IRRIGATION WATER

JUMPING BROOK COUNTRY CLUB
IRRIGATION WATER QUALITY – AVERAGE COMPARISON

Comparison of Averages: 2016–2020 vs 2021–2026

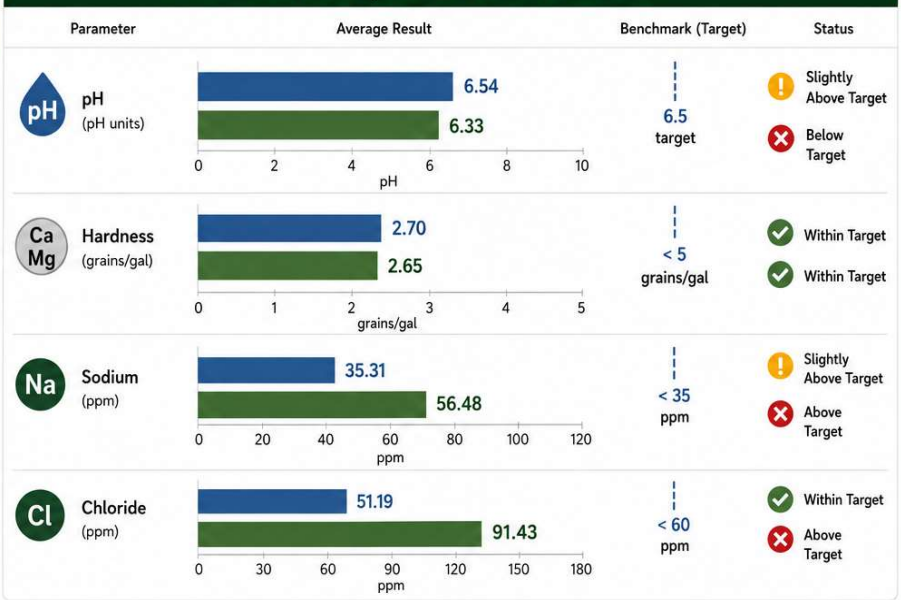
Visit Date: May 7, 2026

SOURCE DATA – INDIVIDUAL SAMPLES

Date	Source	pH	Hardness (grains/gal)	pHc	Sodium (ppm)	Chloride (ppm)
5/3/2016	Pond	6.26	2.99	9.04	29.05	38.30
5/25/2017	Hole #6	6.50	1.80	8.96	17.21	18.72
4/24/2018	Hole #10	6.82	3.34	8.94	85.81	137.87
4/23/2019	Hole #18	6.65	2.99	8.94	28.71	39.83
5/7/2020	#11	6.47	2.37	9.01	17.77	23.15
5/17/2022	#11	6.40	2.47	9.06	32.57	51.40
5/10/2023	Pond	6.27	1.94	9.23	28.41	42.72
5/15/2024	Pond	6.16	2.63	9.00	47.06	77.44
5/7/2025	Pond	6.86	2.82	9.31	67.03	117.27
5/18/2026	Hole #10	5.96	3.39	9.82	105.34	170.33

LEGEND
- 2016–2020 Average (n = 5 samples)
- 2021–2026 Average (n = 5 samples)

IRRIGATION WATER QUALITY – AVERAGE COMPARISON



SUMMARY

- Average pH decreased slightly from 6.54 to 6.33, moving from slightly above target to below target.
- Average hardness remained stable and within the acceptable range in both periods.
- Average sodium increased from 35.31 ppm to 56.48 ppm.
- Average chloride increased from 51.19 ppm to 91.43 ppm.

BENCHMARKS USED: pH = 6.5 (target) | Bicarbonate < 120 ppm | Hardness < 5 grains/gal | Sodium < 35 ppm | Chloride < 60 ppm

Note: Averages are calculated from the samples shown in the table.

- This sample was collected at the spot where the pond on #11 drains into the creek on right of #18.
- There is a slight rise in chloride in that spot. Nothing to be concerned with but I will keep an eye on it.
- The water is one step away from rain water.

