

# Analysis Report

Date of Analysis: 16.05.2023  
Analysis No: MSR220966  
Date of Sampling: 07.05.2023 – 12:00

Customer: David Hicks  
Customer ID: 5347  
Tank: reef tank

## Main Parameters

Parameter	Measured Value	Ideal Value	Rating
Salinity	33,1 psu	35,0 psu	✓
Alkalinity (KH)	8,87 dKH	7,50 dKH	↗

## Main Elements

Parameter	Measured Value	Ideal Value	Rating
Calcium	394 mg/l	416 mg/l	✓
Boron	4,7 mg/l	4,3 mg/l	✓
Bromide	75 mg/l	63,4 mg/l	✓
Chloride	19049 mg/l	18347 mg/l	✓
Potassium	402 mg/l	378 mg/l	✓
Magnesium	1288 mg/l	1324 mg/l	✓
Sodium	10434 mg/l	10214 mg/l	✓
Strontium	12,6 mg/l	7,6 mg/l	↑
Sulfate	2767 mg/l	2553 mg/l	✓

## Trace Elements

Parameter	Measured Value	Ideal Value	Rating
Barium	47,00 µg/l	10–100 µg/l	✓
Chromium	0,06 µg/l	0,2–0,5 µg/l	↘
Cobalt	0,13 µg/l	0,05–0,2 µg/l	✓
Iron	0,46 µg/l	0,1–3 µg/l	✓
Fluoride	1,16 mg/l	1,3 mg/l	✓
Iodine	48,0 µg/l	50–70 µg/l	✓
Copper	0,47 µg/l	0,2–2 µg/l	✓
Lithium	319 µg/l	50–150 µg/l	↗
Manganese	0,06 µg/l	0,2–1 µg/l	↓
Molybdenum	3,9 µg/l	10–15 µg/l	↓
Nickel	0,89 µg/l	2–5 µg/l	↓

Rubidium	54,4 µg/l	90–150 µg/l	⬇
Selenium	0,053 µg/l	0,2–0,5 µg/l	⬇
Vanadium	1,14 µg/l	2–3 µg/l	⬇
Zinc	1,63 µg/l	1–3 µg/l	✓
Tin	1,88 µg/l	0,05–1 µg/l	↗
Caesium	0,97 µg/l	0,3–3 µg/l	✓

## Pollutants

Parameter	Measured Value	Ideal Value	Rating
Aluminium	27,6 µg/l	< 40 µg/l	✓
Bismuth	n.n.	< 1 µg/l	✓
Lead	n.n.	< 3 µg/l	✓
Mercury	n.n.	< 0,5 µg/l	✓
Antimony	1,969 µg/l	< 3 µg/l	✓
Titan	n.n.	< 1 µg/l	✓
Cadmium	0,010 µg/l	< 0,5 µg/l	✓
Uranium	0,262 µg/l	< 3 µg/l	✓
Beryllium	n.n.	< 0,2 µg/l	✓
Arsenic	1,048 µg/l	< 3 µg/l	✓
Lanthanum	0,015 µg/l	< 3 µg/l	✓
Thallium	n.n.	< 0,5 µg/l	✓
Gallium	n.n.	< 2 µg/l	✓
Tellurium	n.n.	< 2 µg/l	✓
Thorium	n.n.	< 0,3 µg/l	✓
Cerium	n.n.	< 0,5 µg/l	✓
Ruthenium	n.n.	< 0,1 µg/l	✓
Neodymium	n.n.	< 0,1 µg/l	✓
Tungsten	n.n.	< 2 µg/l	✓

## Nutrients

Parameter	Measured Value	Ideal Value	Rating
Phosphate (photometric)	0,436 mg/l	0,03–0,1 mg/l	⬆
Nitrate	29,26 mg/l	2–15 mg/l	↗
Nitrite	0,128 mg/l	< 0,3 mg/l	✓
Silicon	66 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

n.n.

n.n. µg/l



No action required

n.n Not found



Need for action

n.b Not measured



Urgent need for action

## Interpretation

Hello!

Please enter the above results into the Reef Moonshiner's ICP Assessment tool for a detailed assessment and dosing instructions, which can be found here under this weblink:

<https://www.reefmoonshiners.com/handbook-tools>

All the best,

Christoph

