



Analysis Report

Date of Analysis: 16.07.2025

Analysis No: MSR229111

Date of Sampling: 01.07.2025 – 12:00

Customer: Kenneth Shumake

Customer ID: 8447

Tank: 240 L reef tank

Main Parameters

Parameter	Measured Value	Ideal Value	Rating
Salinity	32.8 psu	35 psu	✓
Alkalinity (KH)	11.0 dKH	7.5 dKH	↑
SAC254	0.9 m-1	2-8 m-1	✓

Main Elements

Parameter	Measured Value	Ideal Value	Rating
Calcium	392 mg/l	412 mg/l	✓
Boron	4.1 mg/l	4.2 mg/l	✓
Bromide	74 mg/l	63 mg/l	✓
Chloride	18472 mg/l	18181 mg/l	✓
Potassium	334 mg/l	375 mg/l	↓
Magnesium	1223 mg/l	1218 mg/l	✓
Sodium	10313 mg/l	10121 mg/l	✓
Strontium	6.8 mg/l	7.5 mg/l	✓
Sulfate	2703 mg/l	2530 mg/l	✓

Trace Elements

Parameter	Measured Value	Ideal Value	Rating
Barium	23.44 µg/l	10-100 µg/l	✓
Chromium	0.15 µg/l	0,2-0,5 µg/l	↓
Cobalt	0.01 µg/l	0,05-0,2 µg/l	↓
Iron	0.06 µg/l	0,1-3 µg/l	✓
Fluoride	0.41 mg/l	1.3 mg/l	↓
Iodine	62.2 µg/l	50-70 µg/l	✓
Copper	0.06 µg/l	0,2-2 µg/l	↓
Lithium	322 µg/l	50-150 µg/l	↓
Manganese	0.11 µg/l	0,2-1 µg/l	↓
Molybdenum	3.1 µg/l	10-15 µg/l	↓
Nickel	0.67 µg/l	2-5 µg/l	↓
Rubidium	64.1 µg/l	90-150 µg/l	✓
Selenium	0.038 µg/l	0,2-0,5 µg/l	↓
Vanadium	2.87 µg/l	2-3 µg/l	✓

Zinc	0.07	µg/l	1–3 µg/l	↓
Tin	0.66	µg/l	0,05–1 µg/l	✓
Caesium	1.18	µg/l	0,3–3 µg/l	✓

Pollutants

Parameter	Measured Value	Ideal Value	Rating
Aluminium	6.9 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	0.218 µg/l	< 3 µg/l	✓
Titanium	n.n.	< 1 µg/l	✓
Cadmium	n.n.	< 0,5 µg/l	✓
Uranium	0.214 µg/l	< 3 µg/l	✓
Beryllium	0.006 µg/l	< 0,2 µg/l	✓
Arsenic	0.258 µg/l	< 3 µg/l	✓
Lanthanum	6.363 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	0.09 µg/l	< 2 µg/l	✓

Nutrients

Parameter	Measured Value	Ideal Value	Rating
Phosphate (photometric)	0.088 mg/l	0,03–0,1 mg/l	✓
Nitrate	13.31 mg/l	2–15 mg/l	✓
Nitrite	0.202 mg/l	< 0,3 mg/l	✓
Silicon	46 µg/l	50–250 µg/l	✓

Osmose

Parameter	Measured Value	Ideal Value	Rating
Copper (RO)	n.n.	n.n. µg/l	✓
Zinc (RO)	n.n.	n.n. µg/l	✓
Silicon (RO)	n.n.	n.n. µg/l	✓
Beryllium (RO)	n.n.	n.n. µg/l	✓
Cobalt (RO)	n.n.	n.n. µg/l	✓
Chromium (RO)	n.n.	n.n. µg/l	✓
Iron (RO)	n.n.	n.n. µg/l	✓
Lithium (RO)	n.n.	n.n. µg/l	✓
Manganese (RO)	n.n.	n.n. µg/l	✓

Molybdenum (RO)	n.n.	n.n. µg/l	✓
Nickel (RO)	n.n.	n.n. µg/l	✓
Phosphorus (RO)	n.n.	n.n. µg/l	✓
Lead (RO)	n.n.	n.n. µg/l	✓
Antimony (RO)	n.n.	n.n. µg/l	✓
Tin (RO)	8.9 µg/l	n.n. µg/l	⚠
Titanium (RO)	n.n.	n.n. µg/l	✓
Vanadium (RO)	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