TEES

JUMPING BROOK COUNTRY CLUB

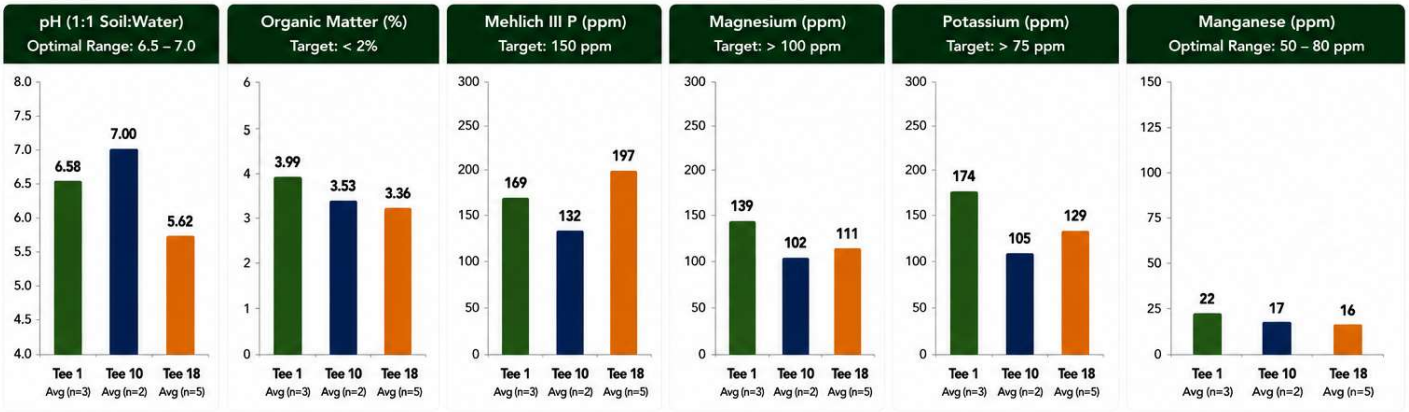
SOIL ANALYSIS SUMMARY

TEE SOIL SAMPLES – ZONE COMPARISON (AVERAGES)

VISIT DATE: May 7, 2026

Course: Jumping Brook Country Club

Feature: Tee



Parameter	Optanal Mange / Target	Tee 1 Average (n=3)	Tee 10 Average (n=2)	Tee 18 Average (n=5)	Highest (Best)	Lowest (Least Desirable)	Comparison
pH (1:1 Soil:Water)	6.5 – 7.0	6.58	7.00	5.62	Tee 10 (7.00)	Tee 18 (5.62)	Tee 1 & 10 In Range; Tee 18 Below
Organic Matter (%)	< 2%	3.99	3.53	3.36	Tee 1 (3.99)	Tee 18 (3.36)	All Above Target
Mehlich III P (ppm)	150 ppm	169	132	197	Tee 18 (197)	Tee 10 (132)	Tee 1 & 18 At/Above; Tee 10 Below
Magnesium (ppm)	> 100 ppm	139	102	111	Tee 1 (139)	Tee 10 (102)	All Above Target
Potassium (ppm)	> 75 ppm	174	105	129	Tee 1 (174)	Tee 10 (105)	All Above Target
Manganese (ppm)	50 – 80 ppm	22	17	16	None In Range	Tee 18 (16)	All Below Optimal Range

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

- This chart shows the averages of the 3 tees over several years. The pH has fluctuated but I believe it is based on the Spring that I sampled. Rain and snow does change how you start the season.
- The tees are in good condition with regards to soil chemistry.
- The OM% is stable but higher than I like to see it. The < 2% guideline is more my experience of what I see on firm tee surfaces.

