

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

FROM KNOWN BOTTOM HOLE PRESSURE (P_b or P_s)

COMPANY V.H. Westbrook LEASE Grandi WELL NO. 1 DATE 7-13-83
 LOCATION: Unit F Section 22 Township 22S Range 27E
 T 9572 H 9572 L/H 1.000 G .6739 % CO₂ 0.445 % N₂ 0.881 % H₂S

GH 6451 P_{cr} 669 T_{cr} 382

LINE	1st	2nd	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)	630	630	630	630	630	630	630
3	T = ($\frac{T_w + T_s}{2}$)	582	582	582	582	582	582	582
4	Z (Est.)	.984	.933	.927	.884	.875	.828	.801
5	TZ	573	543	540	515	509	482	466
6	GH/TZ	11.264	11.880	11.957	12.539	12.668	13.387	13.838
7	e ^s (Table XIV)	1.526	1.561	1.566	1.600	1.608	1.652	1.687
8	P _f or P _s	5300.2	5300.2	4734.2	4734.2	4176.2	3586.2	3586.2
9	P _f ² or P _s ²	28092.1	28092.1	22412.7	22412.7	17440.6	12860.8	12860.8
10	P _c ² = P _f ² /e ^s or P _w ² = P _s ² /e ^s	18413.6	17993.1	14313.9	14004.9	10845.5	7784.8	7654.3
11	P _c or P _w	4291.1	*4241.8	3783.4	*3742.3	3293.3	2790.1	*2766.6
12	P _r = ($\frac{P_w + P_s}{2}$) or ($\frac{P_c + P_f}{2}$)	4795.7	4771.0	4258.8	4238.3	3734.7	3188.2	3176.4
13	P _r = (P/P _{cr})	7.17	7.13	6.37	6.34	5.58	4.77	4.75
14	T _r = (T/T _{cr})	1.52	1.52	1.52	1.52	1.52	1.52	1.52
15	Z (Table XI)	.933	.931	.884	.882	.839	.801	.800