

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

Adopted 9-1-65

DATE 1/20/83

COMPANY Yates Petroleum Corporation LEASE Sherrel "SR" Com WELL NO. 1

LOCATION: Unit L Section 32 Township 17S Range 26E

L 8424.0 H 8424.0 L/H 1.000 G .633 %CO2 1.26 %N2 .42 %H2S 0.00

d 2.441 Fr .010495 GH 5332.4 Pcr 675.6 Tcr 363.6

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.105	.153	.221	.291	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	637.0	637.0	637.0	637.0	0.0
4 T=(Tw+Ts)/2	579.5	579.5	579.5	579.5	0.0
5 Z(Est.)	.819	.820	.827	.858	0.000
6 TZ	474.6	475.2	479.5	497.2	0.0
7 GH/TZ	11.235	11.221	11.120	10.725	0.000
8 e ^a (Table XIV)	1.524	1.523	1.517	1.495	0.000
9 1-e ^{-a} (Table XIV)	.344	.343	.341	.331	0.000
10 Pt	2164.2	1997.2	1718.2	1233.2	0.0
11 Pt ² /1000	4683.8	3988.8	2952.2	1520.8	0.0
12 Fr(Table XV)	.010495	.010495	.010495	.010495	0.000000
13 Fc=FrTZ	4.981	4.987	5.033	5.218	0.000
14 FcQm	.523	.763	1.115	1.519	0.000
15 L/H(FcQm) ²	.273	.582	1.242	2.308	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-a})	.094	.200	.424	.764	0.000
17 Pw ² =Pt ² +Fw	4683.8	3989.0	2952.6	1521.5	0.0
18 Ps ² =e ^a Pw ²	7137.8	6075.9	4480.3	2274.8	0.0
19 Ps	2671.7	2464.9	2116.7	1508.3	0.0
20 P=(Pt+Ps)/2	2417.9	2231.1	1917.4	1370.7	0.0
21 Pr=(P/Pcr)	3.58	3.30	2.84	2.03	0.00
22 Tr=(T/Tcr)	1.59	1.59	1.59	1.59	0.00
23 Z(Table XI)	.819	.820	.827	.858	0.000