

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

FILED 5-1-82

COMPANY W. A. MONCRIEF JR. LEASE BALDRICK FED. WELL NO. 1 DATE 5-26-82

LOCATION: Unit J Section 14 Township 24 Range 24

L 10842 H 10842 L/H 1.000 G. 575- % CO₂ 1.23 % N₂ .19 % H₂S -0-

d 1.995 F_i .018231 GH 6234.15 P_{cr} 672 T_{cr} 346

TABLE IX & X

LINE	1ST	2ND	1ST	2ND	1ST	2ND	1ST	2ND
1 Q _m	.296	.296	.504	.504	.763	.763	1.198	1.198
2 T _w (W.H. °R)	534	534	534	534	534	534	534	534
T _s (B.H. °R)	643	643	643	643	643	643	643	643
4 T = ($\frac{1}{2}W + \frac{1}{2}S$)	588.5	588.5	588.5	588.5	588.5	588.5	588.5	588.5
5 Z (Est.)	.861	.873	.859	.869	.856	.864	.857	.856
6 TZ	533.6	561.3	532.3	538.8	530.4	535.5	531.1	530.4
7 GH/TZ	11.260	11.106	11.287	11.157	11.326	11.222	11.313	11.326
8 e ^s (Table XIV)	1.525	1.517	1.527	1.520	1.529	1.523	1.528	1.529
9 1-e ^s (Table XIV)	.344	.340	.345	.342	.346	.343	.346	.346
10 P _i	2912.2	2912.2	2830.2	2830.2	2697.2	2697.2	2417.2	2417.2
11 P _i 2/1000	8480.9	8480.9	8010.0	8010.0	7274.9	7274.9	5842.9	5842.9
12 F _i (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231
13 F _c = F _i TZ	10.093	10.234	10.070	10.187	10.034	10.128	10.046	10.034
4 F _i Q _m	2.988	3.029	5.075	5.134	7.656	7.728	12.035	12.021
15 L/H (F _c Q _m) ²	8.926	9.176	25.76	26.36	58.62	59.72	144.85	144.51
16 F _w = L/H (F _c Q _m) ² (1-e ^s)	3.07	3.13	8.89	9.01	20.29	20.51	50.08	50.01
17 P _w = P _i + F _w	8484.0	8484.0	8018.9	8019.0	7295.2	7295.4	5892.9	5892.9
18 P _s = e ^s P _w	12941.7	12866.9	12244.3	12185.0	1155.7	1112.3	9006.9	9011.3
19 P _s	3597.5	3587.0	3499.2	3490.7	3340.0	3333.5	3001.2	3001.9
20 P = ($\frac{P_i^2 + P_s^2}{2}$)	3259.8	3249.6	3164.7	3160.5	3018.6	3015.4	2709.2	2709.5
21 F _i = (P/P _i)	4.84	4.84	4.71	4.70	4.49	4.49	4.03	4.03
22 T _r = (T/T _{cr})	1.70	1.70	1.70	1.70	1.70	1.70	1.70	1.70
23 Z (Table XI)	.873	.873	.869	.869	.869	.864	.856	.856