

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)COMPANY Good & Sons, Inc. Lease RoseWELL NO. 1DATE 11-28-21LOCATION: Unit J Section 13 Township 15-S Range 27-EL 8626 H 8626 L/H 1.000 Gmix 0.690 % CO₂ 0 % N₂ 0 % H₂S 0d 1.995" F_r 0.018231 GH 5952 P_{CT} 669 T_{CT} 388
TABLE IX & X 4th RATE

LINE	1st Trial	2nd Trial	1st Trial	2nd Trial	3rd Rate
1 Q _m	.300	.434	.620		
2 T _w (W.H. °R)	520	520	520		
3 T _s (B.H. °R)	620	620	620		
4 T = $\frac{T_w + T_s}{2}$	570	570	570		
5 Z (Est.)	.850	.785	.820	.817	.843
6 TZ	484.5	442.5	442.6	445.7	480.5
7 GH/TZ	12.285	13.301	12.268	12.734	12.387
8 e ^s (Table XIV)	1.585	1.645	1.645	1.612	1.591
9 1-e ^s (Table XIV)	.369	.410	.398	.382	.371
10 P _t	1622.2	1270.2	1370.2	1144.2	920.2
11 P _t ÷ 1000	2631.5	1872.4	1872.4	1244.4	846.8
12 F _r (Table XV)	.018231	.018231	.018231	.018231	.018231
13 F _C = F _r TZ	9.8329	4.9597	8.1784	8.5212	8.7600
14 F _C Q _m	2.6499	2.3877	3.5407	3.5231	5.8867
15 L/H (F _C Q _m) ²	9.0220	5.7021	12.5374	12.598	34.65
16 F _w = L/H (F _C Q _m) ² (1-e ^s)	2.5911	2.2379	5.0023	5.0140	12.86
17 P _w ² = P _t ² + F _w	2634.1	2633.6	1882.4	1252.1	860.0
18 P _s ² = e ^s P _w ²	4425.0	4293.2	3100.3	2018.4	1368.3
19 P _s	2043.3	2095.0	1760.8	1420.7	1169.7
20 P = $\frac{P_t + P_s}{2}$	1932.8	1852.1	1565.5	1268.1	1045.0
21 P _r = (P/P _{CT})	2.24	2.18	2.34	1.89	1.56
22 T _r = (T/T _{CT})	1.47	1.47	1.47	1.47	1.47
23 Z (Table XI)	.766	.787	.787	.816	.843