

WORKSHEET FOR CALCULATION OF S.I. IC COLUMN WELLHEAD PRESSURE (P_w)

DATE 7-16-80

COMPANY YPC LEASE Five Mile Draw LX Fair WELL NO. 1 Range 25E

LOCATION: Unit 0 Section 24 Township 6S % H₂S N7

L 4873 H 4873 L/H 1.0000 G 636 % CO₂ 0.40 % N₂ 5.64 T_{cr} 363

214895 F_r 100938 GH 3099 P_{cr} 687 TABLE 11 & 2

278 - 4812(5453).78670 0.79% H₂O

51/25112 - 1532

11823(6.147) 30202

LINE	51	1	2	3	4				
1 Q _m	-	0.215	0.289	0.399	0.506				
2 T _w (W.H. °R)	552	546	548	550	551				
3 T _s (B.H. °R)	567	566	566	565	565				
4 T = (T _w + T _s) / 2	559.5	556	557	557.5	558				
5 Z (Eq. 1)	.804	1815	1829	1850	1877				
6 T _z	444.21	453.14	461.75	473.875	489.366				
7 G _{H/TZ}	6.9764	6.8389	6.7114	6.5397	6.3327				
8 e ^s (Table XIV)	1.2990	1.29235	1.2862	1.2779	1.26805				
9 1-e ^s (Table XIV)		0.22262	0.2225	0.2175	0.2114				
10 P ₁	1632.2	1534.2	1377.2	1153.2	913.2				
11 P ₁ / 2 / 1000	2664.1	2353.8	1896.68	1329.9	833.93				
12 F ₁ (Table XVI)	0.26162	0.25646	0.25168	0.24524	0.23748				
13 F ₂ = F ₁ T _z		4.2505	4.3312	4.445	4.590				
14 F ₂ Q _m		0.014	1.2517	1.7735	2.323				
15 L/H (F ₂ Q _m) ²		0.835	1.567	3.145	5.395				
16 F _w = L/H (F ₂ Q _m) ² (1-e ^s)		0.2	0.35	0.7	1.14				
17 P _w ² = P ₁ ² + F _w		2354.0	1897.03	1330.6	835.07				
18 P _w ² = e ^s P ₁ ²	3460.6	3042.2	2440.0	1700.4	1058.9				
19 P _s	1860.2	1744.2	1562.0	1304.0	1029.0				
20 P = (P _s + P _w)	1746.2	1629.2	1469.6	1228.6	971.1				
21 P _i = (P/P _{cr})	2.542	2.386	2.139	1.788	1.414				
22 T _i = (T/T _{cr})	1.522	1.532	1.534	1.536	1.537				
				0.850	0.877				