

NORTHLAND REGIONAL COUNCIL

Report for Field Sheet Number 20241212

Lake Manuwai at Surface intake

Report generated 20/12/24 10:24

Sample ID = 20245314	Date Collected 28/11/2024	Time 11:45		
Site 101985	Lake Manuwai at Surface intake			
Measurement	Method	Value	Units	
Ammoniacal Nitrogen	Ammonia by DA	<0.005	g/m3-N	
Chlorophyll a	Chlorophyll by UVVIS	0.0043	g/m3	
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	51.8	us/cm	
Dissolved Oxygen	ODO	8.71	mg/L	
Dissolved Oxygen Percent Saturation	ODO %	100.1	% Sat	
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.005	g/m3-P	
Faecal Coliforms (presumptive)	Faecal coliforms by Membrane Filtration	3.3	CFU/100ml	
Iron Total	Iron (Total) by ICP-MS	0.25	g/m3	
Manganese Total	Manganese (Total) by ICP-MS	0.047	g/m3	
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.0057	g/m3-N	
pH	pH (field meter)	6.51	pH	
Secchi Depth - with viewer	Secchi with viewer	3.15	m	
Temperature	Temperature - YSI	22.205	degC	
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.241	g/m3	
Total Nitrogen	TN by Calculation	0.25	g/m3-N	
Total Phosphorus	TP by DA	0.007	g/m3-P	
Total Suspended Solids	Suspended Solids by Gravimetry	1.8	g/m3	

Sample ID = 20245315	Date Collected 28/11/2024	Time 11:50		
Site 101986	Lake Manuwai at Bottom (13 m) intake point			
Measurement	Method	Value	Units	
Ammoniacal Nitrogen	Ammonia by DA	0.073	g/m3-N	
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	55.2	us/cm	
Dissolved Oxygen	ODO	0.74	mg/L	
Dissolved Oxygen Percent Saturation	ODO %	7.5	% Sat	
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.003	g/m3-P	
Iron Total	Iron (Total) by ICP-MS	1.2	g/m3	
Manganese Total	Manganese (Total) by ICP-MS	0.18	g/m3	
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.0814	g/m3-N	
pH	pH (field meter)	5.73	pH	
Temperature	Temperature - YSI	15.993	degC	
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.308	g/m3	
Total Nitrogen	TN by Calculation	0.39	g/m3-N	
Total Phosphorus	TP by DA	0.009	g/m3-P	
Total Suspended Solids	Suspended Solids by Gravimetry	4.6	g/m3	

Sample ID = 20245316	Date Collected 28/11/2024	Time 11:00		
Site 327834	Lake Manuwai Weir at Ironbark Road			
Measurement	Method	Value	Units	
Ammoniacal Nitrogen	Ammonia by DA	0.015	g/m3-N	
Chlorophyll a	Chlorophyll by UVVIS	0.0027	g/m3	
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	63.4	us/cm	

Dissolved Oxygen	ODO	7.54	mg/L	
Dissolved Oxygen Percent Saturation	ODO %	82.8	% Sat	
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.006	g/m3-P	
Faecal Coliforms (presumptive)	Faecal coliforms by Membrane Filtration	460	CFU/100ml	
Iron Total	Iron (Total) by ICP-MS	1.2	g/m3	
Manganese Total	Manganese (Total) by ICP-MS	0.044	g/m3	
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.0536	g/m3-N	
pH	pH (field meter)	6.06	pH	
Temperature	Temperature - YSI	19.906	degC	
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.201	g/m3	
Total Nitrogen	TN by Calculation	0.25	g/m3-N	
Total Phosphorus	TP by DA	0.016	g/m3-P	
Total Suspended Solids	Suspended Solids by Gravimetry	3.6	g/m3	

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