

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

Form C-122

RECEIVED

*C/SF
File*

82230

Type Test [x] Initial [] Annual [] Special					Test Date 4/1/88		MAY 04 '88			
Company Yates Petroleum Corporation					Connection Transwestern Pipeline Company			O. C. D.		
Pool Pecos Slope					Formation Abo			Unit ARTESIA, OFFICE		
Completion Date 7/29/86		Total Depth 4900.0'		Plug Back TD 4822.0'		Elevation 3775.0'		Farm or Lease Name Zane ABS Federal		
Csg Size 4.500"	Wt. 9.500#	d 4.090"	Set At 4900.0'	Perforations: From 4546.0' To 4849.0'			Well No. 1			
Tbg Size 2.375"	Wt. 4.700#	d 1.995"	Set At 4507.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge 0 15 9S 26E			
Type Well Single					Packer Set At 4507.0'		County Chaves			
Producing Thru Tubing		Resv. Temp. °F 107 @ 4849'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico		
L 4507.0'	H 4507.0'	Gg .647	%CO2 .03	%N2 4.79	%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	45	650	0	0	0	0 hrs.	
1.	2.067 X 1.250	220	33.9	45	596	62	0	0	24 hrs.	
2.	2.067 X 1.250	220	42.3	45	591	62	0	0	24 hrs.	
3.	2.067 X 1.250	220	46.8	45	582	62	0	0	24 hrs.	
4.	2.067 X 1.250	220	53.0	45	575	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)	Pressure Pm	Flow Temp Factor Ft.	Gravimetric Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd				
1.	8.134	233.20	1.015	1.243	1.022	932				
2.	8.134	233.20	1.015	1.243	1.022	1041				
3.	8.134	233.20	1.015	1.243	1.022	1095				
4.	8.134	233.20	1.015	1.243	1.022	1165				
5.	0.000	0.00	0.000	0.000	0.000	0				
NO	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio Dry Mcf/bbl.					
1.	.35	505	1.41	.958	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.					
2.	.35	505	1.41	.958	Specific Gravity Separator Gas .647 xxxxxxxxxxxxxxx					
3.	.35	505	1.41	.958	Specific Gravity Flowing Fluid xxxxxx .647					
4.	.35	505	1.41	.958	Critical Pressure 662.5 PSIA 662.5 PSIA					
5.	0.00	0	0.00	0.000	Critical Temperature 358.1°R 358.1°R					
Pc 663.2 Pc2 439.8										
NO	Pt2	Pw	Pw2	Pc2-Pw2 (1)	$\frac{Pc2}{Pc2-Pw2} = 6.0480$ (2) $\left[\frac{Pc2}{Pc2-Pw2} \right]^n = 4.3380$					
1.	371.1	620.1	384.5	55.4	ROF = Q $\left[\frac{Pc2}{Pc2-Pw2} \right]^n = 5056$ Mcfd					
2.	365.1	617.8	381.7	58.1						
3.	354.3	610.5	372.7	67.1						
4.	346.0	605.7	366.9	72.9						
5.	0.0	0.0	0.0	0.0						
Absolute Open Flow					5056 Mcfd @ 15.025		Angle of Slope, θ		39	Slope, n .815
Remarks:										
Approved By:		Conducted By: David Weaver		Calculated By: Andrea Carpenter		Checked By:				

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

Adopted 9-1-65

DATE 5/4/88

COMPANY Yates Petroleum Corporation LEASE Zane ABS Federal WELL NO. 1

LOCATION: Unit 0 Section 15 Township 9S Range 26E

L 4507.0 H 4507.0 L/H 1.000 G .647 %CO₂ .03 %N₂ 4.79 %H₂S 0.00

d 1.995 Fr .017777 GH 2916.0 Pcr 662.5 Tcr 358.1

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.932	1.041	1.095	1.165	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	567.0	567.0	567.0	567.0	0.0
4 T=(Tw+Ts)/2	544.5	544.5	544.5	544.5	0.0
5 Z(Est.)	.910	.910	.911	.912	0.000
6 TZ	495.4	495.6	496.3	496.7	0.0
7 GH/TZ	5.887	5.883	5.876	5.871	0.000
8 e ^s (Table XIV)	1.247	1.247	1.247	1.246	0.000
9 1-e ^{-s} (Table XIV)	.198	.198	.198	.198	0.000
10 Pt	609.2	604.2	595.2	588.2	0.0
11 Pt ² /1000	371.1	365.1	354.3	346.0	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.810	8.811	8.822	8.830	0.000
14 FcQm	8.211	9.173	9.661	10.291	0.000
15 L/H(FcQm) ²	67.422	84.153	93.341	105.898	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	13.350	16.661	18.459	20.925	0.000
17 Pw ² =Pt ² +Fw	384.5	381.7	372.7	366.9	0.0
18 Ps ² =e ^s Pw ²	479.4	475.9	464.6	457.3	0.0
19 Ps	692.4	689.9	681.6	676.2	0.0
20 P=(Pt+Ps)/2	650.8	647.0	638.4	632.2	0.0
21 Pr=(P/Pcr)	.98	.98	.96	.95	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.910	.910	.911	.912	0.000

Company	Yates Petroleum Corporation
Well	Zane ABS Federal No. 1
Location	O, 15-9S-26E
County	Chaves
Date	5/4/88

