

Tank
Red Sea 250

Net size
242 liter

Reason for analysis
Tissue necrosis (fast, RTN)

Barcode
YA5J-5NST-FHWV-FAUA (ID: 317666)

Created
03/06/2025

Arrived in the laboratory
03/12/2025

Evaluated
03/13/2025



Quality assessment:
The quality of your aquarium water is assessed using the score in the circle. The closer it is to 100, the better the quality. You can also use the bar chart to identify the areas in which problems may occur.

Major elements	90 / 100
Minor elements	89 / 100
Pollutants	100 / 100
Base elements	92 / 100

Results of Salt water

Base elements

Sal. total	32.52 PSU	BELOW NORMAL
Salinity	Ideal value: 35.00 PSU	Attention
KH	7.80 °dKH	NORMAL
Carbonate hardness	Ideal value: 7.50 °dKH	Near nature

Major elements

Cl	18018 mg/l	NORMAL
Chloride	Ideal value: 18338 mg/l	Near nature
Na	10366 mg/l	NORMAL
Sodium	Ideal value: 10188 mg/l	Near nature
Mg	1254 mg/l	NORMAL
Magnesium	Ideal value: 1218 mg/l	Near nature
S	868.1 mg/l	NORMAL
Sulfur	Ideal value: 842.8 mg/l	Near nature
Ca	381.7 mg/l	NORMAL
Calcium	Ideal value: 389.9 mg/l	Near nature
K	382.1 mg/l	NORMAL
Potassium	Ideal value: 377.9 mg/l	Near nature
Br	70.78 mg/l	NORMAL
Bromine	Ideal value: 62.05 mg/l	Near nature
Sr	7.15 mg/l	NORMAL
Strontium	Ideal value: 7.50 mg/l	Near nature
B	4.56 mg/l	NORMAL
Boron	Ideal value: 4.17 mg/l	Near nature
F	0.59 mg/l	CRITICALLY LOW
Fluorine	Ideal value: 1.20 mg/l	Critical



Minor elements

Li Lithium	239.7 µg/l Ideal value: 157.4 µg/l	NORMAL Near nature
Si Silicon	89.98 µg/l Ideal value: 92.62 µg/l	NORMAL Near nature
I Iodine	63.21 µg/l Ideal value: 60.20 µg/l	NORMAL Near nature
Ba Barium	4.27 µg/l Ideal value: 9.26 µg/l	NORMAL Near nature
Mo Molybdenum	9.75 µg/l Ideal value: 11.11 µg/l	NORMAL Near nature
Ni Nickel	--- Ideal value: 0.46 µg/l	NORMAL Near nature
Mn Manganese	--- Ideal value: 0.93 µg/l	BELOW NORMAL Attention
As Arsenic	--- Ideal value: 0.46 µg/l	NORMAL Near nature
Be Beryllium	--- Ideal value: 0.09 µg/l	NORMAL Near nature
Cr Chrome	--- Ideal value: 0.46 µg/l	NORMAL Near nature
Co Cobalt	--- Ideal value: 0.09 µg/l	NORMAL Near nature
Fe Iron	--- Ideal value: 0.46 µg/l	BELOW NORMAL Attention
Cu Copper	--- Ideal value: 0.46 µg/l	NORMAL Near nature
Se Selenium	--- Ideal value: 0.46 µg/l	NORMAL Near nature
Ag Silver	--- Ideal value: 0.09 µg/l	NORMAL Near nature
V Vanadium	0.61 µg/l Ideal value: 1.39 µg/l	BELOW NORMAL Attention
Zn Zinc	1.05 µg/l Ideal value: 1.85 µg/l	NORMAL Near nature
Sn Tin	5.42 µg/l Ideal value: 0.46 µg/l	ABOVE NORMAL Attention

Nutrients

NO3 Nitrate	3.38 mg/l Ideal value: 2.00 mg/l	NORMAL Near nature
P Phosphorus	28.32 µg/l Ideal value: 13.89 µg/l	ABOVE NORMAL Attention
PO4 Phosphate	0.09 mg/l Ideal value: 0.04 mg/l	ABOVE NORMAL Attention

