

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Tucson Country Club City Tucson State AZ

Independent Consultant Soil and Water Consulting Date 9/25/2019

Sample Location TEE			7	16			
Sample Identification							
Lab Number			0063-1	0064-1			
Total Exchange Capacity (ME/100 g)			14.89	8.14			
pH (H ₂ O 1:1)			a 8.3	a 7.6			
Organic Matter (360°C LOI) %			2.99	2.47			
Estimated Nitrogen Release lb/A			80	69			
ANIONS	SOLUBLE SULFUR* ppm		59	44			
	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		32	41			
			7	9			
	CALCIUM* lb/A		4746	2520			
		ppm	2373	1260			
	MAGNESIUM* lb/A		276	160			
		ppm	138	80			
	POTASSIUM* lb/A		376	230			
		ppm	188	115			
	SODIUM* lb/A		430	262			
		ppm	215	131			
BASE SATURATION PERCENT							
Calcium %			79.68	77.40			
Magnesium %			7.72	8.19			
Potassium %			3.24	3.62			
Sodium %			6.28	7.00			
Other Bases %			3.10	3.80			
Hydrogen %			0.00	0.00			
EXTRACTABLE MINORS							
Boron** (ppm)			1.13	0.88			
Iron** (ppm)			100	230			
Manganese** (ppm)			58	32			
Copper** (ppm)			3.54	3.81			
Zinc** (ppm)			12.01	11.53			
Aluminum** (ppm)			102	142			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		27.5	9.5			
	NH ₄ -N (ppm)		3.2	4.8			

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			0065-1	0066-1			
Total Exchange Capacity (ME/100 g)			12.27	10.75			
pH (H ₂ O 1:1)			a 8.3	a 7.8			
Organic Matter (360°C LOI) %			2.37	3.76			
Estimated Nitrogen Release lb/A			67	88			
ANIONS	SOLUBLE SULFUR* ppm		43	42			
	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		27 6	119 26			
	CALCIUM* lb/A ppm		3682 1841	3048 1524			
	MAGNESIUM* lb/A ppm		244 122	258 129			
	POTASSIUM* lb/A ppm		650 325	672 336			
	SODIUM* lb/A ppm		384 192	372 186			
BASE SATURATION PERCENT							
	Calcium %		75.02	70.88			
	Magnesium %		8.29	10.00			
	Potassium %		6.79	8.01			
	Sodium %		6.80	7.52			
	Other Bases %		3.10	3.60			
	Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS							
	Boron** (ppm)		1.12	0.79			
	Iron** (ppm)		90	238			
	Manganese** (ppm)		60	27			
	Copper** (ppm)		2.97	3.10			
	Zinc** (ppm)		10.00	13.03			
	Aluminum** (ppm)		110	130			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		21.2	16.2			
	NH ₄ -N (ppm)		3.0	63.5			

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Sample Location <u>GREEN</u>		7	16			
Sample Identification						
Lab Number		0067-1	0068-1			
Total Exchange Capacity (ME/100 g)		7.82	7.22			
pH (H ₂ O 1:1)		a 8.4	a 8.1			
Organic Matter (360°C LOI) %		0.60	0.76			
Estimated Nitrogen Release lb/A		24	30			
ANIONS	SOLUBLE SULFUR* ppm	8	7			
	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	41 9	50 11			
EXCHANGEABLE CATIONS	CALCIUM* lb/A	2082	1934			
	ppm	1041	967			
	MAGNESIUM* lb/A	226	186			
	ppm	113	93			
	POTASSIUM* lb/A	810	782			
	ppm	405	391			
	SODIUM* lb/A	182	168			
	ppm	91	84			
BASE SATURATION PERCENT						
Calcium %		66.56	66.97			
Magnesium %		12.04	10.73			
Potassium %		13.28	13.89			
Sodium %		5.06	5.06			
Other Bases %		3.00	3.30			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		0.71	0.64			
Iron** (ppm)		88	101			
Manganese** (ppm)		76	83			
Copper** (ppm)		3.71	3.91			
Zinc** (ppm)		13.42	13.16			
Aluminum** (ppm)		360	299			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	1.3	1.7			
	NH ₄ -N (ppm)	2.2	2.2			

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