

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Tucson Country Club City Tucson State AZ

Independent Consultant Soil and Water Consulting Date 6/26/2019

Sample Location <u>TEE</u>		6	15			
Sample Identification						
Lab Number		1893-1	1894-1			
Total Exchange Capacity (ME/100 g)		8.67	10.84			
pH (H ₂ O 1:1)		a 7.7	a 8.3			
Organic Matter (360°C LOI) %		3.07	2.43			
Estimated Nitrogen Release lb/A		81	69			
ANIONS	SOLUBLE SULFUR* ppm	18	50			
	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	2678	3206			
	ppm	1339	1603			
	MAGNESIUM* lb/A	194	258			
	ppm	97	129			
	POTASSIUM* lb/A	286	526			
	ppm	143	263			
	SODIUM* lb/A	220	340			
	ppm	110	170			
BASE SATURATION PERCENT						
Calcium %		77.22	73.94			
Magnesium %		9.32	9.92			
Potassium %		4.23	6.22			
Sodium %		5.52	6.82			
Other Bases %		3.70	3.10			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		0.83	1.13			
Iron** (ppm)		137	129			
Manganese** (ppm)		46	59			
Copper** (ppm)		3.27	3.31			
Zinc** (ppm)		12.02	15.72			
Aluminum** (ppm)		102	116			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	22.8	46.1			
	NH ₄ -N (ppm)	15.8	101.3			

a - alkaline soil

* Ammonium Acetate Extractable (pH of 8.1)

** Mehlich III Extractable

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Sample Location FAIRWAY		6	15			
Sample Identification						
Lab Number		1895-1	1896-1			
Total Exchange Capacity (ME/100 g)		11.19	10.17			
pH (H ₂ O 1:1)		^a 7.8	7.3			
Organic Matter (360°C LOI) %		3.51	3.52			
Estimated Nitrogen Release lb/A		85	85			
ANIONS	SOLUBLE SULFUR* ppm	31	25			
	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	46 10	101 22			
EXCHANGEABLE CATIONS	CALCIUM* lb/A	3240	2736			
	ppm	1620	1368			
	MAGNESIUM* lb/A	254	286			
	ppm	127	143			
	POTASSIUM* lb/A	706	762			
	ppm	353	381			
	SODIUM* lb/A	334	342			
	ppm	167	171			
BASE SATURATION PERCENT						
Calcium %		72.39	67.26			
Magnesium %		9.46	11.72			
Potassium %		8.09	9.61			
Sodium %		6.49	7.31			
Other Bases %		3.60	4.10			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		1.05	0.70			
Iron** (ppm)		123	227			
Manganese** (ppm)		60	25			
Copper** (ppm)		2.64	2.75			
Zinc** (ppm)		9.33	12.14			
Aluminum** (ppm)		58	135			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	43.7	29.9			
	NH ₄ -N (ppm)	28.7	9.0			

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SOIL AUDIT AND INVENTORY REPORT

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Sample Location <u>GREEN</u>		6	15			
Sample Identification						
Lab Number		1897-1	1898-1			
Total Exchange Capacity (ME/100 g)		8.07	8.72			
pH (H ₂ O 1:1)		a 8.1	a 8.5			
Organic Matter (360°C LOI) %		1.28	1.45			
Estimated Nitrogen Release lb/A		46	49			
ANIONS	SOLUBLE SULFUR* ppm	25	45			
	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	73 16	105 23			
EXCHANGEABLE CATIONS	CALCIUM* lb/A	2166	2342			
	ppm	1083	1171			
	MAGNESIUM* lb/A	230	228			
	ppm	115	114			
	POTASSIUM* lb/A	866	1014			
	ppm	433	507			
	SODIUM* lb/A	146	166			
	ppm	73	83			
BASE SATURATION PERCENT						
Calcium %		67.10	67.14			
Magnesium %		11.88	10.89			
Potassium %		13.76	14.91			
Sodium %		3.93	4.14			
Other Bases %		3.30	2.90			
Hydrogen %		0.00	0.00			
EXTRACTABLE MINORS						
Boron** (ppm)		0.65	0.69			
Iron** (ppm)		133	147			
Manganese** (ppm)		110	111			
Copper** (ppm)		4.74	4.81			
Zinc** (ppm)		19.41	19.86			
Aluminum** (ppm)		259	210			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	5.8	10.1			
	NH ₄ -N (ppm)	6.8	42.0			

a - alkaline soil

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** Mehlich III Extractable