FAIRWAYS

JUMPING BROOK COUNTRY CLUB

SOIL ANALYSIS SUMMARY

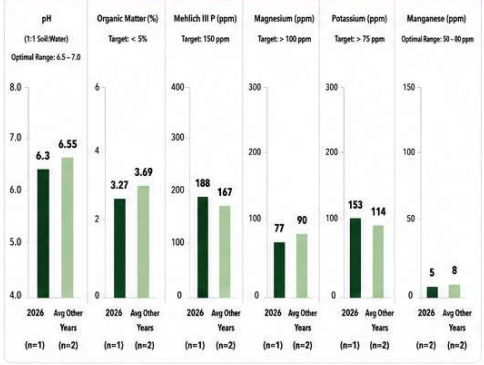
FAIRWAY SOIL SAMPLES – ZONE COMPARISON

VISIT DATE: May 7, 2026

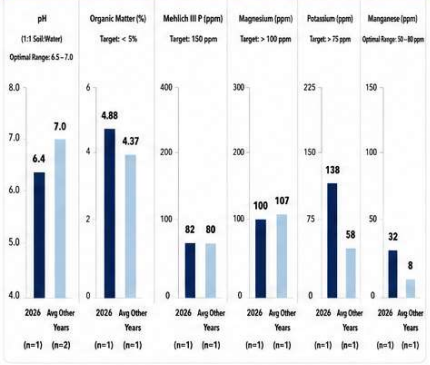
Course: Jumping Brook Country Club

Feature: Fairway

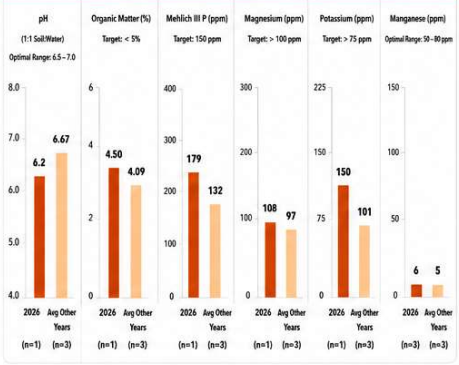
FAIRWAY 1 – 2026 vs AVERAGE OF OTHER YEARS



FAIRWAY 10 – 2026 vs AVERAGE OF OTHER YEARS



FAIRWAY 18 – 2026 vs AVERAGE OF OTHER YEARS



Parameter	Optimal Range / Target	FAIRWAY 1 – 2026 vs AVERAGE OF OTHER YEARS			FAIRWAY 10 – 2026 vs AVERAGE OF OTHER YEARS			FAIRWAY 18 – 2026 vs AVERAGE OF OTHER YEARS			Highest (Best)	Lowest (Least Desirable)	Comparison
		2026 (n=1)	Avg Other Years (n=2)	Difference (2026 – Avg)	2026 (n=1)	Avg Other Years (n=1)	Difference (2026 – Avg)	2026 (n=1)	Avg Other Years (n=3)	Difference (2026 – Avg)			
pH (1:1 Soil:Water)	6.5 – 7.0	6.3	6.55	-0.25	6.4	7.0	-0.60	6.2	6.67	-0.47	F10 Other (7.0)	F18 2026 (6.2)	All In Range
Organic Matter (%)	< 5%	3.27	3.69	-0.42	4.88	4.37	+0.51	4.50	4.09	+0.41	F1 2026 (3.27)	F10 2026 (4.88)	All Below Target
Mehlich III P (ppm)	150 ppm	188	167	+21	82	80	+2	179	132	+47	F1 2026 (188)	F10 Other (80)	F1 & F18 Above Target; F10 Below Target
Magnesium (ppm)	> 100 ppm	77	90	-13	100	107	-7	108	97	+11	F18 2026 (108)	F1 2026 (77)	F10 & F18 At/Above; F1 Below Target
Potassium (ppm)	> 75 ppm	153	114	+39	138	58	+80	150	101	+49	F1 2026 (153)	F10 Other (58)	All Above Target
Manganese (ppm)	50 – 80 ppm	5	8	-3	32	8	+24	6	5	+1	F10 2026 (32)	F1 2026 (5)	All Below Optimal Range

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

- The chart may seem a little “busy” but your course has distinct pockets of soil. For example, I collected #18 only in the top area. If I sample the bentgrass bottom fairway, the numbers would be different.
- Currently, you have been able to keep these 3 holes at a similar pH which will help maintain nutrient availability evenly across these areas.
- Limestone applications to the fairways may be in the next year or so if the trend continues.

