



DOWNHOLE TOOLS TRAINING COURSE WEEK 1 (ACQUISITION)

Same schedule for the 3 down hole tools (SlimWave, GeoWaves and MaxiWave).

WEEK 1 AIM:

- Get familiar with the downhole tools string system for seismic operations.

TARGETED PEOPLE:

- Field observers.

COURSE PREREQUISITES :

- Basic knowledge of seismic acquisition.

TEACHING METHODS:

- Typical course attendance numbers would be maximum 6 participants.

EQUIPMENT

- PC
- WaveLab

TECHNICAL DOCUMENTATION:

- Training course application manual.

DURATION : 1 week

- The length could be adjusted in regards to the technical backgrounds of the trainees.

Schedule – week 1

1 - SYSTEM OVERVIEW

- ♦ Tools string description (telemetry, satellite, weight unit and auxiliaries (casing collar locator, gamma ray, tensiometer)
- ♦ Transmissions features

2 - LAB PRESENTATION (WAVELAB)

- ♦ Boards description and features
- ♦ Connection to the string

3 - ACQUISITION SOFTWARE TEACHING (WAVE CONTROL & TOOLS PILOT)

- ♦ Tools string configuration
- ♦ Tests management
- ♦ Logging display
- ♦ Motors operations
- ♦ Acquisition

4 - PRACTICE (BONNEFONT TEST WELL 3000M 100°C)

- ♦ Tools string rig up and down operations
- ♦ Interfacings: source (GGUN), hydrophone, source controller (Hot Shot RTS), depth encoder
- ♦ Acquisition (Zero offset)



DOWNHOLE TOOLS TRAINING COURSE WEEK 2 (MAINTENANCE)

Same schedule for the 3 down hole tools (SlimWave, GeoWaves and MaxiWave).

WEEK 2 AIM :

- To acquire the basic knowledge for maintenance and repairs

TARGETED PEOPLE :

- Any technician and/or field engineer who has to deal with maintenance and/or troubleshooting.

COURSE PREREQUISITES :

- Basic knowledge about mechanics.
- Knowledge in electronics not mandatory

TEACHING METHODS:

- Typical course attendance numbers would be maximum 6 participants.
- Practise on the down hole tools.

TECHNICAL DOCUMENTATION :

- Service manual and CD ROM (for the complete 2 week course).

DURATION : 1 week

- The length could be adjusted with regards to the technical backgrounds of the trainees.

Schedule – week 2

1 - SEISMIC UNIT & DIGITIZER

- ♦ Tool description: motor assembly, anchoring arm assembly. Disassembling the seismic unit
- ♦ Seismic cartridge assembly and geophone's replacement
- ♦ Maintenance operation

2 - TELEMETRY AND AUXILIARY TOOLS

- ♦ Tool description
- ♦ Assembly and disassembly
- ♦ Maintenance operation

3 - CABLES

- ♦ Building an intertool cable
- ♦ Maintenance operation

4 - ELECTRICAL AND ELECTRONIC CHECKS