



SOIL AND WATER CONSULTING

Data Collection Report

Fall 2022

Date of Collection: 10/3/22

Client: Los Robles Greens Golf Course



Testing Results

	<u>10/23/20</u>	<u>9/29/21</u>	<u>10/3/22</u>
Humidity/Air Temperature	70%/70°	50%/75°	50%/78°
Greens Temperature	n/r	(avg)58.43°	(avg)73.8°
Fairway Temperature	n/r	(avg)63.67°	(avg)72.8°

WATER	Acceptable Range For Water Sample	Hole #2 10/23/20	Hole #14 9/29/21	Hole #14 10/3/22	New Well 10/3/22
pH	6.50	9.00	8.34	8.06	7.38
EC	<2.25 mmhos/cm	0.42	0.64	0.82	1.86
Sodium		51.44	75.55	87.36	118.50
Calcium	20 - 60 ppm	26.00	36.20	46.61	151.10
Magnesium	10 - 25 ppm	11.17	13.40	27.85	117.10
Potassium	5 - 20 ppm	6.53	3.32	3.25	3.46
Sulfur	30 - 90 ppm	58.29	105.60	192.57	531.00
Bicarbonate	<120 ppm	79.86	125.99	109.89	425.65
Boron	<0.67 ppm	0.18	0.19	0.19	0.19
Chloride	<177 ppm	51.40	81.70	86.64	169.36

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	4,10,15(avg) 10/23/20	9,11,17(avg) 9/29/21	2,5,14(avg) 10/3/22
Organic Matter (Humus)	2 - 3%	7.02	5.02	9.35
Sulfur	12 - 16 ppm	66.67	366.00	102.00
Olsen - Phosphorus	13 - 20 ppm	19.33	14.00	24.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	5,472.00	6,546.67	5,881.33
Magnesium	>7% base saturation or at least 200 lbs/acre	30.00%/1,762.66	24.57%/1,635.33	25.99%/1,548.66
Potassium - TEC of 0 - 35	100 ppm	482.67	398.67	473.67
Manganese	50-80 ppm	54.00	101.67	78.67

GREENS	Acceptable Range For Alkaline Soils Sample	2,4,6,10,12,15(avg) 10/23/20	3,5,9,13,14,17(avg) 9/29/21	2,4,6,10,12,15(avg) 10/3/22
Organic Matter (Humus)	2 - 3%	1.05	1.26	1.83
Sulfur	12 - 16 ppm	10.83	28.36	22.17
Olsen - Phosphorus	13 - 20 ppm	7.50	11.64	17.17
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,432.33	1,508.33	1,592.33
Magnesium	>7% base saturation or at least 200 lbs/acre	16.83%/198.3	13.85%/167.66	14.22%/194
Potassium - TEC of 0 - 35	150 ppm	75.33	62.22	90.33
Manganese	50-80 ppm	31.67	76.08	104.33

FAIRWAYS	Acceptable Range For Saturated Paste Sample	4,10(avg) 10/23/20	9,17(avg) 9/29/21	2,14(avg) 10/3/22
Nitrate	5-10 ppm	1.60	<3.6	9.15
Phosphorus	2 - 10 ppm	1.94	2.05	2.79
Potassium	40 - 100 ppm	36.18	67.92	75.70
Calcium	60 - 200 ppm	85.13	231.36	130.13
Magnesium	20 - 70 ppm	45.61	135.52	57.40
Sodium	0 - 30 ppm	117.09	307.44	200.80
Soluble Salts	<1,920 ppm	835.50	1,847.00	1,147.00
Bicarbonate	<60 ppm	158.33	178.32	211.81
Chloride	<1,000 ppm	226.50	561.00	304.50
SAR	<4%	2.55	4.03	3.84

GREENS	Acceptable Range For Saturated Paste Sample	2,10,15(avg) 10/23/20	3,14,17(avg) 9/29/21	2,12,15(avg) 10/3/22
Nitrate- Bentgrass/poa	1-3 ppm	<0.55	2.70	2.60
Phosphorus	2 - 7 ppm	1.86	2.60	6.65
Potassium	25-40 ppm	11.73	9.72	27.26
Calcium	50-75 ppm	17.93	19.04	40.06
Magnesium	15-30 ppm	5.65	5.34	10.74
Sodium	0 - 30 ppm	25.94	37.71	67.97
Soluble Salts	<1,000 ppm	171.33	243.67	375.33
Bicarbonate	<60 ppm	67.46	70.54	103.38
Chloride	<200 ppm	20.00	32.78	55.67
SAR	<4%	1.37	1.97	2.48