

كلية الهندسة – جامعة مصر اأة

القسم/ الهندسة النفطية
الزمن / ثلاث ساعات
أستاذ المادة / أ. عطية عوينات

الامتحان النهائي

فصل الربيع 2013 / 2014
المقرر / جيولوجيا نفظ واستكشاف
التاريخ / 19 / 06 / 2014 م

أجب عن جميع الأسئلة الآتية :

Question One.

Fill the gaps:

1. The three basic layers of the Earth are and
2. The earth's crust is composed of three basic rock types
..... and
3. In chemical terms a hydrocarbon *is* a compound containing the elements
and with other materials often contain
..... and
4. Crude oils are a complex mixture of organic compounds including different compound classes:
..... , and.....
5. Primary migration is while
secondary migration is
6. Source rock is
7. The main source rock maturation indicators are ,
..... and
8. Oil is generated at temperatures of° to °C, which are typically found at
depths of to km.
9. In the Carbonate reservoirs the porosity is called While in
the clastic reservoirs it is called

Question Two.

What is Kerogen? Explain the main types of kerogen with a sketch where possible?

Question Three.

Explain the main conversion steps of the organic matter to the hydrocarbon? What are the main factors influencing the quality of the source rocks and the criteria for a sedimentary rock to be an effective oil source?

باقى الاسئلة خلف الصفحة
→

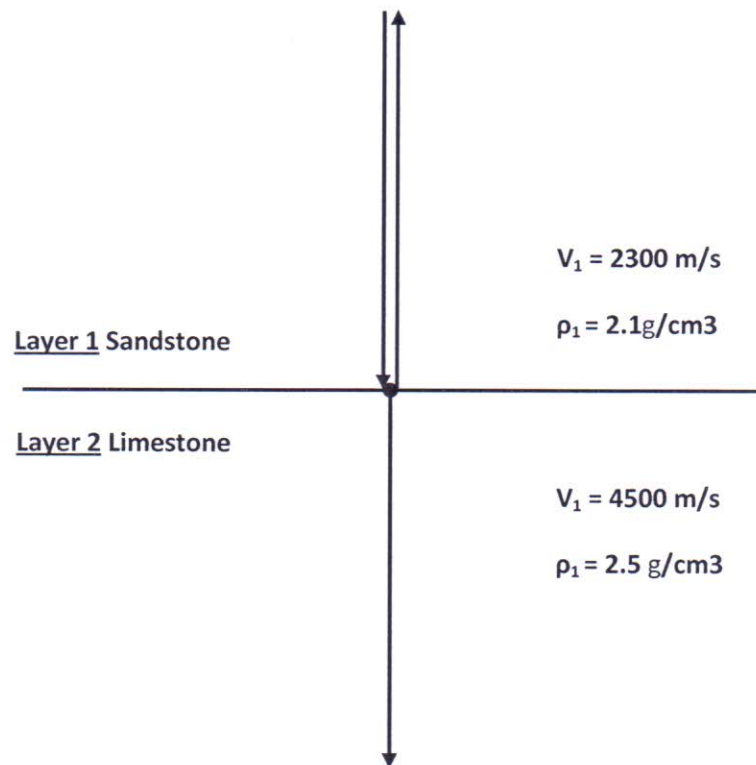
Question Four.

Explain the main properties required from a rock to be a viable reservoir rock? Explain the major factors affecting the clastic rock permeability?

Question Five.

From the two layers model below calculate:

1. The Acoustic Impedance (Z).
2. The Reflection Coefficient (R_c).
3. The Transmission Coefficient (T_c).



انتهت الأسئلة