

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Western Golf Properties City Lake Forest State CA

Independent Consultant Soil and Water Consulting Date 6/24/2021

Sample Location	YUCAIPA VALLEY GC	TEE	TEE	TEE	FAIRWAY	
Sample Identification		5	12	14	5	
Lab Number		0847-1	0848-1	0849-1	0850-1	
Total Exchange Capacity (ME/100 g)		8.13	7.87	5.37	20.32	
pH (H ₂ O 1:1)		6.3	6.6	6.8	^a 8.0	
Organic Matter (360°C LOI) %		3.53	3.24	2.13	3.45	
Estimated Nitrogen Release lb/A		85	82	63	84	
ANIONS	SOLUBLE SULFUR*	ppm	98	73	89	73
	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	82 18	55 12	41 9	27 6
EXCHANGEABLE CATIONS	CALCIUM*	lb/A ppm	1902 951	1966 983	1372 686	5460 2730
	MAGNESIUM*	lb/A ppm	314 157	344 172	256 128	842 421
	POTASSIUM*	lb/A ppm	152 76	108 54	94 47	162 81
	SODIUM*	lb/A ppm	276 138	246 123	160 80	1040 520
BASE SATURATION PERCENT						
	Calcium	%	58.49	62.45	63.87	67.18
	Magnesium	%	16.09	18.21	19.86	17.27
	Potassium	%	2.40	1.76	2.24	1.02
	Sodium	%	7.38	6.80	6.48	11.13
	Other Bases	%	5.10	4.80	4.60	3.40
	Hydrogen	%	10.50	6.00	3.00	0.00
EXTRACTABLE MINORS						
	Boron** (ppm)		0.78	0.83	0.61	1.57
	Iron** (ppm)		312	249	347	209
	Manganese** (ppm)		10	10	15	73
	Copper** (ppm)		2.20	1.73	1.74	2.87
	Zinc** (ppm)		9.03	5.35	3.76	3.72
	Aluminum** (ppm)		151	121	181	285
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)		12.7	5.7	2.6	2.6
	NH ₄ -N (ppm)		4.9	4.7	6.2	3.0

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

80046-15

 Name Western Golf Properties City Lake Forest State CA

 Independent Consultant Soil and Water Consulting Date 6/24/2021

Sample Location		YUCAIPA VALLEY GC	FAIRWAY	GREEN	GREEN		GREEN
Sample Identification			14	5	12		16
Lab Number			0851-1	0852-1	0853-1		0854-1
Total Exchange Capacity (ME/100 g)			10.54	5.92	5.33		5.00
pH (H ₂ O 1:1)			a 8.0	7.3	7.3		7.2
Organic Matter (360°C LOI) %			2.42	1.95	1.50		1.03
Estimated Nitrogen Release lb/A			68	59	50		41
ANIONS	SOLUBLE SULFUR*	ppm	174	87	102		47
	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	92 20	73 16		73 16
EXCHANGEABLE CATIONS	CALCIUM*	lb/A ppm	2726 1363	1554 777	1392 696		1342 671
	MAGNESIUM*	lb/A ppm	488 244	244 122	222 111		194 97
	POTASSIUM*	lb/A ppm	114 57	198 99	178 89		198 99
	SODIUM*	lb/A ppm	544 272	238 119	222 111		172 86
BASE SATURATION PERCENT							
	Calcium	%	64.66	65.63	65.29		67.10
	Magnesium	%	19.29	17.17	17.35		16.17
	Potassium	%	1.39	4.29	4.28		5.08
	Sodium	%	11.22	8.74	9.05		7.48
	Other Bases	%	3.40	4.10	4.10		4.20
	Hydrogen	%	0.00	0.00	0.00		0.00
EXTRACTABLE MINORS							
	Boron** (ppm)		1.18	0.80	0.65		0.57
	Iron** (ppm)		211	372	261		206
	Manganese** (ppm)		56	48	39		30
	Copper** (ppm)		2.51	3.49	2.21		1.48
	Zinc** (ppm)		3.38	16.21	11.27		8.29
	Aluminum** (ppm)		326	108	68		87
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		2.3	3.8	2.7		3.3
	NH ₄ -N (ppm)		2.2	3.1	3.4		2.8

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable