	562.0	562.0	0.0
4 T=(Tw+Ts)/2	542.0	542.0	542.0	542.0	0.0
5 Z(Est.)	.898	.901	.908	.916	0.000
6 TZ	486.9	488.3	492.4	496.5	0.0
7 GH/TZ	5.106	5.092	5.050	5.007	0.000
8 e ^s (Table XIV)	1.211	1.210	1.208	1.207	0.000
9 1-e ^{-s} (Table XIV)	.174	.174	.173	.171	0.000
10 Pt	696.2	677.2	620.2	563.2	0.0
11 Pt ² /1000	484.7	458.6	384.6	317.2	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.655	8.684	8.753	8.829	0.000
14 FcQm	6.199	6.540	9.209	10.835	0.000
15 L/H(FcQm) ²	38.424	42.767	84.803	117.387	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	6.696	7.430	14.629	20.092	0.000
17 Pw ² =Pt ² +Fw	491.4	466.0	399.3	337.3	0.0
18 Ps ² =e ^s Pw ²	595.1	564.0	482.5	406.9	0.0
19 Ps	771.4	751.0	694.6	637.9	0.0
20 P=(Pt+Ps)/2	733.8	714.1	657.4	600.6	0.0
21 Pr=(P/Pcr)	1.11	1.08	1.00	.91	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.898	.901	.908	.916	0.000

Company	Yates Petroleum Corporation
Well	Bernice "RP" Fed No. 1
Location	G, 3-8S-25E
County	Chaves
Date	6/6/84

