

	Environmental Analysis Teaching and Research Laboratory	Date: 8/11/2016	Number: X
	Standard Operating Procedure	Title: Nitrate Quick Test	
	Approved By: Los Huertos	Revision Date:     /     /	

## 1. Scope and Application

**1.1** Hello, here is some text without a meaning. This text should show, how a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like ■Huardest gefburn■? Kjift – Never mind! A blind text like this gives you information about the selected font, how the letters are written and the impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for a special contents, but the length of words should match to the language.

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## 2. Health and Safety

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## 3. Personnel & Training Responsibilities

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Students using this SOP should be trained for the following SOPsa:

- SOP1
- SOP2

#### **4. Required Materials**

**4.1** Distilled water

**4.2** Calcium Chloride

**4.3** Nitrate test strips

**4.4** Falcon tubes(volumetrically marked centrifuge tubes?)

**4.5** Soil Probe (Auger?)

**4.6** Bucket

#### **5. Estimated Time**

**5.1** This will take XX minutes...

#### **6. Procedure**

**6.1** Preparation: Add 6 g (1tspn) CaCl<sub>2</sub> to 1 gal distilled water (makes 125 tests).

**6.2** Fill volumetric container w/ 30 ml solution

**6.3** Add soil into container until solution reaches 40 ml

**6.4** cap and shake until all soil is well mixed

**6.5** allow sample to sit and soil particles to settle (around 10 mins, no more than 1hr)

**6.6** Dip test strip in clearer solution near top for one second

**6.7** compare strip to standard color chart at 30 and 60 seconds

**6.8** Interpretation of N testing quick strips

Table 1: Soil Texture Correction Factor

Texture	Moist Soil	Dry Soil
Sand	2.3	2.6
Loam	2.0	2.5
Clay	1.7	2.2

**6.9** Calculate correction factor using soil textures (average values) See Texture Analysis SOP.

**6.10** Corrected value = test strip value of N (ppm) / correction factor

**6.11** record nitrate ppm and correction factor in field notebook

## 7. References

**7.1** APHA, AWWA. WEF. (2012) Standard Methods for examination of water and wastewater. 22nd American Public Health Association (Eds.). Washington. 1360 pp. (2014).