

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-1222
Adopted 9-1-65

COMPANY Pete Corp LEASE Arkway west WELL NO. 16 DATE 3/27/80

LOCATION: Unit 2 Section 21 Township 15 Range 29E

L 11,268 H 11,268 L/H 1,000 GMH 1,655 % CO₂ _____ % N₂ _____ % H₂S _____

d 1.995 F_i 1018231 GH 7381 P_{cr} 670 T_{cr} 375

LINE	15L	3 nB	3 R D	47H				
1 Q _m	1,509	1,509	.797	.797	1,000	1,000	1,180	1,180
2 T _w (W.H. °R)	534	534	534	534	534	534	534	534
3 T _s (B.H. °R)	646	646	646	646	646	646	646	646
4 T = ($\frac{T_w + T_s}{2}$)	590	590	590	590	590	590	590	590
5 Z (Est.)	1,825	1,817	1,829	1,819	1,833	1,822	1,834	1,826
6 T _Z	486.7	482.0	484.1	483.2	491.5	484.9	495.0	487.3
7 GH/T _Z	15,164	15,312	15,091	15,275	15,018	15,219	14,511	15,145
8 e ^s (Table XIV)	1,766	1,776	1,761	1,773	1,756	1,769	1,745	1,765
9 1 - e ^s (Table XIV)	.4337	.4369	.4322	.4361	.4306	.4344	.4283	.4333
10 P _t	2003.2	2003.2	1911.2	1911.2	1803.2	1803.2	1711.2	1711.2
11 P _t 2/1000	4012.8	4012.8	3652.7	3652.7	3251.5	3251.5	2928.2	2928.2
12 F _t (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231
13 F _c = F _t T _Z	8,874	8,788	8,917	8,809	8,960	8,842	9,025	8,865
14 F _c Q _m	4,517	4,473	7,107	7,021	8,560	8,842	10,649	10,484
15 L/H (F _c Q _m) ²	20,402	20,008	50,507	49,296	80,281	78,175	113,400	109,913
16 F _w = L/H (F _c Q _m) ² (1 - e ^{-s})	8,848	8,741	21,827	21,496	34,569	33,997	48,570	47,627
17 P _w ² = P _t ² + F _w	4021.7	4021.7	3674.5	3674.5	3286.1	3285.5	2976.8	2975.8
18 P _w ² = e ^s P _w ²	7101.7	7141.2	6470.4	6575.2	5771.2	5813.5	5206.9	5251.3
19 P _s	2664.9	2672.3	2543.8	2552.5	2402.3	2411.2	2281.9	2291.4
20 P = ($\frac{P_t + P_s}{2}$)	2334.1	2337.8	2227.5	2231.8	2102.8	2107.2	1996.5	2001.4
21 P _i = (P/P _{cr})	3.48	3.49	3.32	3.33	3.14	3.14	2.98	2.99
22 T _i = (T/T _{cr})	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57
23 Z (Table XI)	1.877	1.817	1.819	1.819	1.822	1.822	1.826	1.825

TABLE IX & X