

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 6/23/2015

Sample Location TEE		1	7	16	18	
Sample Identification						
Lab Number		0142-1	0143-1	0141-1	0140-1	
Total Exchange Capacity (ME/100 g)		21.06	21.11	21.82	19.77	
pH (H ₂ O 1:1)		a 7.9	a 7.9	a 7.7	a 7.9	
Organic Matter (360°C LOI) %		4.51	4.57	6.61	3.81	
Estimated Nitrogen Release lb/A		95	96	108	88	
ANIONS	SOLUBLE SULFUR* ppm	102	106	191	145	
	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	160 35	169 37	183 40	128 28	
EXCHANGEABLE CATIONS	CALCIUM* lb/A	5580	5406	5912	5190	
	ppm	2790	2703	2956	2595	
	MAGNESIUM* lb/A	588	626	610	556	
	ppm	294	313	305	278	
	POTASSIUM* lb/A	1656	1920	1506	1614	
	ppm	828	960	753	807	
	SODIUM* lb/A	826	822	810	792	
	ppm	413	411	405	396	
BASE SATURATION PERCENT						
Calcium %		66.24	64.02	67.74	65.63	
Magnesium %		11.63	12.36	11.65	11.72	
Potassium %		10.08	11.66	8.85	10.47	
Sodium %		8.53	8.46	8.07	8.71	
Other Bases %		3.50	3.50	3.70	3.50	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron M3 (ppm)						
Iron** (ppm)		53	55	53	51	
Manganese** (ppm)		3	5	2	3	
Copper** (ppm)		1.22	1.67	1.45	1.41	
Zinc** (ppm)		6.36	6.93	8.99	6.08	
Aluminum (ppm)						
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** DTPA Extractable

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Sample Location FAIRWAY		1	7	16	18	
Sample Identification						
Lab Number		0146-1	0147-1	0145-1	0144-1	
Total Exchange Capacity (ME/100 g)		36.28	50.57	73.60	60.53	
pH (H ₂ O 1:1)		a 7.8	a 7.8	a 7.8	a 7.8	
Organic Matter (360°C LOI) %		5.28	3.28	5.40	3.21	
Estimated Nitrogen Release lb/A		101	83	102	82	
ANIONS	SOLUBLE SULFUR* ppm	1782	4071	6779	5369	
	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	188 41	147 32	325 71	160 35	
EXCHANGEABLE CATIONS	CALCIUM* lb/A	9592	15002	23180	18896	
	ppm	4796	7501	11590	9448	
	MAGNESIUM* lb/A	694	588	826	608	
	ppm	347	294	413	304	
	POTASSIUM* lb/A	3432	3658	3516	3536	
	ppm	1716	1829	1758	1768	
	SODIUM* lb/A	1702	1886	2322	1862	
	ppm	851	943	1161	931	
BASE SATURATION PERCENT						
Calcium %		66.10	74.16	78.74	78.04	
Magnesium %		7.97	4.84	4.68	4.19	
Potassium %		12.13	9.27	6.12	7.49	
Sodium %		10.20	8.11	6.86	6.69	
Other Bases %		3.60	3.60	3.60	3.60	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron M3 (ppm)						
Iron** (ppm)		53	36	62	47	
Manganese** (ppm)		4	3	4	5	
Copper** (ppm)		2.06	1.42	2.52	1.29	
Zinc** (ppm)		4.53	3.41	5.24	2.80	
Aluminum (ppm)						
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

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Sample Location <u>GREEN</u>		1	7	16	18	
Sample Identification						
Lab Number		0150-1	0151-1	0149-1	0148-1	
Total Exchange Capacity (ME/100 g)		14.05	13.39	13.83	11.83	
pH (H ₂ O 1:1)		a 7.6	a 7.4	a 7.4	a 7.7	
Organic Matter (360°C LOI) %		2.40	2.83	2.57	1.89	
Estimated Nitrogen Release lb/A		68	77	71	58	
ANIONS	SOLUBLE SULFUR* ppm	136	154	191	125	
	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	115 25	128 28	96 21	
EXCHANGEABLE CATIONS	CALCIUM* lb/A	2386	2396	2554	3146	
	ppm	1193	1198	1277	1573	
	MAGNESIUM* lb/A	278	298	300	342	
	ppm	139	149	150	171	
	POTASSIUM* lb/A	3068	2480	2572	818	
	ppm	1534	1240	1286	409	
	SODIUM* lb/A	1132	1126	1078	484	
	ppm	566	563	539	242	
BASE SATURATION PERCENT						
Calcium %		42.46	44.73	46.17	66.48	
Magnesium %		8.24	9.27	9.04	12.05	
Potassium %		28.00	23.75	23.84	8.86	
Sodium %		17.52	18.28	16.94	8.89	
Other Bases %		3.80	4.00	4.00	3.70	
Hydrogen %		0.00	0.00	0.00	0.00	
EXTRACTABLE MINORS						
Boron M3 (ppm)						
Iron** (ppm)		13	13	10	14	
Manganese** (ppm)		< 1	< 1	< 1	< 1	
Copper** (ppm)		0.77	0.72	0.64	0.67	
Zinc** (ppm)		6.05	8.13	8.93	6.46	
Aluminum (ppm)						
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

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