



SOIL AND WATER CONSULTING

Data Collection Report

Spring 2023

Date of Collection: 3/22/23

Client: Quail Creek Golf Club



Quail Creek
A ROBSON RESORT
COMMUNITY

Testing Results

<u>3/22/23</u>		
Humidity/Air Temperature	60%/63°	
Greens Temperature	(avg)54.35°	
Fairway Temperature	(avg)54.5°	

WATER	Acceptable Range For Water Sample	Coyote Hole #1 3/22/23
pH	6.0-6.5 pH	7.50
EC	<2.25 mmhos/cm	0.53
Sodium		101.55
Calcium	20 - 60 ppm	19.97
Magnesium	10 - 25 ppm	<0.20
Potassium	5 - 20 ppm	2.42
Phosphorus	0.1 - 0.4 ppm	<0.20
Nitrate	5 - 50 ppm	0.12
Bicarbonate	<120 ppm	106.60
Boron	<0.67 ppm	0.23
Chloride	<177 ppm	3.06

ROADRUNNER TEE	Acceptable Range For Tissue Sample	2 3/22/23
Nitrogen	3.34%-5.10%	3.00
Phosphorus	0.35% - 0.55%	0.33
Potassium	2.0% - 3.42%	1.88
Calcium	0.25%-0.5%	0.77
Magnesium	0.16%-0.32%	0.18
Sodium	229-1107 ppm	2,353.00

ROADRUNNER FAIRWAY	Acceptable Range For Tissue Sample	1 3/22/23
Nitrogen	3.34%-5.10%	3.35
Phosphorus	0.35% - 0.55%	0.41
Potassium	2.0% - 3.42%	2.14
Calcium	0.25%-0.5%	0.79
Magnesium	0.16%-0.32%	0.18
Sodium	229-1107 ppm	2,436.00

GREENS	Acceptable Range For Tissue Sample	1,1(avg) 3/22/23
Nitrogen	3.0%-6.5%	3.44
Phosphorus	0.2%-0.55%	0.36
Potassium	0.86%-2.55%	0.97
Calcium	0.21%-0.50%	0.83
Magnesium	0.09%-0.22%	0.10
Sodium	506- 2264 ppm	5,462.40

TEES	Acceptable Range For Alkaline Soils Sample	1/2(avg) 3/22/23
Organic Matter (Humus)	2 - 3%	2.09
Sulfur	12 - 16 ppm	26.00
Olsen - Phosphorus	13 - 20 ppm	2.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,560.00
Magnesium	>7% base saturation or at least 200 lbs/acre	5.1%/138
Potassium - TEC of 0 - 35	100 ppm	127.50
Manganese	>50 ppm	45.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	1/2(avg) 3/22/23
Organic Matter (Humus)	2 - 3%	4.10
Sulfur	12 - 16 ppm	231.00
Olsen - Phosphorus	13 - 20 ppm	6.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	6,153.33
Magnesium	>7% base saturation or at least 200 lbs/acre	4.86%/228.67
Potassium - TEC of 0 - 35	100 ppm	307.67
Manganese	>50 ppm	46.00

GREENS	Acceptable Range For Alkaline Soils Sample	1/2(avg) 3/22/23
Organic Matter (Humus)	2 - 3%	1.00
Sulfur	12 - 16 ppm	14.00
Olsen - Phosphorus	13 - 20 ppm	5.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,819.00
Magnesium	>7% base saturation or at least 200 lbs/acre	4.12%/56
Potassium - TEC of 0 - 35	150 ppm	69.50
Manganese	>50 ppm	21.00

COYOTE TEE	Acceptable Range For Saturated Paste Sample	1 3/22/23
Nitrate -Bermudagrass	5 - 10 ppm	48.70
Phosphorus	2 - 10 ppm	0.50
Potassium	40 - 100 ppm	9.96
Calcium	60 - 200 ppm	46.80
Magnesium	20 - 70 ppm	7.58
Sodium	0 - 30 ppm	161.56
Soluble Salts	<1,920 ppm	538.00
Bicarbonate	<60 ppm	256.43
Chloride	<1,000 ppm	23.00
SAR	<4%	5.78

COYOTE FAIRWAY	Acceptable Range For Saturated Paste Sample	1 3/22/23
Nitrate -Bermudagrass	5 - 10 ppm	1.40
Phosphorus	2 - 10 ppm	0.28
Potassium	40 - 100 ppm	25.71
Calcium	60 - 200 ppm	149.32
Magnesium	20 - 70 ppm	8.64
Sodium	0 - 30 ppm	25.71
Soluble Salts	<1,920 ppm	971.00
Bicarbonate	<60 ppm	218.05
Chloride	<1,000 ppm	36.00
SAR	<4%	4.84

GREENS	Acceptable Range For Saturated Paste Sample	1/2(avg) 3/22/23
Nitrate -Bermudagrass	1-3 ppm	2.70
Phosphorus	2 - 7 ppm	0.42
Potassium	25-40 ppm	2.94
Calcium	50- 75 ppm	11.70
Magnesium	15-30 ppm	1.70
Sodium	0 - 30 ppm	73.61
Soluble Salts	<1,000 ppm	246.00
Bicarbonate	<60 ppm	72.22
Chloride	<200 ppm	7.00
SAR	<4%	5.31