Geology Lab Dr. Ah A AlShaikh

# **Practical Geology for Engineering Students**

Lab No	Name of Student
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### **Sedimentary Lab**

## 1-Description of Terrigenous Soils and Rocks\*:

Grain Size	Class	Deposits (Soil)	Texture	Rocks	
> 2 mm	Rudaceous	Gravels	v. coarse - Rounded	Breccia	
> 2 mm			v. coarse - Angular	Conglomerate	
		Sands	Siliceous	Sandstone	
	Arenaceous		Cement		
2- 1/16 (0.06) mm			Calcareous		
2- 1/10 (0.00) 111111			Cement	Saliustone	
			Hematitic		
			Cement		
1/16 - 1/156	Aargillaceous	Silts	Fine grained		
(0.06)-(0.004) mm		Sills	Fille graffied	Mudrocks	
< 1/256		Clave	massive		
mm		Clays	Fissile	Shale	

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#### **Texture:**

Grain Size: > 2 mm, 2- 1/16 mm, 1/16 - 1/156 mm or < 1/256 mm

Roundness: Angular, Subangular, Subrounded and Rounded.

Structure: Massive, Laminated, Fissile

**Cement:** - Siliceous (colourless/white and doesn't react with HCl).

- Calcareous (colourless/white and reacts with HCl with effervescence).
- Hematitic/calcareous (Red coloured & reacts with HCl with effervescence).
- Hematitic/Siliceous (Red coloured and doesn't react with HCl).

### Fossil content:

- Fossiliferous
- Non-fossiliferous

Type:	 •	•••••	 	
Name:	 		 	

st Samples to be studied: Many samples under the 8 names as in the shaded columns of the above given table

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2-						
/-		m	<b>DC</b>	ΓN	n	ρc
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3-Rock Salt

Colour:
Structure:
Carbonate mud (Fine crystalline limestone).
Oolites
Skeletal remains (Shells, corals,etc)
Cement:
Siliceous (Hard and weak reaction with HCl)
Calcareous (Soft white and reacts with HCl with strong effervescence).
Hematitic (reddish stained)
Fossil Content:
Fossiliferous
Non-fossiliferous
Type:
Name:
Samples to be studied: Many samples under <u>only</u> the following names:  1-Chemical Limestone  2-Biochemical Limestone
3-Evaporites
Colour:
Mineral Composition:
Fossil Content:
Fossiliferous
Non-fossiliferous
Туре:
Name:
Samples to be studied: Many samples under <u>only</u> the following names:  1-Gypsum  2-Anhydrite

Sample No	Colour	Texture/Structure	Cement	<b>Type</b> Terrigenous/Chemical	Name
1					Gravel / Rudaceous Soil
2					Sands/ Arenaceous Solil
3					Argillaceous soil
4					Conglomerate
5					Breccia
6					Sandstone
7					Siltstone
8					Shale
9					Claystone
10					Chemical Limestone
11					Biochemical Limestone
12					Gypsum
13					Ahhydrite
14					Rock Salt

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