

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

Adopted 9-1-65

DATE 1/19/83

COMPANY Yates Petroleum Corporation LESSE Margaret "RQ" St WELL NO. 2

LOCATION: Unit G Section 36 Township 4S Range 24E

L 3584.0 H 3584.0 L/H 1.000 G .676 %CO₂ 3.06 %N₂ 6.06 %H₂S 0.00

d 1.995 Fr .017777 GH 2422.8 Pcr 672.4 Tcr 359.0

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.407	.502	.589	.666	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.)	.864	.867	.870	.874	0.000
6 TZ	468.9	470.4	472.2	473.9	0.0
7 GH/TZ	5.167	5.150	5.131	5.112	0.000
8 e ^s (Table XIV)	1.214	1.213	1.212	1.211	0.000
9 1-e ^{-s} (Table XIV)	.176	.176	.175	.174	0.000
10 Pt	951.2	928.2	903.2	878.2	0.0
11 Pt ² /1000	904.8	861.6	815.8	771.2	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.335	8.363	8.393	8.431	0.000
14 FcQm	3.390	4.197	4.940	5.612	0.000
15 L/H(FcQm) ²	11.490	17.612	24.402	31.498	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	2.024	3.093	4.271	5.491	0.000
17 Pw ² =Pt ² +Fw	906.8	864.6	820.0	776.7	0.0
18 Ps ² =e ^s Pw ²	1100.7	1048.9	994.0	940.7	0.0
19 Ps	1049.1	1024.1	997.0	969.9	0.0
20 P=(Pt+Ps)/2	1000.2	976.2	950.1	924.1	0.0
21 Pr=(P/Pcr)	1.49	1.45	1.41	1.37	0.00
22 Tr=(T/Tcr)	1.51	1.51	1.51	1.51	0.00
23 Z(Table XI)	.864	.867	.870	.874	0.000