

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES ~~(P_{wh} or P_w)~~

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE ~~(P_{wh} or P_s)~~

COMPANY Newbourne Oil LEASE Federal 5 WELL NO. 1 DATE 27E

LOCATION: Unit 9432 H 9432 Section 21 Township 18S Range 27E
L/H 1.000 G 0.572 % CO₂ 0.02 % N₂ 0.61 % H₂S 0

GH 5583 P_{cr} 671 T_{cr} 351

LINE	1	2	3	4	5	6	7	8
1	T _w (W.H. °R)	534	534	534	534	534	534	534
2	T _s (B.H. °R)	611	611	611	611	611	611	611
3	T = $(\frac{T_w + T_s}{2})$	572.5	572.5	572.5	572.5	572.5	572.5	572.5
4	Z (Est.)	0.850	0.867	0.867	0.889	0.917	0.917	0.943
5	TZ	486.6	496.4	496.4	509.2	509.0	525.0	540
6	GH/TZ	11.473	11.248	11.248	10.965	10.970	10.635	10.339
7	e ^s (Table XIV)	1.538	1.525	1.525	1.509	1.509	1.490	1.474
8	P_{wh} or P _s	1548	1548	1203	1203	871	871	584
9	P_{wh} or P _s ²	2396.3	2396.3	1447.2	1447.2	758.6	341.1	341.1
10	P_{wh} or P _s ² /e ^s or P _w ² = P _s ² /e ^s	1558.0	1571.3	949.0	959.1	502.7	228.9	231.4
11	P_{wh} or P _w	1248.2	1253.5	974.2	979.3	709.0	478.4	481.0
12	P = $(\frac{P_w + P_s}{2})$ or $\frac{P_{wh} + P_s}{2}$	1398.1	1400.8	1082.6	1091.2	790.0	792.3	532.5
13	P _r = (P/P _{cr})	2.08	2.09	1.62	1.63	1.18	0.79	0.79
14	T _r = (T/T _{cr})	1.63	1.63	1.63	1.63	1.63	1.63	1.63
15	Z (Table XI)	0.867	0.867	0.889	0.889	0.917	0.917	0.943