



SOIL AND WATER CONSULTING

Data Collection Report

Spring 2023

Date of Collection: 3/9/23

Client: Los Robles Greens Golf Course



Testing Results

	<u>3/16/21</u>	<u>3/9/22</u>	<u>3/9/23</u>
Humidity/Air Temperature	45%/56°	40%/69°	50%/65°
Greens Temperature	(avg)41.45°	(avg)42.41°	(avg)45.8°
Fairway Temperature	(avg)45.05°	(avg)47.95°	(avg)47.3°

FAIRWAY	Acceptable Range For Alkaline Soils Sample	12,13(avg) <u>3/16/21</u>	6,8,16(avg) <u>3/9/22</u>	1,2,10(avg) <u>3/9/23</u>
Organic Matter (Humus)	2 - 3%	7.72	6.15	7.22
Sulfur	12 - 16 ppm	104.50	118.50	13.00
Olsen - Phosphorus	13 - 20 ppm	26.50	15.50	23.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	5,818.00	5,654.00	4,752.67
Magnesium	>7% base saturation or at least 200 lbs/acre	29.05%/1,784	22.47%/1,068	26.03%/1,180
Potassium - TEC of 0 - 35	100 ppm	517.50	225.50	323.00
Manganese	50-80 ppm	81.00	50.50	110.67

FAIRWAYS	Acceptable Range For Saturated Paste Sample	12 <u>3/16/21</u>	6,16(avg) <u>3/9/22</u>	2,10(avg) <u>3/9/23</u>
Nitrate	10 - 15 ppm	22.90	<0.5	<1.2
Phosphorus	2 - 10 ppm	2.64	1.50	1.29
Potassium	40 - 100 ppm	80.83	29.70	14.29
Calcium	60 - 200 ppm	58.03	75.95	17.19
Magnesium	20 - 70 ppm	29.13	29.27	6.79
Sodium	0 - 30 ppm	75.82	105.45	23.88
Soluble Salts	<1,920 ppm	586.00	657.00	176.33
Bicarbonate	<60 ppm	174.00	200.76	81.07
Chloride	<1,000 ppm	118.00	78.50	12.67
SAR	<4%	2.03	2.03	1.02

WATER	Acceptable Range For Water Sample	Hole #12 <u>3/16/21</u>	Hole #11 <u>3/9/22</u>	Hole #14 <u>3/9/23</u>
pH	6.50	7.62	8.71	7.23
EC	<2.25 mmhos/cm	0.48	0.53	0.82
Sodium		59.70	72.89	54.59
Calcium	20 - 60 ppm	29.80	34.04	62.23
Magnesium	10 - 25 ppm	10.96	9.79	40.94
Potassium	5 - 20 ppm	3.13	2.52	14.73
Sulfur	30 - 90 ppm	56.70	85.77	203.92
Bicarbonate	<120 ppm	141.10	96.47	207.36
Boron	<0.67 ppm	0.20	0.17	0.12
Chloride	<177 ppm	60.93	66.55	74.55

GREENS	Acceptable Range For Alkaline Soils Sample	8,11,12,13(avg) <u>3/16/21</u>	1,2,6,8,10,16(avg) <u>3/9/22</u>	1,8,10,11,12,16(avg) <u>3/9/23</u>
Organic Matter (Humus)	2 - 3%	1.19	1.06	1.17
Sulfur	12 - 16 ppm	18.75	23.17	22.00
Olsen - Phosphorus	13 - 20 ppm	19.50	16.50	13.83
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,537.00	1,705.33	1,496.00
Magnesium	>7% base saturation or at least 200 lbs/acre	15.75%/200.5	12.57%/167.33	15.54%/187
Potassium - TEC of 0 - 35	150 ppm	95.25	73.33	73.83
Manganese	50-80 ppm	56.50	54.33	74.67

GREENS	Acceptable Range For Saturated Paste Sample	8,11,12,13(avg) <u>3/16/21</u>	1,2,6,8(avg) <u>3/9/22</u>	1,10,11,16(avg) <u>3/9/23</u>
Nitrate- Bentgrass/poa	1-3 ppm	<0.5	2.85	<1.25
Phosphorus	2 - 7 ppm	1.54	2.47	2.88
Potassium	25-40 ppm	43.17	20.91	27.98
Calcium	50- 75 ppm	54.71	39.17	59.30
Magnesium	15-30 ppm	15.79	8.59	16.70
Sodium	0 - 30 ppm	46.78	42.09	19.54
Soluble Salts	<1,000 ppm	357.50	318.75	347.25
Bicarbonate	<60 ppm	153.27	70.62	111.57
Chloride	<200 ppm	35.75	39.75	20.50
SAR	<4%	1.44	1.60	0.58