

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Western Golf Properties City Lake Forest State CA

Independent Consultant Soil and Water Consulting Date 7/27/2020

Sample Location	YUCAIPA VALLEY GC	TEE	TEE	TEE	FAIRWAY	FAIRWAY
Sample Identification		4	11	15	4	11
Lab Number		0155-1	0156-1	0157-1	0158-1	0159-1
Total Exchange Capacity (ME/100 g)		7.86	7.49	6.05	16.24	11.37
pH (H ₂ O 1:1)		7.3	7.1	7.0	^a 7.9	^a 7.9
Organic Matter (360°C LOI) %		4.30	4.37	4.13	3.17	4.70
Estimated Nitrogen Release lb/A		93	94	91	82	97
ANIONS	SOLUBLE SULFUR* ppm	59	34	42	131	81
	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	110 24	23 5	37 8	23 5	23 5
EXCHANGEABLE CATIONS	CALCIUM* lb/A	2058	2046	1630	4346	2932
	ppm	1029	1023	815	2173	1466
	MAGNESIUM* lb/A	372	360	286	718	568
	ppm	186	180	143	359	284
	POTASSIUM* lb/A	184	126	102	174	248
	ppm	92	63	51	87	124
	SODIUM* lb/A	278	178	178	734	440
	ppm	139	89	89	367	220
BASE SATURATION PERCENT						
	Calcium %	65.46	68.29	67.36	66.90	64.47
	Magnesium %	19.72	20.03	19.70	18.42	20.82
	Potassium %	3.00	2.16	2.16	1.37	2.80
	Sodium %	7.69	5.17	6.40	9.83	8.41
	Other Bases %	4.10	4.30	4.40	3.50	3.50
	Hydrogen %	0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS						
	Boron** (ppm)	0.78	0.83	0.83	1.78	1.54
	Iron** (ppm)	388	278	275	190	231
	Manganese** (ppm)	11	7	10	40	33
	Copper** (ppm)	1.92	1.87	1.85	2.43	2.51
	Zinc** (ppm)	5.78	4.25	4.73	3.35	2.60
	Aluminum** (ppm)	203	139	155	207	317
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	9.3	5.2	10.9	7.9	7.5
	NH ₄ -N (ppm)	2.6	2.1	3.1	< 0.5	3.0

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

lb/A

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80046-10

SOIL AUDIT AND INVENTORY REPORT

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Sample Location				YUCAIPA VALLEY GC	FAIRWAY	GREEN	GREEN	GREEN	GREEN
Sample Identification					15	3	4	11	15
Lab Number					0160-1	0161-1	0162-1	0163-1	0164-1
Total Exchange Capacity (ME/100 g)					10.23	6.11	5.31	5.17	5.60
pH (H ₂ O 1:1)					a 7.4	7.1	a 7.4	7.3	7.0
Organic Matter (360°C LOI) %					4.09	1.55	1.80	1.94	2.03
Estimated Nitrogen Release lb/A					91	51	56	59	61
ANIONS	SOLUBLE SULFUR* ppm				49	25	41	27	34
	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	27 6	101 22	50 11	92 20	73 16
EXCHANGEABLE CATIONS	CALCIUM*		lb/A		2626	1660	1408	1416	1522
			ppm		1313	830	704	708	761
	MAGNESIUM*		lb/A		534	248	224	212	220
			ppm		267	124	112	106	110
	POTASSIUM*		lb/A		282	214	202	172	234
			ppm		141	107	101	86	117
	SODIUM*		lb/A		310	180	176	146	154
			ppm		155	90	88	73	77
BASE SATURATION PERCENT									
Calcium %					64.17	67.92	66.29	68.47	67.95
Magnesium %					21.75	16.91	17.58	17.09	16.37
Potassium %					3.53	4.49	4.88	4.27	5.36
Sodium %					6.59	6.40	7.21	6.14	5.98
Other Bases %					4.00	4.30	4.00	4.10	4.40
Hydrogen %					0.00	0.00	0.00	0.00	0.00
EXTRACTABLE MINORS									
Boron** (ppm)					0.93	0.57	0.72	0.73	0.61
Iron** (ppm)					274	232	279	279	283
Manganese** (ppm)					26	27	30	32	28
Copper** (ppm)					2.37	1.80	1.73	2.23	1.72
Zinc** (ppm)					2.46	8.78	9.76	8.57	8.58
Aluminum** (ppm)					314	82	87	83	84
OTHER TESTS	Soluble Salts (mmhos/cm)								
	Chlorides (ppm)								
	NO3-N (ppm)				4.4	12.9	7.6	14.3	14.1
	NH4-N (ppm)				4.8	3.4	3.9	14.4	3.8

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable