

## Lake Waingaro at Surface - intake/abstraction

<b>Sample ID = 20224466</b>	<b>Date Collected 17/08/2022</b>	<b>Time 09:55</b>	
<b>Site 101981</b>	<b>Lake Waingaro at Surface -</b>		
<b>Measurement</b>	<b>Method</b>	<b>Value</b>	<b>Units</b>
Ammoniacal Nitrogen	Ammonia by DA	0.007	g/m3-N
Chlorophyll a	Chlorophyll by UVVIS	0.012	g/m3
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	50.2	us/cm
Dissolved Oxygen	ODO	9.8	mg/L
Dissolved Oxygen Percent Saturation	ODO %	94.9	% Sat
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.003	g/m3-P
Faecal Coliforms (presumptive)	Faecal coliforms by Membrane Filtration	56	CFU/100ml
Iron Total	Iron (Total) by ICP-MS	0.12	g/m3
Manganese Total	Manganese (Total) by ICP-MS	0.013	g/m3
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.029	g/m3-N
pH	pH (field meter)	6.8	pH
Secchi Depth - with viewer	Secchi with viewer	5.63	m
Temperature	Temperature - YSI	13.87	degC
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.205	g/m3
Total Nitrogen	TN by Calculation	0.23	g/m3-N
Total Phosphorus	TP by DA	0.007	g/m3-P
Total Suspended Solids	Suspended Solids by Gravimetry	1.8	g/m3

<b>Sample ID = 20224467</b>	<b>Date Collected 17/08/2022</b>	<b>Time 09:50</b>	
<b>Site 101982</b>	<b>Lake Waingaro at Bottom (18 m) at intake</b>		
<b>Measurement</b>	<b>Method</b>	<b>Value</b>	<b>Units</b>
Ammoniacal Nitrogen	Ammonia by DA	0.017	g/m3-N
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	50.8	us/cm
Dissolved Oxygen	ODO	8.79	mg/L
Dissolved Oxygen Percent Saturation	ODO %	84.4	% Sat
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.005	g/m3-P
Iron Total	Iron (Total) by ICP-MS	0.14	g/m3
Manganese Total	Manganese (Total) by ICP-MS	0.019	g/m3
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.033	g/m3-N
pH	pH (field meter)	6.85	pH
Temperature	Temperature - YSI	13.5	degC

Total Kjeldahl Nitrogen	TKN by DA_TKN	0.12	g/m3
Total Nitrogen	TN by Calculation	0.15	g/m3-N
Total Phosphorus	TP by DA	0.005	g/m3-P
Total Suspended Solids	Suspended Solids by Gravimetry	0.9	g/m3

<b>Sample ID = 20224468</b>	<b>Date Collected 17/08/2022</b>	<b>Time 10:40</b>	
<b>Site 327836</b>	<b>Lake Manuwai Weir at Onekura Road</b>		
<b>Measurement</b>	<b>Method</b>	<b>Value</b>	<b>Units</b>
Ammoniacal Nitrogen	Ammonia by DA	0.046	g/m3-N
Chlorophyll a	Chlorophyll by UVVIS	0.0022	g/m3
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	62.1	us/cm
Dissolved Oxygen	ODO	9.15	mg/L
Dissolved Oxygen Percent Saturation	ODO %	88.4	% Sat
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.015	g/m3-P
Faecal Coliforms (presumptive)	Faecal coliforms by Membrane Filtration	15000	CFU/100ml
Iron Total	Iron (Total) by ICP-MS	0.76	g/m3
Manganese Total	Manganese (Total) by ICP-MS	0.014	g/m3
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.16	g/m3-N
pH	pH (field meter)	6.16	pH
Temperature	Temperature - YSI	13.78	degC
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.492	g/m3
Total Nitrogen	TN by Calculation	0.66	g/m3-N
Total Phosphorus	TP by DA	0.053	g/m3-P
Total Suspended Solids	Suspended Solids by Gravimetry	8	g/m3

Methods used: Standard Methods for the Examination of Water and Waste Water. APHA, AWWA, WEF, 1998 20th edition