

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

80046-17

 Name Western Golf Properties City Lake Forest State CA

 Independent Consultant Soil and Water Consulting Date 10/7/2021

Sample Location	ASHWOOD GC	TEE	TEE	TEE	FAIRWAY	FAIRWAY
Sample Identification		M1	S1	B9	M1	S1
Lab Number		1009-1	1010-1	1011-1	1012-1	1013-1
Total Exchange Capacity (ME/100 g)		13.54	9.57	8.82	8.62	9.68
pH (H ₂ O 1:1)		a 8.0	a 7.9	a 7.7	a 7.8	a 8.2
Organic Matter (360°C LOI) %		3.46	3.43	3.26	3.95	2.76
Estimated Nitrogen Release lb/A		85	84	83	90	75
ANIONS	SOLUBLE SULFUR* ppm	50	47	29	28	29
	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	23 5	18 4	27 6	5 1	14 3
EXCHANGEABLE CATIONS	CALCIUM* lb/A	4410	3080	2790	2770	3150
	ppm	2205	1540	1395	1385	1575
	MAGNESIUM* lb/A	362	264	252	258	258
	ppm	181	132	126	129	129
	POTASSIUM* lb/A	170	82	196	116	146
	ppm	85	41	98	58	73
	SODIUM* lb/A	152	152	100	72	108
	ppm	76	76	50	36	54
BASE SATURATION PERCENT						
	Calcium %	81.43	80.46	79.08	80.34	81.35
	Magnesium %	11.14	11.49	11.90	12.47	11.11
	Potassium %	1.61	1.10	2.85	1.73	1.93
	Sodium %	2.44	3.45	2.46	1.82	2.43
	Other Bases %	3.40	3.50	3.70	3.60	3.20
	Hydrogen %	0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS						
	Boron** (ppm)	0.98	0.65	0.78	0.89	0.77
	Iron** (ppm)	164	217	176	133	122
	Manganese** (ppm)	33	18	42	23	27
	Copper** (ppm)	0.94	1.35	1.59	1.03	0.64
	Zinc** (ppm)	7.37	7.12	13.23	6.33	4.59
	Aluminum** (ppm)	113	164	178	137	136
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	6.6	5.1	7.7	9.7	5.7
	NH ₄ -N (ppm)	3.1	3.8	2.8	3.8	3.1

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

80046-17

 Name Western Golf Properties City Lake Forest State CA

 Independent Consultant Soil and Water Consulting Date 10/7/2021

Sample Location <u>ASHWOOD GC</u>			FAIRWAY	GREEN	GREEN	GREEN	GREEN
Sample Identification			B9	M1	S1	B1	B9
Lab Number			1014-1	1015-1	1016-1	1017-1	1018-1
Total Exchange Capacity (ME/100 g)			10.82	5.22	5.19	5.60	5.99
pH (H ₂ O 1:1)			a 7.7	a 7.8	a 7.4	a 8.0	a 7.6
Organic Matter (360°C LOI) %			3.01	1.59	1.66	1.27	1.17
Estimated Nitrogen Release lb/A			80	52	53	45	43
ANIONS	SOLUBLE SULFUR* ppm		27	32	31	25	27
	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	37 8	5 1	32 7	23 5	9 2
EXCHANGEABLE CATIONS	CALCIUM* lb/A ppm		3522 1761	1732 866	1714 857	1888 944	2088 1044
	MAGNESIUM* lb/A ppm		270 135	114 57	118 59	112 56	86 43
	POTASSIUM* lb/A ppm		236 118	68 34	64 32	84 42	60 30
	SODIUM* lb/A ppm		88 44	64 32	56 28	54 27	50 25
	BASE SATURATION PERCENT						
	Calcium	%	81.38	82.95	82.56	84.29	87.15
	Magnesium	%	10.40	9.10	9.47	8.33	5.98
	Potassium	%	2.80	1.67	1.58	1.92	1.28
	Sodium	%	1.77	2.67	2.35	2.10	1.81
	Other Bases	%	3.70	3.60	4.00	3.40	3.80
	Hydrogen	%	0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS							
Boron** (ppm)			0.73	0.69	0.54	0.54	0.45
Iron** (ppm)			133	121	114	92	101
Manganese** (ppm)			33	44	41	30	26
Copper** (ppm)			1.20	1.38	0.97	1.26	0.85
Zinc** (ppm)			4.05	4.78	4.20	2.80	2.06
Aluminum** (ppm)			86	83	70	47	44
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		2.7	4.7	4.6	2.0	1.9
	NH ₄ -N (ppm)		2.7	3.6	2.7	1.8	1.9

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable