



Thanks for downloading my recommended test kit list. I created the list to give you a no-nonsense approach to which test kits to use and more importantly, what your parameters should be in your saltwater tank.

If you like the test kit list and are looking for even more specific advice from me in a format you can easily understand, check out my [success store](#). I've got books on [setting up a saltwater tank](#), [algae control](#) and [one full of the facts \(not rumors, not myths...facts\) about marine fish quarantining and disease treatment](#).

Enjoy your tank,

A handwritten signature in black ink that reads 'Mark Callahan'. The signature is written in a cursive, flowing style.

-Mark Callahan, *Mr. Saltwater Tank*



## Mr. Saltwater Tank Tests Recommended List

Description of each parameter appears at the end of the tables.

<b>Test by Tank Type</b>		
<b><u>Fish Only With Live Rock (FOWLR)</u></b>		
<i>Test Parameter</i>	<i>Recommended Test Kit (click on the link)</i>	<i>Acceptable Value</i>
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.019 - 1.020*
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Nitrite</b>	<a href="#">Salifert</a>	0 ppm
<b>Nitrate</b>	<a href="#">Salifert</a>	0 - 10ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 - .1ppm
<i>* For FOWLR tank, a lower salinity (1.019 - 1.020) is recommended</i>		
<b><u>Softie Tank (Soft Corals)</u></b>		
<i>Test Parameter</i>	<i>Recommended Test Kit (click on the link)</i>	<i>Acceptable Value</i>
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.025
<b>Alkalinity</b>	<a href="#">Hanna Checker</a>	6 - 11 KH

<b>Test by Tank Type</b>		
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Nitrite</b>	<a href="#">Salifert</a>	0 ppm
<b>Nitrate</b>	<a href="#">Salifert</a>	0 - 3 ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Softie Tank (Soft Corals), continued</b>		
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 - 0.1 ppm
<b>Mixed Reef (Softies, LPS, SPS)</b>		
<i>Test Parameter</i>	<i>Recommended Test Kit (click on the link)</i>	<i>Acceptable Value</i>
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.025
<b>Alkalinity</b>	<a href="#">Hanna Checker</a>	6 - 11 KH
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Calcium</b>	<a href="#">SeaChem</a>	380-450 mg/mL
<b>Magnesium</b>	<a href="#">SeaChem</a>	1200-1400 mg/mL
<b>Nitrite</b>	<a href="#">Salifert</a>	0 ppm
<b>Nitrate</b>	<a href="#">Salifert</a>	0-3 ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 -.03 ppm
<b>SPS Dominant Reef</b>		
<i>Test Parameter</i>	<i>Recommended Test Kit (click on the link)</i>	<i>Acceptable Value</i>
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.025
<b>Alkalinity</b>	<a href="#">Hanna Checker</a>	6 - 11 KH

<b>Test by Tank Type</b>		
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Calcium</b>	<a href="#">SeaChem</a>	380-450 mg/mL
<b>Magnesium</b>	<a href="#">SeaChem</a>	1200-1400 mg/mL
<b>Nitrite</b>	<a href="#">Hanna Checker</a>	0 <i>ppb</i>
<b>SPS Dominant Reef (continued)</b>		
<b>Nitrate</b>	<a href="#">Salifert</a>	0 -1 ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 -.02 <i>ppb</i>

<b>Test to Run by <a href="#">Tank Personality</a></b>		
<b><a href="#">Tank Dabblers</a></b>		
<i>Test Parameter</i>	<i>Recommended Test Kit (click on the link)</i>	<i>Acceptable Value</i>
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.019 - 1.020*
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Nitrite</b>	<a href="#">Salifert</a>	0 ppm
<b>Nitrate</b>	<a href="#">Salifert</a>	0 - 10 ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 - .03ppm
<i>* For FOWLR tank, a lower salinity (1.019 - 1.020) is recommended</i>		
<b><a href="#">Reef Enthusiasts</a></b>		
<i>Test Parameter</i>	<i>Recommended Test Kit (click on the link)</i>	<i>Acceptable Value</i>

<b>Test to Run by <a href="#">Tank Personality</a></b>		
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.025
<b>Alkalinity</b>	<a href="#">Hanna Checker</a>	6 - 11 KH
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Calcium</b>	<a href="#">SeaChem</a>	380-450 mg/mL
<b><a href="#">Reef Enthusiasts (continued)</a></b>		
<b>Magnesium</b>	<a href="#">SeaChem</a>	1200-1400 mg/mL
<b>Nitrite</b>	<a href="#">Salifert</a>	0 ppm
<b>Nitrate</b>	<a href="#">Salifert</a>	0 - 2 ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 - .03 ppm
<b><a href="#">Reef Junkies</a></b>		
<i><u>Test Parameter</u></i>	<i><u>Recommended Test Kit (click on the link)</u></i>	<i><u>Acceptable Value</u></i>
<b>Salinity/Specific Gravity</b>	<a href="#">Refractometer</a>	1.025
<b>Alkalinity</b>	<a href="#">Hanna Checker</a>	6 - 11 KH
<b>Ammonia</b>	<a href="#">Salifert</a>	0 mg/mL
<b>Calcium</b>	<a href="#">SeaChem</a>	380-450 mg/mL
<b>Magnesium</b>	<a href="#">SeaChem</a>	1200-1400 mg/mL
<b>Nitrite</b>	<a href="#">Hanna Checker</a>	0 <i>ppb</i>
<b>Nitrate</b>	<a href="#">Salifert</a>	0-1 ppm
<b>pH</b>	<a href="#">Salifert</a>	7.6-8.4
<b>Phosphate</b>	<a href="#">Hanna Checker</a>	0 - .02 <i>ppb</i>
<b><i>continued next page</i></b>		

# Explanation of Parameters

(in everyday language)

**Alkalinity** - how much your tank can resist a drop or rise in pH. Also known as “buffering capacity”

**Ammonia** - fish and invertebrate waste. Ammonia is the first step in the nitrogen cycle

**Calcium** - building block of coral. Also moves in opposite direction to Alkalinity. So when your Alkalinity is high, Calcium tends to be low.

**Magnesium** - binds to ions preventing their precipitation in your tank. Consistent low Alkalinity readings can be due to low Magnesium values. Magnesium is also a building block of coral and is often overlooked by saltwater tank owners.

**Nitrite** - *highly* toxic compound to fish, corals and invertebrates. A fully cycled saltwater tank should show 0 nitrates. Nitrites come about in the second step of the nitrogen cycle.

**Nitrate** - last step of nitrogen cycle. Toxic in high levels (above 20 ppm) to fish, invertebrates and corals. Learn more about it [here](#)

**pH** - simply, how acidic or basic a solution is. In reality, [keeping it at the suggested 8.3 is not necessary.](#)

**Phosphate** - food for algae. Usually introduced into tank by foods, non [RO/DI water](#) or the break down of wastes/excess food/dying livestock.

**Salinity/Specific Gravity** - how much salt is dissolved in water.