

## CMPT Water PT Grading Schemes

Table 1: CMPT Grading Scale for PT Drinking Water Samples										
Mean cfu/100mL or MPN/100mL or cfu/mL	0	15	25	30	40	50	60	70	80	100
Scores (see Table 2)	NG = 3	1 - 29 = 3	10 - 42 = 3	16 - 59 = 3	21 - 62 = 3	32 - 97 = 3	46 - 119 = 3	49 - 139 = 3	52 - 142 = 3	74 - 149 = 3
	Growth = 0	30 - 59 = 2	1 - 9, 43 - 59 = 2	1 - 15 = 2	1 - 20 = 2	10 - 31, >97 = 2	16 - 45, >119 = 2	23 - 48, >140 = 2	25 - 51, >142 = 2	30-73, >149 = 2
	0 - <2 MPN/100 ml = 3	>59 = 1 NG = 0	>59 = 1 NG = 0	>59 = 1 NG = 0	>62 = 1 NG = 0	1 - 9 = 1 NG = 0	1 - 15 = 1 NG = 0	1 - 22 = 1 NG = 0	1 - 24 = 1 NG = 0	1 - 30 = 1 NG = 0

Table 2: PT Drinking Water Samples Assessment Criteria	
Score	Assessment Criteria
3	Result is considered accurate (see Table 1)
2	Result is acceptable with minor error (see Table 1)
1	Major error (see Table 1) False Positive: a sample containing only total coliforms is reported as containing thermotolerant coliforms or <i>E.coli</i>
0	Very major error with potential water safety consequences, i - A sample containing thermotolerant bacteria is reported as containing only total coliforms and no <i>E.coli</i> , or ii - A sample containing <i>E.coli</i> is reported as containing only total coliforms iii - False Negative: a report of no growth when bacteria are present.

**Please Note:**

- Grading is assessed against the Group Means of Total Coliforms (TC), Thermotolerant Coliforms (ThC) and *E.coli* (EC).
- TC and ThC or EC are a combined score out of 3 for drinking water samples: #1, 2, 3, 4, Total =12.
- Additional scores for *E. coli* testing are out of a score of 3 each for drinking water samples #1, 2, 3, 4, Total =12.
- When only one component (ie TC, ThC or EC) of a water sample is reported, a qualitative score is given, eg "correct/incorrect".
- When no definitive MF count is reported, ie count is preceded by > or <, a qualitative score is given, eg "correct/incorrect".
- Recreational water samples for *Enterococci*, *Pseudomonas* or fresh water beach *E. coli* testing is out of a total of 3 per sample.
- Laboratories are graded depending on the scope of testing that is performed.

Table 3: CMPT Grading Scale for PT Recreational Samples: Membrane Filtration												
Mean cfu/100ml	20	30	50	60	70	80	90	100	200	300	400	500
Scores	1 - 39 = 3	1 - 49 = 3	28 - 69 = 3	38 - 80 = 3	44 - 99 = 3	55 - 103 = 3	62 - 118 = 3	69 - 134 = 3	155 - 248 = 3	253 - 345 = 3	335 - 467 = 3	428 - 575 = 3
			1 - 28 = 2	1 - 37 = 2	1 - 43 = 2	1 - 54 = 2	1 - 61 = 2	1 - 68 = 2	1 - 154 = 2	1 - 252 = 2	1 - 334 = 2	1 - 427 = 2
	≥ 40 = 2 NG = 0	≥ 50 = 2 NG = 0	≥ 70 = 2 NG = 0	≥ 81 = 2 NG = 0	≥ 100 = 2 NG = 0	≥ 104 = 2 NG = 0	≥ 119 = 2 NG = 0	≥ 135 = 2 NG = 0	≥ 249 = 2 NG = 0	≥ 346 = 2 NG = 0	≥ 468 = 2 NG = 0	≥ 576 = 2 NG = 0

Scores are calculated based on Poisson Probability, 0.05% - 99.95%. Ranges are adjusted to the mean from reported results.

Table 4: CMPT Grading Scale for PT Recreational Samples: Colilert Quantitray, Enterolert, Pseudoalert, MPN											
Mean MPN/100ml	30	40	50	60	70	80	100	200	300	400	500
Scores	1 - 89 = 3	10 - 119 = 3	15 - 150 = 3	22 - 150 = 3	22 - 170 = 3	22 - 220 = 3	32 - 350 = 3	70 - 710 = 3	100 - 1100 = 3	150 - 1550 = 3	200 - 1999 = 3
		1 - 9 = 2	1 - 14 = 2	1 - 21 = 2	1 - 21 = 2	1 - 21 = 2	1 - 31 = 2	1 - 69 = 2	1 - 99 = 2	1 - 149 = 2	1 - 199 = 2
	≥ 90 = 2 NG = 0	≥ 120 = 2 NG = 0	≥ 151 = 2 NG = 0	≥ 151 = 2 NG = 0	≥ 171 = 2 NG = 0	≥ 221 = 2 NG = 0	≥ 351 = 2 NG = 0	≥ 711 = 2 NG = 0	≥ 1101 = 2 NG = 0	≥ 1551 = 2 NG = 0	≥ 2000 = 2 NG = 0

Scores are calculated based on 95% confidence limits (based on Standard Methods)