

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Canyon Gate Country Club City Las Vegas State NV

Independent Consultant Soil and Water Consulting Date 10/1/2019

Sample Location TEE			7	16			
Sample Identification							
Lab Number			0317-1	0318-1			
Total Exchange Capacity (ME/100 g)			18.70	14.56			
pH (H ₂ O 1:1)			a 7.7	a 7.9			
Organic Matter (360°C LOI) %			4.43	4.06			
Estimated Nitrogen Release lb/A			94	91			
ANIONS	SOLUBLE SULFUR* ppm		45	38			
	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		137	169			
			30	37			
	CALCIUM* lb/A		5554	4284			
		ppm	2777	2142			
	MAGNESIUM* lb/A		760	626			
		ppm	380	313			
	POTASSIUM* lb/A		458	354			
		ppm	229	177			
	SODIUM* lb/A		172	128			
		ppm	86	64			
BASE SATURATION PERCENT							
Calcium %			74.25	73.56			
Magnesium %			16.93	17.91			
Potassium %			3.14	3.12			
Sodium %			2.00	1.91			
Other Bases %			3.70	3.50			
Hydrogen %			0.00	0.00			
EXTRACTABLE MINORS							
Boron** (ppm)			1.30	1.30			
Iron** (ppm)			122	162			
Manganese** (ppm)			15	17			
Copper** (ppm)			1.68	1.53			
Zinc** (ppm)			24.17	28.87			
Aluminum** (ppm)			43	77			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		14.6	23.4			
	NH ₄ -N (ppm)		5.9	3.7			

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location FAIRWAY		7	16			
Sample Identification						
Lab Number		0319-1	0320-1			
Total Exchange Capacity (ME/100 g)		19.26	20.47			
pH (H ₂ O 1:1)		a 7.7	a 7.9			
Organic Matter (360°C LOI) %		6.58	5.78			
Estimated Nitrogen Release lb/A		108	104			
ANIONS	SOLUBLE SULFUR* ppm	52	269			
	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	321 70	307 67			
EXCHANGEABLE CATIONS	CALCIUM* lb/A	5674	6128			
	ppm	2837	3064			
	MAGNESIUM* lb/A	826	810			
	ppm	413	405			
	POTASSIUM* lb/A	484	524			
	ppm	242	262			
	SODIUM* lb/A	138	176			
	ppm	69	88			
BASE SATURATION PERCENT						
Calcium %		73.65	74.84			
Magnesium %		17.87	16.49			
Potassium %		3.22	3.28			
Sodium %		1.56	1.87			
Other Bases %		3.70	3.50			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		2.41	2.77			
Iron** (ppm)		97	105			
Manganese** (ppm)		16	30			
Copper** (ppm)		1.40	1.28			
Zinc** (ppm)		41.23	32.94			
Aluminum** (ppm)		41	75			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	26.7	30.5			
	NH ₄ -N (ppm)	5.4	6.6			

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SOIL AUDIT AND INVENTORY REPORT

Name Canyon Gate Country Club City Las Vegas State NV

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Sample Location <u>GREEN</u>			7	16			
Sample Identification							
Lab Number			0321-1	0322-1			
Total Exchange Capacity (ME/100 g)			5.53	4.69			
pH (H ₂ O 1:1)			a 8.3	a 8.7			
Organic Matter (360°C LOI) %			0.21	0.36			
Estimated Nitrogen Release lb/A			8	14			
ANIONS	SOLUBLE SULFUR* ppm		34	30			
	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		37 8	27 6			
	CALCIUM* lb/A ppm		1784 892	1456 728			
	MAGNESIUM* lb/A ppm		148 74	152 76			
	POTASSIUM* lb/A ppm		104 52	114 57			
	SODIUM* lb/A ppm		68 34	66 33			
BASE SATURATION PERCENT							
Calcium %			80.65	77.61			
Magnesium %			11.15	13.50			
Potassium %			2.41	3.12			
Sodium %			2.67	3.06			
Other Bases %			3.10	2.70			
Hydrogen %			0.00	0.00			
EXTRACTABLE MINORS							
Boron** (ppm)			0.28	1.44			
Iron** (ppm)			37	30			
Manganese** (ppm)			27	27			
Copper** (ppm)			0.53	0.28			
Zinc** (ppm)			3.16	2.82			
Aluminum** (ppm)			63	57			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		< 0.5	0.7			
	NH ₄ -N (ppm)		1.6	10.5			

a - alkaline soil

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