



SOIL AND WATER CONSULTING

Data Collection Report

Summer 2022

Date of Collection: 6/14/22

Client: Braemar Country Club



Testing Results

	<u>7/17/20</u>	<u>6/18/21</u>	<u>6/14/22</u>
Humidity/Air Temperature	33%/89°	40%/93°	40%/88°
Greens Temperature	(avg)67.6°	(avg)69.8°	(avg)65.3°
Fairway Temperature	(avg)72.06°	(avg)74.2°	(avg)71.26°

WATER	Acceptable Range For Water Sample	Western Hole #7 <u>7/17/20</u>	Masters Hole #2 <u>6/18/21</u>	US Open Hole #8 <u>6/14/22</u>
EC	<2.25 mmhos/cm	0.44	0.67	0.68
Sodium		37.78	54.62	63.30
Calcium	20 - 60 ppm	27.72	44.15	52.48
Magnesium	10 - 25 ppm	12.59	13.81	12.44
Potassium	5 - 20 ppm	6.21	3.30	1.99
Sulfur	30 - 90 ppm	61.71	95.61	120.21
Bicarbonate	<120 ppm	114.71	151.01	143.98
Boron	<0.67 ppm	0.34	0.27	0.25
Chloride	<177 ppm	33.53	54.64	64.51

MASTERS TEE	Acceptable Range For Tissue Sample	8 <u>6/14/22</u>
Nitrogen	2.49%-4.56%	2.01
Phosphorus	0.26%-0.38%	0.70
Potassium	0.95% - 1.97%	2.76
Calcium	0.50%-0.90%	0.74
Magnesium	0.13%-0.16%	0.20
Sodium	622-1709 ppm	2,160.00

MASTERS FAIRWAY	Acceptable Range For Tissue Sample	8 <u>6/14/22</u>
Nitrogen	2.49%-4.56%	3.78
Phosphorus	0.26%-0.38%	0.48
Potassium	0.95% - 1.97%	1.56
Calcium	0.50%-0.90%	0.58
Magnesium	0.13%-0.16%	0.17
Sodium	622-1709 ppm	1,190.00

MASTERS GREEN	Acceptable Range For Tissue Sample	8 <u>6/14/22</u>
Nitrogen	3.0%-6.5%	3.74
Phosphorus	0.2%-0.55%	0.41
Potassium	0.86%-2.55%	1.91
Calcium	0.21%-0.50%	0.56
Magnesium	0.09%-0.22%	0.21
Sodium	506- 2264 ppm	1,050.00

TEES	Acceptable Range For Alkaline Soils Sample	7(avg) 7/17/20	2(avg) 6/18/21	8(avg) 6/14/22
Organic Matter (Humus)	2 - 3%	5.46	2.12	2.69
Sulfur	12 - 16 ppm	45.67	56.67	47.00
Olsen - Phosphorus	13 - 20 ppm	49.00	24.00	31.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,631.33	3,020.67	4,380.00
Magnesium	>7% base saturation or at least 200 lbs/acre	19.12%/648.66	15.26%/377.33	15.62%/556.66
Potassium - TEC of 0 - 35	100 ppm	172.33	111.00	118.67
Manganese	50-80 ppm	11.67	19.00	23.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	7(avg) 7/17/20	2(avg) 6/18/21	8(avg) 6/14/22
Organic Matter (Humus)	2 - 3%	8.94	8.19	8.21
Sulfur	12 - 16 ppm	61.67	97.33	1,323.67
Olsen - Phosphorus	13 - 20 ppm	32.00	51.00	49.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,678.00	5,369.33	9,226.67
Magnesium	>7% base saturation or at least 200 lbs/acre	21.22%/944	19.68%/954	20.92%/1,674.66
Potassium - TEC of 0 - 35	100 ppm	390.00	428.67	443.00
Manganese	50-80 ppm	17.00	9.67	19.00

GREENS	Acceptable Range For Alkaline Soils Sample	7(avg) 7/17/20	2(avg) 6/18/21	8(avg) 6/14/22
Organic Matter (Humus)	2 - 3%	0.99	1.21	1.14
Sulfur	12 - 16 ppm	44.00	27.00	62.33
Olsen - Phosphorus	13 - 20 ppm	3.33	11.00	4.67
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,624.67	1,487.33	1,780.00
Magnesium	>7% base saturation or at least 200 lbs/acre	17.28%/227.33	15.8%/188.66	15.24%/222.66
Potassium - TEC of 0 - 35	150 ppm	59.67	44.67	40.67
Manganese	50-80 ppm	37.67	54.00	56.00

MASTERS TEE	Acceptable Range For Saturated Paste Sample	7 7/17/20	2 6/18/21	8 6/14/22
Nitrate - Bermudagrass	10-15 ppm	<0.5	<0.5	3.60
Phosphorus	2 - 10 ppm	3.13	3.67	3.39
Potassium	40 - 100 ppm	33.76	22.10	10.36
Calcium	60 - 200 ppm	78.90	66.70	53.74
Magnesium	20 - 70 ppm	37.85	17.91	15.65
Sodium	0 - 30 ppm	58.03	68.52	77.34
Soluble Salts	<1,920 ppm	525.00	463.00	415.00
Bicarbonate	<60 ppm	97.80	104.96	97.71
Chloride	<1,000 ppm	85.00	66.00	70.00
SAR	<4%	1.34	1.92	2.39

MASTERS FAIRWAY	Acceptable Range For Saturated Paste Sample	7 7/17/20	2 6/18/21	8 6/14/22
Nitrate - Bermudagrass	10-15 ppm	<0.5	<0.5	<0.5
Phosphorus	2 - 10 ppm	2.22	2.33	2.10
Potassium	40 - 100 ppm	31.54	44.10	73.51
Calcium	60 - 200 ppm	37.15	115.33	198.72
Magnesium	20 - 70 ppm	18.54	34.27	57.78
Sodium	0 - 30 ppm	38.20	114.72	212.89
Soluble Salts	<1,920 ppm	317.00	786.00	1,379.00
Bicarbonate	<60 ppm	86.53	91.06	145.80
Chloride	<1,000 ppm	47.00	133.00	292.00
SAR	<4%	1.28	2.41	3.42

MASTERS GREEN	Acceptable Range For Saturated Paste Sample	7 7/17/20	2 6/18/21	8 6/14/22
Nitrate - Bentgrass/Poa	1-3 ppm	0.70	<0.5	2.00
Phosphorus	2 - 7 ppm	2.29	1.47	1.63
Potassium	25-40 ppm	19.93	14.93	10.04
Calcium	50- 75 ppm	35.88	49.00	38.77
Magnesium	15-30 ppm	14.22	12.12	8.25
Sodium	0 - 30 ppm	49.13	53.54	59.29
Soluble Salts	<1,000 ppm	323.00	353.00	301.00
Bicarbonate	<60 ppm	78.75	95.62	68.89
Chloride	<200 ppm	47.00	50.00	52.00
SAR	<4%	1.76	1.77	2.26