

d/sf File
Form C-122

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

RECEIVED BY
JAN 19 1984

O. C. D.

ARTESIA, OFFICE

Type Test [x] Initial [] Annual [] Special					Test Date 11/26/83						
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company						
Pool Pecos Slope <i>Abso</i>					Formation Abso						
Unit											
Completion Date 3/8/83			Total Depth 4350.0'		Plug Back TD 4269.0'		Elevation 3804.0'		Farm or Lease Name Teckla "MD" Federal		
Csg Size 4.500"	Wt. 3.500#	d 4.090"	Set At 4350.0'	Perforations: From 3727.0' To 3992.0'		Well No. 4-Y					
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 3663.0'	Perforations: From 0.0' To 0.0'		Unit Sec Twp Rge 24 13 6S 25E					
Type Well Single					Packer Set At 3663.0'					County Chaves	
Producing thru Tubing			Resv. Temp. °F 96 @ 3663'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico		
L 3663.0'	H 3663.0'	Gg .642	%CO2 .01	%N2 4.95	%H2S 0.00	Prover 0.000"	Meter Run 2.000"	Taps Flange			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO	Prover Size	Orifice Size	Press. psig	Diff. hw	Temp. °F	Press. psig	Temp. °F	Press. psig	Temp. °F	
SI	0.000	x 0.000	0	0.0	66	921	0	0	0	0 hrs.
1.	2.067	x 1.250	170	16.8	68	883	62	0	0	24 hrs.
2.	2.067	x 1.250	175	24.0	68	865	62	0	0	24 hrs.
3.	2.067	x 1.250	170	50.1	66	842	62	0	0	24 hrs.
4.	2.067	x 1.250	170	73.0	66	815	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)	$\sqrt{hwP_m}$	Pressure P _m	Flow Temp Factor Ft.	Gravity Factor F _g	Super Compress. Fact. F _{sp}	Rate of Flow Q, Mcfd
1.	8.134	55.48	183.20	.992	1.248	1.014	566
2.	8.134	67.21	188.20	.992	1.248	1.014	687
3.	8.134	95.80	183.20	.994	1.248	1.014	980
4.	8.134	115.64	183.20	.994	1.248	1.014	1183
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.	.28	528	1.48	.973	A.P.I. Gravity of Liquid Hydrocarbons	0.000 Deg.
2.	.28	528	1.48	.973	Specific Gravity Separator Gas	.642
3.	.28	526	1.48	.973	Specific Gravity Flowing Fluid	xxxxxx .642
4.	.28	526	1.48	.973	Critical Pressure	662.3 PSIA
5.	0.00	0	0.00	0.000	Critical Temperature	356.0°R

NO	P _c	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2}$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$
1.	934.2	898.3	807.0	65.7	5.1966	3.6242
2.	771.2	881.4	776.9	95.9		
3.	731.4	861.9	742.9	129.8		
4.	685.9	838.3	702.8	169.9		
5.	0.0	0.0	0.0	0.0		

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4289 \text{ Mcfd}$$

Absolute Open Flow 4289 Mcfd @ 15.025 Angle of Slope, 0 38 Slope, n .781

Remarks: _____

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

DATE 1/18/84

COMPANY Yates Petroleum Corporation LEASE Teckla "MD" Federal WELL NO. 4-Y

LOCATION: Unit C Section 13 Township 6S Range 25E

L 3663.0 H 3663.0 L/H 1.000 G .642 %CO2 .01 %N2 4.95 %H2S 0.00

d 1.995 Fr .017777 GH 2351.6 Pcr 662.3 Tcr 356.0

LINE		1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1	Qm	.566	.687	.980	1.183	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.)	.871	.873	.876	.879	0.000
6	TZ	469.2	470.5	472.0	473.8	0.0
7	GH/TZ	5.012	4.999	4.983	4.964	0.000
8	e ^s (Table XIV)	1.207	1.206	1.205	1.205	0.000
9	1-e ^{-s} (Table XIV)	.171	.171	.170	.170	0.000
10	Pt	896.2	878.2	855.2	829.2	0.0
11	Pt ² /1030	803.2	771.2	731.4	685.9	0.0
12	Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13	Fc=FrTZ	8.348	8.363	8.396	8.422	0.000
14	FcQm	4.729	5.742	8.230	9.966	0.000
15	L/H(FcQm) ²	22.364	32.967	67.741	99.323	0.000
16	Fw=L/H(FcQm) ² (1-e ^{-s})	3.829	5.635	11.538	16.869	0.000
17	Pw ² =Pt ² +Fw	807.0	776.9	742.9	702.8	0.0
18	Ps ² =e ^s Pw ²	973.7	937.0	895.4	846.6	0.0
19	Ps	986.8	968.0	946.3	920.1	0.0
20	P=(Pt+Ps)/2	941.5	923.1	900.7	874.1	0.0
21	Pr=(P/Pcr)	1.42	1.39	1.36	1.32	0.00
22	Tr=(T/Tcr)	1.51	1.51	1.51	1.51	0.00
23	Z(Table XI)	.871	.873	.876	.879	0.000

Company	Yates Petroleum Corporation
Well	Teckla "MD" Federal No. 4-Y
Location	C, 13-6S-25E
County	Chaves
Date	1/18/84

