

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Western Golf Properties City Lake Forest State CA

Independent Consultant Soil and Water Consulting Date 3/10/2020

Sample Location REVERE GC		CONCORD	CONCORD	CONCORD	LEXINGTO	LEXINGTO
Sample Identification		TEE 1	FAIRWAY	GREEN 1	TEE 1	TEE 10
Lab Number		0530-1	0531-1	0532-1	0533-1	0534-1
Total Exchange Capacity (ME/100 g)		16.24	40.85	11.02	17.61	17.02
pH (H ₂ O 1:1)		a 7.6	a 7.7	a 7.6	a 7.7	a 7.6
Organic Matter (360°C LOI) %		2.52	4.12	1.82	6.96	5.09
Estimated Nitrogen Release lb/A		70	91	56	110	100
ANIONS	SOLUBLE SULFUR* ppm	65	3357	103	84	93
	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	78 17	96 21	105 23	261 57	279 61
EXCHANGEABLE CATIONS	CALCIUM* lb/A	4552	12674	2982	4254	4224
	ppm	2276	6337	1491	2127	2112
	MAGNESIUM* lb/A	512	656	300	604	610
	ppm	256	328	150	302	305
	POTASSIUM* lb/A	540	1526	806	1044	860
	ppm	270	763	403	522	430
	SODIUM* lb/A	654	1362	396	1134	996
	ppm	327	681	198	567	498
BASE SATURATION PERCENT						
Calcium %		70.07	77.56	67.65	60.39	62.04
Magnesium %		13.14	6.69	11.34	14.29	14.93
Potassium %		4.26	4.79	9.38	7.60	6.48
Sodium %		8.75	7.25	7.81	14.00	12.72
Other Bases %		3.80	3.70	3.80	3.70	3.80
Hydrogen %		0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS						
Boron** (ppm)		1.39	2.04	1.18	2.37	2.12
Iron** (ppm)		98	75	104	179	227
Manganese** (ppm)		38	29	80	20	24
Copper** (ppm)		2.60	2.60	1.54	4.36	4.61
Zinc** (ppm)		9.26	10.58	20.87	32.35	32.60
Aluminum** (ppm)		83	16	37	177	224
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	2.6	2.7	0.5	7.2	15.9
	NH ₄ -N (ppm)	1.1	2.7	1.5	6.6	3.8

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location <u>REVERE GC</u>		LEXINGTO	LEXINGTO	LEXINGTO	LEXINGTO	
Sample Identification		FAIRWAY	FAIRWAY	GREEN 1	GREEN 10	
Lab Number		0535-1	0536-1	0537-1	0538-1	
Total Exchange Capacity (ME/100 g)		27.37	47.48	13.43	10.92	
pH (H ₂ O 1:1)		a 7.4	a 7.5	a 7.8	a 7.7	
Organic Matter (360°C LOI) %		8.67	4.22	2.62	2.18	
Estimated Nitrogen Release lb/A		118	92	72	64	
ANIONS	SOLUBLE SULFUR* ppm	905	4493	89	38	
	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	293 64	289 63	119 26	92 20	
EXCHANGEABLE CATIONS	CALCIUM* lb/A	7596	15104	3228	2426	
	ppm	3798	7552	1614	1213	
	MAGNESIUM* lb/A	738	720	322	258	
	ppm	369	360	161	129	
	POTASSIUM* lb/A	1108	1526	1600	1616	
	ppm	554	763	800	808	
	SODIUM* lb/A	1284	1338	682	600	
	ppm	642	669	341	300	
BASE SATURATION PERCENT						
Calcium %		69.38	79.53	60.09	55.54	
Magnesium %		11.23	6.32	9.99	9.84	
Potassium %		5.19	4.12	15.27	18.97	
Sodium %		10.20	6.13	11.04	11.94	
Other Bases %		4.00	3.90	3.60	3.70	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron** (ppm)		2.28	2.20	1.11	0.89	
Iron** (ppm)		113	50	105	119	
Manganese** (ppm)		19	19	77	72	
Copper** (ppm)		3.55	1.63	1.83	1.44	
Zinc** (ppm)		21.95	14.80	25.28	25.51	
Aluminum** (ppm)		17	20	59	72	
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	2.9	1.6	0.9	0.7	
	NH ₄ -N (ppm)	6.8	3.4	2.6	2.3	

a - alkaline soil

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