



Client: Heritage Golf Club
Spring 2025 Report

	<u>5/12/22</u>	<u>5/2/25</u>
Humidity/Air Temperature	80%/60°	55%/65°
Green Temperature	(avg)56.4°	(avg)62°
Fairway Temperature	(avg)56.7°	(avg)60°

WATER	Acceptable Range For Water Sample	Irrigation Pond <u>5/12/22</u>	Irrigation Pond <u>5/2/25</u>
EC	<2.25 mmhos/cm	0.25	0.49
Sodium		32.57	67.03
Calcium	20 - 60 ppm	11.16	12.04
Magnesium	10 - 25 ppm	2.57	3.69
Potassium	5 - 20 ppm	2.40	2.19
Sulfur	30 - 90 ppm	16.03	21.44
Bicarbonate	<120 ppm	27.36	10.73
Boron	<0.67 ppm	<0.05	<0.05
Chloride	<177 ppm	51.40	117.27



SOIL AND WATER CONSULTING

ROUGHS	Acceptable Range For Standard Soil Sample	4,14,17(avg) <u>5/12/22</u>	1,14,17(avg) <u>5/2/25</u>
pH	6.3-6.5	5.93	6.50
Organic Matter (Humus)	2 - 3%	4.54	4.52
Sulfur	50 - 100 ppm	21.33	19.33
Mehlich III - Phosphorus	350 lbs/acre	325.00	284.00
Calcium	68%	59.56	75.95
Magnesium	15%	12.92	6.64
Potassium	5%	2.89	1.60
Sodium	<2%	1.58	1.35
Boron	1 - 1.5 ppm	0.29	0.58
Iron	120 ppm	364.33	333.00
Manganese	50 ppm	9.33	5.67

TEES	Acceptable Range For Standard Soil Sample	1,4,17 5/12/22	1,4,17 5/2/25
Organic Matter (Humus)	2 - 3%	3.88	3.55
Sulfur	50 - 100 ppm	30.33	13.00
Mehlich III - Phosphorus	350 lbs/acre	774.00	632.00
Calcium	68%	66.06	75.75
Magnesium	15%	13.79	12.44
Potassium	5%	5.04	3.98
Sodium	<2%	1.65	1.80
Boron	1 - 1.5 ppm	0.47	0.63
Iron	120 ppm	351.67	246.33
Manganese	50 ppm	27.00	42.33

FAIRWAYS	Acceptable Range For Standard Soil Sample	1,4,17 5/12/22	1,4,17 5/2/25
Organic Matter (Humus)	2 - 3%	3.97	4.09
Sulfur	50 - 100 ppm	27.67	18.67
Mehlich III - Phosphorus	350 lbs/acre	673.33	576.67
Calcium	68%	71.04	70.05
Magnesium	15%	11.92	10.04
Potassium	5%	4.35	2.47
Sodium	<2%	1.88	1.88
Boron	1 - 1.5 ppm	0.42	0.65
Iron	120 ppm	403.00	400.00
Manganese	50 ppm	6.33	6.67

GREENS	Acceptable Range For Standard Soil Sample	1,4,17 5/12/22	1,4,17 5/2/25
Organic Matter (Humus)	2 - 3%	4.16	3.12
Sulfur	50 - 100 ppm	28.67	19.33
Mehlich III - Phosphorus	350 lbs/acre	1,432.00	1,067.33
Calcium	68%	72.41	73.97
Magnesium	15%	10.24	7.94
Potassium	5%	3.55	2.52
Sodium	<2%	1.37	1.58
Boron	1 - 1.5 ppm	0.49	0.60
Iron	120 ppm	426.33	359.33
Manganese	50 ppm	13.67	34.00

TEES	Acceptable Range For Saturated Paste Sample	1,17(avg) 5/12/22	1,17(avg) 5/2/25
Nitrate-Cool season	5 - 10 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	1.04	1.69
Potassium	40 - 100 ppm	45.04	15.52
Calcium	60 - 200 ppm	38.50	17.07
Magnesium	20 - 70 ppm	9.83	3.66
Sodium	0 - 30 ppm	14.70	12.28
Soluble Salts	<1,920 ppm	253.50	173.50
Bicarbonate	<60 ppm	72.05	63.69
Chloride	<1,000 ppm	22.00	18.50
SAR	<4%	0.55	0.70

FAIRWAYS	Acceptable Range For Saturated Paste Sample	1,17(avg) 5/12/22	1,17(avg) 5/2/25
Nitrate-Cool season	5 - 10 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.64	1.93
Potassium	40 - 100 ppm	22.27	13.20
Calcium	60 - 200 ppm	25.92	13.41
Magnesium	20 - 70 ppm	5.18	2.65
Sodium	0 - 30 ppm	8.25	10.28
Soluble Salts	<1,920 ppm	144.67	142.50
Bicarbonate	<60 ppm	48.12	37.64
Chloride	<1,000 ppm	12.33	16.50
SAR	<4%	0.32	0.68

GREENS	Acceptable Range For Saturated Paste Sample	1,17(avg) 5/12/22	1,17(avg) 5/2/25
Nitrate - Bentgrass/Poa	1-3 ppm	1.65	<0.5
Phosphorus	2 - 7 ppm	1.27	2.70
Potassium	25-40 ppm	20.19	10.73
Calcium	50- 75 ppm	30.66	19.38
Magnesium	15-30 ppm	5.83	3.00
Sodium	0 - 30 ppm	13.06	11.75
Soluble Salts	<1,000 ppm	176.00	158.00
Bicarbonate	<60 ppm	18.80	31.20
Chloride	<200 ppm	6.50	8.50
SAR	<4%	0.57	0.66

Nutrient Deficiencies

		Mg	K	Mn
TEE	1	268	129	26
TEE	4	196	101	65
TEE	17	186	106	36
FAIRWAY	1	166	73	8
FAIRWAY	4	138	57	6
FAIRWAY	17	196	69	6
GREEN	1	176	76	21
GREEN	4	168	85	34
GREEN	17	120	76	47
ROUGH	1	176	81	9
ROUGH	4	100	36	5
ROUGH	17	134	46	3

Potassium/Magnesium can be added to the roughs in the form of 0-0-22 at a rate of 250 pounds of product per acre

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

Comments and Next Level Cultural Practices

- The Greens are the best they have been this time of year. Moving the aerification and adjusting what you did was a great decision and will pay off less stress through Summer.
- The projects on #1 and #8 came in good and look like they have been there for a while.
- Adding more cart path and adjusting #11 and #17 greens surround will be a nice upgrade. I think sodding green banks and bunker banks could be an ongoing thing to enhance the areas around the greens