Pollutants

Al. Aluminium	1.29 µg/l Ideal value: 0.09 µg/l	NORMAL Near nature
Sb Antimony	--- Ideal value: 0.09 µg/l	NORMAL Near nature
Bi Bismuth	--- Ideal value: 0.09 µg/l	NORMAL Near nature
Pb Lead	--- Ideal value: 0.09 µg/l	NORMAL Near nature
Cd Cadmium	--- Ideal value: 0.19 µg/l	NORMAL Near nature
La. Lanthanum	3.44 µg/l Ideal value: 0.001 µg/l	NORMAL Near nature
Tl Thallium	--- Ideal value: 0.09 µg/l	NORMAL Near nature
Ti Titanium	--- Ideal value: 0.09 µg/l	NORMAL Near nature
W Tungsten	--- Ideal value: 0.001 µg/l	NORMAL Near nature
Hg Mercury	--- Ideal value: 0.001 µg/l	NORMAL Near nature

Results of Osmosis water

Minor elements

Li Lithium	---	NORMAL Near nature
Si Silicon	81.84 µg/l Ideal value: 0.001 µg/l	CRITICALLY HIGH Critical
Ba Barium	---	NORMAL Near nature
Mo Molybdenum	---	NORMAL Near nature
Ni Nickel	---	NORMAL Near nature
Mn Manganese	---	NORMAL Near nature
As Arsenic	---	NORMAL Near nature
Be Beryllium	---	NORMAL Near nature
Cr Chrome	---	NORMAL Near nature
Co Cobalt	---	NORMAL Near nature
Fe Iron	---	NORMAL Near nature
Cu Copper	---	NORMAL Near nature
Se Selenium	---	NORMAL Near nature
Ag Silver	---	NORMAL Near nature
V Vanadium	---	NORMAL Near nature
Zn Zinc	---	NORMAL Near nature
Sn Tin	---	NORMAL Near nature

Nutrients

P Phosphorus	---	NORMAL Near nature
PO4 Phosphate	---	NORMAL Near nature

Pollutants

Al. Aluminium	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Sb Antimony	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Bi Bismuth	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Pb Lead	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Cd Cadmium	---	Ideal value: 0.001 µg/l	NORMAL Near nature
La. Lanthanum	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Tl Thallium	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Ti Titanium	---	Ideal value: 0.001 µg/l	NORMAL Near nature
W Tungsten	---	Ideal value: 0.001 µg/l	NORMAL Near nature
Hg Mercury	---	Ideal value: 0.001 µg/l	NORMAL Near nature

Recommendations

The following recommendations were calculated for the aquarium **Red Sea 250** with **242 liters** content.

Recommended actions

Phosphorus Recommended

Phosphorus is slightly too high. Improve the filtration and/or reduce the food supply. Check the osmosis water.

Salinity Recommended

Increase the salinity to 35 PSU.

For example, add 1025 ml Absolute Ocean #1 and 1025 ml Absolute Ocean #2 to the aquarium.

Silicon Osmosis

Maintain osmosis system / replace mixed bed resin.

Vanadium (V)

Recommended

Addition Total: 0.94 ml
Divide the addition into portions: once 0.94 ml

Manganese (Mn)

Recommended

Addition Total: 1.12 ml
Divide the addition into portions: once 1.12 ml

Iron (Fe)

Recommended

Addition Total: 0.56 ml
Divide the addition into portions: five times 0.11 ml *

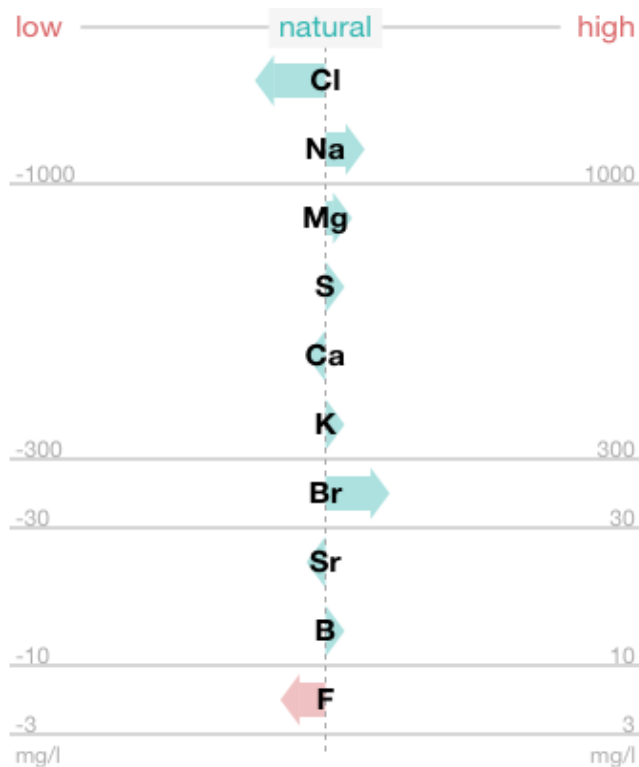
Fluorine (F)

