



IRRIGATION WATER



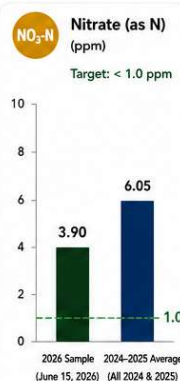
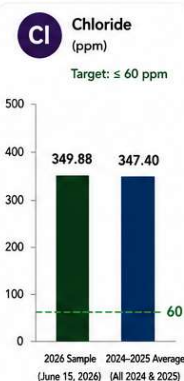
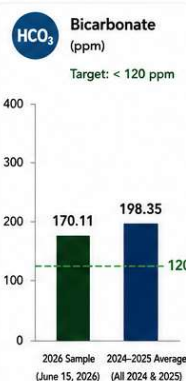
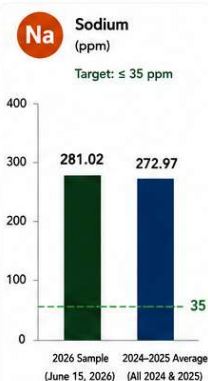
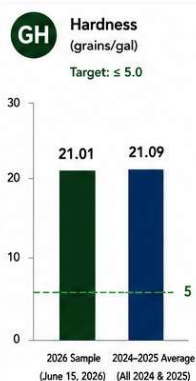
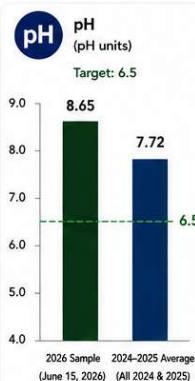
LEGACY GOLF CLUB IRRIGATION WATER QUALITY COMPARISON 2026 Sample vs. 2024-2025 Average



DATE OF VISIT:
June 15, 2026

2026 Sample
(June 15, 2026)

2024-2025 Average
(All 2024 & 2025 Samples)



SUMMARY INSIGHTS

- ↑ **pH**
Higher in 2026 and above the 6.5 target.
- ↔ **Hardness**
Similar to the historical average and well above the 5.0 grains/gal target.
- ↑ **Sodium**
Higher in 2026 and well above the 35 ppm target.
- ↑ **Bicarbonate**
Lower in 2026 but still above the 120 ppm target.
- ↑ **Chloride**
Slightly higher in 2026 and well above the 60 ppm target.
- ↓ **Nitrate (as N)**
Lower in 2026 but still above the 1.0 ppm target.

BENCHMARK TARGETS

pH: 6.5
Hardness: ≤ 5.0 grains/gal
Sodium: ≤ 35 ppm
Bicarbonate: < 120 ppm
Chloride: ≤ 60 ppm
Nitrate (as N): < 1.0 ppm

PARAMETER	TARGET / BENCHMARK	2026 SAMPLE (June 15, 2026)	2024-2025 AVERAGE (All 2024 & 2025 Samples)	CHANGE	CHANGE (%)	COMPARISON
pH pH (pH units)	6.5	8.65	7.72	+0.93	+12.05%	↑ Higher (Above Target)
GH Hardness (grains/gal)	≤ 5.0	21.01	21.09	-0.08	-0.38%	↔ Similar (Above Target)
Na Sodium (ppm)	≤ 35 ppm	281.02	272.97	+8.05	+2.95%	↑ Higher (Above Target)
HCO₃ Bicarbonate (ppm)	< 120 ppm	170.11	198.35	-28.24	-14.23%	↓ Lower (Still Above Target)
Cl Chloride (ppm)	≤ 60 ppm	349.88	347.40	+2.48	+0.71%	↑ Higher (Above Target)
NO₃-N Nitrate (as N) (ppm)	< 1.0 ppm	3.90	6.05	-2.15	-35.54%	↓ Lower (Still Above Target)

IRRIGATION WATER QUALITY BENCHMARKS

pH 6.5

GH ≤ 5.0
grains/gal

Na ≤ 35 ppm

HCO₃ < 120 ppm

Cl ≤ 60 ppm

NO₃-N < 1.0 ppm

All results are averages of irrigation
water samples for each respective period.

- Henderson area reclaimed water is very harsh. It is well over any acceptable level in almost all the main constituents in the water.
- It is a depositing water. This all ends up in your soil. Anywhere irrigation coverage is poor, I often see where these things tend to build up in the soil in those areas specifically. This water can also lead to compaction and high traffic areas.



