



Client: Jumping Brook Country Club
Fall 2023 Report

	<u>9/11/20</u>	<u>9/22/23</u>
Humidity/Air Temperature	80%/75°	70%/80°
Greens Temperature	(avg)75°	(avg)59.3°
Fairways Temperature	(avg)76.25°	(avg)63.7°

WATER	Acceptable Range For Water Sample	Pond 9/11/20	Pond 9/22/23
EC	<2.25 mmhos/cm	0.19	0.21
Sodium		24.74	23.68
Calcium	20 - 60 ppm	5.28	10.22
Magnesium	10 - 25 ppm	1.34	1.74
Potassium	5 - 20 ppm	10.63	3.31
Sulfur	30 - 90 ppm	42.12	14.27
Bicarbonate	<120 ppm	10.89	34.38
Boron	<0.67 ppm	<0.05	<0.05
Chloride	<177 ppm	33.19	25.70



SOIL AND WATER CONSULTING

ROUGH	Acceptable Range For Standard Soil Sample	Between 8&9 3/3/22	Between 7&8 3/3/22	Between 8&9 5/12/22	4,14,17(avg) 5/12/22	11,13,15(avg) 9/22/23
pH	6.3-6.5	4.60	4.70	5.30	5.88	5.60
Organic Matter (Humus)	2 - 3%	6.56	5.61	5.08	4.71	4.45
Sulfur	50 - 100 ppm	11.00	9.00	12.00	20.44	20.00
Mehlich III - Phosphorus	350 lbs/acre	334.00	256.00	463.00	325.00	246.00
Calcium	68%	29.70	30.15	46.47	58.22	50.42
Magnesium	15%	6.28	7.85	7.65	12.97	11.23
Potassium	5%	1.27	1.04	1.68	2.75	2.72
Sodium	<2%	1.55	1.97	1.42	1.56	2.44
Boron	1 - 1.5 ppm	0.34	0.48	0.22	0.28	0.58
Iron	120 ppm	136.00	511.00	420.00	369.78	367.33
Manganese	50 ppm	6.00	5.00	6.00	9.78	5.00

TEE	Acceptable Range For Standard Soil Sample	11,13,15(avg) 9/11/20	11,13,15(avg) 9/22/23
Organic Matter (Humus)	2 - 3%	1.96	3.06
Sulfur	50 - 100 ppm	15.67	16.33
Mehlich III - Phosphorus	350 lbs/acre	685.67	810.67
Calcium	68%	70.12	67.73
Magnesium	15%	11.62	12.87
Potassium	5%	4.94	3.56
Sodium	<2%	3.09	2.39
Boron	1 - 1.5 ppm	0.53	0.60
Iron	120 ppm	379.00	386.00
Manganese	50 ppm	28.67	28.67

FAIRWAY	Acceptable Range For Standard Soil Sample	Low 8,13,17(avg) 9/11/20	Low 8,13,17(avg) 9/22/23
Organic Matter (Humus)	2 - 3%	4.21	3.32
Sulfur	50 - 100 ppm	23.00	32.33
Mehlich III - Phosphorus	350 lbs/acre	687.00	662.67
Calcium	68%	69.77	67.78
Magnesium	15%	9.40	10.79
Potassium	5%	4.09	3.73
Sodium	<2%	2.23	2.62
Boron	1 - 1.5 ppm	0.52	0.63
Iron	120 ppm	375.67	462.67
Manganese	50 ppm	10.67	10.00

GREENS	Acceptable Range For Standard Soil Sample	11,13,15(avg) 9/11/20	11,13,15(avg) 9/22/23
Organic Matter (Humus)	2 - 3%	3.05	2.91
Sulfur	50 - 100 ppm	22.00	13.00
Mehlich III - Phosphorus	350 lbs/acre	1,424.33	1,342.00
Calcium	68%	73.19	74.33
Magnesium	15%	8.10	8.61
Potassium	5%	3.49	3.87
Sodium	<2%	1.72	1.84
Boron	1 - 1.5 ppm	0.60	0.65
Iron	120 ppm	363.67	413.33
Manganese	50 ppm	14.33	21.00

TEE	Acceptable Range For Saturated Paste Sample	13,15(avg) 9/11/20	13,15(avg) 9/22/23
Nitrate-Cool season	5 - 10 ppm	<0.55	<0.5
Phosphorus	2 - 10 ppm	0.31	1.09
Potassium	40 - 100 ppm	28.62	24.88
Calcium	60 - 200 ppm	25.83	19.76
Magnesium	20 - 70 ppm	5.15	5.05
Sodium	0 - 30 ppm	21.93	18.86
Soluble Salts	<1,920 ppm	226.50	189.00
Bicarbonate	<60 ppm	77.81	40.72
Chloride	<1,000 ppm	38.50	27.50
SAR	<4%	1.05	0.97

FAIRWAY	Acceptable Range For Saturated Paste Sample	13,17(avg) 9/11/20	13,17(avg) 9/22/23
Nitrate-Cool season	5 - 10 ppm	5.70	<4.2
Phosphorus	2 - 10 ppm	0.83	2.69
Potassium	40 - 100 ppm	36.43	27.36
Calcium	60 - 200 ppm	33.13	17.44
Magnesium	20 - 70 ppm	5.98	3.75
Sodium	0 - 30 ppm	19.57	12.71
Soluble Salts	<1,920 ppm	269.00	158.50
Bicarbonate	<60 ppm	60.40	43.32
Chloride	<1,000 ppm	47.50	27.50
SAR	<4%	0.86	0.75

GREENS	Acceptable Range For Saturated Paste Sample	13,15(avg) 9/11/20	13,15(avg) 9/22/23
Nitrate - Bentgrass/Poa	1-3 ppm	3.85	4.05
Phosphorus	2 - 7 ppm	1.58	3.42
Potassium	25-40 ppm	24.09	19.58
Calcium	50- 75 ppm	23.24	12.80
Magnesium	15-30 ppm	3.69	2.53
Sodium	0 - 30 ppm	14.88	11.08
Soluble Salts	<1,000 ppm	190.50	111.50
Bicarbonate	<60 ppm	19.19	26.79
Chloride	<200 ppm	22.00	12.00
SAR	<4%	0.76	0.74



Nutrient Deficiencies

		pH	Ca	K	Mn
TEE	11	6.5	2730	105	15
TEE	13	6.5	2342	117	33
TEE	15	6.3	1286	86	38
FAIRWAY	LOWER 8	6.2	2332	71	9
FAIRWAY	13	6.2	1734	133	12
FAIRWAY	17	6.6	2292	124	9
GREEN	11	6.5	3324	158	19
GREEN	13	6.6	2194	128	26
GREEN	15	6.6	2334	108	18
ROUGH	11	5.4	1072	53	6
ROUGH	13	5.8	1832	76	5
ROUGH	15	5.6	1186	81	4

Calcium can be added in the form of Hi-Cal Limestone at a rate of 2,000 pounds of product per acre in November and March in Roughs.

Potassium can be added in the form of 0-0-50 at a rate of 100 pounds of product per acre one time in the next few months in deficient areas. (red numbers)

Manganese can be added in the form of Manganese Oxide at a rate of 3 pounds of product per 1,000 sq ft in October, November and December.

Comments and Next Level Cultural Practices

- Continue applying Lime to the roughs around the course. The end goal is to be like the fairways in pH
- Manganese levels have increased on the greens but not enough to out pace the Fairy Ring on several greens. Now is a great time to apply and would help with color into Winter
- One more verti-cut on the greens as soon as possible