WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Adopted 9-1-65

COMPANY [illegible] LEASE [illegible] WELL NO. [illegible] DATE [illegible]

LOCATION: Unit [illegible] Section [illegible] Township [illegible] Range [illegible]

L [illegible] H [illegible] L/H [illegible] G [illegible] % CO_2 [illegible] % N_2 [illegible] % H_2S [illegible]

d [illegible] F_r [illegible] GH [illegible] P_{cr} 6.51 (TABLE IX & X) T_{cr} 528 (TABLE IX & X)

LINE	S1	1	2	3			1	2	3	4
1 Q_m	—	0.196	0.282	0.324			0.192	0.282	0.324	
2 T_w (W.H. °R)	549	553	554	555						
3 T_s (B.H. °R)	620	618	618	617						
4 $T = (\frac{T_w + T_s}{2})$	584.5	585.5	586	586			[illegible]	586	586	585.5
5 Z (Est.)	0.651	0.471	0.389	0.660			[illegible]	0.390	0.67	0.4675
6 TZ	380.509	275.77	227.954	386.760			272.243	228.54	390.862	273.721
7 GH/TZ	24.4268	40.686	49.2205	29.0102			41.1225	49.0942	28.7058	40.9906
8 e^S (Table XIV)	3.0215	4.5985	6.3330	2.9680			4.6744	6.3030	2.9343	4.6513
9 $1-e^{-S}$ (Table XIV)	—	0.7825	0.8421	0.6631			0.7861	0.8413	0.6592	0.7850
10 P_t	2278.2	1368.2	723.2	493.2			1368.2	723.2	493.2	1368.2
11 $P_t^2/1000$	5190.2	1711.39	523.02	243.25			1711.39	523.02	243.25	1711.39
12 ~~F_r (Table XV)~~ $S = 0.375 \frac{GH}{TZ}$	1.105755	1.52573	1.84577	1.05788			1.54210	1.84103	1.07649	1.53715
13 $F_c = F_r TZ$		4.669	3.8593	6.548			4.619	3.869	6.6173	4.634
14 $F_c Q_m$		0.915	1.0883	2.122			0.905	1.091	2.144	0.908
15 $L/H (F_c Q_m)^2$		0.837	1.184	4.501			0.820	1.190	4.597	0.825
16 $F_w = L/H (F_c Q_m)^2 (1-e^{-S})$		0.66	1.00	2.98			0.64	1.00	3.03	0.65
17 $P_w^2 = P_t^2 + F_w$		1712.05	524.02	246.23			1712.03	524.02	246.28	1712.04
18 $P_s^2 = e^S P_w^2$	15682	7872.9	3318.6	730.8			8002.7	3302.9	722.7	7963.2
19 P_s	3960.2	2805.9	1821.7	854.9			2828.9	1817.4	850.1	2821.9
20 $P = (\frac{P_t + P_s}{2})$	3119.2	2057.0	1272.4	674.0			2068.6	1270.3	671.6	2065.0
21 $P_r = (P/P_{cr})$	4.791	3.160	1.955	1.035			3.187	1.951	1.032	3.172
22 $T_r = (T/T_{cr})$	1.107	1.109	1.110	1.110			1.109	1.110	1.110	1.109
23 Z (Table XI)	0.651	0.466	0.370	[illegible]			0.468	0.390	0.667	0.4675