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TEES



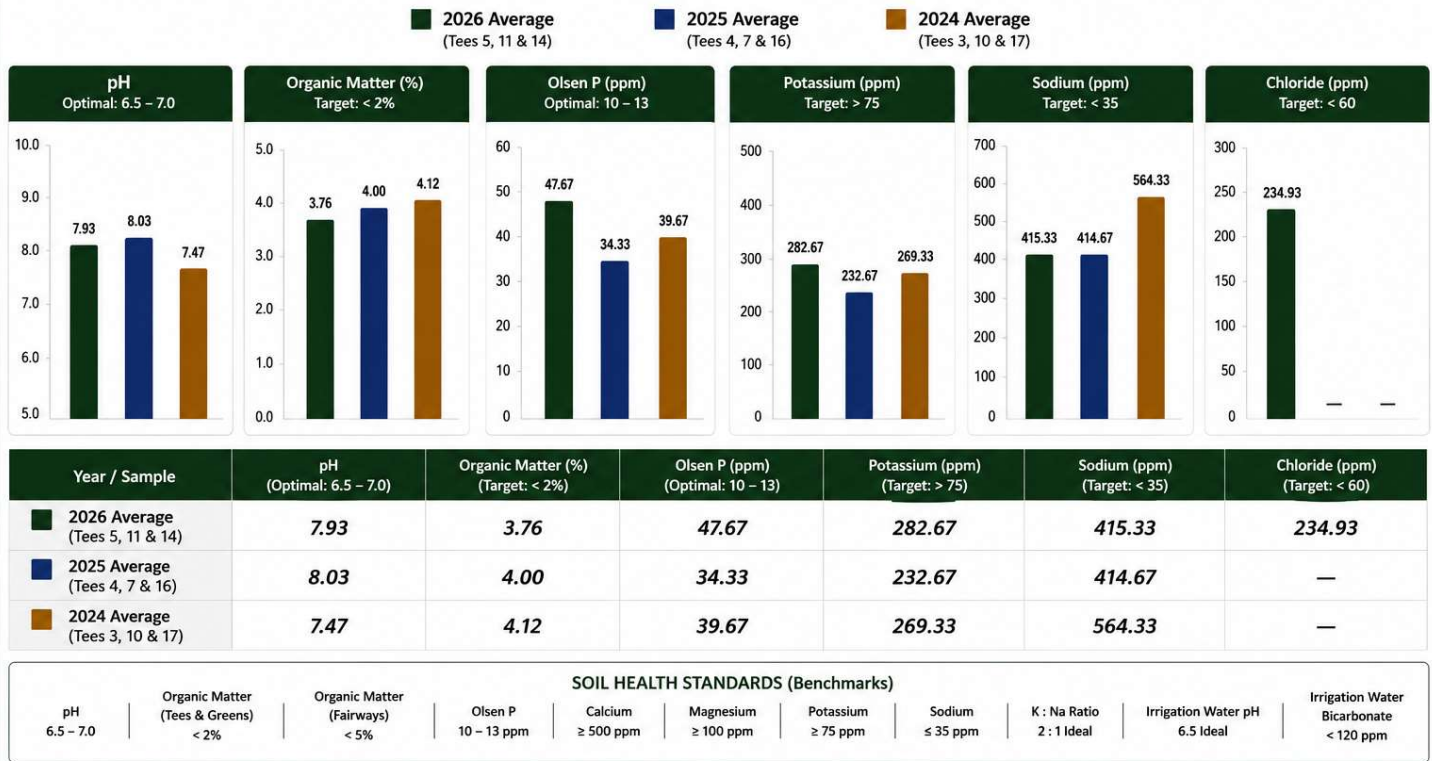
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TEE SOIL ANALYSIS SUMMARY

Average Results by Year



Visit Date:
Monday, June 15, 2026



Note: Soil test results are from samples collected on the dates shown.
Results represent laboratory analysis of the tee samples.

- These charts will show my visits that were all made in June. I did make one other visit in the Fall of 2023. However, it is most accurate to compare season to season.
- Although your nutrient levels are either acceptable or excessive, you'll note here that sodium is nearly double what potassium is. It should be the other way around, at least.



