

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Chimera Golf Club at Tuscany City Henderson State NV

Independent Consultant Soil and Water Consulting Date 6/30/2017

Sample Location TEE		1	7	16	18	
Sample Identification						
Lab Number		0623-1	0624-1	0625-1	0626-1	
Total Exchange Capacity (ME/100 g)		23.05	22.13	23.73	20.16	
pH (H ₂ O 1:1)		^a 7.4	7.1	7.3	7.3	
Organic Matter (360°C LOI) %		2.82	2.66	3.76	4.36	
Estimated Nitrogen Release lb/A		76	73	88	94	
ANIONS	SOLUBLE SULFUR* ppm	360	439	329	201	
	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	151 33	101 22	147 32	156 34	
EXCHANGEABLE CATIONS	CALCIUM* lb/A ppm	5518 2759	5364 2682	5768 2884	5034 2517	
	MAGNESIUM* lb/A ppm	610 305	584 292	614 307	534 267	
	POTASSIUM* lb/A ppm	1496 748	1306 653	1470 735	1236 618	
	SODIUM* lb/A ppm	1782 891	1684 842	1792 896	1352 676	
BASE SATURATION PERCENT						
Calcium %		59.85	60.60	60.77	62.43	
Magnesium %		11.03	11.00	10.78	11.04	
Potassium %		8.32	7.57	7.94	7.86	
Sodium %		16.81	16.54	16.42	14.58	
Other Bases %		4.00	4.30	4.10	4.10	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron M3 (ppm)						
Iron** (ppm)		19	16	25	23	
Manganese** (ppm)		< 1	< 1	1	1	
Copper** (ppm)		0.65	0.74	0.95	1.01	
Zinc** (ppm)		6.21	5.64	6.91	8.15	
Aluminum (ppm)						
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** DTPA Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Chimera Golf Club at Tuscany City Henderson State NV

Independent Consultant Soil and Water Consulting Date 6/30/2017

Sample Location FAIRWAY		1	7	16	18	
Sample Identification						
Lab Number		0627-1	0628-1	0629-1	0630-1	
Total Exchange Capacity (ME/100 g)		41.51	31.85	66.89	42.56	
pH (H ₂ O 1:1)		7.2	7.3	^a 7.5	7.2	
Organic Matter (360°C LOI) %		2.54	2.16	2.26	1.71	
Estimated Nitrogen Release lb/A		71	63	65	54	
ANIONS	SOLUBLE SULFUR* ppm	2782	1373	7050	3449	
	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	78 17	110 24	101 22	
EXCHANGEABLE CATIONS	CALCIUM* lb/A ppm	11184 5592	7924 3962	21170 10585	12244 6122	
	MAGNESIUM* lb/A ppm	658 329	612 306	676 338	562 281	
	POTASSIUM* lb/A ppm	2996 1498	2798 1399	2308 1154	2624 1312	
	SODIUM* lb/A ppm	2402 1201	2114 1057	2568 1284	2052 1026	
BASE SATURATION PERCENT						
Calcium %		67.36	62.20	79.12	71.92	
Magnesium %		6.60	8.01	4.21	5.50	
Potassium %		9.25	11.26	4.42	7.90	
Sodium %		12.58	14.43	8.35	10.48	
Other Bases %		4.20	4.10	3.90	4.20	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron M3 (ppm)						
Iron** (ppm)		18	15	15	12	
Manganese** (ppm)		1	< 1	2	1	
Copper** (ppm)		1.30	1.07	1.11	0.96	
Zinc** (ppm)		3.96	3.80	3.05	3.09	
Aluminum (ppm)						
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** DTPA Extractable

SOIL AUDIT AND INVENTORY REPORT

Name Chimera Golf Club at Tuscany City Henderson State NVIndependent Consultant Soil and Water Consulting Date 6/30/2017

Sample Location			GREEN	1	7	16	18	
Sample Identification								
Lab Number				0631-1	0632-1	0633-1	0634-1	
Total Exchange Capacity (ME/100 g)				15.46	17.81	15.12	12.20	
pH (H ₂ O 1:1)				6.8	6.8	6.9	7.3	
Organic Matter (360°C LOI) %				2.02	2.29	2.38	1.57	
Estimated Nitrogen Release lb/A				60	66	68	51	
ANIONS	SOLUBLE SULFUR* ppm			329	305	301	175	
	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	78 17	69 15	41 9	
EXCHANGEABLE CATIONS	CALCIUM* lb/A		ppm	2448 1224	2740 1370	2506 1253	2896 1448	
	MAGNESIUM* lb/A		ppm	308 154	348 174	312 156	346 173	
	POTASSIUM* lb/A		ppm	2262 1131	2570 1285	2140 1070	666 333	
	SODIUM* lb/A		ppm	1832 916	2236 1118	1798 899	994 497	
BASE SATURATION PERCENT								
Calcium %				39.59	38.46	41.44	59.34	
Magnesium %				8.30	8.14	8.60	11.82	
Potassium %				18.76	18.50	18.15	7.00	
Sodium %				25.76	27.29	25.85	17.71	
Other Bases %				4.60	4.60	4.50	4.10	
Hydrogen %				3.00	3.00	1.50	0.00	
EXTRACTABLE MINORS								
Boron M3 (ppm)								
Iron** (ppm)				10	14	12	12	
Manganese** (ppm)				< 1	1	< 1	< 1	
Copper** (ppm)				0.57	0.56	0.53	0.49	
Zinc** (ppm)				5.30	8.66	8.75	6.63	
Aluminum (ppm)								
OTHER TESTS	Soluble Salts (mmhos/cm)							
	Chlorides (ppm)							

* Ammonium Acetate Extractable (pH of 8.1)

** DTPA Extractable