# PROJECT REPORT

DETERMINATION OF SOIL PROPERTIES OF WAPDA COLONY (TARU JABBA) AND MAPPING THROUGH QGIS.

Submitted to: Engr.Hamza Mustafa Submitted by: M Afaq Khan Student id: 7700 Section:

## **INTRODUCTION:**

Taru jabba WAPDA housing society is located at GT road, district Nowshera. It has almost 900 houses, parks, mosques, clinics, primary schools and commercial area. It is well planned town and easily accessible as it is on main road to main city Peshawar.But the main problem is that the water table is very low in this town area, because in past the area was lowland region saturated with water, swaps and marshes. Because of the still water the soil become cohesive clayey soil occurs in arid climate. people are constructing houses, but they are facing different problems regarding their foundation construction.

#### • EXPERIMENTS

- 1. Liquid limit
- 2. Plastic limi
- 3. Unconfined compression test
- 4. Standard proctor test.

#### **Aims and Objectives**

- The objective of this study is to identify that what are the engineering properties of that soil, of different phases.
- And to map the identified spots using GIS and also to perform different analytical tools of GIS.

#### **Literature Review**

Different research papers were studied and researchers in different countries analyzed the soil properties according to their methodology.

#### . Methodology

#### 1. Site Selection:

The site was WAPDA colony district Nowshera, I collected differ soil sample of different phases of the colony and performs test on it. The Map of the coloney is show below:



## 2. DATA COLLECTION:



• Coordinates are taken from google earth as shown below:

Different tests were performed on soil of the colony. The results of the test are as

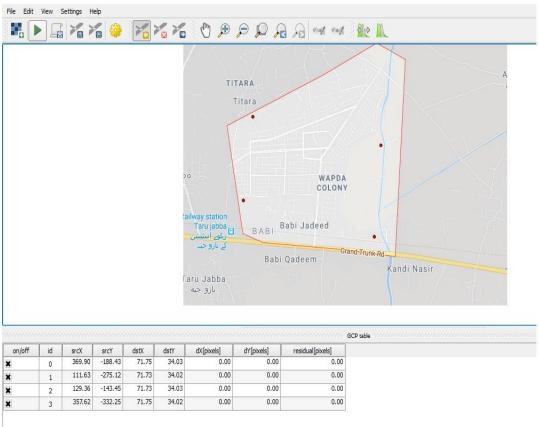
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#### 3. DATA ANALYSIS:

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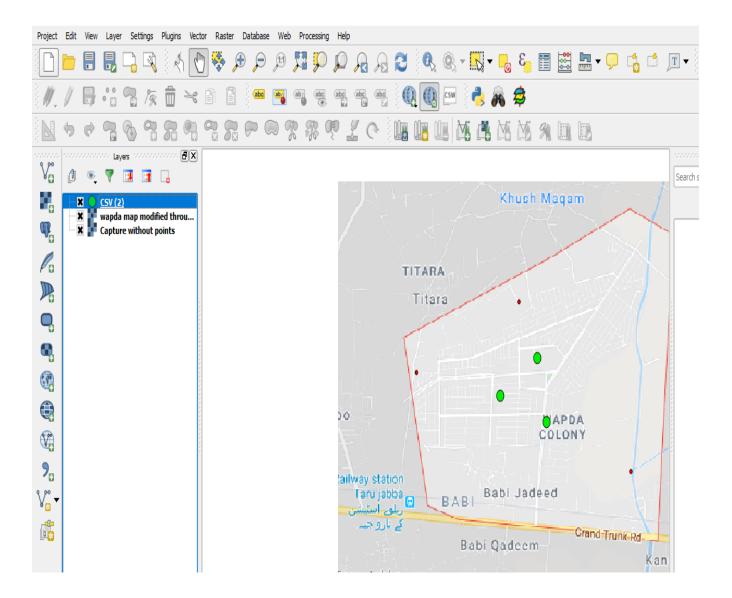
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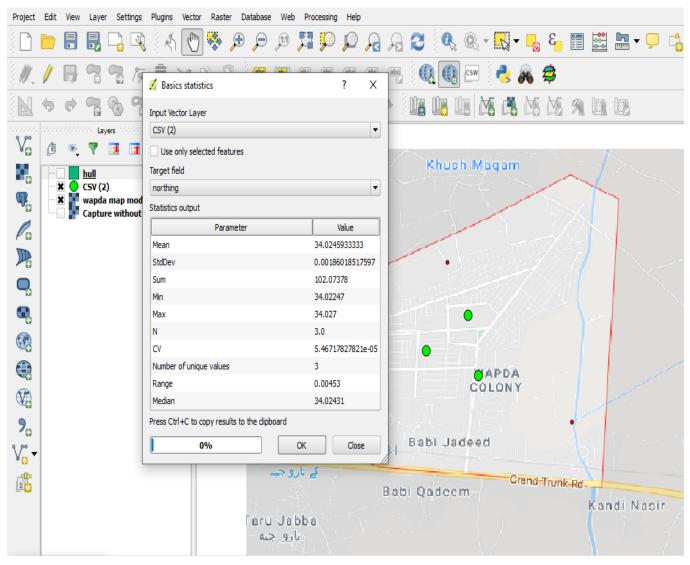


