



Client: Los Robles Greens Golf Course
Fall 2023 Report

	9/29/21	10/3/22	10/19/23
Humidity/Air Temperature	50%/75°	50%/78°	36%/86°
Greens Temperature	(avg)58.43°	(avg)73.8°	(avg)60.9°
Fairway Temperature	(avg)63.67°	(avg)72.8°	(avg)61.9°

WATER	Acceptable Range For Water Sample	Hole #14 9/29/21	Hole #14 10/19/23
pH	6.50	8.34	7.72
EC	<2.25 mmhos/cm	0.64	1.04
Sodium		75.55	80.78
Calcium	20 - 60 ppm	36.20	72.33
Magnesium	10 - 25 ppm	13.40	52.30
Potassium	5 - 20 ppm	3.32	2.93
Sulfur	30 - 90 ppm	105.60	272.50
Bicarbonate	<120 ppm	125.99	220.31
Boron	<0.67 ppm	0.19	0.20
Chloride	<177 ppm	81.70	104.68



SOIL AND WATER CONSULTING

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	9,11,17(avg) 9/29/21	11,17(avg) 10/19/23
Organic Matter (Humus)	2 - 3%	5.02	7.54
Sulfur	12 - 16 ppm	366.00	325.00
Olsen - Phosphorus	13 - 20 ppm	14.00	11.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	6,546.67	4,692.00
Magnesium	>7% base saturation or at least 200 lbs/acre	24.57%/1,635.33	24.25%/1,095
Potassium - TEC of 0 - 35	100 ppm	398.67	213.50
Manganese	50-80 ppm	101.67	55.50

GREENS	Acceptable Range For Alkaline Soils Sample	3,5,9,13,14,17(avg) 9/29/21	3,5,9,13,14,17(avg) 10/19/23
Organic Matter (Humus)	2 - 3%	1.26	1.15
Sulfur	12 - 16 ppm	28.36	27.17
Olsen - Phosphorus	13 - 20 ppm	11.64	6.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,508.33	1,422.67
Magnesium	>7% base saturation or at least 200 lbs/acre	13.85%/167.66	23.81%/309.66
Potassium - TEC of 0 - 35	150 ppm	62.22	66.67
Manganese	50-80 ppm	76.08	63.67

FAIRWAYS	Acceptable Range For Saturated Paste Sample	9,17(avg) 9/29/21	17 10/19/23
Nitrate-Kikuyagrass	5-10 ppm	<3.6	6.40
Phosphorus	2 - 10 ppm	2.05	1.73
Potassium	40 - 100 ppm	67.92	54.88
Calcium	60 - 200 ppm	231.36	84.73
Magnesium	20 - 70 ppm	135.52	40.79
Sodium	0 - 30 ppm	307.44	103.40
Soluble Salts	<1,920 ppm	1,847.00	797.00
Bicarbonate	<60 ppm	178.32	95.46
Chloride	<1,000 ppm	561.00	85.00
SAR	<4%	4.03	2.31

GREENS	Acceptable Range For Saturated Paste Sample	3,14,17(avg) 9/29/21	3,14,17(avg) 10/19/23
Nitrate- Bentgrass/poa	1-3 ppm	2.70	2.40
Phosphorus	2 - 7 ppm	2.60	3.80
Potassium	25-40 ppm	9.72	13.27
Calcium	50- 75 ppm	19.04	29.67
Magnesium	15-30 ppm	5.34	15.47
Sodium	0 - 30 ppm	37.71	48.31
Soluble Salts	<1,000 ppm	243.67	321.67
Bicarbonate	<60 ppm	70.54	52.29
Chloride	<200 ppm	32.78	36.67
SAR	<4%	1.97	1.79

Nutrient Deficiencies

		P	K
FAIRWAY	9	14.0	274
FAIRWAY	11	15.0	236
FAIRWAY	17	8.0	342
GREEN	3	8.0	96
GREEN	5	1.0	62
GREEN	9	5.0	61
GREEN	13	9.0	57
GREEN	14	6.0	73
GREEN	17	9.0	51

Phosphorus can be added in the form of 11-55-00, or similar, 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 two times in the next four months.

Comments and Next Level Cultural Practices

- We can see a change in the soil chemistry on fairway #9 from 2021. It has always been slower draining thus, holding more sulfur, sodium and bicarbonate, but it seems to be “stuck” like a clogged bathtub. We did discuss prioritizing repairing and adding drainage from 1 down to the highway. I am sure the city would have to get involved to do the project entirely properly
- Phosphorus levels are lagging in the greens, but you can work on this over the Winter. Potassium is nearly the same compared to 2021 results. It would be best to increase levels going into the colder months
- The nitrogen levels on the fairways were a little inconsistent. Knowing that you recently applied a Poly-On product, it makes sense. When I catch some in a sample, it can give differing results