



SOIL AND WATER CONSULTING

Data Collection Report

Spring 2018

Date of Collection: 4/17/18

Client: East Orange Golf Course



Testing Results

	<u>4/30/16</u>	<u>5/17/17</u>	<u>4/17/18</u>
Humidity/Air Temperature	75%/50°	64%/70	47%/53°
Green Temperature	49.3°	64°	47.6°
Fairway Temperature	50.8°	62°	48.9°



WATER	Acceptable Range For Water Sample	Sprinkler Head <u>4/30/16</u>	Sprinkler Head <u>5/17/17</u>	Sprinkler Head <u>4/17/18</u>
EC	<2.25 mmhos/cm	0.80	0.81	0.50
Sodium		21.18	22.41	14.25
Calcium	20 - 60 ppm	90.69	87.50	56.08
Magnesium	10 - 25 ppm	28.80	26.78	14.78
Potassium	5 - 20 ppm	1.49	0.75	2.07
Sulfur	30 - 90 ppm	49.08	48.48	29.17
Bicarbonate	<120 ppm	226.52	205.46	130.68
Boron	<0.67 ppm	0.15	0.13	0.06
Chloride	<177 ppm	104.00	101.95	63.66



TEE	Acceptable Range For Standard Soil Sample	2, 9,17(avg) 4/30/16	6,16 (avg) 5/17/17	11 5/17/17	2,9,17(avg) 4/17/18
Organic Matter (Humus)	2 - 3%	0.56	3.91	0.42	1.00
Sulfur	50 - 100 ppm	20.00	17.50	12.00	35.67
Mehlich III - Phosphorus	350 lbs/acre	281.00	852.00	220.00	458.00
Calcium	68%	67.04	68.31	64.94	71.01
Magnesium	15%	16.74	15.00	20.11	14.60
Potassium	5%	4.08	2.89	4.72	3.89
Sodium	<2%	4.00	1.40	6.00	2.43
Boron	1 - 1.5 ppm	0.24	0.73	0.28	0.24
Iron	120 ppm	216.67	326.50	205.00	224.67
Manganese	50 ppm	16.67	19.50	33.00	21.00

FAIRWAY	Acceptable Range For Standard Soil Sample	2, 9,17(avg) 4/30/16	6,11,16 (avg) 5/17/17	2,9,17 (avg) 4/17/18
Organic Matter (Humus)	2 - 3%	4.79	4.98	5.62
Sulfur	50 - 100 ppm	14.00	17.00	13.67
Mehlich III - Phosphorus	350 lbs/acre	172.33	273.33	207.33
Calcium	68%	69.51	63.76	68.67
Magnesium	15%	15.38	14.54	15.31
Potassium	5%	1.54	2.62	1.80
Sodium	<2%	1.18	1.36	1.31
Boron	1 - 1.5 ppm	0.61	0.65	0.72
Iron	120 ppm	205.67	216.00	226.00
Manganese	50 ppm	21.33	27.00	23.00

GREENS	Acceptable Range For Standard Soil Sample	2, 9,17(avg) 4/30/16	6,10 (avg) 4/12/17	3,4 (avg) 4/12/17	2,9,17(avg) 4/17/18
Organic Matter (Humus)	2 - 3%	4.09	2.95	0.53	4.23
Sulfur	50 - 100 ppm	15.67	21.50	21.00	13.67
Mehlich III - Phosphorus	350 lbs/acre	925.33	955.00	181.00	1,107.00
Calcium	68%	74.40	71.38	65.83	74.02
Magnesium	15%	17.65	12.98	16.97	15.88
Potassium	5%	2.19	5.76	5.65	4.74
Sodium	<2%	1.41	1.52	6.38	1.14
Boron	1 - 1.5 ppm	0.66	0.74	0.53	0.68
Iron	120 ppm	293.67	286.50	178.50	363.33
Manganese	50 ppm	9.67	15.50	13.00	13.33

TEE	Acceptable Range For Saturated Paste Sample	2,9 (avg) 4/30/16	6,16 (avg) 5/17/17	2,17 (avg) 4/17/18
Nitrate - KBG	5 - 10 ppm	<0.5	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.30	0.31	0.49
Potassium	40 - 100 ppm	16.79	18.90	36.86
Calcium	60 - 200 ppm	29.78	28.64	53.48
Magnesium	20 - 70 ppm	8.36	8.32	13.13
Sodium	0 - 30 ppm	9.90	9.32	5.68
Soluble Salts	<1,920 ppm	181.00	180.00	355.00
Bicarbonate	<60 ppm	103.11	103.72	120.80
Chloride	<1,000 ppm	29.25	31.50	7.00
SAR	<4%	0.41	0.39	0.18

FAIRWAY	Acceptable Range For Saturated Paste Sample	2,9 (avg) 4/30/16	6,16 (avg) 5/17/17	2,17 (avg) 4/17/18
Nitrate - Ryegrass	5 - 10 ppm	<0.5	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.05	0.06	0.50
Potassium	40 - 100 ppm	10.81	9.26	4.23
Calcium	60 - 200 ppm	41.97	39.13	23.53
Magnesium	20 - 70 ppm	9.22	9.91	6.75
Sodium	0 - 30 ppm	10.76	10.06	8.45
Soluble Salts	<1,920 ppm	206.00	223.00	130.50
Bicarbonate	<60 ppm	93.35	89.08	78.09
Chloride	<1,000 ppm	41.75	46.50	11.50
SAR	<4%	0.39	0.38	0.40

GREENS	Acceptable Range For Saturated Paste Sample	2,9 (avg) 4/30/16	6,10 (avg) 5/17/17	2,17 (avg) 4/17/18
Nitrate - 007 Bentgrass	1-3 ppm	<0.5	3.15	<0.5
Phosphorus	2 - 7 ppm	1.41	1.28	1.33
Potassium	25-40 ppm	32.51	28.85	18.31
Calcium	50- 75 ppm	22.05	25.22	15.87
Magnesium	15-30 ppm	7.77	6.98	5.26
Sodium	0 - 30 ppm	8.52	8.04	5.03
Soluble Salts	<1,000 ppm	228.00	201.00	99.00
Bicarbonate	<60 ppm	60.40	57.35	52.47
Chloride	<200 ppm	14.25	13.50	5.50
SAR	<4%	0.37	0.37	0.28