



SOIL AND WATER CONSULTING

Data Collection Report

Spring 2022

Date of Collection: 5/6/22

Client: Tamarack Golf Course



Testing Results

	<u>5/6/22</u>
Humidity/Air Temperature	rainy/60°
Green Temperature	(avg)60.1°
Fairway Temperature	(avg)59.55°

WATER	Acceptable Range For Water Sample	East Pumphouse <u>5/6/22</u>
pH	6.3-6.5	6.36
EC	<2.25 mmhos/cm	0.10
Sodium		10.47
Calcium	20 - 60 ppm	7.58
Magnesium	10 - 25 ppm	2.23
Potassium	5 - 20 ppm	2.12
Sulfur	30 - 90 ppm	7.80
Bicarbonate	<120 ppm	40.32
Boron	<0.67 ppm	<0.05
Chloride	<177 ppm	12.94

EAST COURSE TEES	Acceptable Range For Standard Soil Sample	2,14(avg) 5/6/22
Organic Matter (Humus)	2 - 3%	3.65
Sulfur	50 - 100 ppm	65.00
Mehlich III - Phosphorus	350 lbs/acre	2448.00
Calcium	68%	65.72
Magnesium	15%	16.20
Potassium	5%	5.90
Sodium	<2%	2.20
Boron	1 - 1.5 ppm	0.78
Iron	120 ppm	726.00
Manganese	50 ppm	28.50

EAST COURSE FAIRWAYS	Acceptable Range For Standard Soil Sample	2,14(avg) 5/6/22
Organic Matter (Humus)	2 - 3%	4.29
Sulfur	50 - 100 ppm	27.50
Mehlich III - Phosphorus	350 lbs/acre	185.50
Calcium	68%	58.00
Magnesium	15%	13.16
Potassium	5%	3.53
Sodium	<2%	1.68
Boron	1 - 1.5 ppm	0.52
Iron	120 ppm	284.00
Manganese	50 ppm	15.50

EAST COURSE GREENS	Acceptable Range For Standard Soil Sample	11,14(avg) 5/6/22
Organic Matter (Humus)	2 - 3%	2.43
Sulfur	50 - 100 ppm	29.00
Mehlich III - Phosphorus	350 lbs/acre	501.50
Calcium	68%	60.00
Magnesium	15%	12.93
Potassium	5%	3.52
Sodium	<2%	1.57
Boron	1 - 1.5 ppm	0.53
Iron	120 ppm	496.00
Manganese	50 ppm	10.50

EAST COURSE TEE	Acceptable Range For Saturated Paste Sample	14 5/6/22
Nitrate -Cool Season grass	5 - 10 ppm	<0.5
Phosphorus	2 - 10 ppm	2.86
Potassium	40 - 100 ppm	53.11
Calcium	60 - 200 ppm	106.72
Magnesium	20 - 70 ppm	36.98
Sodium	0 - 30 ppm	36.50
Soluble Salts	<1,920 ppm	573.00
Bicarbonate	<60 ppm	166.13
Chloride	<1,000 ppm	38.00
SAR	<4%	0.78

EAST COURSE FAIRWAY	Acceptable Range For Saturated Paste Sample	14 5/6/22
Nitrate -Cool Season grass	5 - 10 ppm	<0.5
Phosphorus	2 - 10 ppm	0.26
Potassium	40 - 100 ppm	16.22
Calcium	60 - 200 ppm	48.57
Magnesium	20 - 70 ppm	11.06
Sodium	0 - 30 ppm	16.39
Soluble Salts	<1,920 ppm	240.00
Bicarbonate	<60 ppm	44.73
Chloride	<1,000 ppm	30.00
SAR	<4%	0.55

EAST COURSE GREENS	Acceptable Range For Saturated Paste Sample	13,14(avg) 5/6/22
Nitrate -Poa/Bentgrass	1-3 ppm	<0.5
Phosphorus	2 - 7 ppm	0.89
Potassium	25-40 ppm	37.45
Calcium	50- 75 ppm	73.43
Magnesium	15-30 ppm	21.66
Sodium	0 - 30 ppm	19.67
Soluble Salts	<1,000 ppm	382.50
Bicarbonate	<60 ppm	32.12
Chloride	<200 ppm	13.00
SAR	<4%	0.52

WEST COURSE FAIRWAYS	Acceptable Range For Standard Soil Sample	1 5/6/22
Organic Matter (Humus)	2 - 3%	7.61
Sulfur	50 - 100 ppm	125.00
Mehlich III - Phosphorus	350 lbs/acre	298.00
Calcium	68%	35.35
Magnesium	15%	6.63
Potassium	5%	1.90
Sodium	<2%	3.75
Boron	1 - 1.5 ppm	0.58
Iron	120 ppm	376.00
Manganese	50 ppm	9.00

WEST COURSE GREENS	Acceptable Range For Standard Soil Sample	1,17(avg) 5/6/22
Organic Matter (Humus)	2 - 3%	2.34
Sulfur	50 - 100 ppm	20.00
Mehlich III - Phosphorus	350 lbs/acre	561.00
Calcium	68%	66.63
Magnesium	15%	15.84
Potassium	5%	4.21
Sodium	<2%	2.57
Boron	1 - 1.5 ppm	0.63
Iron	120 ppm	451.50
Manganese	50 ppm	12.50