

دفتر شروط طلبية تركيب و تشغيل جهاز روك إيفال - ٦ مع تدريب مهندسين  
اثنين من مديرية الاستكشاف - دائرة المخابر

• تركيب جهاز روك إيفال - ٦ :

- تركيب جهاز روك إيفال - ٦ مع الأجهزة المرفقة :

- مولد هواء عالي النقاوة .

- اسطوانة غاز نتروجين .

- U.P.S. .

- ضاغط هواء .

- مولد الهيدروجين .

\*ملاحظة: التركيب حسب المواصفات المذكورة في الملحق رقم ١ المرفق.

• تشغيل جهاز روك إيفال - ٦ :

- صلاحية الجهاز للعمل بما يخدم عمل مخبر الجيوكيمياء و الغاية منه .

- تجريب عينات من الشركة السورية للنفط .

- الحصول على نتائج تخدم عمل مخبر الجيوكيمياء .

• تدريب مهندسين اثنين على تشغيل و صيانة و استثمار جهاز روك إيفال - ٦ :

- التدريب على برنامج software لمدة أسبوع .

- التدريب على صيانة جهاز روك إيفال - ٦ .

- التدريب على استثمار جهاز روك إيفال - ٦ .

\*ملاحظة: مدة التدريب الداخلي و الخارجي أسبوع واحد.

## Appendix 1

### UP TO DATE ROCK EVAL-6 EQUIPMENT AND SOFTWARES FOR PETROLEUM GEOCHEMICAL STUDIES

#### I- ROCK EVAL-6 EQUIPMENT

- General Specifications:
- TOC analysis up to 100% Carbon.
- High programmed temperature pyrolysis and oxidation to (850 C°)
- Multi pyrolysis cycles.
- System of detection:
  - FID for HC.
  - IR cell for CO and CO<sub>2</sub> .
- Auto samplers is required .
- Ovens :
  - a- programmed temperature.
  - B- Multi rates program slops.
- Crucibles :
  - a- Material: Incoloy.
  - b- Cabacity:150 mg of sample.
- Workstation loaded with suitable software for data transfer and parameters Interpretation.
- Electrical requirement: 220V/50 Hz

## Appendix 1

### II- Software for Basin MODLLING:

- Ability to compute the quantities of oil and gas generated by different types of source rocks for a given well as a function of their burial history from the results supplied by rock Eval-6 data and other geochemical parameters.
- Allows assimilation of hydrocarbon generation and expulsion (5classes of products : C<sub>1</sub>, C<sub>2</sub>-C<sub>5</sub>, C<sub>6</sub>-C<sub>15</sub>, C<sub>15+</sub>, Coke )
- Provide the following main features:
  - Standard time scale.
  - Multi – rift computation.
  - Vertical profile of vitrinite reflectance adjustment.
  - Primary gas generation.
  - Printing or plotting of more than 30 different graphs in 3 groups:
    1. Well stage at selected age.
    2. Geohistory and burial.
    3. History of source rocks.

### III- Additional requirements:

#### 1- Hydrogen generator

##### Main characteristic:

- Maximum flow 150 ml/min
- Purity: 99.9999+%
- Voltage: 220 V/50 Hz

#### 2- Air generator:

##### Main characteristic:

- Purity: 99.9999+%
- Voltage:220 V/50 Hz

Appendix 1

3- USP suitable for the equipment and its additional parts.

-Accessories supplies and sufficient for five years concerning

**ROCK –EVAL-6 SYSTEM and its additional equipment are required**

-Operating, maintenance manual , and illustration catalogues for all parts of the system are Required.

-Cook book for all types of the samples is required.

-installation, calibration & operating in local labs in Damascus.

-Test and analysis of twenty different samples from S.P.C. fields in local S.P.C. labs in Damascus.

-The technical offer should be included list of all spare parts of the system with out prices , and list of type and quantity of spare parts necessary for working of three years .

-Electrical requirement: 220 V -50 Hz

-THE FINANCIAL OFFER SHOULD BE Included detailed prices off spare parts of the system .

**Training:**

1- Interior: should be in local S.P.C. labs for seven days.

2-External training should be in the manufacturer company for seven days for two persons.