

Client: Stan and Lindy Donaldson Tall Timbers Recreation Park
Main Rd Anytown Phone:

Sample: Number: Date:
Location:
Situation:
Feature:
Conditions:
Application

Summary

The water is slightly alkaline with very slightly elevated salts and hardness. The concrete tank may be contributing a little to this.

This water was discoloured pale yellow / brown. Both the colour and high dissolved organics level (DOC) suggest that this is probably being caused by humic material.

The water quality factors pH, oxidizing potential as ORP, reactive organic matter and carbon dioxide level are favourable. The factors turbidity and DOC are slightly less favourable although humic materials that give the water the yellow colour are not in themselves usually harmful.

No E coli were detected and coliforms level was similar to protected surface waters. Total aerobic bacteria level was slightly elevated compared to rain water fed tanks but does not indicate any unusual contamination.

The low UV transparency means that UV disinfection, if used would only be partly effective.

The water is likely to be slightly corrosive to concrete as indicated by the langelier Index.

Physical:

Measurement	Result	Units	Method	Levels	Comments
Conductivity (EC)	231	uS/cm	EC meter		low salts as EC
Langelier Index	-1.67		Calculated		significant corrosion potential for concrete
ORP	236	mV	REDOX meter		oxidizing potential is within the desirable range
pH	7.14		pH meter		very slightly alkaline
Turbidity	7.5	FTU	Infra-red		slight cloudiness
UV transmission	74.6	%	UVT 254 nm		slightly low for efficient UV disinfection if required

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Sample Number:

Chemical:

Measurement	Result	Units	Method	Levels	Comments
Bicarbonate	33.2	mg/L	Acid titration		used to calculate Langelier Index
CO2 (aqueous)**	3.3	ppm	Base titration		not elevated
DOC*	7.7	ppm	UVA 254 nm		slightly elevated dissolved organics
Hardness total	54	ppm	EDTA / Calmagite		as CaCO ₃ , low
Organic C ***	0.12	mg/L	Permanganate digestion		low fresh organic matter

Nutrients:

Metals:

Biological:

Measurement	Result	Units	Method	Levels	Comments
Aerobic plate count	8727	CFU's/100 ml	Plate count		slightly elevated for tanks
Coliforms	680	CFU's/100 ml	Chromogenic / enzyme		within the range for protected surface waters
E. coli	0	CFU's/100 ml	Chromogenic / enzyme		none detected

To help with interpreting your water test report please refer to www.appslabs.com.au/What_do_your_water_test_results_mean.doc.

* DOC = Dissolved Organic Carbon. DOC is directly proportional to UVA 254 for most waters. Here it is estimated from UVA at 254 nm based on an approximate relationship derived from published data from a variety of waters.

** represents dissociated carbon dioxide / carbonic acid .

*** represents reactive organic matter using potassium permanganate digestion. 0.2 mg/L low, 0.4 mg/L moderate, 0.6 mg/L elevated, 1.0 mg/L C high.