GREENS

JUMPING BROOK COUNTRY CLUB

SOIL ANALYSIS SUMMARY

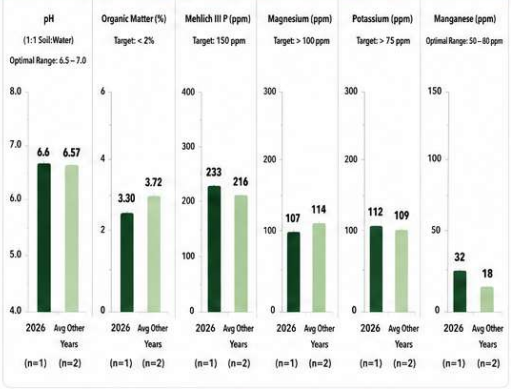
GREEN SOIL SAMPLES – ZONE COMPARISON

VISIT DATE: May 7, 2026

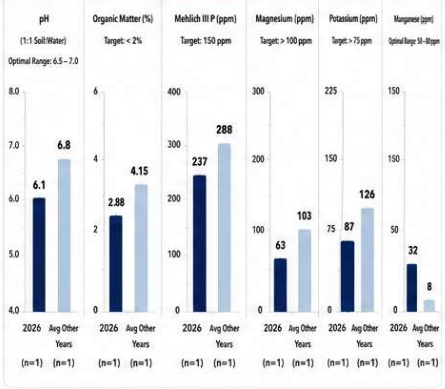
Course: Jumping Brook Country Club

Feature: Green

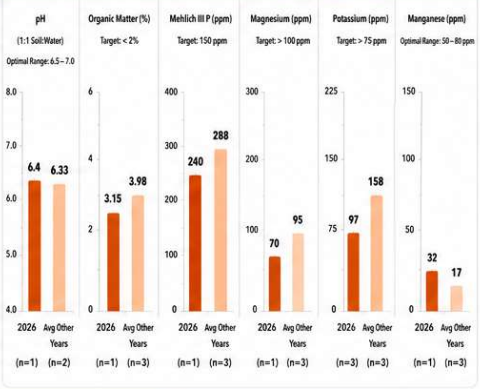
GREEN 1 – 2026 vs AVERAGE OF OTHER YEARS



GREEN 10 – 2026 vs AVERAGE OF OTHER YEARS



GREEN 18 – 2026 vs AVERAGE OF OTHER YEARS



Parameter	Optimal Range / Target	GREEN 1 – 2026 vs AVERAGE OF OTHER YEARS			GREEN 10 – 2026 vs AVERAGE OF OTHER YEARS			GREEN 18 – 2026 vs AVERAGE OF OTHER YEARS			Highest (Best)	Lowest (Least Desirable)	Comparison
		2026 (n=1)	Avg Other Years (n=2)	Difference (2026 – Avg)	2026 (n=1)	Avg Other Years (n=1)	Difference (2026 – Avg)	2026 (n=1)	Avg Other Years (n=3)	Difference (2026 – Avg)			
pH (1:1 Soil:Water)	6.5 – 7.0	6.6	6.57	+0.03	6.1	6.8	-0.70	6.4	6.33	+0.07	G10 Other (6.8)	G10 2026 (6.1)	All In Range
Organic Matter (%)	< 2%	3.30	3.72	-0.42	2.88	4.15	-1.27	3.15	3.98	-0.83	G10 Other (4.15)	G10 2026 (2.88)	All Above Target
Mehlich III P (ppm)	150 ppm	233	216	+17	237	288	-51	240	288	-48	G18 Other (288)	G1 Other (216)	All Above Target
Magnesium (ppm)	> 100 ppm	107	114	-7	63	103	-40	70	95	-25	G1 Other (114)	G10 2026 (63)	Some Below Target
Potassium (ppm)	> 75 ppm	112	109	+3	87	126	-39	97	158	-61	G18 Other (158)	G10 2026 (87)	All Above Target
Manganese (ppm)	50 – 80 ppm	32	18	+14	32	8	+24	32	17	+15	G1 & G10 2026 (32)	G10 Other (8)	All Below Optimal Range

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

- The best note from this chart is the OM% is lessening. The verti-cutting the previous 2 years is paying off. Continue to dilute the top 2-3" with sand.
- Phosphorus levels remain high.
- Only green #10 needs magnesium. 0-0-22 or Pro-mag 36 in one application will be enough.
- Manganese is increasing. Maybe 1 more year of what you have been applying and it can be re-evaluated then.

