



Client: DragonRidge Country Club
Summer 2025 Report

	<u>6/12/24</u>	<u>6/12/25</u>
Humidity/Air Temperature	7%/108°	10%/100°
Green Temperature	(avg)76°	(avg)75°
Fairway Temperature	(avg)81°	(avg)78°

WATER	Acceptable Range For Water Sample	Irrigation Water Direct Line #7 6/12/08	Irrigation Water Fairway #15 6/12/24	Irrigation Water Hole #6 6/12/25
pH	6.0-6.5	6.88	7.26	7.88
EC	<2.25 mmhos/cm	2.04	1.91	1.99
Sodium		277.20	258.48	288.09
Calcium	20 - 60 ppm	113.70	92.70	100.18
Magnesium	10 - 25 ppm	39.81	28.58	32.78
Potassium	5 - 20 ppm	28.61	19.52	21.18
Phosphorus	0.1 - 0.4 ppm	<0.20	3.87	2.37
Nitrate	5 - 50 ppm	5.32	8.26	4.51
Sulfur	30 - 90 ppm	409.20	300.37	280.64
Bicarbonate	<120 ppm	205.68	164.86	204.60
Boron	<0.67 ppm	0.55	0.31	0.07
Chloride	<177 ppm	381.10	357.95	335.48



SOIL AND WATER CONSULTING

TEE	Acceptable Range For Tissue Sample	6 6/12/25
Nitrogen	2.49%-4.56%	2.77
Phosphorus	0.26%-0.38%	0.32
Potassium	0.95% - 1.97%	0.63
Calcium	0.50%-0.90%	0.79
Magnesium	0.13%-0.16%	0.16
Sodium	622-1709 ppm	4,834.70

FAIRWAY	Acceptable Range For Tissue Sample	6 6/12/25
Nitrogen	2.49%-4.56%	4.80
Phosphorus	0.26%-0.38%	0.62
Potassium	0.95% - 1.97%	2.23
Calcium	0.50%-0.90%	0.74
Magnesium	0.13%-0.16%	0.34
Sodium	622-1709 ppm	6,753.80

GREENS	Acceptable Range For Tissue Sample	6,15(avg) 6/12/25
Nitrogen	3.0%-6.5%	3.78
Phosphorus	0.2%-0.55%	0.49
Potassium	0.86%-2.55%	2.01
Calcium	0.21%-0.50%	1.23
Magnesium	0.09%-0.22%	0.45
Sodium	506- 2264 ppm	5,482.20

TEES	Acceptable Range For Alkaline Soils Sample	3,12(avg) 6/12/24	6,15(avg) 6/12/25
Organic Matter (Humus)	2 - 3%	2.86	2.11
Sulfur	12 - 16 ppm	114.00	320.50
Olsen - Phosphorus	13 - 20 ppm	28.00	32.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,981.00	2,345.00
Magnesium	>7% base saturation or at least 200 lbs/acre	13.53%/247	14.01%/345
Potassium - TEC of 0 - 35	100 ppm	105.00	136.50
Manganese	>50 ppm	21.00	15.50

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	3,12(avg) 6/12/24	6,15(avg) 6/12/25
Organic Matter (Humus)	2 - 3%	1.97	2.32
Sulfur	12 - 16 ppm	109.50	132.00
Olsen - Phosphorus	13 - 20 ppm	27.50	72.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	2,347.00	2,293.00
Magnesium	>7% base saturation or at least 200 lbs/acre	13.27%/286	15.24%/358
Potassium - TEC of 0 - 35	100 ppm	116.00	150.00
Manganese	>50 ppm	20.50	21.00

GREENS	Acceptable Range For Alkaline Soils Sample	PG,3,12(avg) 6/12/24	6,15(avg) 6/12/25
Organic Matter (Humus)	2 - 3%	0.48	0.64
Sulfur	12 - 16 ppm	22.33	61.00
Olsen - Phosphorus	13 - 20 ppm	7.00	9.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,876.67	2,049.00
Magnesium	>7% base saturation or at least 200 lbs/acre	12.45%/181.33	13.15%/2231
Potassium - TEC of 0 - 35	150 ppm	82.67	115.00
Manganese	>50 ppm	21.67	17.00

TEE	Acceptable Range For Saturated Paste Sample	3 6/12/24	6 6/12/25
Nitrate-Bermudagrass	10-15 ppm	7.60	<0.5
Phosphorus	2 - 10 ppm	2.89	3.88
Potassium	40 - 100 ppm	66.58	61.54
Calcium	60 - 200 ppm	124.63	52.86
Magnesium	20 - 70 ppm	38.43	19.67
Sodium	0 - 30 ppm	395.97	294.41
Soluble Salts	<1,920 ppm	1,644.00	1,345.00
Bicarbonate	<60 ppm	106.86	232.64
Chloride	<1,000 ppm	443.00	371.00
SAR	<4%	7.95	8.78

FAIRWAY	Acceptable Range For Saturated Paste Sample	3 6/12/24	6 6/12/25
Nitrate- Ryegrass	5 - 10 ppm	26.40	23.80
Phosphorus	2 - 10 ppm	5.54	4.90
Potassium	40 - 100 ppm	75.36	58.23
Calcium	60 - 200 ppm	114.35	59.37
Magnesium	20 - 70 ppm	37.07	21.79
Sodium	0 - 30 ppm	405.17	263.62
Soluble Salts	<1,920 ppm	1,533.00	1,275.00
Bicarbonate	<60 ppm	153.76	229.10
Chloride	<1,000 ppm	341.00	272.00
SAR	<4%	8.42	7.43

GREENS	Acceptable Range For Saturated Paste Sample	PG,3(avg) 6/12/24	6,15(avg) 6/12/25
Nitrate -Dominator Bentgrass	1-3 ppm	<0.5	<0.5
Phosphorus	2 - 7 ppm	3.07	3.00
Potassium	25-40 ppm	29.76	38.69
Calcium	50- 75 ppm	44.40	49.23
Magnesium	15-30 ppm	13.84	18.53
Sodium	0 - 30 ppm	74.43	109.26
Soluble Salts	<1,000 ppm	478.00	644.50
Bicarbonate	<60 ppm	108.17	113.16
Chloride	<200 ppm	20.50	77.00
SAR	<4%	2.57	3.47

Nutrient Deficiencies

		Mn
TEE	6	19
TEE	15	12
FAIRWAY	6	19
FAIRWAY	15	23
GREEN	6	14
GREEN	15	20

Manganese can be added in the form of Manganese Oxide or Sulfate at a rate of 3 pounds of product per 1,000 sq ft in September- December

Comments and Next Level Cultural Practices

- We did our site visit with a Sales Representative from Empac. We discussed him formulating an acid with other products they have, to work on the tees specifically. The tees have a significant thatch layer and getting water to penetrate is difficult. Not only does the water need treatment, but the tees have a different issue than the fairways. The fairways have a soil layer on top of the capping material whereas the tees are true thatch.
- For the Fall of 2025, I think that the overseeding process needs to be limited to the “old” or original bermudagrass. Any areas that were sodded during the green’s complex renovation should be left dormant. We saw several areas that were damaged from the overseeding in September 2024.
- At this time, you might try mowing all the new TifTuf sod at one lower height to increase the density and work to close the thinner areas.

