



SOIL AND WATER CONSULTING

Data Collection Report

Fall 2020

Date of Collection: 10/23/20

Client: Los Robles Greens Golf Course



Testing Results

	<u>9/12/18</u>	<u>9/13/19</u>	<u>10/23/20</u>
Humidity/Air Temperature	50%/84°	40%/92°	70%/70°
Greens Temperature	(avg)74.3°	(avg)68°	n/r
Fairway Temperature	76.8°	(avg)66.5°	n/r

FAIRWAY	Acceptable Range For Alkaline Soils Sample	14 9/12/18	3,7,18(avg) 9/13/19	4,10,15(avg) 10/23/20
Organic Matter (Humus)	2 - 3%	8.74	5.86	7.02
Sulfur	12 - 16 ppm	93.00	160.89	66.67
Olsen - Phosphorus	13 - 20 ppm	28.00	22.22	19.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,776.00	6,260.44	5,472.00
Magnesium	>7% base saturation or at least 200 lbs/acre	27.05%/1,346	27.54%/1,694.66	30.00%/1,762.66
Potassium - TEC of 0 - 35	100 ppm	469.00	663.33	482.67
Manganese	50-80 ppm	73.00	111.00	54.00

FAIRWAY	Acceptable Range For Saturated Paste Sample	14 9/12/18	3,7(avg) 9/13/19	4,10(avg) 10/23/20
Nitrate	5-10 ppm	<0.5	40.15	1.60
Phosphorus	2 - 10 ppm	0.85	1.75	1.94
Potassium	40 - 100 ppm	81.29	104.16	36.18
Calcium	60 - 200 ppm	307.83	228.76	85.13
Magnesium	20 - 70 ppm	159.64	112.44	45.61
Sodium	0 - 30 ppm	277.16	147.08	117.09
Soluble Salts	<1,920 ppm	2,390.00	1,504.50	835.50
Bicarbonate	<60 ppm	224.52	292.85	158.33
Chloride	<1,000 ppm	175.00	245.50	226.50
SAR	<4%	3.19	2.05	2.55

WATER	Acceptable Range For Water Sample	Hole #7 9/12/18	Hole #1 9/13/19	Hole #2 10/23/20
pH	6.50	8.73	2.80	9.00
EC	<2.25 mmhos/cm	0.40	1.20	0.42
Sodium		44.55	55.04	51.44
Calcium	20 - 60 ppm	18.21	27.85	26.00
Magnesium	10 - 25 ppm	8.16	12.81	11.17
Potassium	5 - 20 ppm	4.52	2.95	6.53
Sulfur	30 - 90 ppm	37.53	228.39	58.29
Bicarbonate	<120 ppm	61.91	0.00	79.86
Boron	<0.67 ppm	0.22	0.17	0.18

GREENS	Acceptable Range For Alkaline Soils Sample	1,5,18(avg) 9/12/18	3,5,9,13,15,17(avg) 9/13/19	2,4,6,10,12,15(avg) 10/23/20
Organic Matter (Humus)	2 - 3%	1.10	1.14	1.05
Sulfur	12 - 16 ppm	21.67	9.36	10.83
Olsen - Phosphorus	13 - 20 ppm	8.67	11.19	7.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	1,530.67	1,420.22	1,432.33
Magnesium	>7% base saturation or at least 200 lbs/acre	17.54%/231.3	18.19%/228	16.83%/198.3
Potassium - TEC of 0 - 35	150 ppm	110.33	128.75	75.33
Manganese	50-80 ppm	31.67	41.64	31.67

GREENS	Acceptable Range For Saturated Paste Sample	1,5,18(avg) 9/12/18	3,5,15(avg) 9/13/19	2,10,15(avg) 10/23/20
Nitrate- Bentgrass/poa	1-3 ppm	<0.5	4.50	<0.55
Phosphorus	2 - 7 ppm	3.24	4.31	1.86
Potassium	25-40 ppm	37.30	26.82	11.73
Calcium	50-75 ppm	46.63	18.33	17.93
Magnesium	15-30 ppm	17.36	5.88	5.65
Sodium	0 - 30 ppm	54.46	37.56	25.94
Soluble Salts	<1,000 ppm	399.00	257.67	171.33
Bicarbonate	<60 ppm	147.24	77.62	67.46
Chloride	<200 ppm	54.00	26.33	20.00
SAR	<4%	1.73	1.95	1.37