



SOIL AND WATER CONSULTING

Data Collection Report

Fall 2021

Date of Collection: 9/22/21

Client: The Las Vegas Country Club



Testing Results

	<u>9/21/19</u>	<u>10/14/20</u>	<u>9/22/21</u>
Humidity/Air Temperature	10%/90°	10%/94°	10%/100°
Greens Temperature	(avg)63°	(avg)72°	(avg)72.6°
Fairway Temperature	(avg)62.5°	(avg)71°	(avg)68.9°

WATER	Acceptable Range For Water Sample	Hole #7 9/21/19	Hole #16 10/14/20	Hole #2 9/22/21
EC	<2.25 mmhos/cm	0.68	0.79	0.68
Sodium		17.24	19.24	17.53
Calcium	20 - 60 ppm	75.16	73.07	69.94
Magnesium	10 - 25 ppm	39.70	39.75	40.66
Potassium	5 - 20 ppm	3.70	4.94	3.69
Sulfur	30 - 90 ppm	164.49	187.50	179.88
Bicarbonate	<120 ppm	238.67	217.81	230.37
Boron	<0.67 ppm	0.09	0.09	0.08
Chloride	<177 ppm	18.72	18.04	23.32

TEE	Acceptable Range For Tissue Sample	9/22/21
Nitrogen	3.34%-5.10%	n/r
Phosphorus	0.35% - 0.55%	n/r
Potassium	2.0% - 3.42%	n/r
Calcium	0.25%-0.5%	n/r
Magnesium	0.16%-0.32%	n/r
Sodium	229-1107 ppm	n/r

FAIRWAY	Acceptable Range For Tissue Sample	9/22/21
Nitrogen	3.34%-5.10%	n/r
Phosphorus	0.35% - 0.55%	n/r
Potassium	2.0% - 3.42%	n/r
Calcium	0.25%-0.5%	n/r
Magnesium	0.16%-0.32%	n/r
Sodium	229-1107 ppm	n/r

GREENS	Acceptable Range For Tissue Sample	2,11(avg) 9/22/21
Nitrogen	3.0%-6.5%	5.53
Phosphorus	0.2%-0.55%	0.63
Potassium	0.86%-2.55%	2.54
Calcium	0.21%-0.50%	0.87
Magnesium	0.09%-0.22%	0.36
Sodium	506- 2264 ppm	653.00

TEES	Acceptable Range For Alkaline Soils Sample	7,16(avg) 9/21/19	8,17(avg) 10/14/20	2,11(avg) 9/22/21
Organic Matter (Humus)	2 - 3%	2.88	3.21	2.16
Sulfur	12 - 16 ppm	35.50	38.50	424.50
Olsen - Phosphorus	13 - 20 ppm	24.00	18.50	17.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	4,203.00	4,454.00	5,644.00
Magnesium	>7% base saturation or at least 200 lbs/acre	21.60%/791	22.35%/869	19.36%/924
Potassium - TEC of 0 - 35	100 ppm	218.50	237.50	362.50
Manganese	>50 ppm	24.00	18.00	20.50

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	7,16(avg) 9/21/19	8,17(avg) 10/14/20	2,11(avg) 9/22/21
Organic Matter (Humus)	2 - 3%	3.53	3.44	4.92
Sulfur	12 - 16 ppm	7,033.50	213.00	6,889.00
Olsen - Phosphorus	13 - 20 ppm	29.00	25.00	23.00
Calcium - TEC of 6 - 12	1,000 lbs/acre	22,107.00	5,006.00	23,734.00
Magnesium	>7% base saturation or at least 200 lbs/acre	7.46%/879	19.55%/814	9%/1,254
Potassium - TEC of 0 - 35	100 ppm	178.50	238.50	293.00
Manganese	>50 ppm	17.00	23.50	18.50

GREENS	Acceptable Range For Alkaline Soils Sample	7,16(avg) 9/21/19	8,17(avg) 10/14/20	2,11(avg) 9/22/21
Organic Matter (Humus)	2 - 3%	0.88	0.84	1.19
Sulfur	12 - 16 ppm	327.00	165.00	308.50
Olsen - Phosphorus	13 - 20 ppm	105.50	40.50	99.50
Calcium - TEC of 6 - 12	1,000 lbs/acre	3,350.00	2,814.00	3,491.00
Magnesium	>7% base saturation or at least 200 lbs/acre	18.95%/516	16.17%/353	15.78%/438
Potassium - TEC of 0 - 35	150 ppm	209.00	66.00	172.50
Manganese	>50 ppm	50.00	36.00	55.00

TEE	Acceptable Range For Saturated Paste Sample	8 10/14/20	2 9/22/21
Nitrate - Ryegrass	5 - 10 ppm	17.90	29.90
Phosphorus	2 - 10 ppm	2.24	0.47
Potassium	40 - 100 ppm	12.43	54.37
Calcium	60 - 200 ppm	66.80	406.15
Magnesium	20 - 70 ppm	39.10	143.33
Sodium	0 - 30 ppm	22.77	74.62
Soluble Salts	<1,920 ppm	538.00	1,487.00
Bicarbonate	<60 ppm	141.97	155.40
Chloride	<1,000 ppm	36.00	23.00
SAR	<4%	0.55	0.81

FAIRWAYS	Acceptable Range For Saturated Paste Sample	8 10/14/20	2 9/22/21
Nitrate - Ryegrass	5 - 10 ppm	11.30	46.20
Phosphorus	2 - 10 ppm	1.07	0.60
Potassium	40 - 100 ppm	35.55	87.16
Calcium	60 - 200 ppm	226.42	464.59
Magnesium	20 - 70 ppm	114.30	261.40
Sodium	0 - 30 ppm	37.94	131.27
Soluble Salts	<1,920 ppm	1,034.00	1,950.00
Bicarbonate	<60 ppm	140.09	166.07
Chloride	<1,000 ppm	35.00	160.00
SAR	<4%	0.51	1.21

GREENS	Acceptable Range For Saturated Paste Sample	8,17(avg) 10/14/20	2,11(avg) 9/22/21
Nitrate - Bentgrass	1-3 ppm	<3.1	13.50
Phosphorus	2 - 7 ppm	1.06	1.13
Potassium	25-40 ppm	59.54	124.83
Calcium	50- 75 ppm	224.39	227.13
Magnesium	15-30 ppm	107.13	107.61
Sodium	0 - 30 ppm	42.79	58.77
Soluble Salts	<1,000 ppm	1,061.00	1,257.50
Bicarbonate	<60 ppm	175.74	191.52
Chloride	<200 ppm	50.50	77.50
SAR	<4%	0.59	0.84