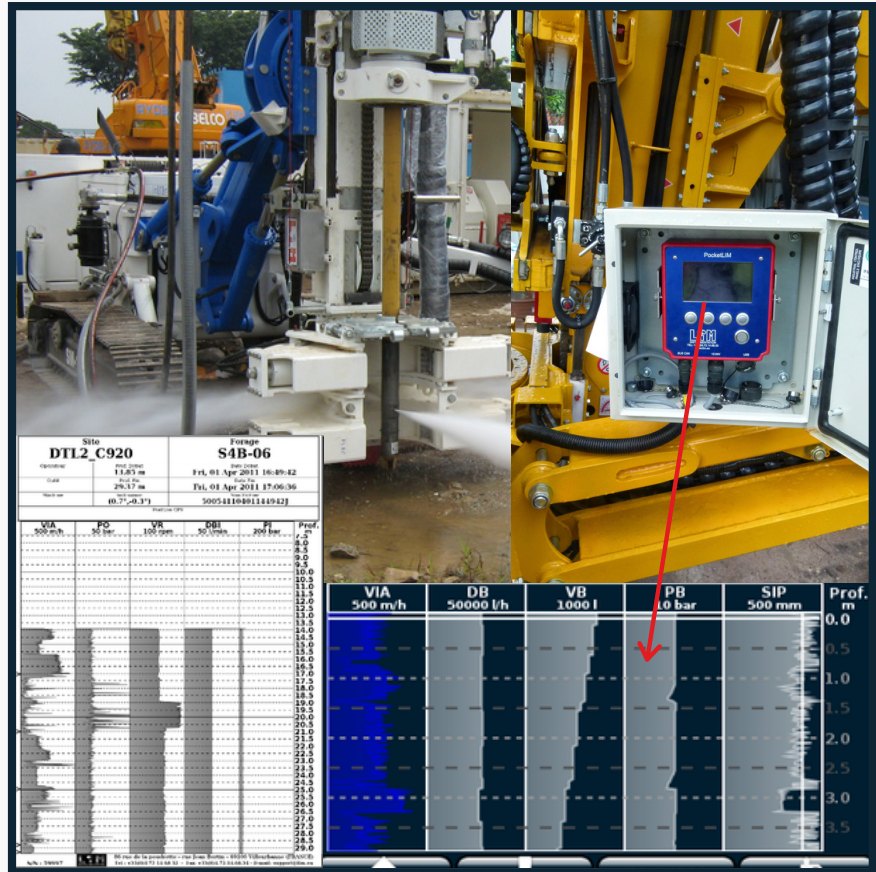**LIM**

JET-GROUTING METHOD: MONITORING AND DATA ACQUISITION

Main display: JET application

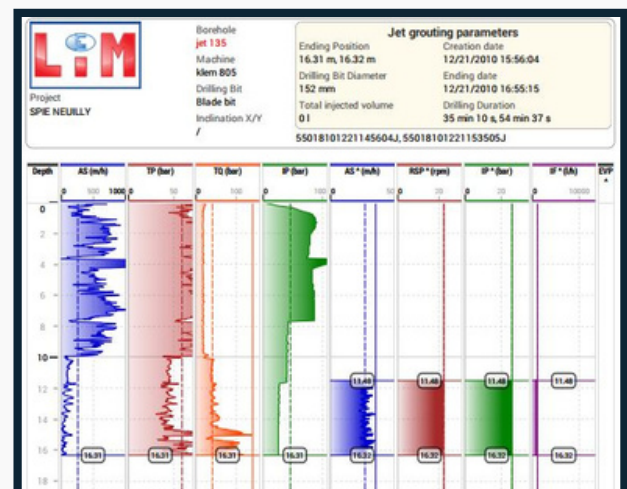**PDF graphical output (Virtual printer)**

Graphics display in real time on the Pocket/MiniLIM-JET

Flow, Volume, Pressure sensor (grout)

Rotation Speed sensor

Jet grouting log report produced by the GEO-LOG 4 cloud based software

JET-GROUTING METHOD: MONITORING AND DATA ACQUISITION

The **PocketLIM & MiniLIM-JET** use the CANBUS technology which makes possible the installation of sensors along one unique cable (network system).

During the DRILLING stage corresponding to the soil destruction (DESCENT of the bit), the **PocketLIM & MiniLIM-JET** acquire and record in real time the following parameters versus depth :
✓ The Instantaneous Advance Speed (IAS) or Penetration Rate of the drilling bit;
✓ The 3 hydraulic pressures, Tool (or Bit) Pressure (TP), Torque Pressure (TQ) and Injection Pressure of the drilling fluid (IP);
✓ The Rotation Speed of the drill bit (Bit RPM).

During the JETING stage corresponding to the jet column construction (LIFTING of the bit), the **PocketLIM & MiniLIM-JET** can perform:
1) The automatic control of the lifting due to the possible programming of time and step bit stops as well as the rotation speed (one constant value can be entered).
2) The recording and acquisition of the following parameters versus depth:
✓ The instantaneous Lifting Rate of the drilling bit (ILR);
✓ The Rotation Speed of the bit (Bit RPM);
✓ The Flow (IF), Volume (VOL) and Pressure (PI) of the Grout;
✓ The Flow (AF) and Pressure (AP) of the Air (DOUBLE JET);
✓ The Flow (WF), Volume (WVOL) and Pressure (WP) of the water (TRIPLE JET).

A virtual printer is automatically generating PDF graphics
The INCLINO function of **PocketLIM & MiniLIM-JET** helps, before drilling, to the 2D positionning of the drill mast by displaying the X and Y angles.
The BOR datafiles are downloaded either via USB or internet (Wifi, GSM), **Lim@Mail** on line service.
Data is then processed with the **GEO-LOG 4-JET** web application (cloud based software).