



SOIL AND WATER CONSULTING

Data Collection Report

Summer 2022

Date of Collection: 6/15/22

Client: Seven Oaks Country Club



Testing Results

	<u>6/19/21</u>	<u>6/15/22</u>
Humidity/Air Temperature	10%/100°	10%/98°
Greens Temperature	n/r	(avg)89.6°
Fairways Temperature	n/r	(avg)81.56°

WATER	Acceptable Range For Water Sample	Irrigation Pond	Irrigation Water
		<u>6/19/21</u>	<u>6/15/22</u>
pH	6.3-6.5	8.61	7.73
EC	<2.25 mmhos/cm	0.19	0.24
Sodium		22.96	31.55
Calcium	20 - 60 ppm	12.40	16.79
Magnesium	10 - 25 ppm	0.67	0.94
Potassium	5 - 20 ppm	2.45	0.78
Sulfur	30 - 90 ppm	18.32	20.09
Bicarbonate	<120 ppm	59.53	93.59
Boron	<0.67 ppm	0.13	0.13
Chloride	<177 ppm	4.26	20.25

TEES	Acceptable Range For Alkaline Soils Sample	Oaks 1 6/5/15	Oaks 1 6/15/22	Lakes 1 6/5/15	Lakes 1 6/15/22	Islands 1 6/5/15	Islands 1 6/15/22
Organic Matter (Humus)	2 - 3%	n/r	2.57	n/r	2.38	n/r	2.58
Sulfur	12 - 16 ppm	n/r	10.00	n/r	10.00	n/r	9.00
Olsen - Phosphorus	13 - 20 ppm	n/r	2.00	n/r	4.00	n/r	4.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	n/r	2,682.00	n/r	2,372.00	n/r	2,256.00
	>7% base saturation or at least 200 lbs/acre						
Magnesium		n/r	8.94%/180	n/r	8.82%/158	n/r	12.35%/224
Potassium - TEC of 0 - 35	100 ppm	n/r	147.00	n/r	126.00	n/r	161.00
Manganese	>50 ppm	n/r	29.00	n/r	29.00	n/r	15.00

FAIRWAYS	Acceptable Range For Standard Soils Sample	Oaks 1 6/5/15	Oaks 1 6/15/22	Lakes 1 6/5/15	Lakes 1 6/15/22	Islands 1 6/5/15	Islands 1 6/15/22
Organic Matter (Humus)	2 - 3%	3.93	3.41	4.95	3.41	2.64	1.97
Sulfur	12 - 16 ppm	20.00	16.00	89.00	32.00	17.00	18.00
Olsen - Phosphorus	13 - 20 ppm	23.00	17.00	25.00	11.00	21.00	5.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	2,194.00	2,630.00	1,918.00	2,258.00	1,680.00	1,934.00
	>7% base saturation or at least 200 lbs/acre						
Magnesium		7.57%/142	10.94%/240	5.70%/86	10.85%/220	9.91%/128	11.89%/208
Potassium - TEC of 0 - 35	100 ppm	164.00	253.00	144.00	243.00	77.00	168.00
Manganese	>50 ppm	n/r	22.00	n/r	11.00	n/r	19.00

GREENS	Acceptable Range For Alkaline Soils Sample	Oaks 1 6/5/15	Oaks 1 6/15/22	Lakes 1 6/5/15	Lakes 1 6/15/22	Islands 1 6/5/15	Islands 1 6/15/22
Organic Matter (Humus)	2 - 3%	1.23	1.00	1.19	0.99	0.69	0.51
Sulfur	12 - 16 ppm	18.00	52.00	14.00	117.00	13.00	56.00
Olsen - Phosphorus	13 - 20 ppm	30.00	13.00	33.00	10.00	26.00	14.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,642.00	1,890.00	1,402.00	2,440.00	936.00	922.00
	>7% base saturation or at least 200 lbs/acre						
Magnesium		10.81%/136	8.31%/124	9.88%/106	7.72%/148	12.02%/90	17.15%/142
Potassium - TEC of 0 - 35	150 ppm	91.00	198.00	89.00	208.00	64.00	83.00
Manganese	>50 ppm	n/r	77.00	n/r	57.00	n/r	65.00

TEES	Acceptable Range For Saturated Paste Sample	Oaks 1 6/15/22	Lakes 1 6/15/22
Nitrate -Bermudagrass	5 - 10 ppm	0.80	14.30
Phosphorus	2 - 10 ppm	1.38	2.15
Potassium	40 - 100 ppm	30.84	27.81
Calcium	60 - 200 ppm	39.92	50.31
Magnesium	20 - 70 ppm	7.24	7.73
Sodium	0 - 30 ppm	48.27	55.93
Soluble Salts	<1,920 ppm	285.00	333.00
Bicarbonate	<60 ppm	130.78	124.91
Chloride	<1,000 ppm	32.00	33.00
SAR	<4%	1.84	1.94

FAIRWAYS	Acceptable Range For Saturated Paste Sample	Oaks 1 6/15/22	Lakes 1 6/15/22
Nitrate -Bermudagrass	10-15 ppm	5.40	13.10
Phosphorus	2 - 10 ppm	1.58	1.55
Potassium	40 - 100 ppm	40.48	40.96
Calcium	60 - 200 ppm	38.24	42.00
Magnesium	20 - 70 ppm	7.70	7.53
Sodium	0 - 30 ppm	60.58	61.57
Soluble Salts	<1,920 ppm	343.00	367.00
Bicarbonate	<60 ppm	66.76	61.38
Chloride	<1,000 ppm	71.00	55.00
SAR	<4%	2.34	2.30

GREENS	Acceptable Range For Saturated Paste Sample	Oaks 1 6/15/22	Lakes 1 6/15/22
Nitrate -Dominator Bentgrass	1-3 ppm	<0.5	<0.5
Phosphorus	2 - 7 ppm	2.85	2.44
Potassium	25-40 ppm	89.85	57.69
Calcium	50- 75 ppm	89.22	100.07
Magnesium	15-30 ppm	13.91	14.24
Sodium	0 - 30 ppm	88.96	83.27
Soluble Salts	<1,000 ppm	644.00	601.00
Bicarbonate	<60 ppm	67.21	45.94
Chloride	<200 ppm	35.00	27.00
SAR	<4%	2.31	2.06