

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name River Winds Golf and Tennis City Deptford State NJ

Independent Consultant Soil and Water Consulting Date 5/15/2018

Sample Location	TEE	6	11			
Sample Identification						
Lab Number		0194-1	0195-1			
Total Exchange Capacity (ME/100 g)		9.43	7.69			
pH	Buffer (SMP/Sikora) H ₂ O (1:1)	7.4 6.2	7.4 6.1			
Organic Matter (360°C LOI) %		2.98	2.81			
Estimated Nitrogen Release	lb/A	80	76			
ANIONS	SOLUBLE SULFUR*	ppm	205	66		
	MEHLICH III	lb/A P as P ₂ O ₅ ppm of P	577 126	545 119		
	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				
EXCHANGEABLE CATIONS	CALCIUM*	lb/A ppm	2408 1204	1962 981		
	MAGNESIUM*	lb/A ppm	284 142	210 105		
	POTASSIUM*	lb/A ppm	276 138	166 83		
	SODIUM*	lb/A ppm	114 57	118 59		
BASE SATURATION PERCENT						
	Calcium %		63.84	63.78		
	Magnesium %		12.55	11.38		
	Potassium %		3.75	2.77		
	Sodium %		2.63	3.34		
	Other Bases %		5.20	5.20		
	Hydrogen %		12.00	13.50		
EXTRACTABLE MINORS						
	Boron* (ppm)		0.57	0.51		
	Iron* (ppm)		419	486		
	Manganese* (ppm)		6	11		
	Copper* (ppm)		11.97	10.01		
	Zinc* (ppm)		54.98	43.25		
	Aluminum* (ppm)		427	415		
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)		1.3	0.6		
	NH ₄ -N (ppm)		12.6	3.8		

* Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name River Winds Golf and Tennis City Deptford State NJ

Independent Consultant Soil and Water Consulting Date 5/15/2018

Sample Location FAIRWAY			6	11				
Sample Identification								
Lab Number			0196-1	0197-1				
Total Exchange Capacity (ME/100 g)			5.98	6.39				
pH	Buffer (SMP/Sikora)		7.4	7.4				
	H ₂ O (1:1)		6.2	6.3				
Organic Matter (360°C LOI) %			1.83	2.47				
Estimated Nitrogen Release lb/A			57	69				
ANIONS	SOLUBLE SULFUR*							
		ppm	42	34				
	PHOSPHORUS	MEHLICH III lb/A P as P ₂ O ₅	540	499				
			ppm of P	118	109			
		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						
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	1502	1680				
		ppm	751	840				
	MAGNESIUM*	lb/A	174	176				
		ppm	87	88				
	POTASSIUM*	lb/A	178	188				
		ppm	89	94				
	SODIUM*	lb/A	112	102				
		ppm	56	51				
BASE SATURATION PERCENT								
Calcium %		62.79	65.73					
Magnesium %		12.12	11.48					
Potassium %		3.82	3.77					
Sodium %		4.07	3.47					
Other Bases %		5.20	5.10					
Hydrogen %		12.00	10.50					
EXTRACTABLE MINORS								
Boron* (ppm)		0.57	0.50					
Iron* (ppm)		659	547					
Manganese* (ppm)		13	13					
Copper* (ppm)		5.99	6.79					
Zinc* (ppm)		40.56	36.63					
Aluminum* (ppm)		382	370					
OTHER TESTS	Soluble Salts (mmhos/cm)							
	Chlorides (ppm)							
	NO ₃ -N (ppm)		0.5	0.8				
	NH ₄ -N (ppm)		9.5	6.6				

* Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name River Winds Golf and Tennis City Deptford State NJ

Independent Consultant Soil and Water Consulting Date 5/15/2018

Sample Location <u>GREEN</u>		6	11			
Sample Identification						
Lab Number		0198-1	0199-1			
Total Exchange Capacity (ME/100 g)		1.79	2.05			
pH	Buffer (SMP/Sikora)	7.6	7.6			
	H ₂ O (1:1)	6.9	6.8			
Organic Matter (360°C LOI) %		0.84	0.90			
Estimated Nitrogen Release lb/A		34	36			
ANIONS	SOLUBLE SULFUR*	ppm	14	7		
	PHOSPHORUS					
	MEHLICH III lb/A P as P ₂ O ₅	ppm of P	211	224		
			46	49		
	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				
	CALCIUM*	lb/A	496	574		
		ppm	248	287		
	MAGNESIUM*	lb/A	60	72		
		ppm	30	36		
	POTASSIUM*	lb/A	58	30		
		ppm	29	15		
	SODIUM*	lb/A	54	54		
		ppm	27	27		
BASE SATURATION PERCENT						
Calcium %		69.27	70.00			
Magnesium %		13.97	14.63			
Potassium %		4.15	1.88			
Sodium %		6.56	5.73			
Other Bases %		4.50	4.60			
Hydrogen %		1.50	3.00			
EXTRACTABLE MINORS						
Boron* (ppm)		< 0.20	< 0.20			
Iron* (ppm)		96	96			
Manganese* (ppm)		7	12			
Copper* (ppm)		1.19	0.93			
Zinc* (ppm)		6.87	5.99			
Aluminum* (ppm)		83	110			
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	0.7	< 0.5			
	NH ₄ -N (ppm)	4.3	3.3			

* Mehlich III Extractable

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name River Winds Golf and Tennis City Deptford State NJ

Independent Consultant Soil and Water Consulting Date 5/15/2018

Sample Location		GREENBANK	17				
Sample Identification			d 3 in 3"				
Lab Number			0200-1				
Total Exchange Capacity (ME/100 g)			9.17				
pH	Buffer (SMP/Sikora)		7.4				
	H ₂ O (1:1)		6.3				
Organic Matter (360°C LOI) %			3.39				
Estimated Nitrogen Release lb/A			42				
ANIONS	SOLUBLE SULFUR*		ppm	74			
	PHOSPHORUS	MEHLICH III	lb/A P as P ₂ O ₅ ppm of P	305 133			
		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				
	EXCHANGEABLE CATIONS	CALCIUM*	lb/A	1136			
		ppm	1136				
MAGNESIUM*		lb/A	176				
		ppm	176				
POTASSIUM*		lb/A	150				
	ppm	150					
	SODIUM*	lb/A	47				
	ppm	47					
BASE SATURATION PERCENT							
	Calcium	%	61.94				
	Magnesium	%	15.99				
	Potassium	%	4.19				
	Sodium	%	2.23				
	Other Bases	%	5.10				
	Hydrogen	%	10.50				
EXTRACTABLE MINORS							
	Boron* (ppm)		0.58				
	Iron* (ppm)		428				
	Manganese* (ppm)		10				
	Copper* (ppm)		7.34				
	Zinc* (ppm)		39.43				
	Aluminum* (ppm)		424				
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						
	NO ₃ -N (ppm)		1.9				
	NH ₄ -N (ppm)		9.3				

d - specific depth

* Mehlich III Extractable