Predictive Home & Garden

Soil Report

Mehlich-3 Extraction

Links to Helpful Information

Client: Marty Krogh
4801 Winding Oak way
Apex, NC 27539

Sampled County : Wake

Client ID: 520276

Advisor: Davenport Environmental
HOUSE ACCT
3201 Garner Station Blvd
Raleigh, NC 27603

Advisor ID: 337414

Sampled: 04/30/2021 **Received:** 05/19/2021 **Completed:** 05/27/2021 **Farm:**

Agronomist's Comments:

This report provides Test Results and Recommendations for each sample submitted for testing. Look for Lime Recommendations and N-P-K Fertilizer Recommendations. The lime recommendation is always listed next to the first crop and will be based on the higher target pH if the pH targets for crop 1 and crop 2 differ. Application at the indicated rate will raise soil pH to the optimal level for the plant you specified and should be sufficient for 2 to 3 years, depending on soil type. Common target pH values are as follows: 5.0 for azalea, camellia, rhododendron and mt. laurel; 5.5 for centipedegrass; 6.0 for other lawn grasses, shrubbery, and; flowering plants; and 6.5 for vegetable gardens. N-P-K Recommendations are based on the nitrogen (N) needs of the plants being grown and the soil test results for phosphorus (P-I) and potassium (K-I); a 50 to 70 index for either is optimum. If the exact fertilizer cannot be found, find the closest match and adjust the rate accordingly. Refer to "Understanding the Soil Report" (last page of this report) for additional explanation and links to helpful information.

Sample ID: BACk

Lime History:
0.30 tons/acre;
12/2020

Marty Krogh

Lime Recommendations

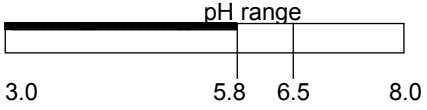
Crop 1- Lawn (not centip.) 0.0 lb per 1,000 sq ft
Crop 2- 0.0 lb per 1,000 sq ft

N-P-K Fertilizer Recommendations *

20 lbs per 1,000 sq ft 5-10-10 Group A

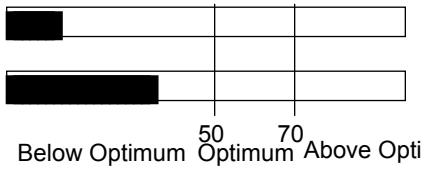
Test Results:

pH = 5.9



Phosphorus Index (P-I) =12

Potassium Index (K-I) =37



Additional Test Results:

Soil Class	HM%	W/V	CEC	Mn-I	Zn-I	Cu-I	S-I
Mineral	0.18	1.01 g/cm^3	5.2 meq/100 cm^3	83	67	49	133

**If you cannot find the fertilizer recommended here, choose one from the same Group (A, B, C or D) listed on the last page of this report.*
Note: This soil test does not measure nitrogen (N) levels. N fertilizer recommendations are based only on needs of the designated crop.

Reprogramming of the laboratory-information-management system that makes this report possible is being funded through a grant from the North Carolina Tobacco Trust Fund Commission.

Thank you for using agronomic services to manage nutrients and safeguard environmental quality.

- *Steve Troxler, Commissioner of Agriculture*

Understanding the Soil Report

Lime

Application of lime at the recommended rate will raise soil pH to the optimum range. Do not apply too much lime. When soil pH becomes too high, lowering it is very difficult. Often, the best solution then is to choose plants that can tolerate a high pH.

Choosing dolomitic lime can be advantageous because it contains the nutrients calcium and magnesium. Pelleted lime is easier to spread uniformly than powdered lime.

Lime can be applied at any time of year, but because it reacts slowly, it is best to apply it several months before a new planting. Mixing it into the soil will speed the reaction time. Lime applied to the soil surface takes much longer to correct soil pH.

A surface application should not exceed 60 lb per 1,000 sq ft. If a soil report recommends more than this, apply 60 lb per 1,000 sq ft initially and the rest in similar increments every 6-9 months until the full rate is applied.

Fertilizer

Soil tests do not measure nitrogen (N) since it is very unstable in soils; the N recommendations provided on the soil report are based on plant needs. If soil-test P-I and K-I values are adequate (>50), only nitrogen is recommended- Group D below. A mixed (N-P-K) fertilizer is recommended if P-I and
K-I values are less than optimum- Groups A - C below. Although a specific fertilizer grade may be recommended (e.g., 5-10-10), other equivalent options are likely to be available (e.g., any fertilizer in Group A from Table 1).

Tips on Fertilizer Application

- To determine how much fertilizer to buy, estimate (in feet) the length (L) and width (W) of the area to be treated: L × W = sq ft. Square off curves to make estimates easier. If the recommendation is 20 lb per 1,000 sq ft and your area is 5,000 sq ft, then you need 100 lb (20 × 5) for your 5,000-sq-ft area.
- Calibrate your spreader according to manufacturer settings. Apply half the total rate in one direction; apply the rest at a 90° angle. This cross-hair pattern provides a more uniform application.
- After application, sweep up any fertilizer on hard surfaces and apply to fertilized areas so rainfall does not carry fertilizer to a storm drain.

Table 1. Groups of equivalent fertilizers that supply 1 lb of N per 1,000 sq ft *

Group A: low P-I + low K-I	Group B: low P-I + high K-I	Group C: high P-I + low K-I	Group D: N only
5-10-10 @ 20 lb	5-10-5 @ 20 lb	8-0-24 @ 12 lb	15-0-0 @ 7 lb
3-9-9 @ 30 lb	18-46-0 @ 6 lb	15-0-14 @ 7 lb	21-0-0 @ 5 lb
10-10-10 @ 10 lb	18-24-10 @ 6 lb	6-6-18 @ 18 lb	16-0-0 @ 6 lb
11-15-11 @ 10 lb	9-13-7 @ 11 lb	5-5-15 @ 20 lb	28-0-4 @ 4 lb
8-10-8 @ 12 lb	9-17-8 @ 11 lb	10-0-14 @ 10 lb	12-6-6 @ 8 lb

* Since these rates supply 1 lb N per 1,000 sq ft, use half the rate if centipede is the grass type.

Report Abbreviations

CEC	cation exchange capacity
Cu-I	copper index
HM%	percent humic matter
Mn-I	manganese index
pH	soil pH
S-I	sulfur index
SS-I	soluble salt index
W/V	weight per volume
Zn-I	zinc index

Time Fertilizer Application to Coincide with Plant Growth Cycle:
Bermudagrass: May, July, Sept
Centipedegrass: May
St. Augustine grass: May, August
Tall fescue: Sept, Nov, Feb
Zoysia: May, July
Flowers/shrubs: prior to planting or during the growing season
Vegetables: prior to planting

A Homeowner's Guide to Fertilizer

Note 4: Fertilization of Lawns, Gardens & Ornamentals

Caring for Your Lawn & Environment

Carolina Lawns

Soil Acidity and Liming: Basic Information for Farmers & Gardeners