WORK SHEET FOR CALCULATION OF WELLHEAD PRESSURES (P_c or ~~P_x~~)

FROM KNOWN BOTTOM HOLE PRESSURE (P_f or ~~P_{xs}~~)

Form C-122F
Adopted 9-1-65

COMPANY Gulf Oil Expl. & Prod LEASE South Shugart Deep WELL NO. Fed. Unit #1 DATE 4-5-82

LOCATION: Unit C Section 4 Township 19s Range 31e

L 11751 H 11751 L/H 1.000 G mix .784 % CO_2 .49 % N_2 .44 % H_2S

GH 9213 P_{cr} 666 (TABLE IX & X) T_{cr} 418 (TABLE IX & X)

S. I. P.

LINE		1	2	3	4	5	6	7	8
1	T_w(W.H. °R)	534	534	534					
2	T_s(B.H. °R)	652	652	652					
3	$T=(\frac{T_w + T_s}{2})$	593	593	593					
4	Z (Est.)	.932	.858	.852					
5	TZ	552.7	508.8	505.2					
6	GH/TZ	16.670	18.108	18.234					
7	e^s(Table XIV)	1.868	1.972	1.981					
8	P_f or P_s	4929.2	4929.2	4929.2					
9	P_f^2 or P_s^2	24297.0	24297.0	24297.0					
10	$P_c^2 = P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	13003.6	12321.0	12262.4					
11	P_c or P_w	3606.1	3510.1	*3501.8					
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	4267.6	4219.7	4215.5					
13	$P_r = (P/P_{cr})$	6.41	6.34	6.33					
14	$T_r = (T/T_{cr})$	1.42	1.42	1.42					
15	Z (Table XI)	.858	.852	.852					

One copy to be filed in District Office (Work copy acceptable)