

COMPANY Yates Petroleum Corp LEASE Butte "D" State WELL NO. #1 DATE 12/21/81
 LOCATION: Unit K Section 16 Township 5S Range 25E
 L 4060 H 2060 LH 1.000 G .663 % CO₂ 1.54 % N₂ 0.8 % H₂S 0
 d 1.495 F_r .01823 GH 2672 P_{cr} 677 T_{cr} 392

LINE	Rate #1	Rate #2	Rate #3	Rate #4		
1 Q _m	14.88	1.285	1.078	1009		
2 T _w (W.H. °R)	534	534	534	534		
3 T _s (B.H. °R)	253	558	558	558		
4 T = $(\frac{1}{w} + \frac{1}{s})$	546	546	546	546		
5 Z (Est.)	.853	.846	.843	.841		
6 T _D	465.130	461.92	460.28	459.19		
7 GH-TZ	5.780	5.766	5.849	5.863		
8 e _s (Table XIV)	1.242	1.244	1.245	1.246		
9 1-e _s (Table XIV)	.195	.191	.197	.197		
10 F _r	923.2	967.2	999.2	1011.2		
11 P _r 2.1000	852.3	935.5	998.4	1022.5		
12 F _r (Table XIV)	.01823	.01823	.01823	.01823		
13 F _r = F _r T _z	3.490	8.121	8.391	8.271		
14 F _r 2 _m	12.634	10.821	9.045	8.446		
15 L/H (F _c Q _m) ²	159.611	117.086	81.818	71.340		
16 F _{cr} = L/H (F _c Q _m) ² (1-e _s)	31.124	22.949	16.118	14.054		
17 P _w ² = P _r ² + F _w	883.4	958.4	1014.5	1036.6		
18 P _s ² = e _s P _w ²	1097.2	1192.3	1263.1	1291.6		
19 P _s	1047.5	1091.9	1123.9	1136.5		
20 P = $(\frac{F_r + P_s}{2})$	955.3	1027.6	1061.5	1073.8		
21 P _r = (P/P _{cr})	1.46	1.52	1.57	1.59		
22 T _r = (T/T _{cr})	1.47	1.47	1.47	1.47		
23 Z (Table XI)	.653	.846	.843	.841		