

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Tucson Country Club City Tucson State AZ

Independent Consultant Soil and Water Consulting Date 10/1/2018

Sample Location TEE			2	11			
Sample Identification							
Lab Number			0088-1	0089-1			
Total Exchange Capacity (ME/100 g)			12.98	11.83			
pH (H ₂ O 1:1)			a 8.3	a 7.8			
Organic Matter (360°C LOI) %			2.33	2.34			
Estimated Nitrogen Release lb/A			67	67			
ANIONS	SOLUBLE SULFUR* ppm		32	39			
	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		46	23			
			10	5			
	CALCIUM* lb/A		4060	3582			
		ppm	2030	1791			
	MAGNESIUM* lb/A		224	254			
		ppm	112	127			
	POTASSIUM* lb/A		492	390			
		ppm	246	195			
	SODIUM* lb/A		396	408			
		ppm	198	204			
BASE SATURATION PERCENT							
Calcium %			78.20	75.70			
Magnesium %			7.19	8.95			
Potassium %			4.86	4.23			
Sodium %			6.63	7.50			
Other Bases %			3.10	3.60			
Hydrogen %			0.00	0.00			
EXTRACTABLE MINORS							
Boron** (ppm)			1.03	1.11			
Iron** (ppm)			80	88			
Manganese** (ppm)			69	49			
Copper** (ppm)			2.92	2.94			
Zinc** (ppm)			7.54	15.39			
Aluminum** (ppm)			88	104			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		12.8	14.5			
	NH ₄ -N (ppm)		1.9	2.8			

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location FAIRWAY		2	11			
Sample Identification						
Lab Number		0090-1	0091-1			
Total Exchange Capacity (ME/100 g)		11.76	11.28			
pH (H ₂ O 1:1)		a 8.0	a 7.9			
Organic Matter (360°C LOI) %		2.63	3.37			
Estimated Nitrogen Release lb/A		73	84			
ANIONS	SOLUBLE SULFUR* ppm	25	28			
	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	60 13	69 15			
EXCHANGEABLE CATIONS	CALCIUM* lb/A	3586	3424			
	ppm	1793	1712			
	MAGNESIUM* lb/A	220	238			
	ppm	110	119			
	POTASSIUM* lb/A	612	498			
	ppm	306	249			
	SODIUM* lb/A	318	320			
	ppm	159	160			
BASE SATURATION PERCENT						
Calcium %		76.23	75.89			
Magnesium %		7.79	8.79			
Potassium %		6.67	5.66			
Sodium %		5.88	6.17			
Other Bases %		3.40	3.50			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		1.09	1.15			
Iron** (ppm)		91	131			
Manganese** (ppm)		52	44			
Copper** (ppm)		2.57	2.96			
Zinc** (ppm)		7.34	9.29			
Aluminum** (ppm)		76	77			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	16.9	15.0			
	NH ₄ -N (ppm)	2.5	1.7			

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Sample Location <u>GREEN</u>		2	11			
Sample Identification						
Lab Number		0092-1	0093-1			
Total Exchange Capacity (ME/100 g)		6.25	7.07			
pH (H ₂ O 1:1)		a 8.1	a 8.5			
Organic Matter (360°C LOI) %		0.81	0.88			
Estimated Nitrogen Release lb/A		32	35			
ANIONS	SOLUBLE SULFUR* ppm	10	9			
	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	37 8	60 13			
EXCHANGEABLE CATIONS	CALCIUM* lb/A	1720	1848			
	ppm	860	924			
	MAGNESIUM* lb/A	146	190			
	ppm	73	95			
	POTASSIUM* lb/A	560	754			
	ppm	280	377			
	SODIUM* lb/A	194	222			
	ppm	97	111			
BASE SATURATION PERCENT						
Calcium %		68.80	65.35			
Magnesium %		9.73	11.20			
Potassium %		11.49	13.67			
Sodium %		6.75	6.83			
Other Bases %		3.30	2.90			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		0.53	0.65			
Iron** (ppm)		97	75			
Manganese** (ppm)		73	65			
Copper** (ppm)		3.20	3.19			
Zinc** (ppm)		12.04	11.26			
Aluminum** (ppm)		236	321			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	3.7	3.8			
	NH ₄ -N (ppm)	3.6	3.1			

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