

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Western Golf Properties City Lake Forest State CAIndependent Consultant Soil and Water Consulting Date 7/2/2019

Sample Location YUCAIPA VALLEY GC				TEE	TEE	TEE	FAIRWAY	FAIRWAY
Sample Identification				2	10	17	2	10
Lab Number				1179-1	1180-1	1181-1	1182-1	1183-1
Total Exchange Capacity (ME/100 g)				12.32	7.45	9.25	15.59	11.13
pH (H ₂ O 1:1)				6.7	7.1	6.8	a 7.5	a 7.6
Organic Matter (360°C LOI) %				6.15	3.04	5.39	4.01	4.20
Estimated Nitrogen Release lb/A				106	80	102	90	92
ANIONS	SOLUBLE SULFUR* ppm			72	32	44	51	48
	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	128 28	110 24	64 14	73 16	32 7	
EXCHANGEABLE CATIONS	CALCIUM*		lb/A	3124	2030	2354	4050	2874
			ppm	1562	1015	1177	2025	1437
	MAGNESIUM*		lb/A	582	360	482	806	586
			ppm	291	180	241	403	293
	POTASSIUM*		lb/A	240	162	210	192	250
			ppm	120	81	105	96	125
	SODIUM*		lb/A	296	160	178	574	350
			ppm	148	80	89	287	175
BASE SATURATION PERCENT								
Calcium %				63.39	68.12	63.62	64.95	64.56
Magnesium %				19.68	20.13	21.71	21.54	21.94
Potassium %				2.50	2.79	2.91	1.58	2.88
Sodium %				5.22	4.67	4.18	8.00	6.84
Other Bases %				4.70	4.30	4.60	3.90	3.80
Hydrogen %				4.50	0.00	3.00	0.00	0.00
EXTRACTABLE MINORS								
Boron** (ppm)				1.41	0.86	1.04	1.68	1.18
Iron** (ppm)				340	291	305	317	260
Manganese** (ppm)				12	11	11	47	20
Copper** (ppm)				2.81	0.98	1.89	2.44	1.67
Zinc** (ppm)				8.82	6.42	9.11	3.47	3.31
Aluminum** (ppm)				207	196	204	322	295
OTHER TESTS	Soluble Salts (mmhos/cm)							
	Chlorides (ppm)							

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location		YUCAIPA VALLEY GC	FAIRWAY	GREEN	GREEN	GREEN	GREEN
Sample Identification			17	2	5	10	17
Lab Number			1184-1	1185-1	1186-1	1187-1	1188-1
Total Exchange Capacity (ME/100 g)			13.09	7.24	5.14	5.11	6.01
pH (H ₂ O 1:1)			7.3	6.7	7.1	6.8	6.9
Organic Matter (360°C LOI) %			4.87	2.50	2.15	1.55	2.44
Estimated Nitrogen Release lb/A			99	70	63	51	69
ANIONS	SOLUBLE SULFUR*	ppm	70	47	47	52	48
	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					
EXCHANGEABLE CATIONS	OLSEN	lb/A P as P ₂ O ₅ ppm of P	50 11	96 21	101 22	50 11	87 19
	CALCIUM*	lb/A ppm	3312 1656	1760 880	1316 658	1258 629	1512 756
	MAGNESIUM*	lb/A ppm	728 364	314 157	232 116	234 117	270 135
	POTASSIUM*	lb/A ppm	316 158	324 162	262 131	234 117	288 144
	SODIUM*	lb/A ppm	384 192	206 103	152 76	138 69	172 86
BASE SATURATION PERCENT							
	Calcium	%	63.25	60.77	64.01	61.55	62.90
	Magnesium	%	23.17	18.07	18.81	19.08	18.72
	Potassium	%	3.09	5.74	6.53	5.87	6.14
	Sodium	%	6.38	6.19	6.43	5.87	6.22
	Other Bases	%	4.10	4.70	4.30	4.60	4.50
	Hydrogen	%	0.00	4.50	0.00	3.00	1.50
EXTRACTABLE MINORS							
	Boron** (ppm)		1.39	0.85	0.87	0.64	0.69
	Iron** (ppm)		331	360	323	287	295
	Manganese** (ppm)		24	30	27	23	25
	Copper** (ppm)		1.86	2.29	1.70	0.90	2.09
	Zinc** (ppm)		3.46	12.29	10.44	8.90	9.70
	Aluminum** (ppm)		302	110	90	84	91
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable