

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

Form G-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_h)

COMPANY Southland Royalty LEASE Buxton 4 1/2 Sec. Com. WELL NO. 1 DATE 12-30-86

LOCATION: Unit G Section 4 Township 20 Range 29

L 10,453 H 10,453 LH 1.00 G 680 %CO₂ _____ %N₂ _____ %H₂S _____

GH 7108 P_{CT} 669 T_{CT} 385

Shut-in late 5

LINE	1	2	3	4	5	6	7	8
1	T _w (B.H. °R)	534					534	534
2	T _s (B.H. °R)	640					640	640
3	T _f = $\frac{T_w + T_s}{2}$	587					587	587
4	Z (Est.)	.777	.791				.805	.823
5	TZ	456.1	464.3				472.5	483.1
6	GH/TZ	15.584	15.309				15.042	14.713
7	e ^S (Table XIV)	1.794	1.775				1.758	1.736
8	P _f or P _s	1990.9	1990.9			P _s =	1544.0	1544.0
9	P _f ² or P _s ²	3963.7	3963.7				2383.9	2383.9
10	P _c ² = P _f ² /e ^S or P _w ² = P _s ² /e ^S	2209.5	2232.5				1356.2	1373.0
11	P _c or P _w	1486.4	1494.1			P _w =	1164.5	1171.8
12	P _i = $\frac{P_w + P_s}{2}$ or $\frac{P_c + P_f}{2}$	1738.7	1742.5				1354.3	1357.9
13	P _i = (P/P _{cr})	2.60	2.60				2.02	2.03
14	T _i = (T/T _{cr})	1.52	1.52				1.52	1.52
15	Z (Table XI)	.791	.791				.823	.822