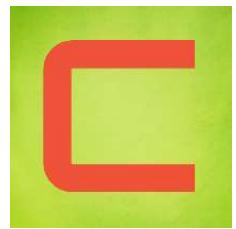


User Manual

CIVILAB 2023
MENARD PRESSUREMETER TEST

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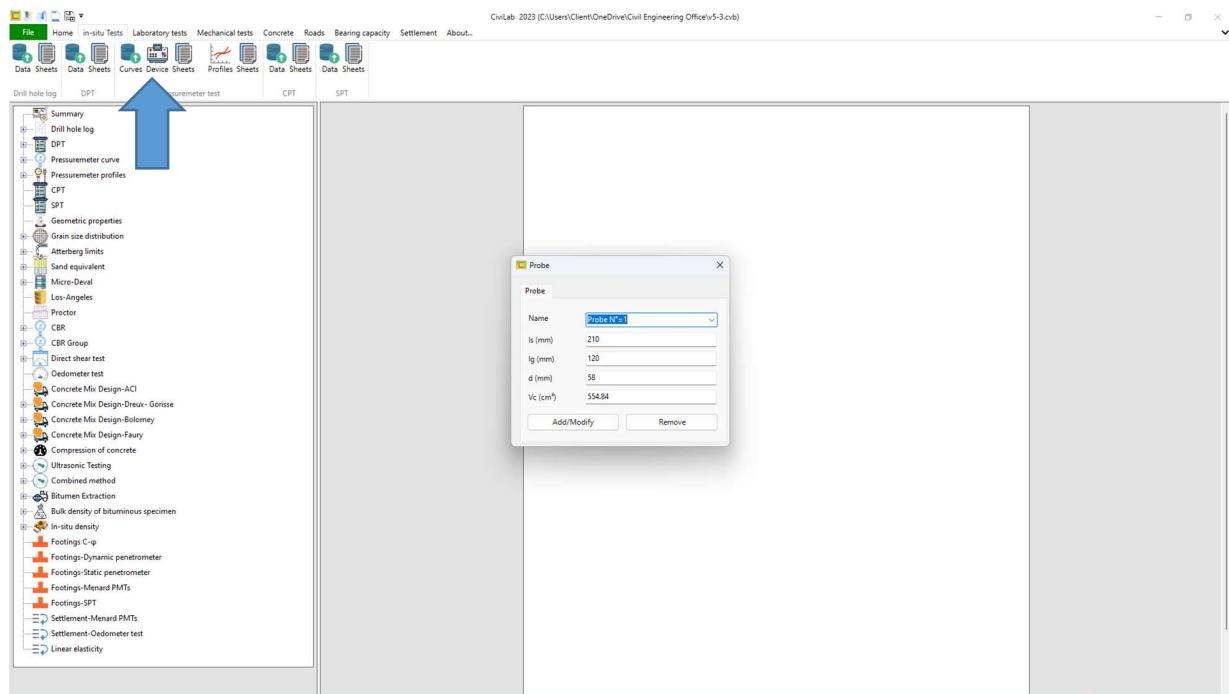


How to use CiviLab to perform the Menard pressuremeter test?

I- Pressuremeter curve

I-1- Add the probe specifications:

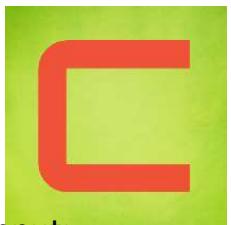
A- Click on the "In-situ tests" tab, then if you do not have a probe, click on the "Device" button in the "Pressuremeter test" panel



B- Input :

