



Client: Seven Oaks Country Club
Fall 2024 Report

	<u>10/17/23</u>	<u>10/24/24</u>
Humidity/Air Temperature	50%/85°	40%/83°
Greens Temperature	(avg)61.5°	(avg)65°
Fairway Temperature	(avg)63.7°	(avg)66°

WATER	Acceptable Range For Water Sample	Shopyard <u>9/14/17</u>	Islands #2 <u>10/24/24</u>
pH	6.3-6.5	8.26	7.84
EC	<2.25 mmhos/cm	0.20	0.21
Sodium		23.08	24.38
Calcium	20 - 60 ppm	19.57	19.69
Magnesium	10 - 25 ppm	0.49	0.39
Potassium	5 - 20 ppm	1.43	1.68
Sulfur	30 - 90 ppm	13.86	14.07
Bicarbonate	<120 ppm	84.94	95.18
Boron	<0.67 ppm	0.13	0.15
Chloride	<177 ppm	11.23	9.02



SOIL AND WATER CONSULTING

TEES	Acceptable Range For Alkaline Soils Sample	Oaks 2 9/14/17	Oaks 2 10/24/24	Lakes 2 9/14/17	Lakes 2 10/24/24	Islands 2 9/14/17	Islands 2 10/24/24
Organic Matter (Humus)	2 - 3%	n/r	3.73	n/r	2.74	n/r	3.44
Sulfur	12 - 16 ppm	n/r	17.00	n/r	9.00	n/r	24.00
Olsen - Phosphorus	13 - 20 ppm	n/r	13.00	n/r	6.00	n/r	9.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	n/r	2,674.00	n/r	2,770.00	n/r	2,336.00
Magnesium	>7% base saturation or at least 200 lbs/acre	n/r	6.68%/134	n/r	6.81%/134	n/r	8.96%/160
Potassium - TEC of 0 - 35	100 ppm	n/r	94.00	n/r	67.00	n/r	110.00
Manganese	>350 ppm	n/r	13.00	n/r	44.00	n/r	20.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	Oaks 2 9/14/17	Oaks 2 10/24/24	Lakes 2 9/14/17	Lakes 2 10/24/24	Islands 2 9/14/17	Islands 2 10/24/24
Organic Matter (Humus)	2 - 3%	n/r	3.71	n/r	3.89	1.30	2.85
Sulfur	12 - 16 ppm	n/r	22.00	n/r	28.00	25.00	14.00
Olsen - Phosphorus	13-20 ppm	n/r	25.00	n/r	30.00	n/r	5.00
Calcium	1,000 lbs/acre	n/r	2,810.00	n/r	2,788.00	2,124.00	1,744.00
Magnesium	>7% base saturation or at least 200 lbs/acre	n/r	8.61%/196	n/r	9.11%/206	10.06%/184	8.40%/118
Potassium	100 ppm	n/r	220.00	n/r	207.00	99.00	92.00
Manganese	>50 ppm	n/r	16.00	n/r	19.00	23.00	24.00

GREENS	Acceptable Range For Alkaline Soils Sample	Oaks 2 9/14/17	Oaks 2 10/24/24	Lakes 2 9/14/17	Lakes 2 10/24/24	Islands 2 9/14/17	Islands 2 10/24/24
Organic Matter (Humus)	2 - 3%	n/r	1.07	1.19	1.45	0.72	0.57
Sulfur	12 - 16 ppm	n/r	90.00	46.00	65.00	12.00	34.00
Olsen - Phosphorus	13 - 20 ppm	n/r	25.00	30.00	28.00	21.00	5.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	n/r	2,028.00	2,018.00	2,440.00	1,012.00	952.00
Magnesium	>7% base saturation or at least 200 lbs/acre	n/r	7.59%/120	12.68%/216	7.24%/134	15.51%/140	12.55%/100
Potassium - TEC of 0 - 35	150 ppm	n/r	188.00	226.00	184.00	115.00	85.00
Manganese	>50 ppm	n/r	102.00	n/r	81.00	n/r	70.00

TEES	Acceptable Range For Saturated Paste Sample	Island 2 9/14/17	Island 2 10/24/24
Nitrate - Ryegrass	5 - 10 ppm	n/r	1.20
Phosphorus	2 - 10 ppm	n/r	0.74
Potassium	40 - 100 ppm	n/r	16.67
Calcium	60 - 200 ppm	n/r	25.52
Magnesium	20 - 70 ppm	n/r	4.45
Sodium	0 - 30 ppm	n/r	49.54
Soluble Salts	<1,920 ppm	n/r	274.00
Bicarbonate	<60 ppm	n/r	87.69
Chloride	<1,000 ppm	n/r	34.00
SAR	<4%	n/r	2.38

FAIRWAYS	Acceptable Range For Saturated Paste Sample	Island 2 9/14/17	Island 2 10/24/24
Nitrate - Ryegrass	5 - 10 ppm	13.90	0.60
Phosphorus	2 - 10 ppm	0.52	0.87
Potassium	40 - 100 ppm	16.29	13.65
Calcium	60 - 200 ppm	38.71	18.67
Magnesium	20 - 70 ppm	6.26	3.03
Sodium	0 - 30 ppm	55.84	27.44
Soluble Salts	<1,920 ppm	320.00	184.00
Bicarbonate	<60 ppm	78.09	63.74
Chloride	<1,000 ppm	32.00	24.00
SAR	<4%	2.20	1.55

GREENS	Acceptable Range For Saturated Paste Sample	Island 2 9/14/17	Island 2 10/24/24
Nitrate - Dominator Bentgrass	1-3 ppm	12.20	1.90
Phosphorus	2 - 7 ppm	6.56	0.91
Potassium	25-40 ppm	32.16	28.93
Calcium	50- 75 ppm	14.38	34.71
Magnesium	15-30 ppm	3.71	5.74
Sodium	0 - 30 ppm	34.18	37.32
Soluble Salts	<1,000 ppm	237.00	313.00
Bicarbonate	<60 ppm	63.45	40.80
Chloride	<200 ppm	17.00	20.00
SAR	<4%	2.08	1.55

Nutrient Deficiencies

		Mg
ISLAND	TEE	160
OAKS	TEE	134
LAKES	TEE	134
ISLAND	FAIRWAY	118
OAKS	FAIRWAY	196
LAKES	FAIRWAY	206
ISLAND	GREEN	100
OAKS	GREEN	120
LAKES	GREEN	134

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

Comments

- You had asked me to collect samples on Oaks Fairway #2 and Lakes Fairway #2 in specific spots of concern. They were similar and had no nutrient deficiencies. However, Island Fairway #2 was different par 3 “fairways” are usually sandier or better in general, due to less compaction. I often see a par 3 fairway being treated more like a green and the native soil has been diluted over the years with sand. That would explain the leaner nutrient levels on Island Fairway #2.
- Magnesium has always lagged at Seven Oaks. As the tees become sandier through the years, magnesium levels will dip. One application on the tees and Island Fairway #2 and 2 applications this Winter on the greens will provide what is needed.
- The current water sample is very similar to the one taken in September of 2017.

