

WORKSHEET FOR CALCULATION OF ST. C COLUMN WELLHEAD PRESSURE (P_w)

C-133D
Adapted 2-1-83

COMPANY Hovels LEASE H15007 Fed WELL NO. 1 DATE 5-22-77

LOCATION: Unit 67 Section 31 Township 18 Range 29

L 9472 H 9472 LN 1.00 GML .724 % CO₂ 0 % N₂ 0 % H₂S 0

d 1.995 F₁ .018231 GH 6858 P_{cl} 668 T_{cl} 398

TABLE II B

LINE	RATE I	RATE II	RATE III	RATE IV		
1 Q _m	.469	.469	.772	.772	1.161	1.369
2 (W.H. °R)	534	534	534	534	534	534
3 T _s (B.H. °R)	629	629	629	629	629	629
4 T = ($\frac{1}{2} \frac{W}{T} + \frac{1}{2} \frac{S}{S}$)	582	582	582	582	582	582
5 Z (Est.)	1821	.799	.831	.809	1844	1822
6 T _Z	478	465	484	471	491	478
7 GH/TZ	14.353	14.798	14.180	14.566	13.961	14.335
8 e ^s (Table XIV)	1.71.3	1.739	1.702	1.727	1.688	1.712
9 1-e ^s (Table XIV)	.4162	.4248	.4124	.4209	.4076	.4158
10 P ₁	1155.2	1155.2	1078.2	1078.2	983.2	803.2
11 P ₁ ² /1000	1334.5	1334.5	1162.5	1162.5	966.7	645.1
12 F ₁ (Table XV)	1018231	1018231	1018231	1018231	1018231	1018231
13 F ₁ = F ₁ TZ	8.711	8.478	8.817	8.584	8.955	8.722
14 F ₁ Q _m	4.086	3.976	6.807	6.627	10.397	10.126
15 L/H (F ₁ Q _m) ²	16.692	15.809	46.334	43.524	108.098	102.536
16 F _w = L/H (F ₁ Q _m) ² (1-e ^s)	6.947	6.716	19.109	18.081	44.060	42.638
17 P _w ² = P ₁ ² + F _w	1341.4	(1341.2)	1181.6	(1181.0)	1010.7	(1009.3)
18 P _s ² = c ^s P _w ²	2297.8	2331.7	2011.0	2039.2	1706.2	1727.8
19 P _s	1515.9	1527.0	1418.1	1428.0	1306.2	1314.5
20 P = ($\frac{P_1}{2} + \frac{P_s}{2}$)	1335.5	1341.1	1248.2	1253.1	1144.7	1148.8
21 P ₁ = (P/P _{cl})	2.00	2.00	1.87	1.88	1.71	1.72
22 T ₁ = (T/T _{cl})	1.46	1.46	1.46	1.46	1.46	1.46
23 Z (Table XII)	.799	.799	.809	.808	.822	.821
						1849
						1848