

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

Adopted 9-1-65

DATE 11/6/84

COMPANY Yates Petroleum Corporation LEASE Skinny "Q0" State WELL NO. 6

LOCATION: Unit K Section 16 Township 6S Range 25E

L 3653.0 H 3653.0 L/H 1.000 G .643 %CO₂ .01 %N₂ 5.16 %H₂S 0.00

d 1.995 Fr .017777 GH 2348.9 Pcr 661.9 Tcr 355.7

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.302	.393	.449	.472	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	562.0	562.0	562.0	562.0	0.0
4 T=(Tw+Ts)/2	542.0	542.0	542.0	542.0	0.0
5 Z(Est.)	.889	.899	.900	.909	0.000
6 TZ	481.8	487.1	487.9	492.4	0.0
7 GH/TZ	4.876	4.822	4.814	4.770	0.000
8 e ^s (Table XIV)	1.200	1.198	1.198	1.196	0.000
9 1-e ^{-s} (Table XIV)	.167	.165	.165	.164	0.000
10 Pt	779.2	705.2	694.2	633.2	0.0
11 Pt ² /1000	607.2	497.3	481.9	400.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.569	8.664	8.674	8.757	0.000
14 FcQm	2.592	3.406	3.894	4.132	0.000
15 L/H(FcQm) ²	6.719	11.600	15.160	17.074	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	1.122	1.918	2.504	2.795	0.000
17 Pw ² =Pt ² +Fw	608.3	499.2	484.4	403.7	0.0
18 Ps ² =e ^s Pw ²	730.2	598.1	580.3	482.8	0.0
19 Ps	854.5	773.4	761.7	694.8	0.0
20 P=(Pt+Ps)/2	816.9	739.3	728.0	664.0	0.0
21 Pr=(P/Pcr)	1.23	1.12	1.10	1.00	0.00
22 Tr=(T/Tcr)	1.52	1.52	1.52	1.52	0.00
23 Z(Table XI)	.889	.899	.900	.909	0.000