

NORTHLAND REGIONAL COUNCIL

Report for Field Sheet Number 20240432

Lake Manuwai at Surface intake

Report generated 15/07/24 09:28

Sample ID = 20241819	Date Collected 30/05/2024	Time 12:45		
Site 101985	Lake Manuwai at Surface intake			
Measurement	Method	Value	Units	
Ammoniacal Nitrogen	Ammonia by DA	0.012	g/m3-N	
Chlorophyll a	Chlorophyll by UVVIS	0.013	g/m3	
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	52	us/cm	
Dissolved Oxygen	ODO	9.16	mg/L	
Dissolved Oxygen Percent Saturation	ODO %	92.3	% Sat	
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	<0.002	g/m3-P	
Faecal Coliforms (presumptive)	Faecal coliforms by Membrane Filtration	<1.6	CFU/100ml	
Iron Total	Iron (Total) by ICP-MS	0.27	g/m3	
Manganese Total	Manganese (Total) by ICP-MS	0.029	g/m3	
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.0043	g/m3-N	
pH	pH (field meter)	6.49	pH	
Secchi Depth - with viewer	Secchi with viewer	1.38	m	
Temperature	Temperature - YSI	15.772	degC	
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.363	g/m3	
Total Nitrogen	TN by Calculation	0.37	g/m3-N	
Total Phosphorus	TP by DA	0.006	g/m3-P	
Total Suspended Solids	Suspended Solids by Gravimetry	4.7	g/m3	

Sample ID = 20241820	Date Collected 30/05/2024	Time 12:40		
Site 101986	Lake Manuwai at Bottom (13 m) intake point			
Measurement	Method	Value	Units	
Ammoniacal Nitrogen	Ammonia by DA	0.005	g/m3-N	
Conductivity at 25 deg C (uS/cm)	SPC (field meter)	51.9	us/cm	
Depth - Boat	Depth - Boat	14.5	m	
Dissolved Oxygen	ODO	9.02	mg/L	
Dissolved Oxygen Percent Saturation	ODO %	90.1	% Sat	
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	<0.002	g/m3-P	
Iron Total	Iron (Total) by ICP-MS	0.29	g/m3	
Manganese Total	Manganese (Total) by ICP-MS	0.03	g/m3	
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.0027	g/m3-N	
pH	pH (field meter)	6.31	pH	
Temperature	Temperature - YSI	15.354	degC	
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.308	g/m3	
Total Nitrogen	TN by Calculation	0.31	g/m3-N	
Total Phosphorus	TP by DA	0.007	g/m3-P	
Total Suspended Solids	Suspended Solids by Gravimetry	4.8	g/m3	

Sample ID = 20241821	Date Collected 30/05/2024	Time 12:00		
Site 327834	Lake Manuwai Weir at Ironbark Road			
Measurement	Method	Value	Units	
Ammoniacal Nitrogen	Ammonia by DA	0.063	g/m3-N	
Chlorophyll a	Chlorophyll by UVVIS	0.0022	g/m3	

Conductivity at 25 deg C (uS/cm)	SPC (field meter)	83.6	us/cm	
Dissolved Oxygen	ODO	8.34	mg/L	
Dissolved Oxygen Percent Saturation	ODO %	78.8	% Sat	
Dissolved Reactive Phosphorus	Dissolved Reactive Phosphorus by DA	0.002	g/m3-P	
Faecal Coliforms (presumptive)	Faecal coliforms by Membrane Filtration	700	CFU/100ml	
Iron Total	Iron (Total) by ICP-MS	0.76	g/m3	
Manganese Total	Manganese (Total) by ICP-MS	0.052	g/m3	
Nitrite/nitrate nitrogen	NO3NO2 by FA	0.173	g/m3-N	
pH	pH (field meter)	6.22	pH	
Temperature	Temperature - YSI	12.779	degC	
Total Kjeldahl Nitrogen	TKN by DA_TKN	0.219	g/m3	
Total Nitrogen	TN by Calculation	0.39	g/m3-N	
Total Phosphorus	TP by DA	0.013	g/m3-P	
Total Suspended Solids	Suspended Solids by Gravimetry	2.6	g/m3	

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