

Client: El Dorado Golf and Beach Club
Summer 2023 Report

6/22/23

Humidity/Air Temperature 51%/90°

Greens Temperature (avg)86.15°

Fairways Temperature (avg)87.1°

WATER	Acceptable Range For Water Sample	Hole #1 6/22/23
pH	6.50	7.32
EC	<2.25 mmhos/cm	0.70
Sodium		91.11
Calcium	20 - 60 ppm	36.25
Magnesium	10 - 25 ppm	9.10
Potassium	5 - 20 ppm	11.66
Phosphorus	0.1 - 0.4 ppm	3.71
Nitrate	5 - 50 ppm	9.29
Sulfur	30 - 90 ppm	49.52
Bicarbonate	<120 ppm	136.59
Boron	<0.67 ppm	0.23
Chloride	<177 ppm	93.95

TEES	Acceptable Range For Alkaline Soils Sample	3,5,17(avg) 6/22/23
Organic Matter (Humus)	2 - 3%	1.42
Sulfur	12 - 16 ppm	30.67
Olsen - Phosphorus	13 - 20 ppm	16.67
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,457.33
	>7% base saturation or at least 200 lbs/acre	12.52%/160.66
Potassium - TEC of 0 - 35	100 ppm	76.33
Manganese	>50 ppm	100.33

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	3,5,17(avg) 6/22/23
Organic Matter (Humus)	2 - 3%	2.18
Sulfur	12 - 16 ppm	109.00
Olsen - Phosphorus	13 - 20 ppm	32.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	2,060.67
	>7% base saturation or at least 200 lbs/acre	13.06%/274
Potassium - TEC of 0 - 35	100 ppm	142.00
Manganese	>50 ppm	86.67

GREENS	Acceptable Range For Alkaline Soils Sample	3,5,17(avg) 6/22/23
Organic Matter (Humus)	2 - 3%	1.67
Sulfur	12 - 16 ppm	95.00
Olsen - Phosphorus	13 - 20 ppm	39.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,224.00
	>7% base saturation or at least 200 lbs/acre	13.7%/184
Potassium - TEC of 0 - 35	150 ppm	167.00
Manganese	>50 ppm	212.50

TEES	Acceptable Range For Saturated Paste Sample	3,17(avg) 6/22/23
Nitrate - 419 bermudagrass	10 - 15 ppm	<0.5
Phosphorus	2 - 10 ppm	2.42
Potassium	40 - 100 ppm	31.78
Calcium	60 - 200 ppm	58.08
Magnesium	20 - 70 ppm	12.35
Sodium	0 - 30 ppm	144.40
Soluble Salts	<1,920 ppm	621.50
Bicarbonate	<60 ppm	170.71
Chloride	<1,000 ppm	111.50
SAR	<4%	4.47

FAIRWAYS	Acceptable Range For Saturated Paste Sample	3,17(avg) 6/22/23
Nitrate - 419 bermudagrass	10 - 15 ppm	<0.5
Phosphorus	2 - 10 ppm	3.03
Potassium	40 - 100 ppm	49.05
Calcium	60 - 200 ppm	80.88
Magnesium	20 - 70 ppm	19.32
Sodium	0 - 30 ppm	305.01
Soluble Salts	<1,920 ppm	1,178.00
Bicarbonate	<60 ppm	199.46
Chloride	<1,000 ppm	314.00
SAR	<4%	7.92

GREENS	Acceptable Range For Saturated Paste Sample	3,17(avg) 6/22/23
Nitrate - Tifeagle Bermudagrass	1-3 ppm	<0.5
Phosphorus	2 - 7 ppm	1.75
Potassium	25-40 ppm	46.66
Calcium	50- 75 ppm	49.15
Magnesium	15-30 ppm	14.03
Sodium	0 - 30 ppm	263.81
Soluble Salts	<1,000 ppm	1,020.50
Bicarbonate	<60 ppm	67.89
Chloride	<200 ppm	248.00
SAR	<4%	8.55

Nutrient Deficiencies

		<u>Mg</u>	<u>K</u>	<u>Na</u>
TEE	3	93	76	103
TEE	5	98	94	210
TEE	17	50	59	99
FAIRWAY	3	97	120	288
FAIRWAY	5	182	175	489
FAIRWAY	17	132	131	370
GREEN	3	88	152	263
GREEN	5	112	182	339
GREEN	17	76	140	237

Magnesium can be added in the form of Pro-Mag 36 at a rate of 3 pounds of product per 1,000 sq ft in August and September.

Potassium can be added in the form of 0-0-50 at a rate of 2 pounds of product per 1,000 sq ft in August and September.

Comments and Next Level Cultural Practices

- Both the Mg and the K should be 100 or greater on the table above. Red font indicates a deficiency.
- I showed you the Sodium red where the imbalance between sodium and potassium should be addressed. You could increase Empac applications and follow up with 0-0-50 apps or do a gypsum application followed by a 0-0-50 app on tees, fairways and greens.
- Consistent and routine growth regulator applications on fairways through September