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| **Training course of drilling methods and main steps of well construction** | | | |
| Activities | Subject | Time | Date |
| Power point  Presentation  Chart, ,Graph  And photos | * Recitation of holy Quran * Introduction of course participants * Well Drilling Methods and Construction * Component of safe and Reliable Well * Well Most Vulnerable to Microbiological and Chemical Contamination * Main Steps of Well Construction | 09:00 - 09:05  09:00 - 09:10  09:10 - 09:30  09:30 - 09:45  09:45 - 10:15 | 15/12/2013 |
|  | Tea break | 10:15 - 10:30 |
| Power point  Presentation  Chart ,Graph  Photos and practices | * Site Selection for Drilling of Well * Overview of Drilling Methods according to the Geological- Technical Condition * Practical Work | 10:30 - 11:00  11:00 - 11:30  11:30 - 12:30 |
|  | Lunch break and Pray | 12:30 - 01:30 |
| Power point  Presentation  Chart ,Graph | * Well Drilling Methods Selection * Well Drilling Methods * Primary Drilling Method * Secondary Drilling Method * Mechanicaldrilling Well | 01:30 - 02:00  02:00 - 02:15  02:15 - 02:30  02:30 - 02:45  02:45 - 03:00 |
| Power point  Presentation  Chart ,Graph  DACAAR experience | * Drilling Method According to the Using * Selection of Drilling Method According to the Geological-Technical Condition | 09:00 - 09:30  09:30 - 10:00 | 16/12/2013 |
|  | Tea break | 10:00 - 10:15 |
| Power point  Presentation  Chart ,Graph  DACAAR experience | * Direct Mud Rotary * Hosting Equipment * Rooting Equipment * Circulating Equipment | 10:4510:15 -  10:45 - 11:15  11:15 - 12:30 |
|  | Lunch break and pray | 12:30 - 01:30 |
| Power point  Presentation  Chart ,Graph  DACAAR experience | * Type of Drilling Bits * Type of Drilling Bite According to Hardness of Rock * Drilling Joints * Function of Drilling Fluid * Kind of Drilling Fluid | 01:30 - 02:00  02:00 - 02:15  02:15 - 02:30  02:30 - 02:45  02:45 - 03:00 |
| Power point  Presentation  Chart ,Graph  DACAAR experience | * Advantage and Disadvantage of Direct Mud Rotary * Practical Work * Reverse Circulation Drilling Method * Reverse Air Drilling Method | 09:00 - 09:30  09:30 - 10:00 | 17/12/2013 |
|  | Tea break | 10:00 - 10:15 |
| Power point  Presentation  Chart ,Graph  DACAAR experience and  practices | * Cable Tools Percussion Drilling Method * Advantage and Disadvantage of Percussion Drilling Method * Practical Work * Auger Method * Hand Drilling Well Method * Well Design | 10:4510:15 -  10:45 - 11:15  11:15 - 12:30 |
|  | Lunch break and pray | 12:30 - 01:30 |
| Power point  Presentation  Chart ,Graph  DACAAR experience and  practices | * Sampling Observation and Description and Documentation * Drilling Time Log * Geophysical Well Logging Documentation ,Evaluation ,Selection of Screen interval * Sieve Analysis * Selection of Screen Slot and Gravel Packing size according to the Sieving Analysis * Selection of Borehole Diameter Casing Screen and Material * Practical Work(Calculation of Volume of gravel pack and grot) | 01:30 - 02:00  02:00 - 02:15  02:15 - 02:30  02:30 - 02:45  02:45 - 03:00 |

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| Activities | Subjects | Time | Date |
| Power point  Presentation  Chart ,Graph | * Water Well Completion according to the Design * Casing and Screen Strength * Casing and Screen Joints * Installation of Pipe and Filter in Strength line | 09:00 - 09:30  09:30 - 10:00 | 18/12/2013 |
|  | Tea break | 10:00 - 10:15 |
| Power point  Presentation  Chart ,Graph | * Filter Pack * Well Grouting and Sealing * DACAAR Experience | 10:4510:15 -  10:45 - 11:15  11:15 - 12:30 |
|  | Lunch time and pray | 12:30 - 01:30 |
| Power point  Presentation  Chart ,Graph | * Water Well Development (Cleaning) * Purposes of Well Development * Method and Procedures * Over Pumping * Back Washing | 01:30 - 02:00  02:00 - 02:15  02:15 - 02:30  02:30 - 02:45  02:45 - 03:00 |
| Power point  Presentation | * Air lift * High Velocity Jetting * DACAAR Experience | 09:00 - 09:30  09:30 - 10:00 | 19/12/2013 |
|  | Tea break | 10:00 - 10:15 |
| Power point  Presentation | * Solution to Well Drilling Problem * Excessive Fluid Losses * Borehole Caving * Drilling Bit Jamming | 10:4510:15 -  10:45 - 11:15  11:15 - 12:30 |
|  | Lunch time and pray | 12:30 - 01:30 |
| Power point  Presentation | * Drilling Fluid Back Flow * Object dropped into well * Resistant Bed encountered * Flowing * Course finishing * Certificate | 01:30 - 02:00  02:00 - 02:15  02:15 - 02:30  02:30 - 02:45  02:45 - 03:00 |