



SOIL AND WATER CONSULTING

Corey M. Angelo
Consultant

848.225.5115
corey@soilandwaterconsulting.com

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Re: Summer 2018 Visit

Dear Jake,

The data on this round looked good from a stand-point of few deficiencies. Manganese still lags and we have discussed ways to help that along over time. The Bicarbonates are increasing on the water samples as well as where we measure the soil bicarbonate level on the Saturated Paste Analysis. Again, over time, they will make the soil harder to penetrate and nutrients will be less available. If you cannot aerify tees, fairways and rough due to golf play, the situation will get worse. You may not see what we would consider “direct effects” from the bicarbonate levels in the water and soil, but there will be damage to the turf. It may show up as increased dry spots on mounds or even weaker looking turf that could be considered fertility issues. What I am seeing more in the golf industry, is less cultural practices such as verti-cutting, aerification and treating water sources because of budget constraints or the need to not disrupt play. (which are actually the same issue) The course is not that old and with housing starting in the very near future now is the time, in my opinion, to set a standard at Coyote Springs that will carry on for years. If water is your #1 input, then it stands to reason to make it as good as it can be. If you don't, then not only will the above things happen, but you will need to spend additional money to fix the problems. Also, when bicarbonates tie up nutrients it means that fertilizers must be over applied to compensate for that. So, from a budget stand-point it is six one way and a half dozen the other. For example, the regular soils tests says you have plenty of calcium and phosphorus. The Saturated Paste test says that they are lacking in plant availability. (which is all that matters) The reason you lack those nutrients in soil solution, and thus plant availability, is because the bicarbonates bind them in the soil. If you have a lower pH and bicarbonate water, that bond is loosened and the nutrients are available.

As you have time, let's go over the details of the report together and see how things are since my visit.

Sincerely,
Corey Angelo
Owner
Soil and Water Consulting