

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-123D
Adopted 9-1-65

COMPANY MOOREHEAD JR. LEASE RIDGE FED. WELL NO. 1 DATE 5-4-83

LOCATION: Unit C Section 23 Township 24 Range 24

L 10770 H 10770 L/H 1.000 G .588 % CO₂ 1.10 % N₂ .30 % H₂S .03 OK

d 1.995 F_i .018231 CH 13332.76 P_{CT} 672 T_{CT} 350

TABLE IX B.2

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LINE	1 st RATE	2 nd RATE	3 rd RATE	4 th RATE					
1 Q _m	.546	.546	.892	.892	1.238	1.238	1.722	1.722	
2 T _w (W.H. °R)	534	534	534	534	534	534	534	534	RECEIVED
3 T _g (B.H. °R)	642	642	642	642	642	642	642	642	MAY 09 1983
4 T = ($\frac{T_w + T_g}{2}$)	588	588	588	588	588	588	588	588	
5 Z (Est.)	.855	.873	.854	.868	.850	.862	.848	.854	O.C.D.
6 T _z	503.7	513.3	502.2	510.4	499.8	506.9	499	502	ARTESIA OFFICE
7 CH/TZ	12.581	12.337	12.611	12.408	12.671	12.494	12.700	12.611	
8 e ³ (Table XIV)	1.604	1.588	1.605	1.592	1.608	1.598	1.610	1.605	
9 1-e ³ (Table XIV)	.396	.390	.396	.372	.378	.374	.379	.377	
10 P _i	2980.2	2980.2	2902.2	2902.2	2771.2	2771.2	2565.2	2565.2	
11 P _i 2/1000	2981.6	2981.6	8422.8	8422.7	7679.5	7679.5	6580.2	6580.2	
12 F _i (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231	
13 F _g = F _i TZ	9.165	9.358	9.155	9.305	9.119	9.240	9.090	9.155	
14 F _g Q _m	5.004	5.110	8.166	8.300	11.280	11.439	15.654	15.764	
15 L/H (F _g Q _m) ²	25.043	26.109	66.684	68.898	127.249	130.867	245.038	248.518	
16 F _w = L/H (F _g Q _m) ² (1-e ⁻³)	7.428	9.620	25.128	25.620	48.126	48.955	92.846	93.647	
17 P _w ² = P _i ² + F _w	8891.0	8891.3	8447.9	8448.4	7727.7	7728.5	6673.1	6673.9	
18 P _w ² = e ³ P _w ²	14239.3	14121.5	13556.1	13453.9	12428.0	12347.4	10744.0	10709.4	
19 P _s	3976.2	3957.5	3681.9	3668.0	3525.3	3513.9	3277.8	3272.5	
20 P = ($\frac{P_i + P_s}{2}$)	3378.2	3389.0	3292.0	3285.1	3148.3	3142.5	2921.5	2918.9	
21 P _r = (P _i /P _{ct})	5.01	5.01	4.90	4.89	4.68	4.68	4.34	4.34	
22 T _r = (T/T _{ct})	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	
23 Z (Table XI)	.873	.873	.868	.868	.862	.862	.854	.854	