

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

RECEIVED BY
Form C-122
NOV 08 1984
O. C. D.
ARTESIA, OFFICE

Type Test [x] Initial [] Annual [] Special				Test Date 5/17/84	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company	
Pool Pecos Slope <i>Also</i>				Formation Abo	
Completion Date 1/10/83				Total Depth 4300.0'	
Csg Size 4.500"				Wt. 9.500#	
Tbg Size 2.375"				Wt. 4.700#	
Set At 4282.0'				Perforations: From -3655.0' To 3927.0'	
Set At 3620.0'				Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3620.0'	
Producing Thru Tubing				Resv. Temp. °F 96 @ 3617'	
Mean Temp. °F 62.0				Baño. Press. - Pa 13.2 psia.	
L 3620.0'				H 3620.0'	
Gg .647				%CO2 .01	
%N2 5.54				%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	69	1010	0	0	0	0 hrs.
1.	2.067 X .750	170	14.8	66	903	62	0	0	24 hrs.
2.	2.067 X .750	160	28.9	69	835	62	0	0	24 hrs.
3.	2.067 X .750	160	40.0	69	774	62	0	0	24 hrs.
4.	2.067 X .750	160	58.0	69	715	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	52.07	183.20	.994	1.243	1.014	177
2.	2.709	70.75	173.20	.991	1.243	1.013	239
3.	2.709	83.23	173.20	.991	1.243	1.013	281
4.	2.709	100.23	173.20	.991	1.243	1.013	339
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 .647	Specific Gravity Flowing Fluid .647	Critical Pressure 661.1 PSIA	Critical Temperature 356.0°R
1.	.28	526	1.48	.973						
2.	.26	529	1.49	.975						
3.	.26	529	1.49	.975						
4.	.26	529	1.49	.975						
5.	0.00	0	0.00	0.000						

Pc 1023.2 Pc2 1046.9				
NO	Pt2	Pw	Pw2	Pc2-Pw2
1.	839.4	916.4	839.8	207.1
2.	719.4	848.6	720.1	326.8
3.	619.7	787.8	620.6	426.3
4.	530.3	729.2	531.7	515.3
5.	0.0	0.0	0.0	0.0

$$(1) \frac{Pc^2}{Pc^2 - Pw^2} = 2.4696 \quad (2) \left[\frac{Pc^2}{Pc^2 - Pw^2} \right]^n = 1.7939$$

$$AOF = Q \left[\frac{-Pc^2}{Pc^2 - Pw^2} \right]^n = 505 \text{ Mcfd}$$

Absolute Open Flow 505 Mcfd @ 15.025 Angle of Slope, 0 33 Slope, n .646
Remarks:

Approved By: Conducted By: David Weaver Calculated By: Andie Carpenter Checked By:

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 11/6/84

COMPANY Yates Petroleum Corporation LEASE Monaghan "QY" Fed WELL NO. 8

LOCATION: Unit M Section 28 Township 5S Range 24E

L 3620.0 H 3620.0 L/H 1.000 G .647 %CO₂ .01 %N₂ 5.54 %H₂S 0.00

d 1.995 Fr .017777 GH 2342.1 Pcr 661.1 Tcr 356.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.177	.239	.281	.339	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	556.0	556.0	556.0	556.0	0.0
4 T=(Tw+Ts)/2	539.0	539.0	539.0	539.0	0.0
5 Z(Est.)	.868	.877	.885	.893	0.000
6 TZ	467.8	472.6	477.0	481.4	0.0
7 GH/TZ	5.007	4.956	4.910	4.866	0.000
8 e ^s (Table XIV)	1.207	1.204	1.202	1.200	0.000
9 1-e ^{-s} (Table XIV)	.171	.169	.168	.167	0.000
10 Pt	916.2	848.2	787.2	728.2	0.0
11 Pt ² /1000	839.4	719.4	619.7	530.3	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.316	8.408	8.480	8.557	0.000
14 FcQm	1.470	2.011	2.387	2.900	0.000
15 L/H(FcQm) ²	2.161	4.046	5.696	8.411	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.370	.686	.958	1.403	0.000
17 Pw ² =Pt ² +Fw	839.8	720.1	620.6	531.7	0.0
18 Ps ² =e ^s Pw ²	1013.2	867.1	746.1	638.1	0.0
19 Ps	1006.6	931.2	863.8	798.8	0.0
20 P=(Pt+Ps)/2	961.4	889.7	825.5	763.5	0.0
21 Pr=(P/Pcr)	1.45	1.35	1.25	1.15	0.00
22 Tr=(T/Tcr)	1.51	1.51	1.51	1.51	0.00
23 Z(Table XI)	.868	.877	.885	.893	0.000

Company	Yates Petroleum Corporation
Well	Monaghan "QY" Fed No. 8
Location	M, 28-5S-24E
County	Chaves
Date	11/6/84

