

WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or P_{wf})

Form C-122F
Adopted 9-1-65

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or P_s)

COMPANY Estoril Prod. Corp. LEASE Union Federal A WELL NO. 1 DATE 8-31-80

LOCATION: Unit M Section 10 Township 20s Range 34e

L 12900 H 12900 L/H 1.000 G .6716 % CO₂ .499 % N₂ 1.900 % H₂S

GH 8664 P_{cr} 669 T_{cr} 382
TABLE IX & X TABLE IX & X

LINE	1	2	3	4	5	6	7	8
1	T_w (W.H. °R)	534	534					
2	T_s (B.H. °R)	663	663					
3	$T = (\frac{T_w}{2} + T_s)$	598.5	598.5					
4	Z (Est.)	1.027	.969					
5	TZ	614.7	579.9					
6	GH/TZ	14.096	14.939					
7	e^S (Table XIV)	1.697	1.751					
8	P_f or P_s	5621.2	5621.2					
9	P_f^2 or P_s^2	31597.9	31597.9					
10	$P_c^2 = P_f^2/e^S$ or $P_w^2 = P_s^2/e^S$	18624.7	18045.2					
11	P_c or P_w	4315.6	4248.0					
12	$P = (\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	4968.4	4934.6					
13	$P_r = (P/P_{cr})$	7.43	7.38					
14	$T_r = (T/T_{cr})$	1.57	1.57					
15	Z (Table XI)	.969	.967					