

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Western Golf Properties City Lake Forest State CA

Independent Consultant Soil and Water Consulting Date 9/30/2019

Sample Location			REVERE	GC	CONCORD	CONCORD	LEXINGTO	CONCORD	CONCORD
Sample Identification					TEE 7	TEE 16	TEE 7	FAIRWAY	FAIRWAY
Lab Number					0188-1	0189-1	0190-1	0191-1	0192-1
Total Exchange Capacity (ME/100 g)					15.22	13.24	14.01	66.41	32.74
pH (H ₂ O 1:1)					a 7.6	a 7.6	a 7.6	a 7.8	a 7.9
Organic Matter (360°C LOI) %					3.35	3.98	5.01	4.68	5.45
Estimated Nitrogen Release lb/A					84	90	100	97	102
ANIONS	SOLUBLE SULFUR* ppm				118	94	66	7700	2022
	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	69 15	69 15	142 31	92 20	69 15
EXCHANGEABLE CATIONS	CALCIUM*		lb/A	3988	3604	3704	22608	9772	
			ppm	1994	1802	1852	11304	4886	
	MAGNESIUM*		lb/A	510	478	476	572	686	
			ppm	255	239	238	286	343	
	POTASSIUM*		lb/A	488	378	716	1298	1040	
			ppm	244	189	358	649	520	
	SODIUM*		lb/A	882	574	606	1590	1366	
			ppm	441	287	303	795	683	
BASE SATURATION PERCENT									
Calcium %					65.51	68.05	66.10	85.11	74.62
Magnesium %					13.96	15.04	14.16	3.59	8.73
Potassium %					4.11	3.66	6.55	2.51	4.07
Sodium %					12.60	9.42	9.40	5.20	9.07
Other Bases %					3.80	3.80	3.80	3.60	3.50
Hydrogen %					0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS									
Boron** (ppm)					1.51	1.49	1.31	2.09	2.20
Iron** (ppm)					117	183	194	51	38
Manganese** (ppm)					25	17	20	24	16
Copper** (ppm)					3.26	3.12	3.94	2.35	1.38
Zinc** (ppm)					12.17	13.03	22.66	6.23	10.42
Aluminum** (ppm)					113	121	169	16	8
OTHER TESTS	Soluble Salts (mmhos/cm)								
	Chlorides (ppm)								
	NO3-N (ppm)				8.4	5.4	17.6	10.8	8.4
	NH4-N (ppm)				3.7	4.9	5.1	4.7	7.9

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location REVERE GC		LEXINGTO	CONCORD	CONCORD	LEXINGTO	
Sample Identification		FAIRWAY	GREEN 7	GREEN 16	GREEN 7	
Lab Number		0193-1	0194-1	0195-1	0196-1	
Total Exchange Capacity (ME/100 g)		31.22	9.40	8.13	15.38	
pH (H ₂ O 1:1)		a 7.6	a 7.9	a 7.9	a 7.9	
Organic Matter (360°C LOI) %		4.43	1.52	1.48	1.81	
Estimated Nitrogen Release lb/A		94	50	50	56	
ANIONS	SOLUBLE SULFUR* ppm	1878	37	41	31	
	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	124 27	23 5	50 11	37 8	
EXCHANGEABLE CATIONS	CALCIUM* lb/A	9274	2540	2158	4588	
	ppm	4637	1270	1079	2294	
	MAGNESIUM* lb/A	504	242	202	538	
	ppm	252	121	101	269	
	POTASSIUM* lb/A	1750	756	714	504	
	ppm	875	378	357	252	
	SODIUM* lb/A	1154	340	318	222	
	ppm	577	170	159	111	
BASE SATURATION PERCENT						
Calcium %		74.26	67.55	66.36	74.58	
Magnesium %		6.73	10.73	10.35	14.58	
Potassium %		7.19	10.31	11.26	4.20	
Sodium %		8.04	7.86	8.50	3.14	
Other Bases %		3.80	3.50	3.50	3.50	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron** (ppm)		2.19	0.91	0.78	0.79	
Iron** (ppm)		63	118	119	126	
Manganese** (ppm)		22	58	56	53	
Copper** (ppm)		1.72	1.52	1.46	1.74	
Zinc** (ppm)		15.65	14.74	18.52	26.38	
Aluminum** (ppm)		19	64	64	81	
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	17.3	1.4	1.9	2.8	
	NH ₄ -N (ppm)	4.1	4.3	6.3	6.7	

a - alkaline soil

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** Mehlich III Extractable