

Water Test Results

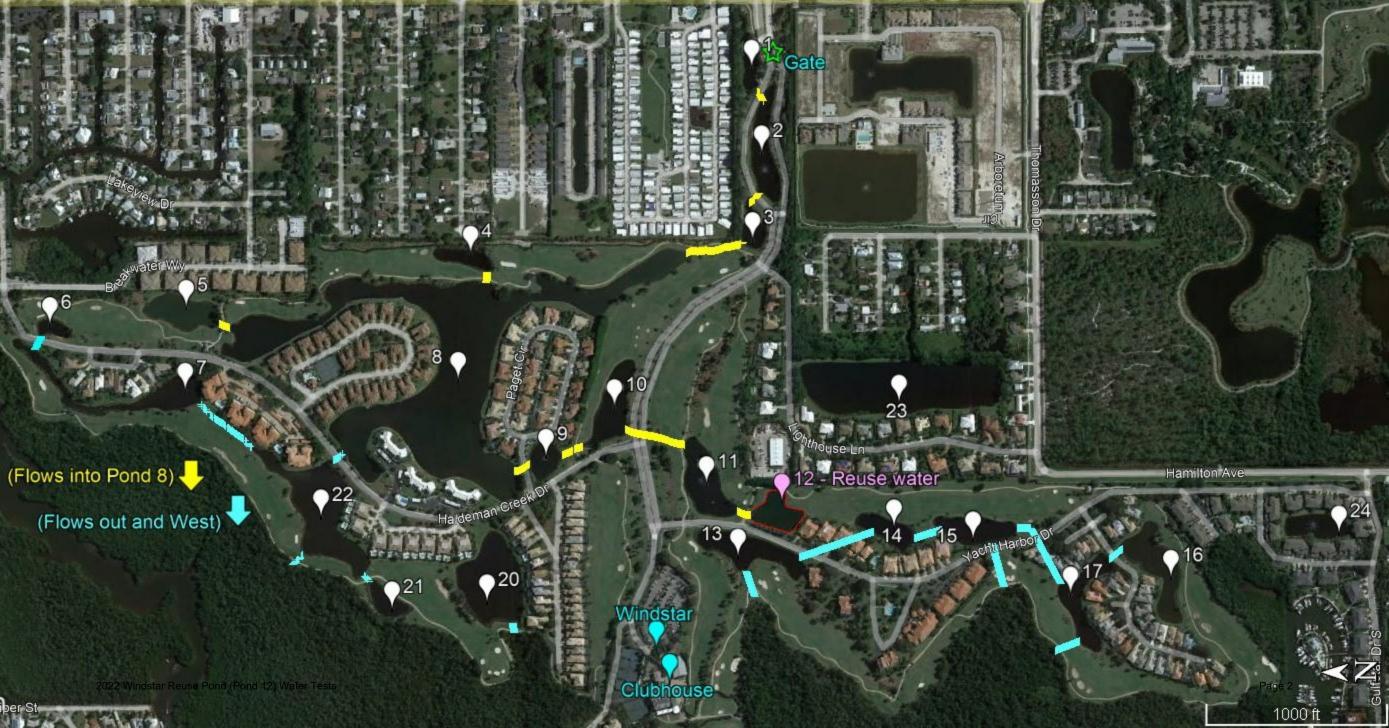
For

Windstar

Pond 12 – Reuse Pond



www.AdvancedAquatic.com lakes@advancedaquatic.com 292 S. Military Trail – Deerfield Beach, FL 33442 Locations in: Deerfield Beach, Fort Myers, Port St. Lucie, and Clearwater/Tampa 2022 Windstar Reuse Pond (Pond 12) Water Tests 1-800-491-9621





Water test analysis descriptions

Total Phosphorous (TP)

Is the measurement of all forms of phosphorous; inorganic, organic, particulate and dissolved. Excess phosphorous is the prime contributor to eutrophication in most water systems. Measuring the amount of phosphorus indicates how productive and susceptible to algae blooms the pond is.

Soluble reactive phosphate (Orthophosphate)

This test is the measurement of the soluble inorganic form of phosphorous. The form that is directly available to algae and plants. High concentrations usually occur in tandem with algal blooms. Fertilizers have relatively high amounts of soluble reactive phosphorous, and in urban settings can be the source of high SRP results.

Electrical Conductivity (EC)

Water has the ability to dissolve many substances as it moves across a watershed. This measurement is the number of dissolved solids or salts that have dissolved in a waterbody. This test is a general indicator of the overall health of the pond. Variations from its normal range may indicate an abnormal amount of pollution e.g., phosphorous, nitrogen, etc. that has entered the pond.

Temperature (°F)

Is a very important measurement and greatly influences the daily chemistry of a pond. The higher the temperature (to a point) the more biological activity and growth. Warmer water temperatures hold less oxygen, and could trigger a fish kill in a nutrient rich pond.



