

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-122D
Adopted 9-1-65

COMPANY _____ LEASE _____ WELL NO. _____ DATE _____

LOCATION: Unit _____ Section _____ Township _____ Range _____

L 3401 H 3401 L/H 1.0 G .6897 % CO₂ .113 % N₂ 2.189 % H₂S 0

d 1.995 F_r .018231 GH 2346 P_{cr} 669 T_{cr} 388

LINE	1st Rate		2nd Rate		3rd Rate		4th Rate			
	1st Test	2nd Test	1st Test	2nd Test	1st Test	2nd Test	1st Test	2nd Test		
1 Q_m	.144	.144	.197	.197	.902	.902	1.125	1.125		
2 T _w (W.H. °R)	530	530	530	530	530	530	530	530		
3 T _s (B.H. °R)	550	550	550	550	550	550	550	550		
4 T = ($\frac{1}{2} \frac{P_t}{P_s} + \frac{1}{2} \frac{P_s}{P_t}$)	540	540	540	540	540	540	540	540		
5 Z (Est.)	.846	.949	.950	.949	.949	.951	.952	.954		
6 TZ	456.84	512.46	513.00	512.4	512.4	513.50	514.08	515.16		
7 GH/TZ	5.133	4.578	4.573	4.578	4.578	4.568	4.563	4.554		
8 e ^s (Table XIV)	1.212	1.187	1.187	1.187	1.187	1.187	1.187	1.186		
9 1-e ^s (Table XIV)	.175	.158	.158	.158	.158	.158	.158	.157		
10 P _t	249.2	249.2	246.2	246.2	233.2	233.2	215.2	215.2		
11 P _t ² /1000	62.101	62.101	60.614	60.614	54.382	54.382	46.311	46.311		
F _r (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231		
13 F _c = F _r TZ	8.329	9.343	9.353	9.342	9.342	9.362	9.372	9.392		
14 F _c Q _m	1.199	1.345	1.842	1.840	8.426	8.444	10.544	10.566		
15 L/H (F _c Q _m) ²	1.438	1.810	3.395	3.387	70.99	71.304	111.170	11.638		
16 F _w = L/H (F _c Q _m) ² (1-e ^s)	.252	.286	.536	.535	11.218	11.266	17.565	17.527		
17 P _w ² = P _t ² + F _w	62.353	62.387	61.150	61.149	65.60	65.65	63.876	63.838		
18 P _s ² = e ^s P _w ²	75.572	74.053	72.585	72.584	77.86	77.92	75.82	75.71		
19 P _s	274.9	272.1	269.4	269.4	279.04	279.15	275.36	275.16		
20 P = ($\frac{P_t + P_s}{2}$)	262.05	260.6	257.8	257.8	256.1	256.2	245.3	245.2		
21 P _r = (P/P _{cr})	.39	.39	.39	.39	.38	.38	.37	.37		
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)	.949	.949	.949	.949	.951	.951	.954	.954		