



Client: East Orange Golf Course

Spring 2023 Report

	<u>4/17/20</u>	<u>5/11/23</u>
Humidity/Air Temperature	30%/48°	60%/80°
Green Temperature	(avg)46.83°	(avg)53.4°
Fairway Temperature	(avg)47.75°	(avg)56.2°

WATER	Acceptable Range For Water Sample	Sprinkler Head <u>4/17/20</u>	Sprinkler Head <u>5/11/23</u>
EC	<2.25 mmhos/cm	0.91	0.84
Sodium		21.12	24.02
Calcium	20 - 60 ppm	85.93	101.60
Magnesium	10 - 25 ppm	27.28	31.54
Potassium	5 - 20 ppm	1.16	1.82
Sulfur	30 - 90 ppm	54.54	35.03
Bicarbonate	<120 ppm	189.62	237.11
Boron	<0.67 ppm	0.13	0.09
Chloride	<177 ppm	101.61	146.89



SOIL AND WATER CONSULTING

TEE	Acceptable Range For Standard Soil Sample	2,17(avg) 4/17/20	2,17(avg) 5/11/23
Organic Matter (Humus)	2 - 3%	0.67	0.99
Sulfur	50 - 100 ppm	10.00	12.50
Mehlich III - Phosphorus	350 lbs/acre	279.50	426.00
Calcium	68%	65.81	69.36
Magnesium	15%	21.52	19.33
Potassium	5%	4.58	4.02
Sodium	<2%	3.91	3.16
Boron	1 - 1.5 ppm	0.29	0.46
Iron	120 ppm	204.50	312.50
Manganese	50 ppm	10.50	18.00

FAIRWAY	Acceptable Range For Standard Soil Sample	2,9,17(avg) 4/17/20	2,9,17(avg) 5/11/23
Organic Matter (Humus)	2 - 3%	4.91	5.14
Sulfur	50 - 100 ppm	13.00	14.67
Mehlich III - Phosphorus	350 lbs/acre	204.67	251.67
Calcium	68%	66.92	63.80
Magnesium	15%	16.01	15.81
Potassium	5%	2.26	1.50
Sodium	<2%	1.34	1.19
Boron	1 - 1.5 ppm	0.70	0.67
Iron	120 ppm	238.00	288.67
Manganese	50 ppm	29.00	29.67

GREENS	Acceptable Range For Standard Soil Sample	2,9,17(avg) 4/17/20	2,9,17(avg) 5/11/23
Organic Matter (Humus)	2 - 3%	3.80	3.60
Sulfur	50 - 100 ppm	14.33	27.00
Mehlich III - Phosphorus	350 lbs/acre	1,001.67	1,151.33
Calcium	68%	74.57	74.05
Magnesium	15%	15.97	11.61
Potassium	5%	3.72	3.28
Sodium	<2%	1.53	1.31
Boron	1 - 1.5 ppm	0.68	0.67
Iron	120 ppm	360.67	524.67
Manganese	50 ppm	17.67	22.33

TEE	Acceptable Range For Saturated Paste Sample	9,17(avg) 4/17/20	9,17(avg) 5/11/23
Nitrate - KBG	5 - 10 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.83	1.07
Potassium	40 - 100 ppm	26.57	22.11
Calcium	60 - 200 ppm	30.58	34.72
Magnesium	20 - 70 ppm	9.59	12.19
Sodium	0 - 30 ppm	10.24	11.69
Soluble Salts	<1,920 ppm	193.50	230.00
Bicarbonate	<60 ppm	88.75	86.40
Chloride	<1,000 ppm	25.00	33.00
SAR	<4%	0.42	0.44

FAIRWAY	Acceptable Range For Saturated Paste Sample	9,17(avg) 4/17/20	9,17(avg) 5/11/23
Nitrate - Ryegrass	5 - 10 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.22	0.30
Potassium	40 - 100 ppm	4.57	3.15
Calcium	60 - 200 ppm	23.68	25.85
Magnesium	20 - 70 ppm	6.26	6.26
Sodium	0 - 30 ppm	7.76	7.77
Soluble Salts	<1,920 ppm	115.00	121.50
Bicarbonate	<60 ppm	43.86	43.10
Chloride	<1,000 ppm	20.50	20.00
SAR	<4%	0.37	0.36

GREENS	Acceptable Range For Saturated Paste Sample	9,17(avg) 4/17/20	9,17(avg) 5/11/23
Nitrate - 007 Bentgrass	1-3 ppm	<0.5	4.85
Phosphorus	2 - 7 ppm	0.73	0.83
Potassium	25-40 ppm	14.41	24.16
Calcium	50- 75 ppm	19.36	35.97
Magnesium	15-30 ppm	5.28	7.08
Sodium	0 - 30 ppm	6.08	10.04
Soluble Salts	<1,000 ppm	104.00	210.00
Bicarbonate	<60 ppm	53.71	27.17
Chloride	<200 ppm	10.00	19.00
SAR	<4%	0.32	0.40

Nutrient Deficiencies

		Ca	Mg	K	Mn
TEE	2	870	124	55	18
TEE	9	1632	286	87	24
TEE	17	890	172	44	18
FAIRWAY	2	4512	714	86	17
FAIRWAY	9	2688	380	70	34
FAIRWAY	17	2650	388	63	38
GREEN	2	3086	288	124	17
GREEN	9	3026	292	131	26
GREEN	17	2900	268	133	24

Calcium can be added to the tees in the form of gypsum at a rate of 10 pounds of product per 1,000 sq ft for the next two months.

Magnesium/Potassium can be added to tees in the form of 0-0-22 at a rate of 4 pounds of product per 1,000 sq ft for the next four months.

Potassium can be added to the fairways in the form of 0-0-50 at a rate of 100 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 September, October and November.

Next Level Cultural Practices

- Verti-cut and Top-dress greens monthly.
- Monthly applications of 0-0-50 on greens through Summer.
- Top-dress tees every other month during growing season.