

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-122D
Adopted 9-1-65

COMPANY GULF OIL ENERGY & MINERALS LEASE EDDY G R STATE COM. WELL NO. # 1 DATE 4-25-79

LOCATION: Unit E Section 16 Township 23 Range 28

L 11904 H 11904 L/H 1.000 G .790 % CO₂ % N₂ % H₂S

d 1.995 F_r .018231 GH 9404 P_{ci} 666 T_{ci} 421
TABLE IX & X TABLE IX & X

LINE	1 st	2 nd	1st	2nd	1st	2nd	1st	2 nd		
1 Q _m	.093	.093	.170	.170	.234	.234	.067	.067		
2 T _w (W.H. °R)	534	534	534	534	534	534	534	534		
3 T _s (B.H. °R)	640	640	640	640	640	640	640	640		
4 T = ($\frac{T_w + T_s}{2}$)	585	585	585	585	585	585	585	585		
5 Z (Est.)	.726	.703	.747	.715	.823	.785	.910	.893		
6 TZ	424.7	411.3	437.0	418.3	481.5	459.2	532.4	522.4		
7 GH/TZ	22.14	22.87	21.52	22.48	19.53	20.48	17.67	18.00		
8 e ^s (Table XIV)	2.294	2.357	2.241	2.324	2.080	2.155	1.940	1.964		
9 1-e ^s (Table XIV)	.564	.576	.554	.570	.519	.536	.484	.491		
10 P _t	1693.2	1693.2	1478.2	1478.2	973.2	973.2	473.2	473.2		
11 P _t ² /1000	2866.9	2866.2	2185.1	2185.1	947.1	947.1	223.9	223.9		
12 F _r (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231		
13 F _c = F _r TZ	7.743	7.498	7.967	7.626	8.777	8.372	9.705	9.524		
14 F _c Q _m	.720	.697	1.354	1.296	2.054	1.959	.650	.638		
15 L/H (F _c Q _m) ²	.519	.486	1.834	1.681	4.219	3.838	.423	.407		
16 F _w = L/H (F _c Q _m) ² (1-e ^s)	.292	.280	1.016	.957	2.191	2.057	.205	.200		
17 P _w ² = P _t ² + F _w	2867.2	2867.2	2186.1	2186.0	949.3	949.2	224.1	224.1		
18 P _s ² = e ^s P _w ²	6577.6	6758.7	4899.4	5079.4	1974.8	2045.7	434.7	440.2		
19 P _s	2564.7	2599.8	2213.4	2253.8	1405.3	1439.3	1659.3	663.5		
20 P = ($\frac{P_t + P_s}{2}$)	2128.9	2146.5	1845.8	1866.0	1189.2	1201.7	566.3	568.3		
21 P _r = (P/P _{cr})	3.20	3.22	2.77	2.80	1.79	1.80	.85	.85		
22 T _r = (T/T _{cr})	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39		
23 Z (Table XI)	.703	.702	.715	.713	.785	.784	.893	.893		