

WORKSHEET FOR CALCULATION OF STATIC COLUMN WELLHEAD PRESSURE (P_w)

Form C-122D
Adopted 9-1-65

COMPANY Red Weiner LEASE Harris "L" WELL NO. 1 DATE 4/27/72

LOCATION: Unit B Section 14 Township 6 S Range 33 E
L 7554 H 7554 L/H 1.000 G_{mix} .775 % CO₂ - % N₂ - % H₂S -

d 1.995 F₁ .018231 GH 5551 P_{CI} 666 T_{CI} 415
1st Rate 2nd Rate 3rd Rate 4th Rate

LINE	1st Trial	2nd Trial	1st Trial	2nd Trial	1st Trial	2nd Trial	1st Trial	2nd Trial
1 Q _m	0.800	0.800	1.159	1.159	1.387	1.387	1.464	1.464
2 T _w (W.H. °R)	532	532	535	535	535	535	535	535
3 T _s (B.H. °R)	587	587	587	587	587	587	587	587
4 T = ($\frac{T_w + T_s}{2}$)	559.5	559.5	561	561	561	561	561	561
5 Z (Est.)	.715	.675	.700	.692	.710	.727	.765	.789
6 TZ	400.0	377.7	392.7	388.2	398.3	407.8	429.2	442.6
7 GH/TZ	13.878	14.697	14.135	14.299	13.937	13.612	12.933	12.542
8 e ^s (Table XIV)	1.682	1.735	1.699	1.707	1.687	1.665	1.622	1.600
9 1-e ^s (Table XIV)	0.405	0.424	0.411	0.415	0.407	0.400	0.384	0.375
10 P _t	1603.2	1603.2	1412.2	1412.2	1177.2	1177.2	873.2	873.2
11 P _t 2/1000	2570.2	2570.2	1994.3	1994.3	1385.8	1385.8	762.5	762.5
12 F _t (Table XV)	.018231	.018231	.018231	.018231	.018231	.018231	.018231	.018231
13 F _c = F _t TZ	7.292	6.886	7.159	7.077	7.261	7.435	7.825	8.069
14 F _c Q _m	5.83	5.51	8.30	8.20	10.07	10.31	11.46	11.81
15 L/H (F _c Q _m) ²	33.99	30.36	68.89	67.24	101.40	106.30	131.33	139.48
16 F _w = L/H (F _c Q _m) ² (1-e ^{-s})	13.77	12.87	28.31	27.90	41.27	42.52	50.43	52.31
17 P _w ² = P _t ² + F _w	2584.0	2583.1	2022.6	2022.2	1427.1	1428.3	812.9	814.8
18 P _s ² = e ^s P _w ²	4346.3	4481.7	3436.4	3451.9	2407.5	2378.1	1318.5	1303.7
19 P _s	2084.8	2117.0	1853.8	1857.9	1551.6	1542.1	1148.3	1141.8
20 P = ($\frac{P_t + P_s}{2}$)	1844.0	1860.1	1633.0	1635.1	1364.4	1359.7	1010.8	1007.5
21 P _t = (P/P _{CI})	2.77	2.79	2.45	2.46	2.05	2.04	1.52	1.51
22 T _t = (T/T _{CI})	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
23 Z (Table XI)	.675	.674	.692	.691	.727	.728	.789	.790

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MAY 1 1972

OIL CONSERVATION COMM.
HOBBS, N. M.