



Client: Granite Bay Golf Club

Spring 2025 Report

<u>4/26/25</u>	
Humidity/Air Temperature	78%/59°
Greens Temperature	(avg)58°
Fairway Temperature	(avg)60°

	Acceptable Range For Water Sample	Hole #1 4/26/25
EC	<2.25 mmhos/cm	0.30
Sodium		20.92
Calcium	20 - 60 ppm	29.43
Magnesium	10 - 25 ppm	8.99
Potassium	5 - 20 ppm	3.03
Sulfur	30 - 90 ppm	10.06
Bicarbonate	<120 ppm	132.18
Boron	<0.67 ppm	0.07
Chloride	<177 ppm	23.15



SOIL AND WATER CONSULTING

GREEN	Green #1 0-4 1/2"		Green #1 Below 4 1/2"	Brown's Sand
		4/26/25	4/26/25	4/26/25
Clay		1.20	2.20	0.10
Silt		2.50	1.90	0.90
Sand		95.60	95.70	98.90
Gravel		0.70	0.20	0.10
Organic Material		0.86	0.74	0.11
<u>Sieve #:</u>				
Fine Gravel	10	0.70	0.20	0.10
Very Coarse Sand	18	4.20	4.00	1.70
Coarse Sand	35	32.30	34.50	24.00
Medium Sand	60	46.30	42.80	52.90
Fine Sand	100	10.20	10.60	15.10
Very Fine Sand	140	1.60	2.40	3.30
Very Fine Sand	270	1.00	1.40	1.90
Infiltration Rate		n/r	n/r	n/r

TEES	Acceptable Range For Alkaline Soils Sample	1,10,18avg) 4/26/25
Organic Matter (Humus)	2 - 3%	1.31
Sulfur	12 - 16 ppm	18.00
Olsen - Phosphorus	13 - 20 ppm	17.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	698.00
Magnesium	>7% base saturation or at least 200 lbs/acre	13.82%/126.66
Potassium - TEC of 0 - 35	100 ppm	60.67
Manganese	50-80 ppm	19.00

FAIRWAYS	Acceptable Range For Alkaline Soils Sample	1,10,18avg) 4/26/25
Organic Matter (Humus)	2 - 3%	4.17
Sulfur	12 - 16 ppm	35.00
Olsen - Phosphorus	13 - 20 ppm	38.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	2,004.00
Magnesium	>7% base saturation or at least 200 lbs/acre	12.57%/264.66
Potassium - TEC of 0 - 35	100 ppm	92.33
Manganese	50-80 ppm	38.00

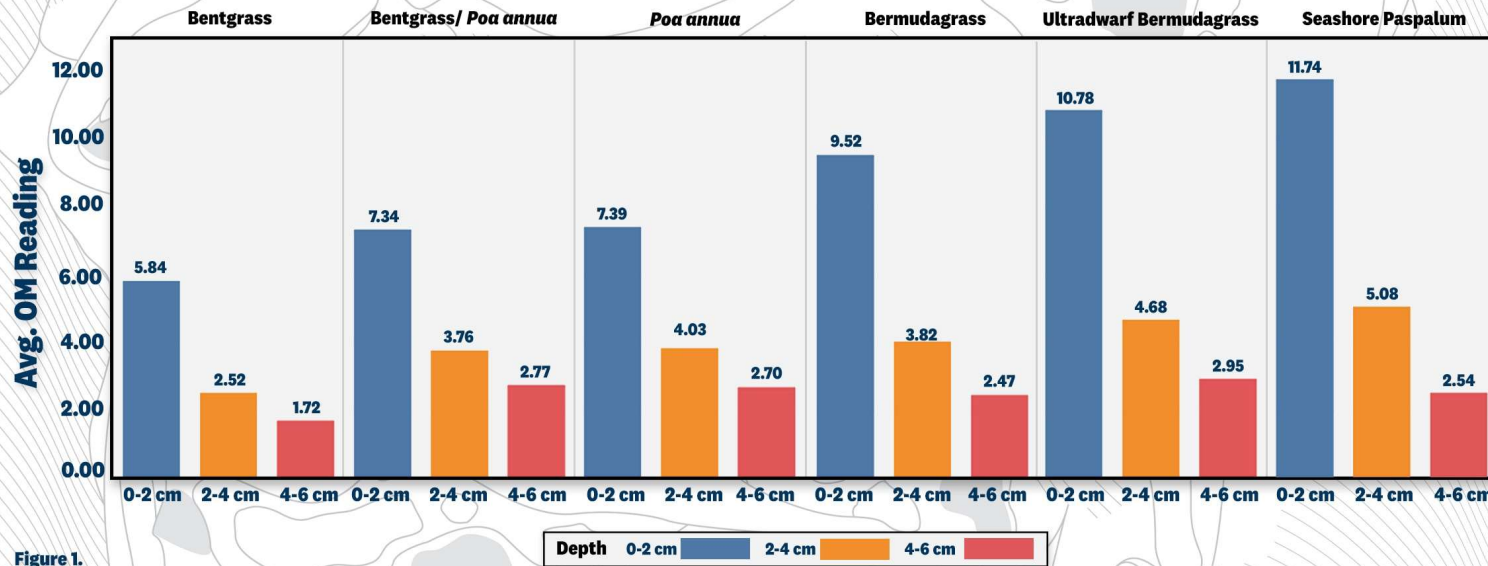
GREENS	Acceptable Range For Alkaline Soils Sample	1,10,18avg) 4/26/25
Organic Matter (Humus)	2 - 3%	0.72
Sulfur	12 - 16 ppm	16.00
Olsen - Phosphorus	13 - 20 ppm	14.33
Calcium - TEC of 6 - 12	1,000 lbs/acre	766.00
Magnesium	>7% base saturation or at least 200 lbs/acre	17.64%/126
Potassium - TEC of 0 - 35	150 ppm	56.00
Manganese	50-80 ppm	21.67

