

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_w)

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_b or P_s)

COMPANY Tenneco LEASE Kewitz Deepthwell WELL NO. 1539 DATE 3-20-60

LOCATION: Unit L 124630 Section 29 Township 16S Range 34E

L 124630 H 124630 LH 1200 G 637 % CO₂ 12.21 % N₂ 1.757 % H₂S

GH 8045 P_{cr} 669 T_{cr} 361
TABLE 12.2
TABLE 12.3

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)	660	660	660	660	660	660	660
3	$T = (\frac{T_w + T_s}{2})$	597	597	597	597	597	597	597
4	Z (Est.)	1.015	963	974	.926	.942	.859	.918
5	TZ	605.9	574.91	581.5	552.8	562.4	536.7	548.0
6	GH/TZ	13.276	13.693	13.835	14.553	14.301	14.679	15.344
7	e^S (Table XIV)	1.645	1.660	1.680	1.726	1.710	1.754	1.778
8	P_f or P_s	5501.2	5501.2	5028.2	5028.2	4655.2	4351.2	4351.2
9	P_f^2 or P_s^2	30263.2	30263.2	25282.8	25282.8	21670.9	18932.9	18932.9
10	$P_c^2 = P_f^2/e^S$ or $P_w^2 = P_s^2/e^S$	18339.7	17906.7	15048.8	14645.4	12673.5	10918.1	10647.7
11	P_c or P_w	4288.9	(4231.6)	3875.3	(3827.5)	3555.9	(3514.6)	3304.3
12	$P \cdot (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	4855.1	4866.4	4053.7	4427.8	4107.6	4044.9	3827.7
13	$P_r = (P/P_{cr})$	7.32	7.27	6.66	6.62	6.14	6.11	5.72
14	$T_r = (T/T_{cr})$	1.64	1.64	1.64	1.64	1.64	1.64	1.64
15	Z (Table XI)	.963	.960	.926	.924	.899	.892	.876