

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

C-122D
Revised 9-1-65

COMPANY 1110 LEASE Gay, MC Adams WELL NO. 1 DATE 7-14-80

LOCATION: Unit H Section 35 Township 5S Range 24E

L 3770 H 3770 L/H 1.000 G 0.649 % CO₂ 0.55 % N₂ 5.03 % H₂S 16.1
3770 (5.456) 222.7 35 (2.512) 7536 3770 (1.118) 230865 185644 P_{cr} 736 T_{cr} 395
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LINE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1 Q _m	81	1	2	3	4																		
2 T _w (W.H. °R)	559	571.6	547	548	549																		
3 T _g (B.H. °R)	556	555	555	554	554																		
4 T = (T _w + T _g)	546.5	550.5	551	551	551.5																		
5 Z (Est.)	.811	.823	.826	.835	.842																		
6 T _Z	443.24	453.06	455.13	458.16	461.36																		
7 GH/T _Z	5.5204	5.4004	5.3759	5.3403	5.3069																		
8 e ^s (Table XIV)	1.2300	1.2245	1.2234	1.2217	1.2185																		
9 1 - e ^s (Table XIV)		0.1833	0.1826	0.1815	0.1793																		
10 P _t	1018.2	979.2	956.2	936.2	914.3																		
11 P _t 2/1000	1036.7	958.8	916.3	865.3	755.5																		
12 F _t (Table XV)	0.207015	0.20851	0.20160	0.20026	0.19759																		
13 F _c = F _t T _Z		4.568	4.6091	4.640	4.7026																		
14 F _c Q _m		1.4315	2.032	2.960	4.0019																		
15 L/H (F _c Q _m) ²		2.004	4.150	8.763	16.005																		
16 F _w = L/H (F _c Q _m) ² (1 - e ^s)		0.4	0.8	1.6	2.9																		
17 P _w ² = P _t ² + F _w		459.2	915.1	866.9	758.4																		
18 P _g ² = e ^s P _w ²	1275.2	1174.5	1119.5	1059.1	924.1																		
19 P _g	1129.2	1083.8	1058.1	1029.1	961.3																		
20 P = (P _g + P _s)	1073.7	1031.5	1007.1	979.7	915.5																		
21 P _t = (P/P _{cr})	1.479	1.421	1.382	1.344	1.261																		
22 T _t = (T/T _{cr})	1.3835	1.3964	1.395	1.395	1.396																		
23 Z (Table XI)	0.811	0.823	0.827	0.835	0.842																		

$$I_2 = \frac{1}{2} \left(16 \cdot 216.5 + 4 \log(1) \right) \frac{1}{2} = 01012.7$$

$$\frac{1.63294}{1.5333}$$

$$17.7448 \times 9.0841$$

$$\frac{16.49}{670 \quad 374.7}$$

$$\frac{56 \quad 204}{726 \quad 395}$$

1.2.1.1