



Client: Quail Creek Golf Club
Spring 2025 Report

	<u>3/22/23</u>	<u>3/14/24</u>	<u>3/4/25</u>
Humidity/Air Temperature	60%/63°	35%/72°	23%/64°
Greens Temperature	(avg)54.35°	(avg)50°	(avg)59°
Fairway Temperature	(avg)54.5°	(avg)51°	(avg)62°

WATER	Acceptable Range For Water Sample	Coyote Hole #1 <u>3/22/23</u>	Coyote Hole #5 <u>3/14/24</u>	Quail Hole #6 <u>3/4/25</u>
pH	6.0-6.5	7.50	7.78	7.93
EC	<2.25 mmhos/cm	0.53	0.57	0.61
Nitrate		0.12	n/r	n/r
Sodium		101.55	104.24	112.10
Calcium	20 - 60 ppm	19.97	21.37	20.98
Magnesium	10 - 25 ppm	<0.20	<0.20	0.33
Potassium	5 - 20 ppm	2.42	2.38	2.20
Sulfur	30 - 90 ppm	175.17	170.32	186.35
Bicarbonate	<120 ppm	106.60	122.06	113.48
Boron	<0.67 ppm	0.23	0.21	0.25
Chloride	<177 ppm	3.06	6.13	5.11

ROADRUNNER TEE	Acceptable Range For Tissue Sample	6 <u>3/4/25</u>
Nitrogen	2.49%-4.56%	3.24
Phosphorus	0.26%-0.38%	0.33
Potassium	0.95% - 1.97%	1.38
Calcium	0.50%-0.90%	0.61
Magnesium	0.13%-0.16%	0.11
Sodium	622-1709 ppm	3,593.20

ROADRUNNER FAIRWAY	Acceptable Range For Tissue Sample	6 <u>3/4/25</u>
Nitrogen	2.49%-4.56%	2.21
Phosphorus	0.26%-0.38%	0.17
Potassium	0.95% - 1.97%	0.47
Calcium	0.50%-0.90%	0.88
Magnesium	0.13%-0.16%	0.08
Sodium	622-1709 ppm	6,242.70

ROADRUNNER GREEN	Acceptable Range For Tissue Sample	6 <u>3/4/25</u>
Nitrogen	3.0%-6.5%	3.03
Phosphorus	0.2%-0.55%	0.35
Potassium	0.86%-2.55%	0.90
Calcium	0.21%-0.50%	0.75
Magnesium	0.09%-0.22%	0.12
Sodium	506- 2264 ppm	7,041.20

TEES	Acceptable Range For Alkaline Soils Sample	5(avg) 3/14/24	6(avg) 3/4/25
Organic Matter (Humus)	2 - 3%	1.19	1.27
Sulfur	12 - 16 ppm	83.00	40.00
Olsen - Phosphorus	13 - 20 ppm	4.00	4.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	2,730.67	2,146.00
Magnesium	>7% base saturation or at least 200 lbs/acre	5.47%/110	5.05%/80
Potassium - TEC of 0 - 35	100 ppm	96.33	142.00
Manganese	>50 ppm	39.67	81.33

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	5(avg) 3/14/24	6(avg) 3/4/25
Organic Matter (Humus)	2 - 3%	4.10	4.64
Sulfur	12 - 16 ppm	117.00	144.00
Olsen - Phosphorus	13 - 20 ppm	4.67	8.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,921.33	5,600.00
Magnesium	>7% base saturation or at least 200 lbs/acre	5.34%/201.33	4.58%/192.66
Potassium - TEC of 0 - 35	100 ppm	238.33	278.00
Manganese	>50 ppm	39.67	33.67

GREENS	Acceptable Range For Alkaline Soils Sample	5(avg) 3/14/24	6(avg) 3/4/25
Organic Matter (Humus)	2 - 3%	0.51	0.82
Sulfur	12 - 16 ppm	8.00	19.00
Olsen - Phosphorus	13 - 20 ppm	2.67	4.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,806.67	1,749.33
Magnesium	>7% base saturation or at least 200 lbs/acre	5.06%/69.33	4.96%/72.66
Potassium - TEC of 0 - 35	150 ppm	64.00	194.00
Manganese	>50 ppm	10.33	15.33

ROADRUNNER TEE	Acceptable Range For Saturated Paste Sample	Coyote 5 3/14/24	6 3/4/25
Nitrate - Tiffuf bermudagrass	10-15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	0.78	1.20
Potassium	40 - 100 ppm	20.50	12.97
Calcium	60 - 200 ppm	24.85	47.87
Magnesium	20 - 70 ppm	9.35	4.42
Sodium	0 - 30 ppm	54.61	251.81
Soluble Salts	<1,920 ppm	212.00	698.00
Bicarbonate	<60 ppm	94.29	215.40
Chloride	<1,000 ppm	13.00	26.00
SAR	<4%	2.37	9.33

ROADRUNNER FAIRWAY	Acceptable Range For Saturated Paste Sample	Coyote 5 3/14/24	6 3/4/25
Nitrate - Tiffuf bermudagrass	10-15 ppm	<0.5	<0.5
Phosphorus	2 - 10 ppm	1.11	0.43
Potassium	40 - 100 ppm	52.63	19.25
Calcium	60 - 200 ppm	23.52	84.01
Magnesium	20 - 70 ppm	9.46	5.62
Sodium	0 - 30 ppm	84.82	314.02
Soluble Salts	<1,920 ppm	372.00	893.00
Bicarbonate	<60 ppm	97.44	229.61
Chloride	<1,000 ppm	46.00	46.00
SAR	<4%	3.73	8.95

ROADRUNNER GREEN	Acceptable Range For Saturated Paste Sample	Coyote 5 3/14/24	6 3/4/25
Nitrate -Mini verde bermudagrass	1-3 ppm	<0.5	2.30
Phosphorus	2-7 ppm	1.08	1.44
Potassium	25-40 ppm	10.83	9.95
Calcium	50- 75 ppm	14.07	11.07
Magnesium	15-30 ppm	6.15	2.60
Sodium	0 - 30 ppm	49.76	74.76
Soluble Salts	<1,000 ppm	166.00	243.00
Bicarbonate	<60 ppm	81.32	85.24
Chloride	<200 ppm	10.00	11.00
SAR	<4%	2.78	5.45

Nutrient Deficiencies

			P	Mg	Na
COYOTE	TEE	6	7	80	174
COYOTE	GREEN	6	7	62	171
QUAIL	TEE	6	3	72	122
QUAIL	GREEN	6	3	76	160
ROADRUNNER	TEE	6	3	112	330
ROADRUNNER	GREEN	6	2	80	184

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

- We discussed increasing the amount of **Primo** growth regulator on the fairways from May to September. This will enhance the other cultural practices you plan to do to the fairways to get the grass to stand more upright.
- Work on decompaction of traffic areas and longer cut bermudagrass areas with aerification. This will help to set up the playing conditions for Winter. The turf needs to go into November as healthy and dense as possible. Very little can be done in your area from December through April to improve turf conditions.
- Magnesium is very deficient in your sandier soil areas like tees and green. You could use a less expensive Dolomitic Limestone application, or the above recommendations.
- Although there are some areas that could use more Phosphorus, I would allow your more organic program to work for a year or so. We should see some increases in soil P from those applications.

