

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

Form C-122F
Adopted 9-1-65

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

COMPANY MARALO, INC. LEASE STATE N.K. COM. WELL NO. 1 DATE 1-7-88

LOCATION: Unit L Section 6 Township 24S Range 25E

* L 9442 H 9442 L/H 1.000 G .646 % CO₂ .92 % N₂ .538 % H₂S 0

* B.H. INSTR. SET @ THIS DEPTH GH 6099.53 P_{CT} 6.73 T_{CT} 372 2nd Date 2nd Date

LINE	1	2	3	4	5	6	7	8
1	$T_w (W.H. \text{ } ^\circ R)$	534	534	534	534	534	534	534
2	$T_s (B.H. \text{ } ^\circ R)$	614	614	614	614	614	614	614
3	$T = (\frac{T_w + T_s}{2})$	574	574	574	574	574	574	574
4	Z (Est.)	.788	.775	.780	.772	.772	.771	.777
5	TZ	452.3	444.8	447.7	443.1	443.7	442.5	445.9
6	GH/TZ	13.485	13.711	13.623	13.764	13.746	13.782	13.676
7	e^S (Table XIV)	1.658	1.672	1.666	1.675	1.674	1.676	1.670
8	P_f or P_s	2982.2	2982.2	2982.2	2982.2	2982.2	2982.2	2982.2
9	P_f^2 or P_s^2	8893.5	8893.5	8893.5	8893.5	8893.5	8893.5	8893.5
10	$P_c^2 = P_f^2 / e^S$ or $P_w^2 = P_s^2 / e^S$	5363.5	5363.5	5363.5	5363.5	5363.5	5363.5	5363.5
11	P_c or P_w	2315.9	2306.1	2315.8	2315.1	1966.1	1965.4	1758.2
12	$P = (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	2649.0	2644.1	2647.0	2647.0	2254.8	2254.8	2254.8
13	$P_r = (P / P_{CT})$	3.93	3.93	3.67	3.67	3.35	3.35	3.35
14	$T_r = (T / T_{CT})$	1.54	1.54	1.54	1.54	1.54	1.54	1.54
15	Z (Table XI)	.775	.775	.772	.772	.772	.777	.777