

Analysis Report

Date of Analysis: 10.07.2021
 Analysis No: OC184867
 Date of Sampling: unknown

Customer: Nicolay Oganessian
 Customer ID: 3778
 Tank: 300l reef tank

Main Parameters

Parameter	Measured Value	Ideal Value	Rating
Salinity	33,3 psu	35,0 psu	✓
Alkalinity (KH)	6,76 dKH	7,50 dKH	✓

Main Elements

Parameter	Measured Value	Ideal Value	Rating
Calcium	474 mg/l	419 mg/l	↗
Boron	8,0 mg/l	4,3 mg/l	↑
Bromide	77 mg/l	63,7 mg/l	↗
Chloride	18194 mg/l	18458 mg/l	✓
Potassium	445 mg/l	381 mg/l	✓
Magnesium	1314 mg/l	1332 mg/l	✓
Sodium	10423 mg/l	10275 mg/l	✓
Strontium	25,6 mg/l	7,6 mg/l	↑
Sulfate	2559 mg/l	2569 mg/l	✓

Trace Elements

Parameter	Measured Value	Ideal Value	Rating
Barium	351,5 µg/l	10-100 µg/l	↑
Chromium	n.n.	0,5 µg/l	✓
Cobalt	n.n.	0,5 µg/l	✓
Iron	1,2 µg/l	1-3 µg/l	✓
Fluoride	0,93 mg/l	1,3 mg/l	✓
Iodine	n.n.	50-70 µg/l	↓
Copper	0,5 µg/l	1-3 µg/l	✓
Lithium	392 µg/l	50-150 µg/l	↗
Manganese	0,1 µg/l	1,0 µg/l	↘
Molybdenum	11,3 µg/l	10-15 µg/l	✓

Nickel	7,6 µg/l	1,0 µg/l	✓
Rubidium	216 µg/l	90–150 µg/l	✓
Selenium	n.n.	0,5 µg/l	✓
Vanadium	8,1 µg/l	2–3 µg/l	↗
Zinc	3,6 µg/l	1,0 µg/l	✓
Tin	n.n.	< 1 µg/l	✓

Pollutants

Parameter	Measured Value	Ideal Value	Rating
Aluminium	38,7 µg/l	< 40 µg/l	✓
Bismuth	n.n.	< 3 µg/l	✓
Lead	n.n.	< 3 µg/l	✓
Mercury	n.n.	< 3 µg/l	✓
Antimony	n.n.	< 3 µg/l	✓
Titan	n.n.	< 1 µg/l	✓
Cadmium	n.n.	< 3 µg/l	✓
Uranium	n.n.	< 10 µg/l	✓
Beryllium	n.n.	< 1 µg/l	✓
Arsenic	n.n.	< 3 µg/l	✓
Lanthanum	n.n.	< 3 µg/l	✓
Thallium	n.n.	< 3 µg/l	✓

Nutrients

Parameter	Measured Value	Ideal Value	Rating
Phosphate (photometric)	0,025 mg/l	0,03–0,1 mg/l	↘
Total Phosphorous (ICP)	10 µg/l	10–50 µg/l	↘
Nitrate	6,66 mg/l	2–15 mg/l	✓
Nitrite	0,166 mg/l	< 0,1 mg/l	↗
Silicon	267 µg/l	50–250 µg/l	↗

Osmose

Parameter	Measured Value	Ideal Value	Rating
Copper	n.n.	n.n. µg/l	✓
Zinc	n.n.	n.n. µg/l	✓
Silicon	94,2 µg/l	n.n. µg/l	↑

- ✓ No action required
- ↗↘ Need for action
- ↑↓ Urgent need for action

- n.n Not found
- n.b Not measured

Interpretation

Dear Nicolay!

Calcium is elevated, the dosing amount should be reduced. **Also Strontium is elevated and should not be dosed, until it has decline back into the optimum value.**

Boron is elevated, and should not be dosed at the moment.

Bromide is elevated and should not be dosed at the moment. Bromide is often contained as impurity in magnesium salts. Ozone can react with bromine forming potentially problematic bromate: Ozone should not be used with elevated bromide levels.

Regarding trace elements there is a deficiency in iodine: The consumption rate of this important trace element can vary from tank to tank, in your case its suggested to dose regularly, and see after the next ICP analysis if the dosing amount should be adopted.

Barium is significantly elevated. The source is likely the zeolithe. Usually elevated barium is not problematic, but we recommend to increase your zeolithe exchange interval, to reduce the influx of barium.

Lithium is slightly elevated, which is not a concern. Typical sources for lithium are reef cement/ceramics/artificial rocks.

In your RO water (and the aquarium) the silicon content is elevated, which might cause the blooming of diatoms. We recommend the use of high quality mixed bed resin as last stage of the water purification setup, to remove silicon from the RO water.

We advise against the usage of silicon adsorbers in the reef tank, since these can also bind phosphate, thus further lowering the availability of this important nutrient in your tank.

In case of questions, i am happy to help! Best regards, Christoph

Produkttempfehlungen

Produkt	Dosierung
Oceamo Single Elements Iodine	0,9 ml 2 x weekly