

WORKSHEET FOR CALCULATION OF SIC COLUMN WELLHEAD PRESSURE (P_w)

C-122D
Revised 9-1-65

COMPANY Yates Petroleum Corp LEASE State Co. Co. WELL NO. 2 DATE 5-16-79

LOCATION: Unit G Section 36 Township 19S Range 24E

L 8832 H 8832 L/H 1.000 G 0.635 % CO₂ 1.66 % N₂ 1.04 % H₂S Nil

8785(3.98) = 34964.3
49(2393) = 11124.7
5000(5.218) = 46089.0
d 2.284 F_i 0.012481 GH 5608.3 P_{cr} 676 T_{cr} 365
TABLE IX B X TABLE IX B X

LINE	S1	1	2	3	4	S1	1	2	3	4
1 Q _m	—	0.439	0.653	0.837	1.064		0.439	0.653	0.837	1.064
2 T _w (W.H. °R)	513	519	524	528	531					
3 T _s (B.H. °R)	605	605	604	604	603					
4 T = (T _w + T _s)	559	562	564	566	567		562	564	566	567
5 Z (Est.)		.795	.792	.792	.804				.7945	
6 T _Z	447.23	446.79	446.69	448.27	455.87				449.687	
7 GH/T _Z	12.540	12.552	12.555	12.511	12.302				12.472	
8 e ^s (Table XIV)	1.6004	1.6011	1.6013	1.5986	1.5862				1.5963	
9 1-e ^s (Table XIV)		0.3754	0.3955	0.3945	0.3696				0.3735	
10 P _i	2667.2	2439.2	2260.1	2056.2	1766.2				2056.2	
11 P _i 2/1000	7114.0	5949.7	5108.5	4228.0	3119.5				4228.0	
12 F _T (Table XV) $\frac{54}{19}$	0.47026	0.47072	0.47082	0.46916	0.46134				0.46768	
13 F _c = F _T T _Z		5.5963	5.7221	5.595	5.6897				5.6125	
14 F _c Q _m		2.448	3.7365	4.633	6.054				41.6976	
15 L/H (F _c Q _m) ²		5.993	13.962	21.930	36.65				22.068	
16 F _w = L/H (F _c Q _m) ² (1-e ^s)		2.2	5.2	8.2	13.5				8.2	
17 P _w = P _i + F _w		5951.9	5113.7	4236.2	3133.0				4236.2	
18 P _g = e ^s P _w	11385	9529.6	8187.6	6772.0	4969.6				6762.2	
19 P _s	3374.2	3087.0	2861.6	2602.3	2229.3				2600.4	
20 P = (P _i + P _s)	3020.7	2763.1	2560.9	2329.2	1997.7				2328.7	
21 P _c = (P/P _{cr})	4.465	4.081	3.788	3.446	2.955				3.444	
22 T _i = (T/T _{cr})	1.5315	1.540	1.545	1.550	1.553				1.550	
23 Z (Table XI)	.801	0.795	.792	.7945	0.804				0.7945	