



Client: Coyote Springs Golf Club
Spring 2024 Report

<u>4/11/24</u>	
Humidity/Air Temperature	85%/15°
Greens Temperature	(avg)52°
Fairway Temperature	(avg)50°

WATER	Acceptable Range For Water Sample	Hole #1 3/5/19	Hole #18 4/11/24
EC	<2.25 mmhos/cm	0.90	0.75
Sodium		84.94	82.28
Calcium	20 - 60 ppm	47.06	48.23
Magnesium	10 - 25 ppm	19.59	22.10
Potassium	5 - 20 ppm	14.79	11.62
Sulfur	30 - 90 ppm	95.52	104.03
Bicarbonate	<120 ppm	321.40	295.52
Boron	<0.67 ppm	0.32	0.35
Chloride	<177 ppm	28.77	33.19



SOIL AND WATER CONSULTING

TEE	Acceptable Range For Tissue Sample	1 4/11/24
Nitrogen	3.34%-5.10%	3.70
Phosphorus	0.35% - 0.55%	0.55
Potassium	2.0% - 3.42%	3.28
Calcium	0.25%-0.5%	0.40
Magnesium	0.16%-0.32%	0.24
Sodium	229-1107 ppm	1,190.80

FAIRWAY	Acceptable Range For Tissue Sample	1 4/11/24
Nitrogen	3.34%-5.10%	4.00
Phosphorus	0.35% - 0.55%	0.65
Potassium	2.0% - 3.42%	3.48
Calcium	0.25%-0.5%	0.52
Magnesium	0.16%-0.32%	0.30
Sodium	229-1107 ppm	1,797.90

GREENS	Acceptable Range For Tissue Sample	2 4/11/24
Nitrogen	3.0%-6.5%	3.38
Phosphorus	0.2%-0.55%	0.50
Potassium	0.86%-2.55%	1.74
Calcium	0.21%-0.50%	0.62
Magnesium	0.09%-0.22%	0.26
Sodium	506- 2264 ppm	1,559.00

TEES	Acceptable Range For Alkaline Soils Sample	9,18(avg) 3/5/18	9,18(avg) 4/11/24
Organic Matter (Humus)	2 - 3%	0.80	1.75
Sulfur	12 - 16 ppm	19.00	32.50
Olsen - Phosphorus	13 - 20 ppm	12.00	11.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,085.00	4,122.00
Magnesium	>7% base saturation or at least 200 lbs/acre	15.87%/519.5	17.76%/620
Potassium - TEC of 0 - 35	100 ppm	243.00	255.00
Manganese	>50 ppm	12.00	17.50

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	9,18(avg) 3/5/18	9,18(avg) 4/11/24
Organic Matter (Humus)	2 - 3%	0.89	1.44
Sulfur	12 - 16 ppm	18.00	23.00
Olsen - Phosphorus	13 - 20 ppm	21.00	6.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,059.00	4,038.00
Magnesium	>7% base saturation or at least 200 lbs/acre	17.05%/577	17.24%/595
Potassium - TEC of 0 - 35	100 ppm	298.50	255.00
Manganese	>50 ppm	10.50	11.50

GREENS	Acceptable Range For Alkaline Soils Sample	9,18(avg) 3/5/18	9,18(avg) 4/11/24
Organic Matter (Humus)	2 - 3%	0.95	0.88
Sulfur	12 - 16 ppm	19.00	35.50
Olsen - Phosphorus	13 - 20 ppm	14.00	5.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,316.00	3,188.00
Magnesium	>7% base saturation or at least 200 lbs/acre	12.09%/300	11.62%/282
Potassium - TEC of 0 - 35	150 ppm	109.50	134.50
Manganese	>50 ppm	22.00	31.50

TEE	Acceptable Range For Saturated Paste Sample	9 3/5/18	18 4/11/24
Nitrate - Ryegrass	10 -15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	2.00	2.98
Potassium	40 - 100 ppm	24.20	36.10
Calcium	60 - 200 ppm	48.42	67.39
Magnesium	20 - 70 ppm	20.75	7.69
Sodium	0 - 30 ppm	69.03	112.93
Soluble Salts	<1,920 ppm	342.00	565.00
Bicarbonate	<60 ppm	165.95	240.09
Chloride	<1,000 ppm	14.00	78.00
SAR	<4%	2.09	2.92

FAIRWAY	Acceptable Range For Saturated Paste Sample	9 3/5/18	18 4/11/24
Nitrate - Ryegrass	10 -15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	2.98	2.03
Potassium	40 - 100 ppm	16.67	22.17
Calcium	60 - 200 ppm	53.46	54.13
Magnesium	20 - 70 ppm	24.05	22.34
Sodium	0 - 30 ppm	75.32	82.18
Soluble Salts	<1,920 ppm	385.00	445.00
Bicarbonate	<60 ppm	200.00	258.17
Chloride	<1,000 ppm	17.00	7.00
SAR	<4%	2.15	2.37

GREEN	Acceptable Range For Saturated Paste Sample	9 3/5/18	9,18(avg) 4/11/24
Nitrate -A-1/A-4 Bentgrass	1-3 ppm	<0.5	1.10
Phosphorus	2 - 7 ppm	2.76	1.47
Potassium	25-40 ppm	13.32	21.70
Calcium	50- 75 ppm	44.65	42.48
Magnesium	15-30 ppm	15.42	13.22
Sodium	0 - 30 ppm	46.15	68.46
Soluble Salts	<1,000 ppm	307.00	379.00
Bicarbonate	<60 ppm	187.91	123.42
Chloride	<200 ppm	11.00	22.00
SAR	<4%	1.52	2.35



Nutrient Deficiencies

		P	Mn
TEE	9	12	21
TEE	18	11	14
FAIRWAY	9	< 2	12
FAIRWAY	18	11	11
GREEN	9	8	33
GREEN	18	2	30

Phosphorus can be added in the form of 11-55-00 at a rate of 3 pounds of product per 1,000 sq ft one time and reevaluate at next soil sample collection

Manganese can be added in the form of Manganese Oxide or Manganese Sulfate at a rate of 3 pounds of product per 1,000 sq ft until June (Must be watered in)

Comments and Next Level Cultural Practices

- In this report, I compared the recent soil sampling from holes 9 & 18 with the same holes that I sampled in the Spring of 2018. It is worth noting how desert soils (your tees and fairways) do not seem to change quickly. Another way to look at it is that all you have spread and sprayed over the previous 6 years has kept things at a status quo. The greens are more in a fluctuating state due to better drainage and sandier conditions compared to the tees and fairways. Consider more routine sample visits to check nutrient levels more frequently and be able to adjust throughout a season which gives your more immediate control, and it will save money by saving applications.
- Overall, the turf looked like how I last saw it. The original construction was done well and has held up as the course has aged.
- We discussed things like bunker renovation. Although it would be appropriate to consider new bunkers, I understand that right timing is even more important. Renovation work on golf courses has been so busy for the last 4 years that waiting, for whatever reason, may pay off when construction companies aren't as busy and costs of products reduce some.

