WATER ANALYSIS RESULTS

eurofins | APAL

P O Box 155 Welland SA 5007 ph: 08 83320199 info@apal.com.au
Member of ASPAC www.apal.com.au

AGENT:	Riverland Backyard Worms	ANALYTICAL No:	W14
CLIENT :	Client	DATE RECEIVED:	11.06.26
SAMPLE :	2	DATE REPORTED:	18.06.26
BATCH No:	2026-409		

RESULTS: PARAMETER		DESIRED LEVEL	LEVEL FOUND	INTERPRETATION
Water Characteristics:				
pH(water)^		6.5 - 8.5	7.7	*High*
Total Alkalinity	$CaCO_3$ mg/L	<150	1372	*High*
Bicarbonate"	HCO_3 mg/L	< 400	1674	*High*
Carbonate"	CO_3 mg/L	-	0	*Below LOQ*
Calcium"	mg/L	< 500	108	*Moderate*
Magnesium"	mg/L	< 125	72	*High*
Hardness	mg/L	< 150	569	*Very Hard*
Saturation Index	LSI	-0.5_+0.5	1.2	*High Risk*
Sodium^	mg/L	< 180	261	*Very High*
Chloride*	mg/L	< 350	376	*Very High*
EC∞@	µS/cm	< 1000	3770	*Very High*
SAR~		< 5.5	4.8	*Low*
Salinity:				
TDS or 'Salts" ^	mg/L	< 600	2530	*Very High*
Macro Elements:				
Nitrate^	mg NO_3/L	< 50	<0.5	*Below LOQ*
Phosphorus	mg/L	< 1	64	*Very High*
Sulphate^	mg SO_4/L	< 250	115	*Moderate*
Potassium"	mg/L	< 20	584	*Extremely High*
Trace Elements:				
Aluminium*	mg/L	< 5	0.74	*Moderate*
Iron^	mg/L	< 0.3	1.9	*High*
Cobalt*	mg/L	< 0.01	0.01	*Moderate*
Copper*	mg/L	< 0.1	0.12	*High*
Manganese^	mg/L	< 0.1	0.19	*High*
Zinc*	mg/L	2	0.28	*Very Low*
Boron*	mg/L	0.5	0.61	*Moderate*
Molybdenum*	mg/L	0.01	<0.01	*Below LOQ*
Heavy Metals:				
Antimony ^	µg/L	< 3	NT	*Not Tested*
Arsenic `	µg/L	< 10	NT	*Not Tested*
Barium `	µg/L	< 2,000	NT	*Not Tested*
Beryllium*	µg/L	< 60	NT	*Not Tested*
Boron*	µg/L	< 4,000	NT	*Not Tested*
Cadmium*	µg/L	< 2	NT	*Not Tested*
Chromium*	µg/L	< 50	NT	*Not Tested*
Cobalt*	µg/L	10	NT	*Not Tested*
Copper*	µg/L	< 2,000	NT	*Not Tested*
Lead*	µg/L	200	NT	*Not Tested*
Manganese*	µg/L	<100	NT	*Not tested*
Mercury*	µg/L	2	NT	*Not Tested*
Molybdenum*	µg/L	<10	NT	*Not Tested*
Nickel*	µg/L	200	NT	*Not Tested*
Selenium*	µg/L	20	NT	*Not Tested*
Tin `	µg/L	NA	NT	*Not Tested*
Vanadium*	µg/L	NA	NT	*Not Tested*
Zinc*	µg/L	2000	NT	*Not Tested*
Cyanide	µg/L	NA	NT	*Not Tested*
Fluoride	µg/L	NA	NT	*Not Tested*

References:

* Australian Water Quality Guidelines, ANZECC, 1992.

^ Australian Drinking Water Guidelines, 1994

" Brookside Laboratories Drinking Water for Livestock Guidelines 1972

` WHO 2009 Heavy Metals in drinking water

* & EPA USA 1994

Legend:

∞ Electrical Conductivity in µS/cm = dS/m x1000 = mS/mx10

LOQ = Limit of Quantitation

~ *Sodium Absorption Ratio = Na/√(Ca+Mg)*0.5 in m.e./L*

TDS = Total Dissolved Salts

NA = Not Applicable or Not Tested

'@ EC: 1000 µS/cm = 1mS/cm = 1 dS/m

Methods of Analysis used by APAL:

pH: Thermo pH meter

Total Alkalinity & CO3: calculation from HCO3, CO3, OH

Saturation Index: calculation from temperature, TDS, pH, Calcium, alkalinity

EC & TDS: Thermo conductivity meter, ion summation

SAR & Hardness: calculation from ICP-OES analysis

HCO3: H2SO4 titration + Thermo conductivity meter

Cl: Automated Potentiometric Titration

NITRATE: Continuous Flow Analyser - Colorimetry

MACRO & TRACE ELEMENTS: ICP-OES analysis

Heavy Metal analysis performed by Eurofins Environment Testing