

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

Adopted 9-1-65

DATE 7/20/88

COMPANY Yates Petroleum Corporation LEASE Cities UO Federal WELL NO. 1

LOCATION: Unit H Section 7 Township 5S Range 25E

L 3680.0 H 3680.0 L/H 1.000 G .654 %CO₂ .02 %N₂ 7.11 %H₂S 0.00

d 1.995 Fr .017777 GH 2406.7 Pcr 658.3 Tcr 353.9

LINE	1st Rate	2nd Rate	3rd Rate	4th Rate	5th Rate
1 Qm	.495	.522	.550	.584	0.000
2 Tw(W.H.°R)	522.0	522.0	522.0	522.0	0.0
3 Ts(B.H.°R)	566.0	566.0	566.0	566.0	0.0
4 T=(Tw+Ts)/2	544.0	544.0	544.0	544.0	0.0
5 Z(Est.)	.896	.898	.903	.904	0.000
6 TZ	487.3	488.5	491.4	491.7	0.0
7 GH/TZ	4.939	4.926	4.898	4.895	0.000
8 e ^s (Table XIV)	1.203	1.203	1.202	1.201	0.000
9 1-e ^{-s} (Table XIV)	.169	.169	.168	.168	0.000
10 Pt	748.2	730.2	690.2	686.2	0.0
11 Pt ² /1000	559.8	533.2	476.4	470.9	0.0
12 Fr(Table XV)	.017777	.017777	.017777	.017777	0.000000
13 Fc=FrTZ	8.667	8.689	8.735	8.744	0.000
14 FcQm	4.293	4.539	4.800	5.108	0.000
15 L/H(FcQm) ²	18.433	20.603	23.044	26.094	0.000
16 Fw=L/H(FcQm) ² (1-e ^{-s})	3.115	3.474	3.867	4.374	0.000
17 Pw ² =Pt ² +Fw	562.9	536.7	480.2	475.2	0.0
18 Ps ² =e ^s Pw ²	677.4	645.5	577.1	571.0	0.0
19 Ps	823.0	803.4	759.7	755.6	0.0
20 P=(Pt+Ps)/2	785.6	766.8	724.9	720.9	0.0
21 Pr=(P/Pcr)	1.19	1.16	1.10	1.10	0.00
22 Tr=(T/Tcr)	1.54	1.54	1.54	1.54	0.00
23 Z(Table XI)	.896	.898	.903	.904	0.000