

Location	Time	FIELD OBSERVATIONS			LABORATORY RESULTS					Comments
		Observations at sample location	Sample appearance in bottle	E. coli cfu/100ml	Enterococci cfu/100ml	Iron mg/l	Clarity	colour	Odour	
South Terminal	11:55	Brown clouds in the water	brown/greenish particles settled	20	<20	0.15	slight cloudy with ss and sm	light straw	sweet odor - fruity	
North crack at GTH	12:03	White filaments entering sea from crack in wall, water has slight brown appearance, but outflowing water is not brown	clear, no sediment	<20	<20	0.02	clear with no ss and sm	transparent	none	There are 2 cracks at GTH (north and south), where water flows into the sea, both have white filamentous material, only north crack sampled as this has highest outflow
Paradise Restaurant	12:12	Clear, no sign of brown or filamentous material in the water	clear, no sediment	422	<20	0.1	clear with no ss and sm	transparent	faint salty/fish odor	sample collected as control as no brown or white material was observed in the water
GT Fish Market	12:22	Slight brown appearance, some dead algae or saragassum	some filaments at bottom = decaying algae or saragassum?	60	104	0.06	slight cloudy with ss and sm	transparent	none	Sample collected at beach area where dead/decaying algae or saragassum was noted
Lobster Pot	12:45	Slight brown appearance, few white filaments in water	brown/green sediment	<20	<20	0.03	slight cloudy with ss and sm	light straw	faint salty/fish odor	
Wharf Restaurant	12:50	Clear, no sign of brown or filamentous material in the water	clear, no sediment	<20	<20	0.05	clear with no ss and sm	transparent	none	

Notes

Samples collected by Yarnon, Kodie and Hendrik, Water Authority

Samples collected in 500ml sterile bottle, bottle is connected to sample stick, sample comes from 10" to 20" below the surface

Lab Methods: E. Coli SM 923A&B (ColiA), Enterococci SM 9230 D(Enterobact) and Iron Hach 8008

Weather: calm and sunny, wind ESE, 8 kt (from Windy App)

Fishermen told WA staff that the brown water always happens this time of the year, they think it is algae coming from the bottom.

Map of sampling locations is in tab 2

WHO 2003 Guidelines for safe recreational water environments - see tab 3. No WHO guideline for E. Coli. Enterococci <40 is below NOAEL in most epidemiological studies, Enterococci 41 - 200 is above threshold of illness transmission in most epidemiological studies

EU 2006/7 Bathing Water Directive - see tab4. Enterococci <100 and E Coli<500 = Excellent quality, Enterococci <200 and E Coli<500 = Good quality

PHOTOS OF SAMPLE BOTTLES AT LABORATORY

