

Tank
75g home
Net size
284 liter
Reason for analysis
Routine

Barcode
ERGN-TSD3-XG5V-VL36 (ID: 284203)

Created
06/19/2024

Arrived in the laboratory
06/28/2024

Evaluated
06/28/2024



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	95 / 100
Minor elements	92 / 100
Pollutants	100 / 100
Base elements	100 / 100

Results of Salt water

Base elements

Sal. total	35.36 PSU	NORMAL
Salinity	Ideal value: 35.00 PSU	Near nature
KH	8.92 °dKH	NORMAL
Carbonate hardness	Ideal value: 7.50 °dKH	Near nature

Major elements

Cl	19607 mg/l	NORMAL
Chloride	Ideal value: 20003 mg/l	Near nature
Na	11333 mg/l	NORMAL
Sodium	Ideal value: 11113 mg/l	Near nature
Mg	1291 mg/l	NORMAL
Magnesium	Ideal value: 1328 mg/l	Near nature
S	956.1 mg/l	NORMAL
Sulfur	Ideal value: 919.3 mg/l	Near nature
Ca	434.8 mg/l	NORMAL
Calcium	Ideal value: 425.3 mg/l	Near nature
K	422.9 mg/l	NORMAL
Potassium	Ideal value: 412.2 mg/l	Near nature
Br	84.49 mg/l	ABOVE NORMAL
Bromine	Ideal value: 67.69 mg/l	Attention
Sr	10.03 mg/l	ABOVE NORMAL
Strontium	Ideal value: 8.18 mg/l	Attention
B	4.87 mg/l	NORMAL
Boron	Ideal value: 4.55 mg/l	Near nature
F	1.32 mg/l	NORMAL
Fluorine	Ideal value: 1.31 mg/l	Near nature



Minor elements

Li Lithium	359.1 µg/l Ideal value: 171.7 µg/l	NORMAL Near nature
Si Silicon	213.0 µg/l Ideal value: 101.0 µg/l	NORMAL Near nature
I Iodine	54.72 µg/l Ideal value: 65.67 µg/l	NORMAL Near nature
Ba Barium	44.32 µg/l Ideal value: 10.10 µg/l	NORMAL Near nature
Mo Molybdenum	--- Ideal value: 12.12 µg/l	CRITICALLY LOW Critical
Ni Nickel	2.46 µg/l Ideal value: 0.51 µg/l	NORMAL Near nature
Mn Manganese	0.78 µg/l Ideal value: 1.01 µg/l	NORMAL Near nature
As Arsenic	--- Ideal value: 0.51 µg/l	NORMAL Near nature
Be Beryllium	--- Ideal value: 0.10 µg/l	NORMAL Near nature
Cr Chrome	--- Ideal value: 0.51 µg/l	NORMAL Near nature
Co Cobalt	--- Ideal value: 0.10 µg/l	NORMAL Near nature
Fe Iron	2.50 µg/l Ideal value: 0.51 µg/l	NORMAL Near nature
Cu Copper	--- Ideal value: 0.51 µg/l	NORMAL Near nature
Se Selenium	--- Ideal value: 0.51 µg/l	NORMAL Near nature
Ag Silver	--- Ideal value: 0.10 µg/l	NORMAL Near nature
V Vanadium	--- Ideal value: 1.52 µg/l	BELOW NORMAL Attention
Zn Zinc	8.49 µg/l Ideal value: 2.02 µg/l	ABOVE NORMAL Attention
Sn Tin	--- Ideal value: 0.51 µg/l	NORMAL Near nature

Nutrients

NO ₃ Nitrate	38.92 mg/l Ideal value: 2.00 mg/l	ABOVE NORMAL Attention
P Phosphorus	443.4 µg/l Ideal value: 15.15 µg/l	CRITICALLY HIGH Critical
PO ₄ Phosphate	1.36 mg/l Ideal value: 0.05 mg/l	CRITICALLY HIGH Critical

Pollutants

Al. Aluminium	7.03 µg/l Ideal value: 0.10 µg/l	NORMAL Near nature
Sb Antimony	--- Ideal value: 0.10 µg/l	NORMAL Near nature
Bi Bismuth	--- Ideal value: 0.10 µg/l	NORMAL Near nature
Pb Lead	--- Ideal value: 0.10 µg/l	NORMAL Near nature
Cd Cadmium	--- Ideal value: 0.20 µg/l	NORMAL Near nature
La. Lanthanum	--- Ideal value: 0.00 µg/l	NORMAL Near nature
Tl Thallium	--- Ideal value: 0.10 µg/l	NORMAL Near nature
Ti Titanium	--- Ideal value: 0.10 µg/l	NORMAL Near nature
W Tungsten	--- Ideal value: 0.00 µg/l	NORMAL Near nature
Hg Mercury	--- Ideal value: 0.00 µg/l	NORMAL Near nature

Results of Osmosis water

Minor elements

Li Lithium	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Si Silicon	1087 µg/l	CRITICALLY HIGH Critical
	Ideal value: 0.00 µg/l	
Ba Barium	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Mo Molybdenum	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Ni Nickel	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Mn Manganese	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
As Arsenic	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Be Beryllium	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Cr Chrome	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Co Cobalt	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Fe Iron	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Cu Copper	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Se Selenium	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Ag Silver	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
V Vanadium	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
Zn Zinc	3.82 µg/l	CRITICALLY HIGH Critical
	Ideal value: 0.00 µg/l	
Sn Tin	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	

Nutrients

P Phosphorus	---	NORMAL Near nature
	Ideal value: 0.00 µg/l	
PO4 Phosphate	---	NORMAL Near nature
	Ideal value: 0.00 mg/l	

