

## CMPT Water PT Grading Schemes

Mean cfu/100mL or MPN/100mL or cfu/mL		Table 1: CMPT Grading Scale for PT Drinking Water Samples (including HPC)									
		0	15	30	40	50	60	70	80	200	300
Scores  (see Table 2)	3	MF: NG, 0 <-1 MPN: NG, 0 <-2	1 - 29	16 - 50	24 - 74	32 - 97	46 - 119	49 - 130	58 - 165	145 - 270	201 - 430
	2		30 - 59	1 - 15 51 - 80	1 - 23 60 - 89	10 - 31, ≥97	16 - 45, ≥119	20 - 48, ≥131	34 - 57, ≥166	70-144, ≥ 271	110-200, ≥ 431
	1		≥60	>81	≥90	1 - 9	1 - 15	1 - 19	1 - 33	1-69	1-109
	0	any count or growth	MF: NG, 0 <-1 or MPN: NG, 0 <-2								

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. Iv - False Positive: a report of bacteria when no bacteria are present

- Grading is assessed against the Group Means of Total Coliforms (TC), Thermotolerant Coliforms (ThC) and *E.coli* (EC).
- TC, ThC or EC are considered suitable for grading when ≥75% of participants' reports are in consensus.
- 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". A \*correct is considered accurate with a minor error.
- When no definitive MF count is reported, ie count is preceded by > or <, a qualitative score is given, eg "correct/incorrect".
- When no definitive MPN count is reported, ie count is preceded by > or < and the group mean is outside of the MPN reported count, a qualitative comment, incorrect, is given. For example, if the group mean is 20 MPN/100 ml and the report is >23 MPN/100 ml, the report would be graded as incorrect. Similarly, if the group mean is >23 MPN/100 ml, and the reported MPN count is <23, the report would be graded as incorrect, also.
- When a target is 0, reporting <1 cfu/100mL (MF only), <1 or <2 MPN/100 mL (MPN only) is acceptable only if reported consistently across applicable parameters (TC, ThC, EC) for the same sample
- 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.
- Scores are calculated based on 95% confidence limits

Table 3: CMPT Grading Scale for PT Recreational Samples: Membrane Filtration											
Mean cfu/100ml		70	80	90	100	150	200	225	250	300	400
Scores	3	44 - 99	55 - 103	62-118	69 - 134	112 - 191	155 - 248	179 - 276	203 - 305	253 - 345	335-467
	2	1- 43 or ≥100	1 - 54 or ≥104	1 - 61 or ≥119	1-68 or ≥135	1 - 110 or ≥192	1 - 154 or ≥249	1 - 178 or ≥277	1 - 202 or ≥306	1 - 252 ≥346	1 - 334 or ≥468
	0	NG, 0 <-1									

Table 4: CMPT Grading Scale for PT Recreational Samples: Colilert Quantitray, Enterolert, Pseudoalert, MPN										
Mean MPN/100ml		70	80	100	150	200	250	300	400	500
Scores	3	22 -170	22 -220	32 - 350	51- 530	70 - 710	85 - 900	100 - 1100	150 - 1550	200 - 1999
	2	1 - 21, ≥171	1 - 21, ≥221	1 - 31, ≥351	1 - 50, ≥ 530	1 - 69, ≥ 711	1 - 84, ≥ 901	1 - 99, ≥1101	1 - 149, ≥1551	1 - 199, ≥2000
	0	NG, 0 <-2								