

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

Form C-122F
Adopted 9-1-55

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)

COMPANY TXO Production Co. LEASE Challenger Payoux WELL NO. 1 DATE 4-23-84

LOCATION: Unit P Section 19 Township 21S Range 27E
L 11.259 H 11.259 LMH G 0.600 %CO₂ 0.978 %N₂ 0.211 %H₂S

GH 6755.4 P_{cr} 671 T_{cr} 358
TABLE IX B X TABLE IX B X

SI S.I. 1st 2nd 3rd

LINE	1	2	3	4	5	6	7	8
1	T _w (W.H. °R)	529	529	529	528	528	529	529
2	T _s (B.H. °R)	647	647	647	647	647	647	647
3	T _i = (T _w + T _s) / 2	588	588	588	588	588	588	588
4	Z (Est.)	.802	.838	.825	.848	.870	.861	.888
5	TZ	471.6	492.7	485	499	511.6	506.3	522
6	GH/TZ	14.3244	13.71	13.928	13.538	13.2045	13.34	12.9414
7	e ^s (Table XIV)	1.71	1.67	1.69	1.66	1.64	1.65	1.62
8	P _f or P _s	2378.2	2378.2	2053.2	2053.2	1749.2	1749.2	1507.2
9	P _f ² or P _s ²	5655.8	5655.8	4215.6	4215.6	3060	3060	2271.7
10	P _c ² = P _f ² /e ^s or P _w ² = P _s ² /e ^s	3307.5	3386.7	2494.4	2539.52	1866	1854.4	1402.3
11	P _c or P _w	1818.65	1840.3	1579.38	1593.6	1366	1362	1184.2
12	P ((F _w + P _s) / 2) or ((P _c + P _f) / 2)	2098.43	2109.3	1816.3	1823.4	1577.6	1555.5	1345.7
13	P _f = (P/P _{cr})	3.13	3.14	2.71	2.72	2.32	2.32	2.00
14	T _r = (T/T _{cr})	1.64	1.64	1.64	1.64	1.64	1.64	1.64
15	Z (Table XI)		.838		.848		.861	.874