ROUGH

JUMPING BROOK COUNTRY CLUB

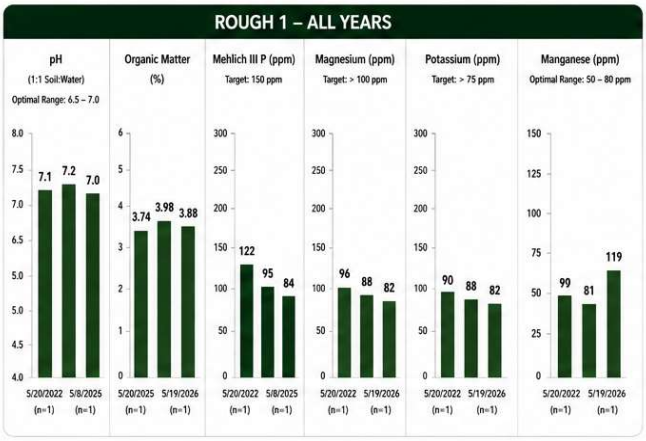
SOIL ANALYSIS SUMMARY

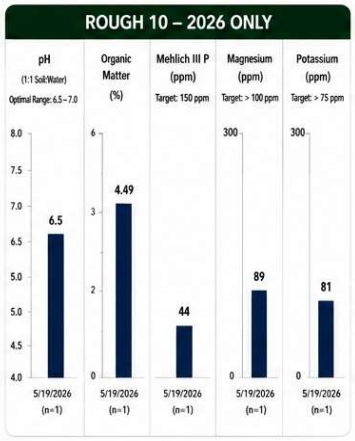
ROUGH SOIL SAMPLES – ZONE COMPARISON

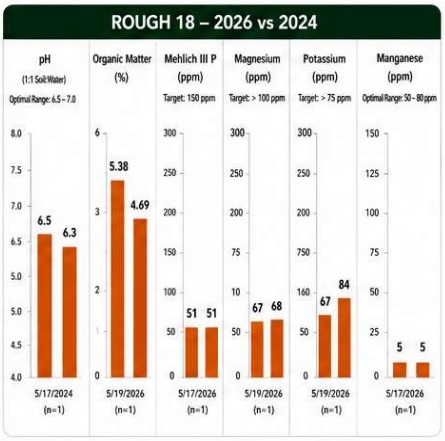
VISIT DATE: May 7, 2026

Course: Jumping Brook Country Club

Feature: Rough







Parameter	Optimal Range / Target	ROUGH 1 – All Years (Average) 2022 5/20/2022 (n=1)	2025 5/8/2025 (n=1)	2026 5/19/2026 (n=1)	Average (n=3)	ROUGH 10 – 2026 5/19/2026 (n=1)	ROUGH 18 – 2024 vs 2026 2024 5/17/2024 (n=1)	2026 5/19/2026 (n=1)	Highest (Best)	Lowest (Least Desirable)	Comparison
pH (1:1 Soil:Water)	6.5 – 7.0	7.1	7.2	7.0	7.1	6.5	6.5	6.3	R1 2025 (7.2)	R18 2026 (6.3)	R1 In Range; R18 2026 Below
Organic Matter (%)	--	3.74	3.98	3.88	3.87	4.49	5.38	4.69	R1 2022 (3.74)	R18 2024 (5.38)	All Above Target
Mehlich III P (ppm)	150 ppm	122	95	84	100	44	51	51	R1 2022 (122)	R10 2026 (44)	R1 At/Below; R10 & R18 Below
Magnesium (ppm)	> 100 ppm	96	88	82	89	89	67	68	None >100	R18 2024 (67)	All Below Target
Potassium (ppm)	> 75 ppm	90	81	119	97	81	67	84	R1 2026 (119)	R18 2024 (67)	R1 & R10 At/Above; R18 2024 Below
Manganese (ppm)	50 – 80 ppm	6	9	4	6	4	5	5	None In Range	R1 2026 (4)	All Below Optimal Range

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

- It has been 4 years of collecting data in the rough. The pH is now in range and you can focus on other nutrient deficiencies.
- On holes #10 and #18 an application of dolomitic limestone would adjust the pH and address the needed magnesium.
- Applying an Earthworks containing Phosphorus (either through the poultry manure or enhanced with P) will address the only other deficiencies at this time.

SUMMARY

- Air temperature during the visit was projected to reach **64°F**, while soil temperatures averaged **55°F**, supporting gradual spring recovery and moderate root activity across the property.

- No. 1 green profile near the planned back expansion showed a relatively clean upper rootzone with limited visible layering and acceptable organic matter accumulation. No. 18 green profile displayed darker lower-profile conditions and greater moisture retention deeper in the rootzone.

- Green firmness and compaction levels were generally moderate. No. 1 green recorded a compaction reading of **265 at 8 inches** with shear strength at **20**. No. 18 green measured **235** on the compaction meter, with shear strength readings of **18 in stronger areas** and **15 in weaker sections**, indicating variable surface stability.

- Fairway compaction levels varied significantly between locations. Fairway No. 10 measured **404**, indicating substantially denser soil conditions, while Fairway No. 18 measured **259 at 4 inches**, reflecting more moderate restriction levels.

- Fairway and rough rooting extended beyond **6 inches**, reflecting healthy rooting depth and generally favorable soil conditions outside greens environments.

- Continue light venting and controlled moisture management on greens to improve oxygen exchange and strengthen weaker surface areas. Prior to the planned No. 1 green expansion, confirm drainage tie-ins and closely match rootzone materials to maintain long-term consistency in firmness and moisture performance.

Corey Angelo | Owner

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