

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

Form C-122

RECEIVED

455
File

Type Test [x] Initial [] Annual [] Special					Test Date 5/6/88		APR 10 '89	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company			O. C. C.	
Pool Foor RANCH PRE-PERMAN Perm				Formation Foor Ranch			Unit ARTESIA, OFFICE	
Completion Date 3/27/88		Total Depth 6150.0'		Plug Back TD 6138.0'		Elevation 3805.7'		Farm or Lease Name Ibis XU State Com
Csg Size 5.500"	Wt. 14.000#	d 5.012"	Set At 6150.0'	Perforations: From 5844.0' To 6032.0'			Well No. 2	
Tbg Size 2.875"	Wt. 6.500#	d 2.441"	Set At 5792.0'	Perforations: From 0.0' To 0.0'			Unit Sec Twp Rge C 25 9S 26E	
Type Well Single				Packer Set At 5792.0'			County Chaves	
Producing Thru Tubing		Resv. Temp. °F 144 @ 6023'		Mean Temp. °F 62.0		Baro. Press. - Pa 13.2 psia.		State New Mexico
L 5792.0'	H 5792.0'	Gg .627	%CO2 1.22	%N2 3.35	%H2S 0.00	Proven 0.000"	Meter Run 2.000"	Taps Flange
FLOW DATA								
NO	Prover Orifice Size X Size	Press. psig	Diff. hw	Temp. °F	TUBING DATA Press. psig Temp. °F		CASING DATA Press. psig Temp. °F	
SI	0.000 X 0.000	0	0.0	90	1800 0		0 0	
1.	2.067 X 1.125	300	29.3	89	1481 62		0 0	
2.	2.067 X 1.125	300	35.4	92	1470 62		0 0	
3.	2.067 X 1.125	250	41.3	90	1447 62		0 0	
4.	2.067 X 1.125	250	53.0	83	1370 62		0 0	
5.	0.000 X 0.000	0	0.0	0	0 0		0 0	
RATE OF FLOW CALCULATIONS								
NO	Coefficient (24 HOUR)	1/hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg	Super Compress. Fact. Fpv	Rate of Flow Q, Mcfd	
1.	6.397	95.80	313.20	.973	1.263	1.021	769	
2.	6.397	105.30	313.20	.971	1.263	1.020	842	
3.	6.397	104.26	263.20	.972	1.263	1.017	833	
4.	6.397	118.11	263.20	.979	1.263	1.018	950	
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.	.47	549	1.55	.960	A.P.I. Gravity of Liquid Hydrocarbons 0.000 Deg.			
2.	.47	552	1.56	.961	Specific Gravity Separator Gas .627 xxxxxxxxxxxxxx			
3.	.39	550	1.56	.967	Specific Gravity Flowing Fluid xxxxxx .627			
4.	.39	543	1.54	.966	Critical Pressure 670.7 PSIA 670.7 PSIA			
5.	0.00	0	0.00	0.000	Critical Temperature 353.5°R 353.5°R			
Pc 1813.2 Pc2 3287.7								
NO	Pt2	Pw	Pw2	Pc2-Pw2	(1) $\frac{Pc^2}{Pc^2-Pw^2} = \frac{2.4067}{2.0159}$ (2) $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = 2.0159$			
1.	2232.6	1495.4	2236.3	1051.4				
2.	2199.9	1484.7	2204.3	1083.4				
3.	2132.2	1461.7	2136.5	1151.2	ROF = Q $\left[\frac{Pc^2}{Pc^2-Pw^2} \right]^n = 1915$ Mcfd			
4.	1913.2	1385.2	1918.9	1368.8				
5.	0.0	0.0	0.0	0.0				
Absolute Open Flow					1915 Mcfd @ 15.025		Angle of Slope, 0 39 Slope, n .798	
Remarks:								

Approved By:	Conducted By: David Weaver	Calculated By: Andrea Carpenter	Checked By:
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WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (Pw) C-122D

Adopted 9-1-65

DATE 4/6/89

COMPANY Yates Petroleum Corporation LEASE Ibis XU State Com WELL NO. 2

LOCATION: Unit C Section 25 Township 9S Range 26E

L 5792.0 H 5792.0 L/H 1.000 G .627 %CO₂ 1.22 %N₂ 3.35 %H₂S 0.00

d 2.441 Fr .010495 GH 3631.6 Pcr 670.7 Tcr 353.5

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.769	.842	.833	.950	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	604.0	604.0	604.0	604.0	0.0
4 T=(Tw+Ts)/2	563.0	563.0	563.0	563.0	0.0
5 Z(Est.)	.841	.842	.843	.848	0.000
6 TZ	473.4	473.8	474.6	477.6	0.0
7 GH/TZ	7.671	7.665	7.651	7.603	0.000
8 e ^s (Table XIV)	1.333	1.333	1.332	1.330	0.000
9 1-e ^{-s} (Table XIV)	.250	.250	.249	.248	0.000
10 Pt	1494.2	1483.2	1460.2	1383.2	0.0
11 Pt ² /1000	2232.6	2199.9	2132.2	1913.2	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	4.968	4.972	4.981	5.013	0.000
14 FcQm	3.819	4.188	4.148	4.763	0.000
15 L/H(FcQm) ²	14.581	17.536	17.206	22.683	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.645	4.381	4.292	5.627	0.000
17 Pw ² =Pt ² +Fw	2236.3	2204.3	2136.5	1918.9	0.0
18 Ps ² =e ^s Pw ²	2981.7	2938.3	2846.5	2551.9	0.0
19 Ps	1726.8	1714.2	1687.2	1597.5	0.0
20 P=(Pt+Ps)/2	1610.5	1598.7	1573.7	1490.3	0.0
21 Pr=(P/Pcr)	2.40	2.38	2.35	2.22	0.00
22 Tr=(T/Tcr)	1.59	1.59	1.59	1.59	0.00
23 Z(Table XI)	.841	.842	.843	.848	0.000

Location	C, 25-9S-26E
Count	Chaves
Date	4/6/89

$P_c^2 - P_w^2$, THOUSANDS

