

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

457
File Rm
Form C-152

RECEIVED

Type Test [x] Initial [] Annual [] Special				Test Date 11/22/82		FEB 3 1983	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		O. C. D.	
Pool Pecos Slope - Abo Pool				Formation Abo		Unit ARTESIA, OFFICE	
Completion Date 9/18/82		Total Depth 4950.0'		Plug Back TD 4211.0'		Elevation 3811.0'	
Farm or Lease Name Godfrey "MP" Fed				Well No. 8			
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4221.0'	Perforations: From 4006.0' To 4018.0'		Unit Sec Top Rge K 15 7S 25E	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3964.0'	Perforations: From 0.0' To 0.0'			
Type Well Single				Packer Set At 3964.0'		County Chaves	
Producing Thru Tubing		Resv. Temp. °F 106 @ 3960'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.	
L 3964.0'		H 3964.0'		Gg .648		%CO2 0.00	
				%N2 4.93		%H2S 0.00	
				Proven 0.000"		Meter Run 2.000"	
						Taps Flange	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO	Proven 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	72	990	0	0	0	0 hrs.
1.	2.067 X 1.250	130	39.0	72	875	62	0	0	24 hrs.
2.	2.067 X 1.250	140	52.2	72	842	62	0	0	24 hrs.
3.	2.067 X 1.250	150	56.0	72	820	62	0	0	24 hrs.
4.	2.067 X 1.250	150	75.4	72	788	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)	$\sqrt{hw/P_m}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	8.134	74.73	143.20	.989	1.242	1.010	754
2.	8.134	89.43	153.20	.989	1.242	1.011	903
3.	8.134	95.60	163.20	.989	1.242	1.012	966
4.	8.134	110.93	163.20	.989	1.242	1.012	1121
5.	0.000	0.00	0.00	0.000	0.000	0.000	0

NO	Pn	Temp. °R	Tn	Z	Gas Liquid Hydrocarbon Ratio	Dry	Mcfd/bbl.
1.	.22	532	1.49	.980	A.P.I. Gravity of Liquid Hydrocarbons	0.000	Deg.
2.	.23	532	1.49	.979	Specific Gravity Separator Gas	.648	xxxxxxxxxxxxxx
3.	.25	532	1.49	.977	Specific Gravity Flowing Fluid	xxxxxx	.648
4.	.25	532	1.49	.977	Critical Pressure	662.1	PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	358.0°R	358.0°R

Pc	1003.2	Pc ²	1006.4		
NO	Pt ²	-Pw	Pw ²	Pc ² -Pw ² (1)	$\frac{Pc^2}{Pc^2-Pw^2} = \frac{2.8932}{(2) \left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \frac{2.3069}{AOF = Q \left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = \frac{2586 \text{ Mcfd}}$
1.	788.9	892.4	796.3	210.1	
2.	731.4	861.5	742.1	264.3	
3.	694.2	840.6	706.5	299.9	
4.	641.9	811.5	658.6	347.8	
5.	0.0	0.0	0.0	0.0	

Absolute Open Flow 2586 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .787
Remarks: _____

Approved By:	Conducted By: David Weaver	Calculated By: Andie Alderson	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELL HEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 2/1/83

COMPANY Yates Petroleum Corporation LEASE Godfrey "MP" Fed WELL NO. 8

LOCATION: Unit K Section 15 Township 7S Range 25E

L 3964.0 H 3964.0 L/H 1.000 G .648 %CO₂ 0.00 %N₂ 4.93 %H₂S 0.00

d 1.995 Fr .017777 GH 2568.7 Pcr 662.1 Tcr 358.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.754	.903	.966	1.121	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	566.0	566.0	566.0	566.0	0.0
4 T=(Tw+Ts)/2	544.0	544.0	544.0	544.0	0.0
5 Z(Est.)	.873	.877	.880	.884	0.000
6 TZ	474.7	477.0	478.5	480.7	0.0
7 GH/TZ	5.411	5.385	5.368	5.344	0.000
8 e ^s (Table XIV)	1.225	1.224	1.223	1.222	0.000
9 1-e ^{-s} (Table XIV)	.184	.183	.182	.181	0.000
10 Pt	888.2	855.2	833.2	801.2	0.0
11 Pt ² /1000	788.9	731.4	694.2	641.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.446	8.485	8.512	8.551	0.000
14 FcQm	6.368	7.663	8.225	9.587	0.000
15 L/H(FcQm) ²	40.555	58.718	67.646	91.904	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	7.442	10.730	12.327	16.679	0.000
17 Pw ² =Pt ² +Fw	796.3	742.1	706.5	658.6	0.0
18 Ps ² =e ^s Pw ²	975.3	908.0	864.0	804.6	0.0
19 Ps	987.6	952.9	929.5	897.0	0.0
20 P=(Pt+Ps)/2	937.9	904.1	881.4	849.1	0.0
21 Pr=(P/Pcr)	1.42	1.37	1.33	1.28	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.873	.877	.880	.884	0.000

Company	Yates Petroleum Corporation
Well	Godfrey "MP" Fed No. 8
Location	K, 15-7S-25E
County	Chaves
Date	2/1/83

