



**TEST METHODS**

Test ID	Test Name	Method ID	Method Name	Method Description	Units
C1	Electrical conductivity*	WQA/C1_01	Electrical conductivity	Method 2510 B. (adapted from Standard methods for the examination of water and waste water, 22 <sup>nd</sup> edition)	µS/cm
C2	pH*	WQA/C2_01	pH	Method 4500-H <sup>+</sup> B. (adapted from Standard methods for the examination of water and waste water, 22 <sup>nd</sup> edition)	-
C3	Salinity	WQA/C3_01	Salinity	Method 2520 B. (adapted from Standard methods for the examination of water and waste water, 22 <sup>nd</sup> edition)	‰
C4	Temperature	WQA/C4_01	Temperature	Electrometry	°C
C5	Total Dissolved Solids	WQA/C5_01	Total Dissolved Solids	Electrometry	mg/L
C6	Total Suspended Solids (TSS)	WQA/C6_01	Total Suspended Solids (TSS)	Method 8006 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C7	Turbidity*	WQA/C7_01	Turbidity	HACH Nephelometric Method (adapted from HACH 2100N Turbidimeter User Manual)	NTU
C8	Free Residual chlorine	WQA/C8_01	Free Residual chlorine	Method 8021 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C9	Chlorine, Total	WQA/C9_01	Chlorine, Total	Method 8167 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C10	Chlorine, Dioxide	WQA/C10_01	Chlorine, Dioxide	Method 10126 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C11	Bromine	WQA/C11_01	Bromine	Method 8016 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C12	Chloride	WQA/C12_01	Chloride_HR	In-house Test method (Adapted from M926 Chloride analyzer Operation Manual)	mg/L
		WQA/C12_02	Chloride_LR	Method 8113 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C12_03	Chloride_ULR	Potentiometry	mg/L
C13	Chromium Hexavalent	WQA/C13_01	Chromium Hexavalent	Method 8023 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C14	Copper*	WQA/C14_01	Copper	Method 8506 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C15	Fluoride*	WQA/C15_01	Fluoride	Method 8029 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C16	Iodine	WQA/C16_01	Iodine	Method 8031 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C17	Iron	WQA/C17_01	Iron	Method 8008 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C17_02	Iron_ICP	Method 3120 B. (adapted from Standard methods for the examination of water and waste water, 22 <sup>nd</sup> edition)	mg/L
C18	Manganese	WQA/C18_01	Manganese_HR	Method 8034 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C18_02	Manganese_LR	Method 8149 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C19	Nitrate*	WQA/C19_01	Nitrate_HR	Method 8039 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C19_02	Nitrate_MR	Method 8171 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C19_03	Nitrate_LR	Method 8192 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C19_04	Nitrate_UV Screening	Method 10049 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C20	Nitrite	WQA/C20_01	Nitrite	Method 8507 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C21	Nitrogen Ammonia	WQA/C21_01	Nitrogen Ammonia	Method 8038 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C22	Sulphate*	WQA/C22_01	Sulphate	Method 8051 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C23	Sulphide	WQA/C23_01	Sulphide	Method 8131 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	µg/L
C24	Ozone	WQA/C24_01	Ozone	Method 8311 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C25	Aluminum	WQA/C25_01	Aluminum	Method 8326 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C26	Barium	WQA/C26_01	Barium	Method 8014 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C27	Cobalt	WQA/C27_01	Cobalt	Method 8078 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C28	Nickel	WQA/C28_01	Nickel	Method 8150 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C29	Calcium Hardness	WQA/C29_01	Calcium Hardness_HR	HACH Method 8204	mg/L
		WQA/C29_02	Calcium Hardness_LR	Method 8030 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C30	Magnesium Hardnes	WQA/C30_01	Magnesium Hardness_HR	HACH Method 8329	mg/L
		WQA/C30_02	Magnesium Hardness_LR	Method 8030 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C31	Total Hardness	WQA/C31_01	Total Hardness_HR	HACH Method 8213	mg/L
		WQA/C31_02	Total Hardness_LR	Method 8030 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L



