

WORKSHEET FOR CALCULATION OF S1 IC COLUMN WELLHEAD PRESSURE (Pw)

COMPANY Y.P.C. LEASE C1 Tank Unit WELL NO. 1 DATE 3-16-81

LOCATION: Unit F Section 23 Township 19-S Range 34-E

L 62294 H 62294 L/H 10000 G 0.0015 % CO₂ 0.23 % N₂ 1.46 % H₂S Nil
 d 2.0084 F 0.01630 GH 4.004 P_{cr} 1700 T_{cr} 391

LINE	5	1	7	3	1	2	3	4	1	2	3	4
1 Qm		8.914	1178	1.50	1.256				0.510			1.956
2 Tw (W.H. °R)	617	524	531		532							
3 Ts (B.H. °R)	583	533	502	532	501							
4 T = $\frac{(Tw + Ts)}{2}$	550	528	516	532	516							557
5 Z (Fsu)	0.74	0.79	0.77	0.72	0.73				0.76			0.75
6 Tc	407.550	220.20	432.00	204.705	403.45				420.300			416.541
7 Gh Tz	9.9227	9.0409	9.3524	9.0123	9.7158				9.3264			9.0702
8 es (Table XIV)	0.405	0.4851	0.401	0.400	0.37659				0.4240			0.3858
9 1-es (Table XIV)		0.2483	0.2118	0.2327	0.2516				0.3300			0.2850
10 P1	1902.2	1699.2	1540.2	1330.2	1265.2				1497.2			0.452
11 P2 (Table XV)	3610.4	2881.5	2392.2	1716.2	1410.2				2000.2			0.420
12 P3 (Table XV)	6772.0	9354.0	9350.2	9340.2	9320.2				9320.2			0.400
13 P4 = F1 Tz		7.000	9.070	9.2297	9.4046				9.3000			0.400
14 P5 Qm		6.0181	7.3473	10.600	14.1022				9.3000			0.400
15 L/H (F _c Q _m) ²		4.0132	6.9170	12.002	17.121				10.000			13.000
16 Fw = L/H (F _c Q _m) ² (1-es)		12.5	20.6	34.7	58.34				13.00			13.00
17 Pw ² = P1 ² + Fw		2394.0	2370.8	1325.6	2000.2				2740.2			13.00
18 Pw ² = es Pw ²	5245.5	11322	3342.0	2567.5	1511.8				4104.0			13.00
19 Ps	2291.2	2032.3	1813.4	1665.5	1261.0				2000.0			13.00
20 P = $\frac{(P1 + Ps)}{2}$	2000.0	1966.0	1900.0	1900.0	1900.0				2000.0			13.00
21 P1 = (P/Pcr)	2.472	2.680	2.472	2.472	2.472				2.472			13.00
22 T1 = (T/Tcr)	1.0435	1.0435	1.0435	1.0435	1.0435				1.0435			13.00