FLOWING BHP'S

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

FROM KNOWN BOTTOM HOLE PRESSURE (P_f ~~or~~ P_s)

Form C-122F
Adopted 9-1-65

COMPANY TXO PROD. CO LEASE CHALLENGER RAYROUX WELL NO. 1 DATE 2-23-89

LOCATION: Unit P Section 19 Township 21S Range 27E

L *8950 H 8950 L/H 1.000 G .616 % CO_2 .86 % N_2 .53 % H_2S 0

* = BHP INCL. SET @ THIS POINT. GH 5513.2 P_{CT} 671 (TABLE IX & X) T_{CT} 362 (TABLE IX & X)

** = BHP FLOWING CAL. TO SURFACE

LINE		(1) 1	2	(2) 3	4	(3) 5	6	(4) 7	8
1	T_w(W.H. °R)	534	534	534	534	534	534	534	534
2	T_s(B.H. °R)	624	624	624	624	624	624	624	624
3	$T=(\frac{T_w + T_s}{2})$	579	579	579	579	579	579	579	579
4	Z (Est.)	.894	.902	.896	.904	.897	.904	.897	.904
5	TZ	517.6	522.2	518.7	523.4	519.3	523.4	519.3	523.4
6	GH/TZ	10.650	10.556	10.627	10.533	10.615	10.533	10.615	10.533
7	e^s(Table XIV)	1.490	1.485	1.489	1.484	1.488	1.484	1.488	1.484
8	~~P_f or~~ P_s	954.2	954.2	928.2	928.2	922.2	922.2	914.2	914
9	~~P_f^2 or~~ P_s^2	910.5	910.5	861.6	861.6	850.5	850.5	835.8	835.8
10	$P_c^2 = P_f^2/e^s$ or $P_w^2 = P_s^2/e^s$	610.6	612.8	578.3	580.4	571.1	572.9	561.3	563.0
11	~~P_c or~~ P_w	781.4 *	782.8 **	760.5 *	761.8 **	755.7	756.9 **	749.2	750.5 **
12	$P=(\frac{P_w + P_s}{2})$ or $(\frac{P_c + P_f}{2})$	867.8	868.5	844.3	845.0	838.9	839.5	831.7	832.2
13	$P_r = (P/P_{CT})$	1.29	1.29	1.26	1.26	1.25	1.25	1.24	1.24
14	$T_r = (T/T_{CT})$	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
15	Z (Table XI)	.902	.902	.904	.904	.904	.904	.904	.904

One copy to be filed in District Office (Work copy acceptabl