What is Electrical Conductivity and why do we measure it?

Electrical Conductivity (EC)

Electrical conductivity is the total dissolved salts, measured as ions, in the water. These salts separate into positively and negatively charged ions (kind of like electrolytes in your sports drink). Some negative ions you may have heard of include bicarbonate, carbonate, chloride, sulfate, phosphates, and nitrates; four positive ions you may have heard of include calcium, magnesium, sodium, potassium, and ammonium. Ions in the water affect the quality of water for drinking or irrigation. The concentration of ions also influences what microorganisms will prosper in the water based on their desired salinity range. Conductivity will vary based on where the water source comes from and can be a good indicator of groundwater seepage or a sewage leak. Waters that have been heavily impacted by industry can fall into the high conductivity range which is bordering on saline conditions, and is not suitable for some fish or plants.

For reference:

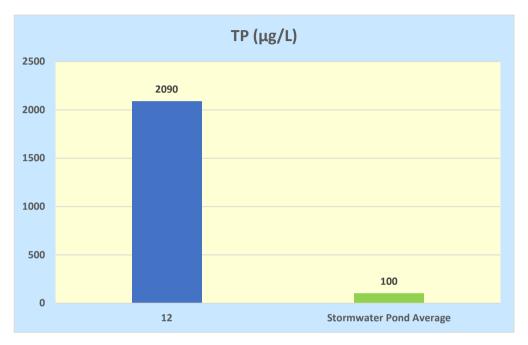
- 0-300 μS = Excellent water quality. Can be consumed by humans. Can be used for irrigation.
- $300-800 \ \mu\text{S}$ = Good drinking water for humans as long as organic material has been filtered out. Generally good for irrigation, although above $300 \ \mu\text{S}$ may start to cause leaves to scorch on sensitive plants.
- 800-2500 μS = Can be consumed by humans, although it would be preferred to have an EC value on the lower end of this scale (800-1650 μS). Requires special management when used for irrigation consider suitability of soil, good drainage, and salt tolerance of plants.
- $2500-10,000 \ \mu\text{S}$ = Not recommended for human consumption. Not normally suitable for irrigation although 6000 μS can be used for extremely salt tolerant crops with special management.
- $10,000 + \mu S = not suitable for human consumption or irrigation.$

www.AdvancedAquatic.com

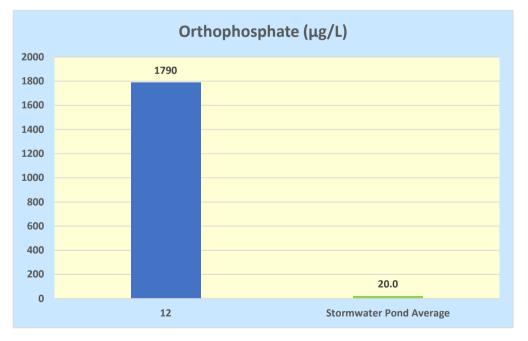
lakes@advancedaquatic.com 292 S. Military Trail – Deerfield Beach, FL 33442 Locations in: Deerfield Beach, Fort Myers, Port St. Lucie, and Clearwater/Tampa 1-800-491-9621

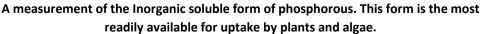


Windstar Reuse Pond (Pond 12) - Water Tests Data - June 22nd, 2022



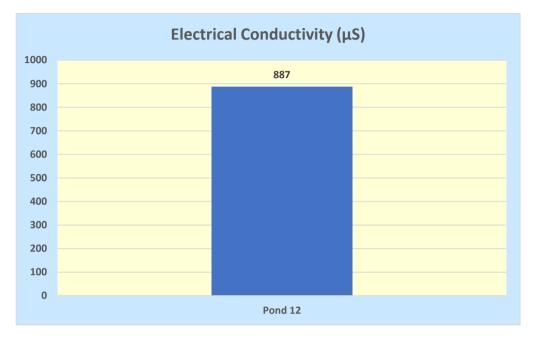
A measurement of both inorganic and organic forms of phosphorous.



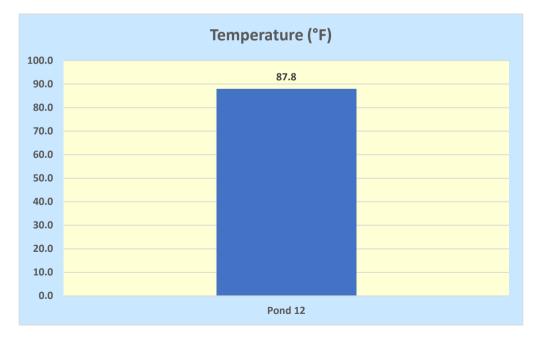




Windstar Reuse Pond (Pond 12) - Water Tests Data - June 22nd, 2022



A measurement of the number of dissolved ions in the water.



A measurement of the surface temperature.