

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

COMPANY YPC LEASE State "CY" (K-6701) WELL NO. 1 DATE 3-6-77

LOCATION: Unit 1C Section 32 Township 17-S Range 25-E
6440 H 6440 L/H 1.000 G 0.683 % CO₂ 0.46 % N₂ 0.99 % H₂S
125(1076)=1305 d 2.0277 " F_r 0.017019 GH 4398.5 P_{Cr} 670 T_{Cr} 382.5
6315(2.98)=2513.1 + 1.9 = 3 TABLE IX & X

LINE	1	2	3	4	1	2	3	4
1 Q _m	S1	0.137	0.217	0.261	S1	0.137	0.170	0.261
2 T _w (W.H. °R)	S08	515	518	519				
3 T _s (B.H. °R)	S83	582	580	579				
4 T = ($\frac{T_w + T_s}{2}$)	S45.5	548.5	549	549	S48.5	549	549	549
5 Z (Est.)	1725	174	1745	175	1728	1739	17425	17515
6 TZ	395.488	405.89	409.005	411.75	399.124	405.34	407.633	412.570
7 GH/TZ	11.1217	10.8267	10.754	10.6825	11.0759	10.8513	10.7904	10.661
8 e ^s (Table XIV)	1.5174	1.5013	1.4967	1.4926	1.5148	1.5021	1.4987	1.4915
9 1-e ^s (Table XIV)	0.3410	0.3339	0.3318	0.3300		0.3343	0.3328	0.3295
10 P _t	1790.2	1692.2	1604.2	1538.2	1790.2	1692.2	1656.2	1535.2
11 P _t 2/1000	3204.84	2863.54	2573.46	2366.06	3204.84	2863.54	2743.00	2366.06
12 F _t (Table XV)	41706	440638	410328	40059	41535	40693	40464	40247
13 F _c = F _t TZ		6.9078	6.9609	7.0076		6.8985	6.9375	7.0216
14 F _c Q _m		0.946	1.5105	1.829		0.945	1.1794	1.833
15 L/H (F _c Q _m) ²		0.896	2.282	3.345		0.892	1.3909	3.359
16 F _w = L/H (F _c Q _m) ² (1-e ^s)		0.299	0.757	1.10		0.299	0.463	1.107
17 P _w ² = P _t ² + F _w		2863.84	2574.46	2367.16		2863.84	2574.46	2367.17
18 P _s ² = e ^s P _w ²	4862.0	4299.48	3852.8	3533.22	4854.8	4301.77	4111.63	3533.23
19 P _s	2205.2	2073.5	1962.9	1879.7	2203.4	2074.1	2027.7	1879.0
20 P = ($\frac{P_t + P_s}{2}$)	1997.7	1882.4	1783.5	1708.9	1996.8	1883.1	1842.0	1708.6
21 P _r = (P/P _{Cr})	2.980	2.810	2.662	2.55	2.98	2.8106	2.749	2.55
22 T _r = (T/T _{Cr})	1.426	1.434	1.435	1.435	1.426	1.434	1.435	1.435
23 Z (Table XI)	0.728	0.739	0.7425	0.7515	0.728	0.739	0.7425	0.7515