



Client: Quail Creek Golf Club
Spring 2024 Report

	<u>3/22/23</u>	<u>3/14/24</u>
Humidity/Air Temperature	60%/63°	35%/72°
Greens Temperature	(avg)54.35°	(avg)50°
Fairway Temperature	(avg)54.5°	(avg)51°

	<u>Acceptable Range For Water Sample</u>	<u>Coyote Hole #1 3/22/23</u>	<u>Coyote Hole #5 3/14/24</u>
pH	6.0-6.5	7.50	7.78
EC	<2.25 mmhos/cm	0.53	0.57
Nitrate		0.12	n/r
Sodium		101.55	104.24
Calcium	20 - 60 ppm	19.97	21.37
Magnesium	10 - 25 ppm	<0.20	<0.20
Potassium	5 - 20 ppm	2.42	2.38
Sulfur	30 - 90 ppm	175.17	170.32
Bicarbonate	<120 ppm	106.60	122.06
Boron	<0.67 ppm	0.23	0.21
Chloride	<177 ppm	3.06	6.13

COYOTE TEE	Acceptable Range For Tissue Sample	5 3/14/24
Nitrogen	2.49%-4.56%	2.30
Phosphorus	0.26%-0.38%	0.20
Potassium	0.95% - 1.97%	0.43
Calcium	0.50%-0.90%	0.50
Magnesium	0.13%-0.16%	0.08
Sodium	622-1709 ppm	1,299.00

COYOTE FAIRWAY	Acceptable Range For Tissue Sample	5 3/14/24
Nitrogen	2.49%-4.56%	2.78
Phosphorus	0.26%-0.38%	0.20
Potassium	0.95% - 1.97%	0.44
Calcium	0.50%-0.90%	1.14
Magnesium	0.13%-0.16%	0.08
Sodium	622-1709 ppm	1,755.20

COYOTE GREEN	Acceptable Range For Tissue Sample	5 3/14/24
Nitrogen	3.0%-6.5%	2.84
Phosphorus	0.2%-0.55%	0.30
Potassium	0.86%-2.55%	0.90
Calcium	0.21%-0.50%	0.96
Magnesium	0.09%-0.22%	0.07
Sodium	506- 2264 ppm	4,123.00

TEES	Acceptable Range For Alkaline Soils Sample	3(avg) 9/26/23	5(avg) 3/14/24
Organic Matter (Humus)	2 - 3%	0.77	1.19
Sulfur	12 - 16 ppm	55.50	83.00
Olsen - Phosphorus	13 - 20 ppm	<1	4.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,129.00	2,730.67
Magnesium	>7% base saturation or at least 200 lbs/acre	7.77%/187	5.47%/110
Potassium - TEC of 0 - 35	100 ppm	139.50	96.33
Manganese	>50 ppm	51.50	39.67

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	3(avg) 9/26/23	5(avg) 3/14/24
Organic Matter (Humus)	2 - 3%	3.79	4.10
Sulfur	12 - 16 ppm	324.67	117.00
Olsen - Phosphorus	13 - 20 ppm	10.33	4.67
Calcium - TEC of 6 - 12	1,000 lbs/acre	5,074.00	4,921.33
Magnesium	>7% base saturation or at least 200 lbs/acre	6.38%/268.67	0.00
Potassium - TEC of 0 - 35	100 ppm	332.00	238.33
Manganese	>50 ppm	73.00	39.67

GREENS	Acceptable Range For Alkaline Soils Sample	3(avg) 9/26/23	5(avg) 3/14/24
Organic Matter (Humus)	2 - 3%	0.59	0.51
Sulfur	12 - 16 ppm	17.67	8.00
Olsen - Phosphorus	13 - 20 ppm	<1.33	2.67
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,880.67	1,806.67
Magnesium	>7% base saturation or at least 200 lbs/acre	7.89%/116	5.06%/69.33
Potassium - TEC of 0 - 35	150 ppm	123.33	64.00
Manganese	>50 ppm	17.33	10.33

COYOTE TEE	Acceptable Range For Saturated Paste Sample	3 9/26/23	5 3/14/24
Nitrate - Tiftuf bermudagrass	10-15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.38	0.78
Potassium	40 - 100 ppm	9.62	20.50
Calcium	60 - 200 ppm	27.78	24.85
Magnesium	20 - 70 ppm	4.11	9.35
Sodium	0 - 30 ppm	120.77	54.61
Soluble Salts	<1,920 ppm	427.00	212.00
Bicarbonate	<60 ppm	169.63	94.29
Chloride	<1,000 ppm	14.00	13.00
SAR	<4%	5.65	2.37

COYOTE FAIRWAY	Acceptable Range For Saturated Paste Sample	3 9/26/23	5 3/14/24
Nitrate - Tiftuf bermudagrass	10-15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.43	1.11
Potassium	40 - 100 ppm	20.88	52.63
Calcium	60 - 200 ppm	47.62	23.52
Magnesium	20 - 70 ppm	7.29	9.46
Sodium	0 - 30 ppm	239.26	84.82
Soluble Salts	<1,920 ppm	769.00	372.00
Bicarbonate	<60 ppm	234.17	97.44
Chloride	<1,000 ppm	41.00	46.00
SAR	<4%	8.53	3.73

COYOTE GREEN	Acceptable Range For Saturated Paste Sample	3 9/26/23	5 3/14/24
Nitrate -Mini verde bermudagrass	1-3 ppm	3.10	<0.5
Phosphorus	2-7 ppm	0.64	1.08
Potassium	25-40 ppm	6.18	10.83
Calcium	50- 75 ppm	12.98	14.07
Magnesium	15-30 ppm	1.68	6.15
Sodium	0 - 30 ppm	45.10	49.76
Soluble Salts	<1,000 ppm	200.00	166.00
Bicarbonate	<60 ppm	78.26	81.32
Chloride	<200 ppm	5.00	10.00
SAR	<4%	3.13	2.78

Nutrient Deficiencies

		P	Mg	K
COYOTE	TEE	5	84	93
QUAIL	TEE	4	138	70
ROADRUNNER	TEE	3	108	126
COYOTE	FAIRWAY	7	166	242
QUAIL	FAIRWAY	5	198	281
ROADRUNNER	FAIRWAY	< 2	240	192
COYOTE	GREEN	2	60	130
QUAIL	GREEN	< 2	82	62
ROADRUNNER	GREEN	4	66	79

Phosphorus can be added in the form of 11-55-00 at a rate of 3 pounds of product per 1,000 sq ft or 125 pounds of product per acre two times between now and Labor Day

Magnesium can be added in the form of Pro-Mag 36 at a rate of 3 pounds of product per 1,000 sq ft

Potassium can be added in the form of 0-0-50 at a rate of 2 pounds of product per 1,000 sq ft

Notes from Visit, Comments and Next Level Cultural Practices

- The bermudagrass seemed greener and growing some, further ahead compared to last year.
- Pre-emergence had been applied at the time of my visit on longer cut grass, along with an Organic based 18-0-7 in December. A similar Organic product is scheduled to be applied in May.
- 6" of rain throughout the Winter really helped "clean" the soil heading to Spring warm up. I believe you are in excellent shape for Summer.
- Phosphorus is low property wide and would help most if available to the plant from June-September.

