

WORKSHEET FOR CALCULATION OF STATIC OIL MAN PRESSURE AT GAS LIQUID INTERFACE

Form C-122G
Adopted 9-1-65

COMPANY MARSHALL PIPE & SUPPLY LEASE SPEIGHT WELL NO. 1766 DATE 1-29-88

L 2027 H 2027 L/H 1.000 G/MIN. 1753 % CO₂ .356 % N₂ 9.369 % H₂S 0

d 1.995 F_i .019231 GH 5328.98 P_{ci} 649 T_{ci} 379

(1) (2) (3) (4)

LINE	1st	2nd	1st	2nd	1st	2nd	1st	2nd
1 Q _m	.296	.296	.361	.361	.417	.417	.587	.587
2 T _w (W.H. °R)	5334	5334	5334	5334	5334	5334	5334	5334
3 T _s (BH °R)	605	605	605	605	605	605	605	605
4 T = $(\frac{T_w + T_s}{2})$	569.5	569.5	569.5	569.5	569.5	569.5	569.5	569.5
5 Z (Est.)	.805	.791	.824	.809	.845	.833	.881	.870
6 TZ	458.4	450.4	469.2	460.7	481.2	474.3	501.7	495.4
7 GH/TZ	11.623	11.829	11.355	11.566	11.073	11.233	10.621	10.755
8 e ^s (Table XIV)	1.546	1.558	1.530	1.543	1.514	1.523	1.489	1.496
9 1 - e ^s (Table XIV)	.353	.358	.346	.351	.339	.343	.328	.331
10 P _c	1458.2	1458.2	1303.2	1303.2	1086.2	1086.2	805.2	805.2
11 P _c ²	2244.6	2244.6	1658.3	1658.3	1179.8	1179.8	648.3	648.3
12 F _i (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231
13 F _c = F _i TZ	8.357	8.212	8.535	8.399	8.773	8.648	9.147	9.032
14 F _c Q _m	2.473	2.431	3.088	3.032	3.658	3.606	5.369	5.302
15 L/H (F _c Q _m) ²	6.120	5.909	9.538	9.194	13.384	13.006	28.829	28.119
16 F _w = L/H (F _c Q _m) ² (1 - e ^s)	2.162	2.117	3.307	3.235	4.598	4.471	9.471	9.331
17 P _w ² = P _i ² + F _w	2246.8	2246.7	1701.6	1701.6	1184.3	1184.3	657.8	657.7
18 P _i ² = e ^s P _c ²	3474.2	3501.1	2605.0	2625.5	1798.0	1804.7	979.6	984.4
19 P _i	1863.9	1871.1	1614.0	1620.3	1339.4	1343.3	989.7	992.1
20 P _i = $P_c \sqrt{\frac{P_i}{P_c}}$	1681.1	1684.6	1458.6	1461.7	1212.8	1224.7	897.4	898.6
21 F _i = $P_c \sqrt{\frac{P_i}{P_c}}$	2.59	2.59	2.25	2.25	1.87	1.87	1.38	1.38
22 T _i = $\frac{T_s}{F_i}$	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
23 Z (Table XI)	.791	.791	.809	.809	.833	.833	.870	