

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

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

Type Test [x] Initial [] Annual [] Special					Test Date 7/27/84	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		
Pool Pecos Slope <i>Alto</i>				Formation Abo		Unit
Completion Date 8/2/83		Total Depth 4170.0'		Plug Back TD 4109.0'		Elevation 3872.1'
Farm or Lease Name Globe "MN" Federal						Well No. 4
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4170.0'	Perforations: From 3660.0' To 3734.0'		Unit Sec Twp Rge K 1 5S 24E
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3629.0'	Perforations: From 0.0' To 0.0'		
Type Well Single					Packer Set At 3629.0'	
Producing Thru Tubing		Resv. Temp. °F 109 @ 3625'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.
L 3629.0'		H 3629.0'	Gg .655	%CO2 .02	%N2 6.18	%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	845	0	0	0	0 hrs.
1.	2.067 X .750	220	4.5	68	806	62	0	0	24 hrs.
2.	2.067 X .750	160	17.6	69	770	62	0	0	24 hrs.
3.	2.067 X .750	140	79.4	69	622	62	0	0	24 hrs.
4.	2.067 X .750	140	135.0	69	500	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	32.39	233.20	.992	1.236	1.018	110
2.	2.709	55.21	173.20	.991	1.236	1.013	186
3.	2.709	110.29	153.20	.991	1.236	1.011	370
4.	2.709	143.81	153.20	.991	1.236	1.011	483
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 Deg.	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure PSIA	Critical Temperature °R
1.	.35	528	1.48	.965	0.000	.655	xxxxxxx	.655	659.8	356.8
2.	.26	529	1.48	.975						
3.	.23	529	1.48	.978						
4.	.23	529	1.48	.978						
5.	0.00	0	0.00	0.000						

NO	Pt ²	Pw	Pw ²	Pc ² -Pw ² (1)	Pc ² / (Pc ² -Pw ²)	(2) [Pc ² / (Pc ² -Pw ²)] ⁿ
1.	671.1	819.3	671.2	65.3	1.5641	1.3989
2.	613.4	783.5	613.8	122.7		
3.	403.5	636.6	405.2	331.3		
4.	263.4	516.2	266.4	470.1		
5.	0.0	0.0	0.0	0.0		

AOF = Q [Pc² / (Pc²-Pw²)]ⁿ = 675 Mcfd

Absolute Open Flow 675 Mcfd @ 15.025 Angle of Slope, θ 37 Slope, n .750

Approved By:	Conducted By: DAVID WEAVER	Calculated By: ANDIE CARPENTER	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 10/31/84

COMPANY Yates Petroleum Corporation LEASE Globe "MN" Federal WELL NO. 4

LOCATION: Unit K Section 1 Township 5S Range 24E

L 3629.0 H 3629.0 L/H 1.000 G .655 %CO₂ .02 %N₂ 6.18 %H₂S 0.00

d 1.995 Fr .017777 GH 2377.0 Pcr 659.8 Tcr 356.8

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.110	.186	.370	.483	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	569.0	569.0	569.0	569.0	0.0
4 T=(Tw+Ts)/2	545.5	545.5	545.5	545.5	0.0
5 Z(Est.)	.885	.889	.909	.926	0.000
6 TZ	482.6	485.2	496.0	505.2	0.0
7 GH/TZ	4.925	4.899	4.793	4.705	0.000
8 e ^s (Table XIV)	1.203	1.202	1.197	1.193	0.000
9 1-e ^{-s} (Table XIV)	.169	.168	.165	.162	0.000
10 Pt	819.2	783.2	635.2	513.2	0.0
11 Pt ² /1000	671.1	613.4	403.5	263.4	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.585	8.625	8.816	8.982	0.000
14 FcQm	.941	1.601	3.263	4.334	0.000
15 L/H(FcQm) ²	.885	2.562	10.645	18.786	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.149	.430	1.751	3.038	0.000
17 Pw ² =Pt ² +Fw	671.2	613.8	405.2	266.4	0.0
18 Ps ² =e ^s Pw ²	807.3	737.6	485.0	317.8	0.0
19 Ps	898.5	858.9	696.4	563.7	0.0
20 P=(Pt+Ps)/2	858.9	821.0	665.8	538.5	0.0
21 Pr=(P/Pcr)	1.30	1.24	1.01	.82	0.00
22 Tr=(T/Tcr)	1.53	1.53	1.53	1.53	0.00
23 Z(Table XI)	.885	.889	.909	.926	0.000

Company	Yates Petroleum Corporation
Well	Globe "MN" Federal No. 4
Location	K, 1-5S-24E
County	CHAVES
Date	10/31/84

$P_c^2 - P_w^2$, THOUSANDS