C32	Magnesium	WQA/C32_01	Magnesium_HR	HACH Method 8329	mg/L
		WQA/C32_02	Magnesium_LR	Method 8030 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C33	Calcium	WQA/C33_01	Calcium_HR	HACH Method 8329	mg/L
		WQA/C33_02	Calcium_LR	Method 8030 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C34	Total Alkalinity	WQA/C34_01	Total Alkalinity	HACH Method 8203	mg/L
C35	Boron	WQA/C35_01	Boron	Method 8015 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C36	Phosphate*	WQA/C36_01	Phosphate	Method 8048 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C37	Chemical Oxygen Demand (COD)	WQA/C37_01	Chemical Oxygen Demand (COD)	Method 8000 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C38	Total Organic Carbon (TOC)	WQA/C38_01	Total Organic Carbon (TOC)_LR	Method 10129 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C38_02	Total Organic Carbon (TOC)_MR	Method 10173 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
		WQA/C38_03	Total Organic Carbon (TOC)_HR	Method 10128 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C39	Oxygen Dissolved (DO)	WQA/C39_01	Oxygen Dissolved (DO)	Standard Methods 19 <sup>th</sup> edition APHA	mg/L
C40	Biological Oxygen Demand (BOD)	WQA/C40_01	Biological Oxygen Demand (BOD)	HACH Method 8043	mg/L
C41	Apparent colour	WQA/C41_01	Apparent colour	Method 8025 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L PtCo
C42	True colour	WQA/C42_01	True colour	Method 8025 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L PtCo
C43	Phenols	WQA/C43_01	Phenols	Method 8047 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C44	Zinc	WQA/C44_01	Zinc	Method 8009 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C45	Cadmium	WQA/C45_01	Cadmium	Method 8017 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C46	Arsenic	WQA/C46_01	Arsenic	Method 8013 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C47	Lead	WQA/C47_01	Lead	Method 8317 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	µg/L
C48	Tannin & Lignin	WQA/C48_01	Tannin & Lignin	Method 8193 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
C49	Total Petroleum Hydrocarbon	WQA/C49_01	TPH	UV Fluorescence	mg/L
C50	Potassium	WQA/C50_01	Potassium_Spectro	Method 8049 (Adapted from HACH DR5000 Spectrophotometer procedure Manual)	mg/L
M1	Total Coliforms	WQA/M1_01	Total Coliforms (Coli-blue)	HACH Method 10029	CFU/100ml
		WQA/M1_02	Total Coliforms (Colilert)	Colilert®-18/Quanti-Tray®	MPN/100ml
		WQA/M1_03	Total Coliforms (Colilert) HR	Colilert®-18/Quanti-Tray®2000	MPN/100ml
M2	Faecal Coliforms	WQA/M2_01	Faecal Coliforms	HACH Method 8074	CFU/100mL
		WQA/M2_02	Faecal Coliforms (Colilert)	Colilert®-18/Quanti-Tray®	MPN/100ml
		WQA/M2_03	Faecal Coliforms (Colilert) HR	Colilert®-18/Quanti-Tray®2000	MPN/100ml
M3	E.Coli	WQA/M3_01	E.coli (Coli-blue)	HACH Method 10029	CFU/100mL
		WQA/M3_02	E.coli (Colilert)	Colilert®-18/Quanti-Tray®	MPN/100ml
		WQA/M3_03	E.coli (Colilert) HR	Colilert®-18/Quanti-Tray®2000	MPN/100ml
M4	Aerobic Bacterial Count	WQA/M4_01	Aerobic Bacterial Count	HACH Method 8242	CFU/100mL
		WQA/M4_02	HPC for Quanti-Tray®	HPC for Quanti-Tray®	MPN/100ml
		WQA/M4_03	HPC for Quanti-Tray® HR	HPC for Quanti-Tray®2000	MPN/100ml
M5	Pseudomonas	WQA/M5_01	Pseudomonas	HACH Method 8026	CFU/100ml
		WQA/M5_02	Pseudalert®	Pseudalert®/Quanti-Tray®	MPN/100ml
		WQA/M5_03	Pseudalert® HR	Pseudalert®/Quanti-Tray®2000	MPN/100ml
M6	Staphylococcus	WQA/M6_01	Staphylococcus	Standard Methods 19th edition APHA	CFU/100ml



M7	Yeast and Mould	WQA/M7_01	Yeast and Mould	Standard Methods 19th edition APHA	CFU/100ml
M8	Enterococcus	WQA/M8_01	Enterococcus	Standard Methods 19th edition APHA	CFU/100mL
		WQA/M8_02	Enterolert®	Enterolert®/ Quanti-Tray®	MPN/100ml
		WQA/M8_03	Enterolert® HR	Enterolert®/ Quanti-Tray®2000	MPN/100ml

**Keys:**

**mg/L:** Milligram per Liter,

**µg/L:** Microgram per Liter,

**µS/cm:** MicroSeimens per Centimeter,

**mg/L PtCo:** Milligram per Liter Platinum Cobalt,

**‰:** Parts per Thousand,

**°C:** Degree Celcius,

**NTU:** Nephelometric Turbidity Unit,

**MPN:** Most Probable Number,

**CFU:** Colony Forming Unit