Pollutants

Al.	---	NORMAL
Aluminium	Ideal value: 0.00 µg/l	Near nature
Sb	---	NORMAL
Antimony	Ideal value: 0.00 µg/l	Near nature
Bi	---	NORMAL
Bismuth	Ideal value: 0.00 µg/l	Near nature
Pb	---	NORMAL
Lead	Ideal value: 0.00 µg/l	Near nature
Cd	---	NORMAL
Cadmium	Ideal value: 0.00 µg/l	Near nature
La.	---	NORMAL
Lanthanum	Ideal value: 0.00 µg/l	Near nature
Tl	---	NORMAL
Thallium	Ideal value: 0.00 µg/l	Near nature
Ti	---	NORMAL
Titanium	Ideal value: 0.00 µg/l	Near nature
W	---	NORMAL
Tungsten	Ideal value: 0.00 µg/l	Near nature
Hg	---	NORMAL
Mercury	Ideal value: 0.00 µg/l	Near nature

Recommendations

The following recommendations were calculated for the aquarium **75g home** with **284 liters** content.

Recommended actions

Phosphorus	Important
Phosphorus is too high. Improve the filtration and/or reduce the amount of food. Use an iron-based PO ₄ adsorber (e.g. ATI Phosphate Stop) to reduce the phosphorus value to 13-17 µg/l.	
Bromine	Recommended
Reduce/stop addition of bromide to bring value down to 65-67 mg/l.	
Strontium	Recommended
Reduce/stop addition of strontium to bring value down to 7,8-8,2 mg/l.	
Zinc	Recommended
Zinc is elevated. Find and eliminate the source (e.g. corroding metals, contaminated water treatment, osmosis water, etc.).	
Nitrate	Recommended
Nitrate is slightly too high. Improve the filtration and/or reduce the food supply.	
Silicon	Osmosis
Maintain osmosis system / replace mixed bed resin.	

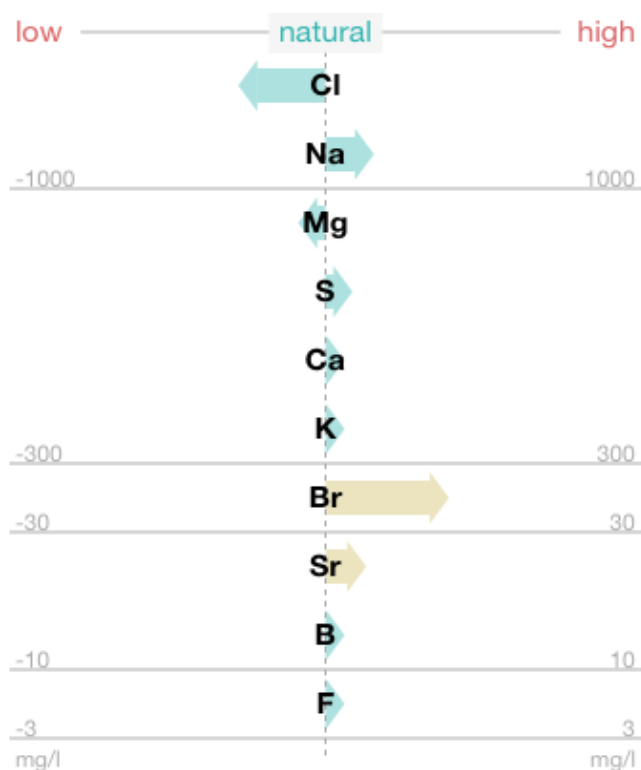
Molybdenum (Mo)**Recommended**

Addition Total: 17.21 ml
 Divide the addition into portions: three times 5.74 ml *

Vanadium (V)**Recommended**

Addition Total: 2.15 ml
 Divide the addition into portions: twice 1.08 ml *

* Only one portion should be dosed per day.

Diagrams**Composition of the aquarium water**

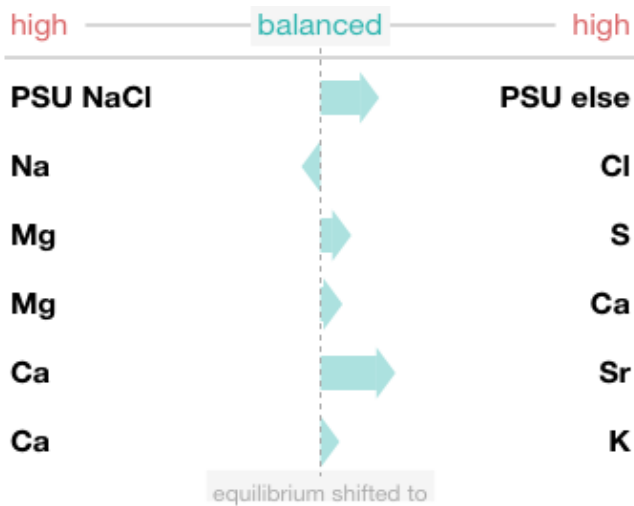
The diagram shows whether the concentrations of the major elements in your water sample match the measured salinity or whether individual elements are increased or reduced. Note the different concentration ranges on the x-axis.

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

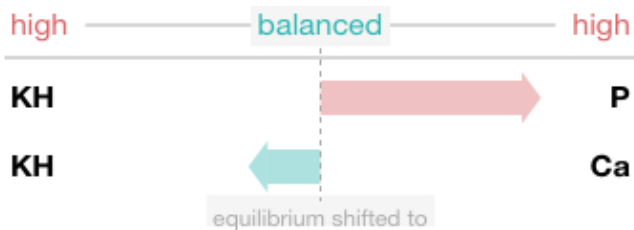
Relationship close to nature.

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.