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FAIRWAYS



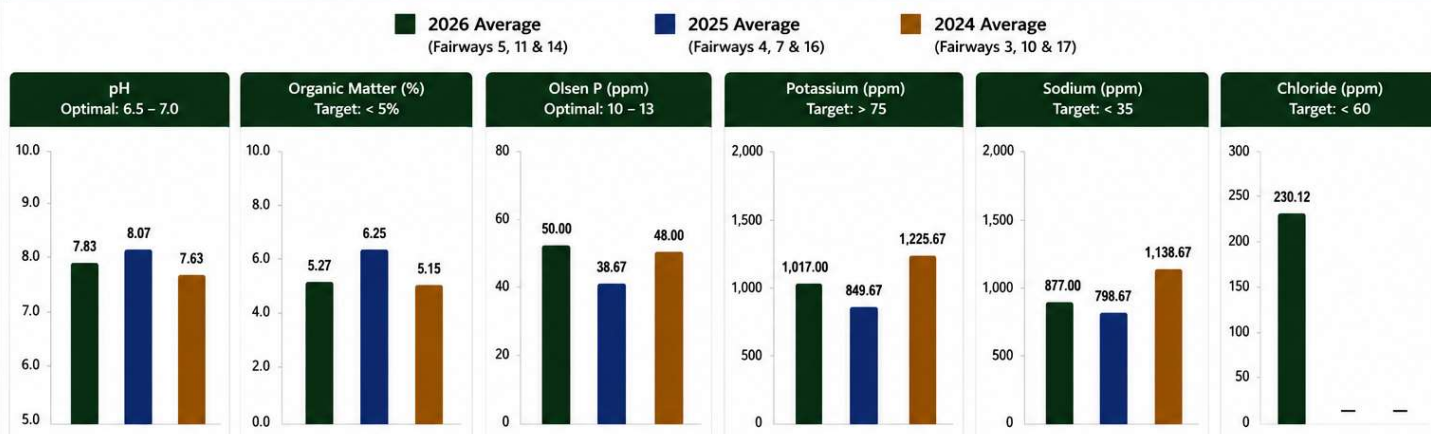
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FAIRWAY SOIL ANALYSIS SUMMARY

Average Results by Year



Visit Date:
Monday, June 15, 2026



Year / Sample	pH (Optimal: 6.5 - 7.0)	Organic Matter (%) (Target: < 5%)	Olsen P (ppm) (Optimal: 10 - 13)	Potassium (ppm) (Target: > 75)	Sodium (ppm) (Target: < 35)	Chloride (ppm) (Target: < 60)
2026 Average (Fairways 5, 11 & 14)	7.83	5.27	50.00	1,017.00	877.00	230.12
2025 Average (Fairways 4, 7 & 16)	8.07	6.25	38.67	849.67	798.67	—
2024 Average (Fairways 3, 10 & 17)	7.63	5.15	48.00	1,225.67	1,138.67	—

SOIL HEALTH STANDARDS (Benchmarks)

pH 6.5 - 7.0	Organic Matter (Tees & Greens) < 2%	Organic Matter (Fairways) < 5%	Olsen P 10 - 13 ppm	Calcium ≥ 500 ppm	Magnesium ≥ 100 ppm	Potassium ≥ 75 ppm	Sodium ≤ 35 ppm	K : Na Ratio 2 : 1 Ideal	Irrigation Water pH 6.5 Ideal	Irrigation Water Bicarbonate < 120 ppm
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Note: Soil test results are from samples collected on the dates shown.
Results represent laboratory analysis of the fairway samples.

- I do notice an increase in the Bermuda grass population density. I think a lot of your work in the past couple of years with the irrigation system helps that.
- For example, on the native soil, having more consistent irrigation cycles, and better coverage, seems to at least keep the sodium to a level where it doesn't outcompete the potassium



