

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

80046-19

 Name Western Golf Properties City Lake Forest State CA

 Independent Consultant Soil and Water Consulting Date 10/11/2021

Sample Location	SAN RAMON GC	TEE	TEE	TEE	FAIRWAY	FAIRWAY
Sample Identification		3	6	12	3	6
Lab Number		0417-1	0418-1	0419-1	0420-1	0421-1
Total Exchange Capacity (ME/100 g)		16.09	9.50	22.89	32.47	25.28
pH (H ₂ O 1:1)		a 7.9	a 8.3	a 7.9	a 8.3	a 8.2
Organic Matter (360°C LOI) %		2.59	2.35	5.47	8.52	8.79
Estimated Nitrogen Release lb/A		72	67	102	118	119
ANIONS	SOLUBLE SULFUR* ppm	45	19	62	58	47
	PHOSPHORUS MEHLICH III lb/A P as P ₂ O ₅ ppm of P					
	BRAY II lb/A P as P ₂ O ₅ ppm of P					
	OLSEN lb/A P as P ₂ O ₅ ppm of P	18 4	64 14	73 16	50 11	37 8
EXCHANGEABLE CATIONS	CALCIUM* lb/A	3958	2312	5284	7334	5764
	ppm	1979	1156	2642	3667	2882
	MAGNESIUM* lb/A	914	620	1476	2286	1738
	ppm	457	310	738	1143	869
	POTASSIUM* lb/A	164	112	250	584	360
	ppm	82	56	125	292	180
	SODIUM* lb/A	744	320	1108	1312	1084
	ppm	372	160	554	656	542
BASE SATURATION PERCENT						
	Calcium %	61.50	60.84	57.71	56.47	57.00
	Magnesium %	23.67	27.19	26.87	29.33	28.65
	Potassium %	1.31	1.51	1.40	2.31	1.83
	Sodium %	10.05	7.32	10.52	8.78	9.32
	Other Bases %	3.50	3.10	3.50	3.10	3.20
	Hydrogen %	0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS						
	Boron** (ppm)	2.48	1.20	5.34	6.20	5.72
	Iron** (ppm)	187	313	103	57	51
	Manganese** (ppm)	29	33	55	28	37
	Copper** (ppm)	1.50	1.14	5.18	3.25	2.64
	Zinc** (ppm)	18.31	4.07	14.18	19.05	8.07
	Aluminum** (ppm)	85	220	107	147	156
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	9.1	2.1	17.2	8.9	15.9
	NH ₄ -N (ppm)	0.8	2.0	1.4	2.7	3.4

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

lb/A

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Sample Location <u>SAN RAMON GC</u>			FAIRWAY	GREEN	GREEN	GREEN	GREEN
Sample Identification			12	2	3	6	12
Lab Number			0422-1	0423-1	0424-1	0425-1	0426-1
Total Exchange Capacity (ME/100 g)			31.15	11.73	14.10	15.81	10.53
pH (H ₂ O 1:1)			a 8.1	a 8.4	a 8.2	a 8.1	a 8.2
Organic Matter (360°C LOI) %			7.48	2.48	2.47	2.85	1.03
Estimated Nitrogen Release lb/A			112	70	69	77	41
ANIONS	SOLUBLE SULFUR* ppm		49	66	90	148	60
	MEHLICH III lb/A P as P ₂ O ₅ ppm of P						
	BRAY II lb/A P as P ₂ O ₅ ppm of P						
	OLSEN lb/A P as P ₂ O ₅ ppm of P		14 3	69 15	82 18	119 26	82 18
EXCHANGEABLE CATIONS	CALCIUM* lb/A ppm		6564 3282	3362 1681	3990 1995	4622 2311	2932 1466
	MAGNESIUM* lb/A ppm		2356 1178	430 215	490 245	466 233	396 198
	POTASSIUM* lb/A ppm		352 176	342 171	394 197	572 286	370 185
	SODIUM* lb/A ppm		1586 793	340 170	520 260	488 244	338 169
	BASE SATURATION PERCENT						
	Calcium %		52.68	71.65	70.74	73.09	69.61
	Magnesium %		31.51	15.27	14.48	12.28	15.67
	Potassium %		1.45	3.74	3.58	4.64	4.50
	Sodium %		11.07	6.30	8.02	6.71	6.98
	Other Bases %		3.30	3.00	3.20	3.30	3.20
	Hydrogen %		0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS							
Boron** (ppm)			7.18	1.45	2.00	1.56	1.11
Iron** (ppm)			78	165	167	163	214
Manganese** (ppm)			77	39	47	32	46
Copper** (ppm)			3.76	2.68	3.33	2.35	1.06
Zinc** (ppm)			4.66	8.21	7.59	6.68	5.19
Aluminum** (ppm)			239	58	45	9	62
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		11.3	2.4	4.0	5.5	0.8
	NH ₄ -N (ppm)		6.0	1.0	< 0.5	0.8	0.7

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable