Client: Yorba Country Club

Fall 2023 Report

	10/20/23
Humidity/Air Temperature	50%/89°
Greens Temperature	(avg)62.65°
Fairway Temperature	(avg)66.5°

	Acceptable Range For Water Sample	Hole #2 10/20/23
EC	<2.25 mmhos/cm	1.85
Sodium		148.94
Calcium	20 - 60 ppm	174.82
Magnesium	10 - 25 ppm	60.73
Potassium	5 - 20 ppm	3.13
Sulfur	30 - 90 ppm	390.95
Bicarbonate	<120 ppm	372.97
Boron	<0.67 ppm	0.21
Chloride	<177 ppm	244.42

TEE	Acceptable Range For Tissue Sample	2 10/20/23
Nitrogen	3.34%-5.10%	
Phosphorus	0.35% - 0.55%	
Potassium	2.0% - 3.42%	
Calcium	0.25%-0.5%	
Magnesium	0.16%-0.32%	
Sodium	229-1107 ppm	

FAIRWAY	Acceptable Range For Tissue Sample	2 10/20/23
Nitrogen	3.34%-5.10%	
Phosphorus	0.35% - 0.55%	
Potassium	2.0% - 3.42%	
Calcium	0.25%-0.5%	
Magnesium	0.16%-0.32%	
Sodium	229-1107 ppm	

GREENS	Acceptable Range For Tissue Sample	2,14(avg) 10/20/23
Nitrogen	3.0%-6.5%	0.00
Phosphorus	0.2%-0.55%	0.00
Potassium	0.86%-2.55%	0.00
Calcium	0.21%-0.50%	0.00
Magnesium	0.09%-0.22%	0.00
Sodium	506- 2264 ppm	0.00

TEES	Acceptable Range For Alkaline Soils Sample	2,14(avg) 10/20/23
Organic Matter (Humus)	2 - 3%	2.74
Sulfur	12 - 16 ppm	64.50
Olsen - Phosphorus	13 - 20 ppm	57.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,921.00
Magnesium	>7% base saturation or at least 200 lbs/acre	15.59%/499
Potassium - TEC of 0 - 35	100 ppm	148.00
Manganese	>50 ppm	21.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	2,14(avg) 10/20/23
Organic Matter (Humus)	2 - 3%	6.87
Sulfur	12 - 16 ppm	188.50
Olsen - Phosphorus	13 - 20 ppm	51.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	6,117.00
Magnesium	>7% base saturation or at least 200 lbs/acre	23.28%/1,311
Potassium - TEC of 0 - 35	100 ppm	323.50
Manganese	>50 ppm	45.00

GREENS	Acceptable Range For Alkaline Soils Sample	2,14(avg) 10/20/23
Organic Matter (Humus)	2 - 3%	0.39
Sulfur	12 - 16 ppm	24.00
Olsen - Phosphorus	13 - 20 ppm	6.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,377.00
Magnesium	>7% base saturation or at least 200 lbs/acre	17.5%/201
Potassium - TEC of 0 - 35	150 ppm	55.50
Manganese	>50 ppm	16.00

TEES	Acceptable Range For Saturated Paste Sample	2 10/20/23
Nitrate	10 -15 ppm	4.70
Phosphorus	2 - 10 ppm	2.07
Potassium	40 - 100 ppm	18.52
Calcium	60 - 200 ppm	77.19
Magnesium	20 - 70 ppm	24.53
Sodium	0 - 30 ppm	96.96
Soluble Salts	<1,920 ppm	609.00
Bicarbonate	<60 ppm	118.12
Chloride	<1,000 ppm	125.00
SAR	<4%	2.46

FAIRWAYS	Acceptable Range For Saturated Paste Sample	2 10/20/23
Nitrate-Kikuyugrass	10 -15 ppm	<0.5
Phosphorus	2 - 10 ppm	3.13
Potassium	40 - 100 ppm	34.13
Calcium	60 - 200 ppm	99.41
Magnesium	20 - 70 ppm	42.05
Sodium	0 - 30 ppm	124.06
Soluble Salts	<1,920 ppm	799.00
Bicarbonate	<60 ppm	142.04
Chloride	<1,000 ppm	165.00
SAR	<4%	2.63

GREENS	Acceptable Range For Saturated Paste Sample	2,14(avg) 10/20/23
Nitrate - Pure Distinction Bentgrass	1-3 ppm	<1.1
Phosphorus	2 - 7 ppm	1.59
Potassium	25-40 ppm	12.56
Calcium	50- 75 ppm	27.33
Magnesium	15-30 ppm	7.73
Sodium	0 - 30 ppm	47.94
Soluble Salts	<1,000 ppm	278.50
Bicarbonate	<60 ppm	58.83
Chloride	<200 ppm	39.00
SAR	<4%	2.09

Nutrient Deficiencies

		P	K	Mn
TEE	2	45	114	17
TEE	14	70	182	25
FAIRWAY	2	65	332	36
FAIRWAY	14	38	315	54
GREEN	2	3	70	16
GREEN	14	10	41	16

Phosphorus can be added in the form of 11-55-00 (or similar) at a rate of 3 pounds of product per 1,000 sq ft one time before the end of 2023.

Potassium can be added in the form of 0-0-50 at a rate of 2 pounds of product per 1,000 sq ft two times in the next four months.

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 (water in) each month until March.

Comments and Next Level Cultural Practices

- The use of straight Dakota Peat as a topdressing on certain areas of the greens is ok with me to a point. I would consider adding Dakota Peat to your current topdressing sand
- Consider Greens core samples this Winter to continually investigate the existing mix and to help manage it. I was able to get some testing results from the sand supplier of the original greens-mix
- Consider using Poa Cure for any poa annua on greens
- The greens were in very good condition and moisture levels were nearly perfect!