

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

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c/s F
 File

Form C-122

Type Test [x] Initial [] Annual [] Special				Test Date 9/20/84	
Company Yates Petroleum Corporation			Connection Transwestern Pipeline Company		
Pool Pecos Slope			Formation Abo		Unit
Completion Date 11/2/82		Total Depth 4100.0'	Plug Back TD 3975.0'	Elevation 3720.0'	Farm or Lease Name Albitus "TH" Fed
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4100.0'	Perforations: From 3835.0' To 3923.0'	
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3796.0'	Perforations: From 0.0' To 0.0'	
Type Well Single				Packer Set At 3796.0'	County Chaves
Producing Thru Tubing		Resv. Temp. °F 103 @ 3879'	Mean Temp. °F 62.0	Baro. Press. - Pa 13.2 psia.	State New Mexico
L 3796.0'	H 3796.0'	Gg .657	%CO2 .04	%N2 7.65	%H2S 0.00
Prover 0.000"	Meter Run 2.000"	Taps Flange			

FLOW DATA					TUBING DATA		CASING DATA		Duration
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	of Flow
SI	0.000 X 0.000	0	0.0	70	1000	0	0	0	0 hrs.
1.	2.067 X .875	190	8.1	70	853	62	0	0	24 hrs.
2.	2.067 X .875	200	10.9	70	790	62	0	0	24 hrs.
3.	2.067 X .875	320	20.0	70	543	62	0	0	24 hrs.
4.	2.067 X .875	330	24.0	70	440	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)	$\frac{1}{hwPm}$	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd
1.	3.729	40.57	203.20	.991	1.234	1.015	183
2.	3.729	48.21	213.20	.991	1.234	1.016	223
3.	3.729	81.63	333.20	.991	1.234	1.025	381
4.	3.729	90.76	343.20	.991	1.234	1.026	424
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.	.31	530	1.50	.971	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.
2.	.32	530	1.50	.970	Specific Gravity Separator Gas .657 xxxxxxxxxxxxxxx
3.	.51	530	1.50	.951	Specific Gravity Flowing Fluid xxxxxx .657
4.	.52	530	1.50	.950	Critical Pressure 657.4 PSIA 657.4 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature 353.3°R 353.3°R

NO	Pt ²	Pw	Pw ²	Pc ² -Pw ² (1)	$\frac{Pc^2}{Pc^2-Pw^2} = 1.2495$	(2) $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 1.1814$
1.	750.3	866.5	750.8	275.8		
2.	645.1	803.6	645.8	380.8		
3.	309.4	558.0	311.3	715.3		
4.	205.4	455.9	207.9	818.7		
5.	0.0	0.0	0.0	0.0		

ROF = Q $\left[\frac{Pc^2}{Pc^2-Pw^2}\right]^n = 501 \text{ Mcfd}$

Absolute Open Flow 501 Mcfd @ 15.025 Angle of Slope, 0 37 Slope, n .748
 Remarks:

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

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

Adopted 9-1-65

DATE 12/28/84

COMPANY Yates Petroleum Corporation LEASE Albitus "TH" Fed WELL NO. 4

LOCATION: Unit I Section 21 Township 7S Range 25E

L 3796.0 H 3796.0 L/H 1.000 G .657 %CO₂ .04 %N₂ 7.65 %H₂S 0.00

d 1.995 Fr .017777 GH 2494.0 Pcr 657.4 Tcr 353.3

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.188	.223	.381	.424	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	563.0	563.0	563.0	563.0	0.0
4 T=(Tw+Ts)/2	542.5	542.5	542.5	542.5	0.0
5 Z(Est.)	.880	.888	.921	.935	0.000
6 TZ	477.4	481.7	499.5	507.3	0.0
7 GH/TZ	5.224	5.177	4.992	4.916	0.000
8 e ^s (Table XIV)	1.216	1.214	1.206	1.202	0.000
9 1-e ^{-s} (Table XIV)	.178	.176	.171	.168	0.000
10 Pt	866.2	803.2	556.2	453.2	0.0
11 Pt ² /1000	750.3	645.1	309.4	205.4	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.486	8.563	8.883	9.021	0.000
14 FcQm	1.592	1.911	3.389	3.829	0.000
15 L/H(FcQm) ²	2.535	3.650	11.484	14.660	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.451	.644	1.960	2.468	0.000
17 Pw ² =Pt ² +Fw	750.8	645.8	311.3	207.9	0.0
18 Ps ² =e ^s Pw ²	913.2	784.1	375.4	249.9	0.0
19 Ps	955.6	885.5	612.7	499.9	0.0
20 P=(Pt+Ps)/2	910.9	844.4	584.4	476.6	0.0
21 Pr=(P/Pcr)	1.39	1.28	.89	.72	0.00
22 Tr=(T/Tcr)	1.54	1.54	1.54	1.54	0.00
23 Z(Table XI)	.880	.888	.921	.935	0.000

Company	Yates Petroleum Corporation
Well	Albitus "TH" Fed No. 4
Location	I, 21-7S-25E
County	Chaves
Date	12/28/84

