

Petroleum Geology

EPS 342

Petroleum Geology is about exploration of the hydrocarbons (oil and gas) in the field.

These are the most important topics.

1: The Factors that affect to form the Hydrocarbons:

- Organic Matters
- Pressure
- Temperature
- Time

2: Source Rock

- Definition: is the source which has non matured organic materials and has a high prosity.
- Types: shale, Black shale,... etc

3: First Migration

- It is the first movement of the hydrocarbons from the source rock to the reservoir.

4: Reservoir

- It is the rock which receive the matured hydrocarbons and has a high permeability
- Types: usually it is sandstone or limestone

5: Second Migration

- It is the second movement of the hydrocarbons inside the reservoir until it stock from a trap.

6: Cap Rock

- It is the rock which stock the hydrocarbons and has a very low permeability

7: Traps

- It is a structure to stock the hydrocarbons
- Types: structural, stratigraphic

8: API

- API equation
- Types of the hydrocarbons according to API

7: The Hydrocarbons in Saudi Arabia