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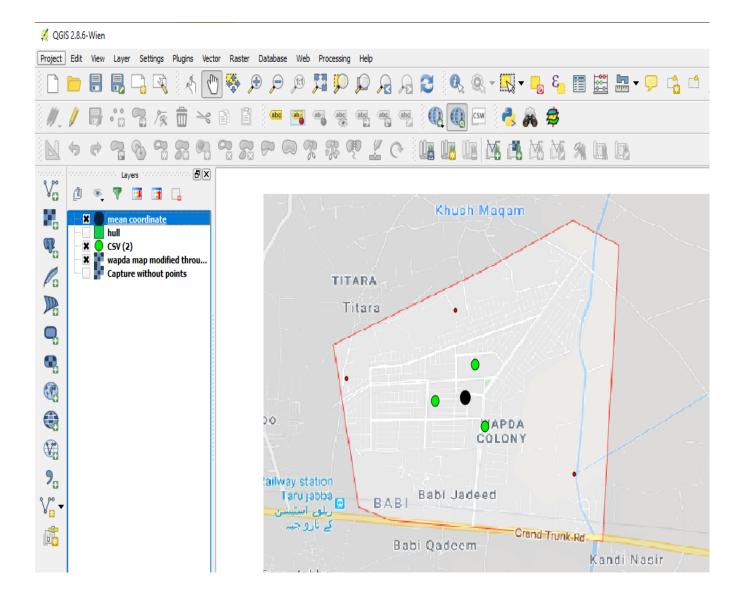
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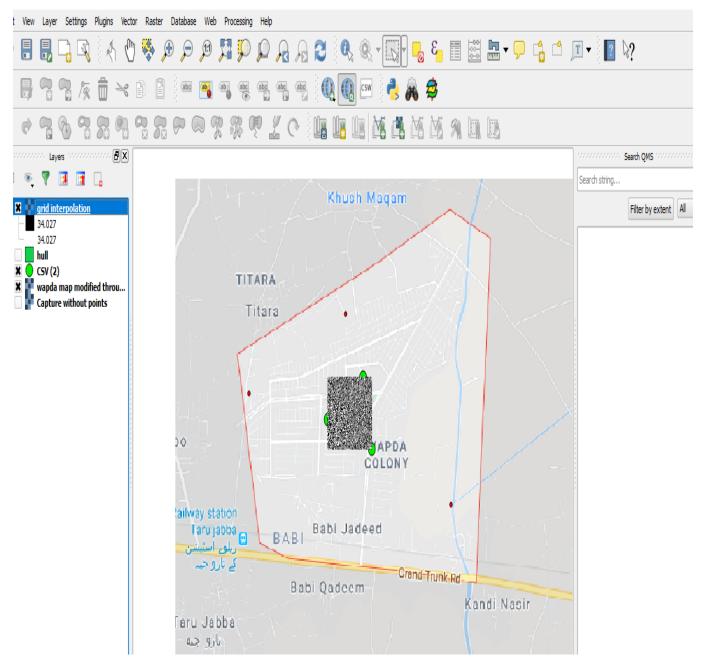
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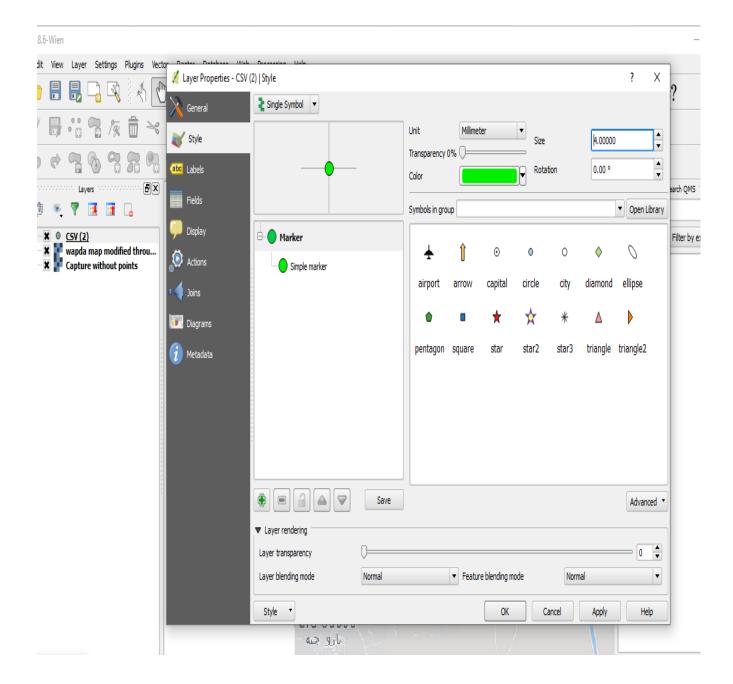
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## STYLING:



## **Conclusion:**

 Different test were performed on soil to determine the engineering properties of soil of wapda colony's different phases, and mapped on qgis.