

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

Adopted 9-1-65

DATE _____

COMPANY Yates Petroleum Corporation LEASE Shadden TN WELL NO. 1

LOCATION: Unit M Section 10 Township 6S Range 26E

L 3805.0 H 3805.0 L/H 1.000 G .660 %CO₂ .03 %N₂ 8.24 %H₂S 0.00

d 1.995 Fr .017777 GH 2511.3 Pcr 656.2 Tcr 352.7

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.200	.249	.266	.287	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	530.0	530.0	530.0	530.0	0.0
4 T=(Tw+Ts)/2	526.0	526.0	526.0	526.0	0.0
5 Z(Est.)	.852	.853	.856	.857	0.000
6 TZ	448.2	448.9	450.3	451.0	0.0
7 GH/TZ	5.603	5.594	5.576	5.568	0.000
8 e ^s (Table XIV)	1.234	1.233	1.233	1.232	0.000
9 1-e ^{-s} (Table XIV)	.190	.189	.189	.188	0.000
10 Pt	963.2	953.2	933.2	924.2	0.0
11 Pt ² /1000	927.8	908.6	870.9	854.1	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	7.967	7.980	8.006	8.017	0.000
14 FcQm	1.595	1.986	2.133	2.303	0.000
15 L/H(FcQm) ²	2.545	3.946	4.548	5.303	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	.482	.747	.858	.999	0.000
17 Pw ² =Pt ² +Fw	928.2	909.3	871.7	855.1	0.0
18 Ps ² =e ^s Pw ²	1145.3	1121.6	1074.5	1053.7	0.0
19 Ps	1070.2	1059.1	1036.6	1026.5	0.0
20 P=(Pt+Ps)/2	1016.7	1006.1	984.9	975.4	0.0
21 Pr=(P/Pcr)	1.55	1.53	1.50	1.49	0.00
22 Tr=(T/Tcr)	1.49	1.49	1.49	1.49	0.00
23 Z(Table XI)	.852	.853	.856	.857	0.000