Recommended

Addition Total: 74.17 ml
Divide the addition into portions: three times 24.72 ml *

* Only one portion should be dosed per day.

Diagrams



Composition of the aquarium water

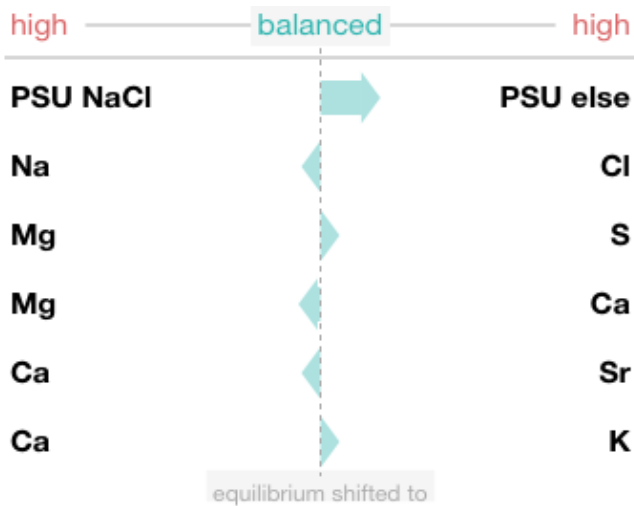
The diagram shows whether the concentrations of the major elements in your water sample match the measured salinity or whether individual elements are increased or reduced. Note the different concentration ranges on the x-axis.

Background: Natural seawater consists of the same elements in fixed proportions. Only the concentrations of the elements increase or decrease in proportion to salinity. That is why the ideal values also change with salinity.

Green arrow
Value is relatively natural.

Yellow arrow
Value is becoming increasingly unnatural.

Red arrow
Value unnatural.



Element ratios

This chart shows whether the element supply is appropriate or whether the ratios of certain element pairs are skewed due to an imbalanced supply. The arrow points in the direction of the element with increased concentration. Only the relationship between the elements is evaluated. The evaluation of the individual measured values may vary.

Background: The reef inhabitants remove various elements from the aquarium water. To compensate for this consumption and obtain water that is true to nature, water changes are carried out and water additives are used. This does not always work as needed.

Green Arrow

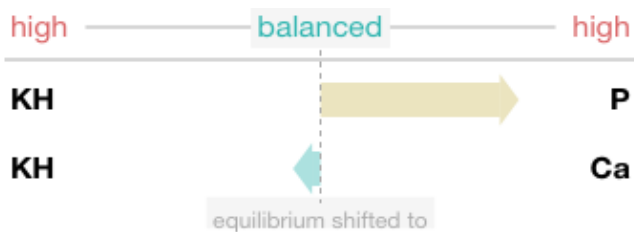
Relationship close to nature.

Yellow arrow

Ratio slightly shifted.

Red arrow

Ratio shifted drastically.



Growth Factors

This diagram shows whether important growth factors are in balance or out of proportion. The arrow points in the direction of the factor with increased concentration. Only the relationship between the factors is evaluated. The evaluation of the individual measured values may vary.

Background: The most important growth factors include carbonate hardness, calcium concentration and phosphorus content. When these values are slightly increased, growth is usually encouraged, while greatly increased or reduced values slow growth. If there is an imbalance between these factors, it can adversely affect coral growth and, in the worst case, lead to tissue necrosis.

Green arrow

Balance between factors OK.

Yellow arrow

Factors increasingly disproportionate to one another.

Red arrow

Factors in disproportion to one another.