



SOIL AND WATER CONSULTING

Data Collection Report

Spring 2019

Date of Collection: 4/19/19

Client: Jumping Brook Country Club



Testing Results

	<u>4/19/17</u>	<u>4/18/18</u>	<u>4/19/19</u>
Humidity/Air Temperature	47%/57°	55%/48°	70%/73°
Green Temperature	(avg) 60°	(avg) 43.8°	(avg) 56.6°
Fairway Temperature	n/r	(avg) 45.1°	(avg) 56.5°

WATER	Acceptable Range For Water Sample	Green #6 <u>4/25/17</u>	Sprinkler Head <u>4/18/18</u>	Sprinkler Head <u>4/19/19</u>
EC	<2.25 mmhos/cm	0.16	0.59	0.30
Sodium		17.21	85.81	28.71
Calcium	20 - 60 ppm	8.27	17.30	13.46
Magnesium	10 - 25 ppm	1.87	3.18	2.95
Potassium	5 - 20 ppm	2.55	4.18	3.34
Sulfur	30 - 90 ppm	14.22	26.89	26.95
Bicarbonate	<120 ppm	44.29	26.14	30.02
Boron	<0.67 ppm	<0.05	<0.05	<0.05
Chloride	<177 ppm	18.72	137.87	39.83

TEE	Acceptable Range For Standard Soil Sample	5,10,16(avg) 4/18/18	6,14(avg) 4/19/19
Organic Matter (Humus)	2 - 3%	2.88	3.04
Sulfur	50 - 100 ppm	16.67	20.00
Mehlich III - Phosphorus	350 lbs/acre	812.33	838.00
Calcium	68%	76.88	75.39
Magnesium	15%	13.77	12.20
Potassium	5%	3.35	4.52
Sodium	<2%	1.90	1.93
Boron	1 - 1.5 ppm	0.45	0.74
Iron	120 ppm	371.67	327.00
Manganese	50 ppm	18.00	22.00

FAIRWAY	Acceptable Range For Standard Soil Sample	5,10,16(avg) 4/18/18	6,14,18(avg) 4/19/19
Organic Matter (Humus)	2 - 3%	3.55	4.31
Sulfur	50 - 100 ppm	15.00	93.00
Mehlich III - Phosphorus	350 lbs/acre	410.67	524.00
Calcium	68%	72.58	70.34
Magnesium	15%	15.56	11.28
Potassium	5%	3.70	3.44
Sodium	<2%	2.24	2.02
Boron	1 - 1.5 ppm	1.45	0.55
Iron	120 ppm	268.67	353.00
Manganese	50 ppm	3.00	5.00

GREENS	Acceptable Range For Standard Soil Sample	5,13,14,16(avg) 4/19/17	5,10,16(avg) 4/18/18	6,14,18(avg) 4/19/19
Organic Matter (Humus)	2 - 3%	3.59	3.69	4.10
Sulfur	50 - 100 ppm	16.25	13.00	25.67
Mehlich III - Phosphorus	350 lbs/acre	1,320.00	1,270.00	1,397.00
Calcium	68%	75.31	78.55	73.15
Magnesium	15%	10.54	11.07	8.96
Potassium	5%	4.03	3.57	3.84
Sodium	<2%	1.72	1.40	1.65
Boron	1 - 1.5 ppm	0.58	0.65	0.77
Iron	120 ppm	415.25	319.00	397.00
Manganese	50 ppm	11.50	8.33	19.33

TEE	Acceptable Range For Saturated Paste Sample	5,16(avg) 4/18/18	6,18(avg) 4/19/19
Nitrate-Cool season	5 - 10 ppm	1.30	<0.5
Phosphorus	2 - 10 ppm	1.05	0.43
Potassium	40 - 100 ppm	19.07	27.94
Calcium	60 - 200 ppm	50.98	42.72
Magnesium	20 - 70 ppm	9.85	9.63
Sodium	0 - 30 ppm	11.99	13.42
Soluble Salts	<1,920 ppm	231.50	231.50
Bicarbonate	<60 ppm	89.08	74.43
Chloride	<1,000 ppm	13.50	20.00
SAR	<4%	0.40	0.49

FAIRWAY	Acceptable Range For Saturated Paste Sample	5,16(avg) 4/18/18	6,18(avg) 4/19/19
Nitrate-Cool season	5 - 10 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.68	0.24
Potassium	40 - 100 ppm	15.85	14.38
Calcium	60 - 200 ppm	29.20	37.86
Magnesium	20 - 70 ppm	7.92	9.23
Sodium	0 - 30 ppm	7.70	16.91
Soluble Salts	<1,920 ppm	178.00	205.00
Bicarbonate	<60 ppm	90.30	84.20
Chloride	<1,000 ppm	14.50	14.50
SAR	<4%	0.33	0.65

GREENS	Acceptable Range For Saturated Paste Sample	CPG, 5, 13,14,16(avg) 4/19/17	5,16 (avg) 4/18/18	6,18(avg) 4/19/19
Nitrate - Bentgrass/Poa	1-3 ppm	<0.92	<0.5	<0.5
Phosphorus	2 - 7 ppm	2.89	2.37	0.98
Potassium	25-40 ppm	16.28	13.93	26.85
Calcium	50- 75 ppm	14.41	14.60	29.77
Magnesium	15-30 ppm	3.41	4.17	6.24
Sodium	0 - 30 ppm	5.40	6.11	12.94
Soluble Salts	<1,000 ppm	106.60	99.00	192.50
Bicarbonate	<60 ppm	59.06	46.37	67.11
Chloride	<200 ppm	9.60	6.50	13.00
SAR	<4%	0.33	0.37	0.57