



SOIL AND WATER CONSULTING

Data Collection Report

Spring 2021

Date of Collection: 3/16/21

Client: Los Robles Greens Golf Course



Testing Results

	<u>3/14/19</u>	<u>2/26/20</u>	<u>3/16/21</u>
Humidity/Air Temperature	15%/65°	12%/77°	45%/56°
Greens Temperature	(avg)56.8°	(avg)49°	(avg)41.45°
Fairway Temperature	(avg)56.3°	(avg)51°	(avg)45.05°

WATER	Acceptable Range For Water Sample	Hole #12 3/14/19	Hole #12 3/16/21
pH	6.50	7.25	7.62
EC	<2.25 mmhos/cm	0.44	0.48
Sodium		40.40	59.70
Calcium	20 - 60 ppm	26.08	29.80
Magnesium	10 - 25 ppm	9.34	10.96
Potassium	5 - 20 ppm	3.85	3.13
Sulfur	30 - 90 ppm	33.78	56.70
Bicarbonate	<120 ppm	133.25	141.10
Boron	<0.67 ppm	0.14	0.20

FAIRWAY	Acceptable Range For Alkaline Soils Sample	5,7,10(avg) 3/14/19	1,10(avg) 2/26/20	12,13(avg) 3/16/21
Organic Matter (Humus)	2 - 3%	8.19	6.66	7.72
Sulfur	12 - 16 ppm	57.33	245.50	104.50
Olsen - Phosphorus	13 - 20 ppm	25.22	14.50	26.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	5,402.00	5,852.00	5,818.00
Magnesium	>7% base saturation or at least 200 lbs/acre	26.88%/1,398	27.98%/1,652	29.05%/1,784
Potassium - TEC of 0 - 35	100 ppm	471.78	410.00	517.50
Manganese	50-80 ppm	81.44	98.50	81.00

GREENS	Acceptable Range For Alkaline Soils Sample	5,7,10(avg) 3/14/19	1,10,16(avg) 2/26/20	8,11,12,13(avg) 3/16/21
Organic Matter (Humus)	2 - 3%	1.35	1.21	1.19
Sulfur	12 - 16 ppm	8.56	14.67	18.75
Olsen - Phosphorus	13 - 20 ppm	8.33	12.00	19.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,661.33	1,601.33	1,537.00
Magnesium	>7% base saturation or at least 200 lbs/acre	16.82%/224.66	17.71%/234.66	15.75%/200.5
Potassium - TEC of 0 - 35	150 ppm	54.22	49.33	95.25
Manganese	50-80 ppm	28.00	53.67	56.50

FAIRWAYS	Acceptable Range For Saturated Paste Sample	10 2/26/20	12 3/16/21
Nitrate	10 -15 ppm	15.00	22.90
Phosphorus	2 - 10 ppm	3.41	2.64
Potassium	40 - 100 ppm	42.50	80.83
Calcium	60 - 200 ppm	62.06	58.03
Magnesium	20 - 70 ppm	32.75	29.13
Sodium	0 - 30 ppm	68.59	75.82
Soluble Salts	<1,920 ppm	537.00	586.00
Bicarbonate	<60 ppm	167.41	174.00
Chloride	<1,000 ppm	84.00	118.00
SAR	<4%	1.75	2.03

GREENS	Acceptable Range For Saturated Paste Sample	1,10,16(avg) 2/26/20	8,11,12,13(avg) 3/16/21
Nitrate- Bentgrass/poa	1-3 ppm	0.60	<0.5
Phosphorus	2 - 7 ppm	2.22	1.54
Potassium	25-40 ppm	7.68	43.17
Calcium	50- 75 ppm	26.24	54.71
Magnesium	15-30 ppm	8.98	15.79
Sodium	0 - 30 ppm	27.56	46.78
Soluble Salts	<1,000 ppm	202.00	357.50
Bicarbonate	<60 ppm	88.93	153.27
Chloride	<200 ppm	17.00	35.75
SAR	<4%	1.19	1.44