TEE	Acceptable Range For Saturated Paste Sample	1 4/26/25
Nitrate - Snata Anna	5-10 ppm	<0.5
Phosphorus	2 - 10 ppm	3.14
Potassium	40 - 100 ppm	45.89
Calcium	60 - 200 ppm	27.09
Magnesium	20 - 70 ppm	7.99
Sodium	0 - 30 ppm	24.89
Soluble Salts	<1,920 ppm	330.00
Bicarbonate	<60 ppm	43.46
Chloride	<1,000 ppm	46.00
SAR	<4%	1.08

FAIRWAY	Acceptable Range For Saturated Paste Sample	1 4/26/25
Nitrate - Santa Anna	5-10 ppm	2.90
Phosphorus	2 - 10 ppm	1.74
Potassium	40 - 100 ppm	33.05
Calcium	60 - 200 ppm	51.74
Magnesium	20 - 70 ppm	12.65
Sodium	0 - 30 ppm	17.85
Soluble Salts	<1,920 ppm	355.00
Bicarbonate	<60 ppm	70.85
Chloride	<1,000 ppm	24.00
SAR	<4%	0.58

GREENS	Acceptable Range For Saturated Paste Sample	1,10,18(avg) 4/26/25
Nitrate- Dominator Bentgrass	1-3 ppm	<0.5
Phosphorus	2 - 7 ppm	1.66
Potassium	25-40 ppm	25.83
Calcium	50- 75 ppm	22.18
Magnesium	15-30 ppm	6.67
Sodium	0 - 30 ppm	16.14
Soluble Salts	<1,000 ppm	214.67
Bicarbonate	<60 ppm	42.38
Chloride	<200 ppm	17.33
SAR	<4%	0.78

Average OM By Species



<https://www.usga.org/content/usga/home-page/course-care/green-section-record/62/issue-22/are-you-managing-putting-green-organic-matter-or-is-it-managing-.html#sectionFilters=research&returnable>

	Green #1 (4-2025)	USGA Research <u>National Averages (Bentgrass)</u>
Organic Material 0-2cm	6.87	5.84
Organic Material 2-4cm	1.94	2.52
Organic Material 4-6cm	0.71	1.72

Nutrient Deficiencies

		pH	Ca	Mg	K	Mn
TEE	1	6.2	688	102	44	14
TEE	10	5.8	634	110	63	17
TEE	18	5.1	772	168	75	26
FAIRWAY	1	6.1	2624	328	83	40
FAIRWAY	10	5.6	1518	214	103	46
FAIRWAY	18	5.8	1870	252	91	28
GREEN	1	6.5	676	124	60	20
GREEN	10	6.7	934	126	52	20
GREEN	18	6.6	688	128	56	25

Calcium can be added in the form of Hi-Cal lime at a rate of 2,000 pounds per acre on tees

Calcium can be added in the form of gypsum at a rate of 10 pounds of product per 1,000 sq ft on greens

Magnesium can be added in the form of Dolomitic Lime at a rate of 1,000 pounds per acre on fairways

Magnesium/Potassium can be added in the form of 0-0-22 at a rate of 6 pounds of product per 1,000 sq ft one time on **Tees** and two times on the **Greens** before Labor Day

Manganese can be added in the form of Manganese Oxide or sulfate at a rate of 3 pounds of product per 1,000 sq ft on greens

Comments

- The dolomitic limestone recommended for the fairways is an attempt to balance the soil and adjust the pH.
- Bermudagrass prefers a little higher pH, so to adjust pH on any of the bermudagrass areas will be beneficial.
- You mentioned the greens don't take water the way you'd like them too. The gypsum applications will help.

