

lb/A

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

90018-4

Name Brooklake Country Club City Florham Park State NJ

Independent Consultant Soil and Water Consulting Date 5/23/2024

Sample Location	TEE	2	9	11	16	
Sample Identification						
Lab Number		0352-1	0353-1	0354-1	0355-1	
Total Exchange Capacity (ME/100 g)		4.60	3.37	4.23	3.27	
pH	Buffer (SMP/Sikora)	7.4	7.4	7.4	7.3	
	H ₂ O (1:1)	6.3	6.4	6.3	5.9	
Organic Matter (360°C LOI) %		2.54	1.39	1.76	1.45	
Estimated Nitrogen Release	lb/A	71	48	55	49	
ANIONS	SOLUBLE SULFUR*					
	ppm	17	14	12	16	
	MEHLICH III lb/A P as P ₂ O ₅	316	224	133	160	
	ppm of P	69	49	29	35	
	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	1310	972	1240	802
	ppm		655	486	620	401
	MAGNESIUM*	lb/A	94	72	72	80
	ppm		47	36	36	40
	POTASSIUM*	lb/A	80	68	74	66
	ppm		40	34	37	33
	SODIUM*	lb/A	52	38	36	34
	ppm		26	19	18	17
BASE SATURATION PERCENT						
Calcium	%	71.20	72.11	73.29	61.31	
Magnesium	%	8.51	8.90	7.09	10.19	
Potassium	%	2.23	2.59	2.24	2.59	
Sodium	%	2.46	2.45	1.85	2.26	
Other Bases	%	5.10	5.00	5.10	5.60	
Hydrogen	%	10.50	9.00	10.50	18.00	
EXTRACTABLE MINORS						
	Boron* (ppm)	0.50	0.30	< 0.20	0.22	
	Iron* (ppm)	278	152	98	135	
	Manganese* (ppm)	8	6	7	5	
	Copper* (ppm)	1.59	0.27	0.41	< 0.2	
	Zinc* (ppm)	5.85	2.62	2.64	1.82	
	Aluminum* (ppm)	158	148	82	186	
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	1.0	< 0.5	0.5	0.5	
	NH ₄ -N (ppm)	2.4	3.5	3.5	3.4	

* Mehlich III Extractable

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Sample Location	FAIRWAY	2	9	11	16	
Sample Identification						
Lab Number		0356-1	0358-1	0359-1	0360-1	
Total Exchange Capacity (ME/100 g)		9.57	11.38	14.59	11.15	
pH	Buffer (SMP/Sikora)	7.3	7.3	7.3	7.4	
	H ₂ O (1:1)	6.4	6.4	6.4	6.6	
Organic Matter (360°C LOI) %		5.27	5.65	6.29	4.12	
Estimated Nitrogen Release	lb/A	101	103	106	91	
ANIONS	SOLUBLE SULFUR*					
	ppm	26	21	24	41	
	MEHLICH III lb/A P as P ₂ O ₅	188	179	160	229	
	ppm of P	41	39	35	50	
	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	2698	3280	4066	3266
	ppm		1349	1640	2033	1633
	MAGNESIUM*	lb/A	264	288	432	324
	ppm		132	144	216	162
	POTASSIUM*	lb/A	176	196	308	164
	ppm		88	98	154	82
	SODIUM*	lb/A	74	64	86	102
	ppm		37	32	43	51
BASE SATURATION PERCENT						
Calcium	%	70.48	72.06	69.67	73.23	
Magnesium	%	11.49	10.54	12.34	12.11	
Potassium	%	2.36	2.21	2.71	1.89	
Sodium	%	1.68	1.22	1.28	1.99	
Other Bases	%	5.00	5.00	5.00	4.80	
Hydrogen	%	9.00	9.00	9.00	6.00	
EXTRACTABLE MINORS						
Boron* (ppm)		0.74	0.77	0.79	0.64	
Iron* (ppm)		157	178	178	383	
Manganese* (ppm)		24	21	26	58	
Copper* (ppm)		3.22	3.25	3.91	3.55	
Zinc* (ppm)		3.89	3.78	4.22	5.53	
Aluminum* (ppm)		739	698	682	533	
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	3.5	3.2	2.8	1.9	
	NH ₄ -N (ppm)	2.5	2.2	2.2	0.8	

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Sample Location	GREEN	2	9	11	16	
Sample Identification						
Lab Number		0361-1	0362-1	0363-1	0364-1	
Total Exchange Capacity (ME/100 g)		3.46	4.03	6.81	7.52	
pH	Buffer (SMP/Sikora)	7.4	7.4	7.4	7.4	
	H ₂ O (1:1)	6.3	6.2	6.6	6.5	
Organic Matter (360°C LOI) %		1.14	1.42	2.63	2.68	
Estimated Nitrogen Release	lb/A	43	48	73	74	
ANIONS	SOLUBLE SULFUR*					
	ppm	10	7	16	12	
	MEHLICH III lb/A P as P ₂ O ₅	522	279	934	966	
	ppm of P	114	61	204	211	
	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	964	1146	2066	2220
	ppm		482	573	1033	1110
	MAGNESIUM*	lb/A	80	82	162	196
	ppm		40	41	81	98
	POTASSIUM*	lb/A	58	50	94	88
	ppm		29	25	47	44
	SODIUM*	lb/A	46	30	54	48
	ppm		23	15	27	24
BASE SATURATION PERCENT						
	Calcium %	69.65	71.09	75.84	73.80	
	Magnesium %	9.63	8.48	9.91	10.86	
	Potassium %	2.15	1.59	1.77	1.50	
	Sodium %	2.89	1.62	1.72	1.39	
	Other Bases %	5.10	5.20	4.80	4.90	
	Hydrogen %	10.50	12.00	6.00	7.50	
EXTRACTABLE MINORS						
	Boron* (ppm)	0.29	0.36	0.71	0.55	
	Iron* (ppm)	223	170	371	305	
	Manganese* (ppm)	15	10	13	12	
	Copper* (ppm)	15.46	16.10	9.75	13.23	
	Zinc* (ppm)	8.90	9.32	13.22	15.15	
	Aluminum* (ppm)	359	140	269	252	
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					
	NO ₃ -N (ppm)	0.8	1.3	1.2	1.8	
	NH ₄ -N (ppm)	< 0.5	0.6	< 0.5	< 0.5	

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