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GREENS



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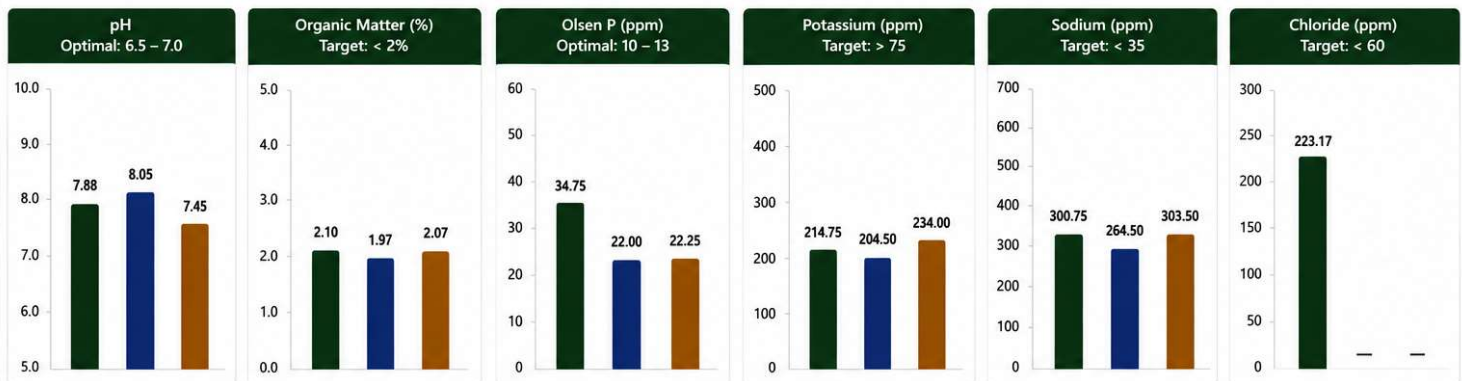
GREEN SOIL ANALYSIS SUMMARY

Average Results by Year



Visit Date:
Monday, June 15, 2026

2026 Average (Greens 5, 11, 14 & 15) 2025 Average (Greens 4, 6, 7 & 16) 2024 Average (Greens 2, 3, 10 & 17)



Year / Sample	pH (Optimal: 6.5 - 7.0)	Organic Matter (%) (Target: < 2%)	Olsen P (ppm) (Optimal: 10 - 13)	Potassium (ppm) (Target: > 75)	Sodium (ppm) (Target: < 35)	Chloride (ppm) (Target: < 60)
2026 Average (Greens 5, 11, 14 & 15)	7.88	2.10	34.75	214.75	300.75	223.17
2025 Average (Greens 4, 6, 7 & 16)	8.05	1.97	22.00	204.50	264.50	—
2024 Average (Greens 2, 3, 10 & 17)	7.45	2.07	22.25	234.00	303.50	—

SOIL HEALTH STANDARDS (Benchmarks)

pH 6.5 - 7.0	Organic Matter (Tees & Greens) < 2%	Organic Matter (Fairways) < 5%	Olsen P 10 - 13 ppm	Calcium ≥ 500 ppm	Magnesium ≥ 100 ppm	Potassium ≥ 75 ppm	Sodium ≤ 35 ppm	K : Na Ratio 2 : 1 Ideal	Irrigation Water pH 6.5 Ideal	Irrigation Water Bicarbonate < 120 ppm
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Note: Soil test results are from samples collected on the dates shown.
Results represent laboratory analysis of the green samples.

- When you think about the numbers you just saw on the fairways and tees, you can see how differently the greens are in their levels because they can drain water.
- On the greens I would recommend monthly applications of gypsum, followed by 0-0-50. This will help keep the sodium down and increase the potassium, giving the plant a better ability to recover and handle the heat of summer.



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SUMMARY

- ❑ Irrigation system reliability remains the primary agronomic challenge on the property. While conditions have become more manageable during Peter's second year, recurring infrastructure issues continue to influence turf performance and consistency.
- ❑ Multiple mainline breaks during the 2025 overseed period disrupted water delivery and contributed to uneven turf conditions entering spring transition. More recently, pump station failures limited irrigation capacity until repairs were completed within the past several days.
- ❑ Fairway and tee rooting was strong throughout the property, with root depths extending beyond 6 inches, indicating healthy rootzone conditions and good resilience despite irrigation-related challenges. Green rooting averaged approximately 3 inches.
- ❑ The course was notably dry at the time of the visit; however, the reduced moisture environment appears to be benefiting the transition from ryegrass to Bermuda grass by accelerating ryegrass decline and promoting Bermuda recovery.
- ❑ Green No. 15 exhibited soil temperatures averaging 72°F and a uniform rootzone profile. Shear strength readings averaged 15 in healthy turf areas but dropped below 10 in locations impacted by *Poa trivialis* decline, confirming reduced root mass and diminished surface stability in affected areas.
- ❑ Several recent equipment investments, including new greens mowers, have strengthened maintenance capabilities and should support improved consistency in playing conditions and operational efficiency.
- ❑ With daytime temperatures reaching 105°F, restoring irrigation uniformity and maintaining adequate moisture in weakened turf areas will be critical to preserving Bermuda recovery and minimizing additional summer stress.



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