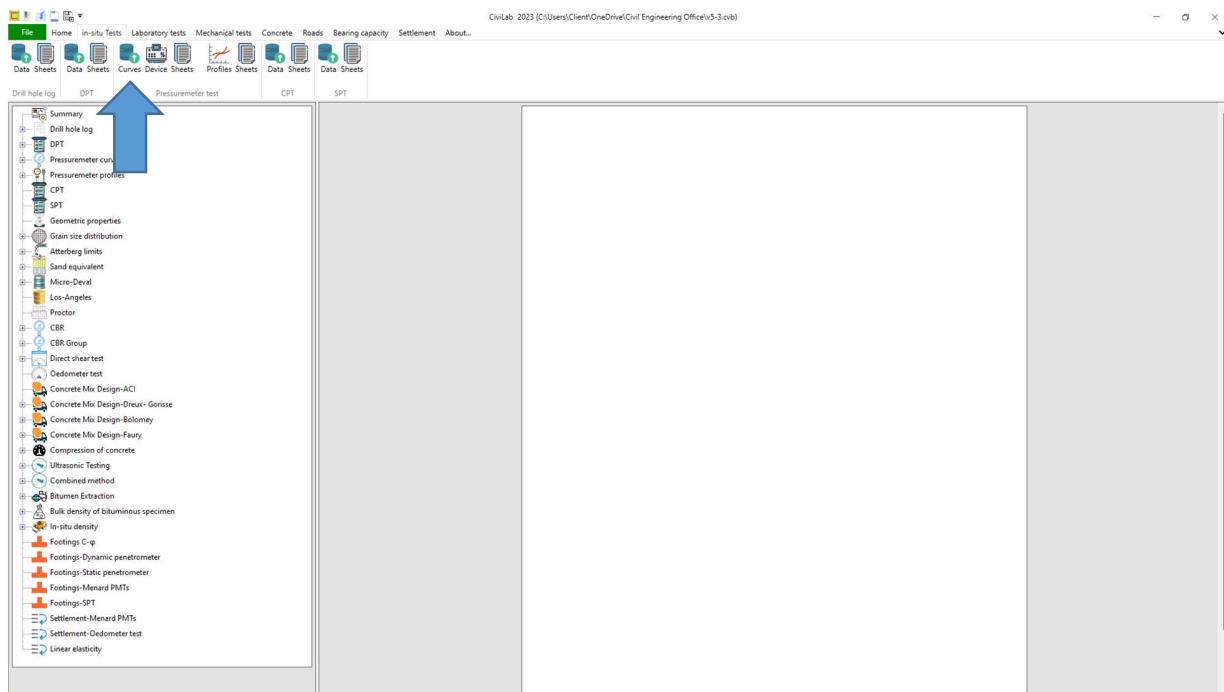
- The probe name;
- l_s (length of the central cell of the probe measured after mounting the membrane)
- l_g (The length of each guard cell of the pressure transducer probe)
- d (Probe diameter)
- V_c (Probe volume)

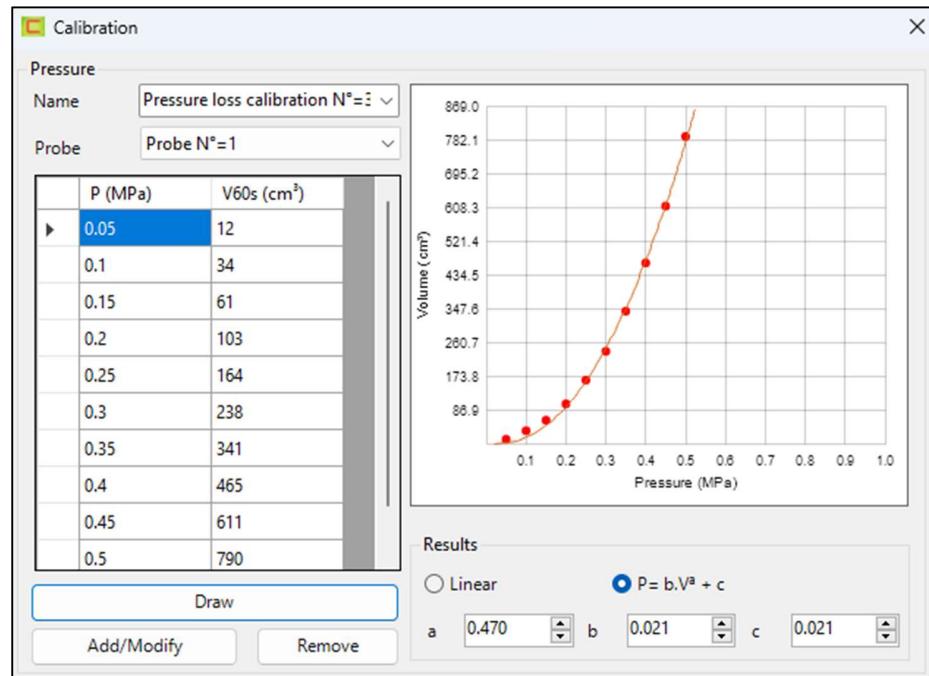
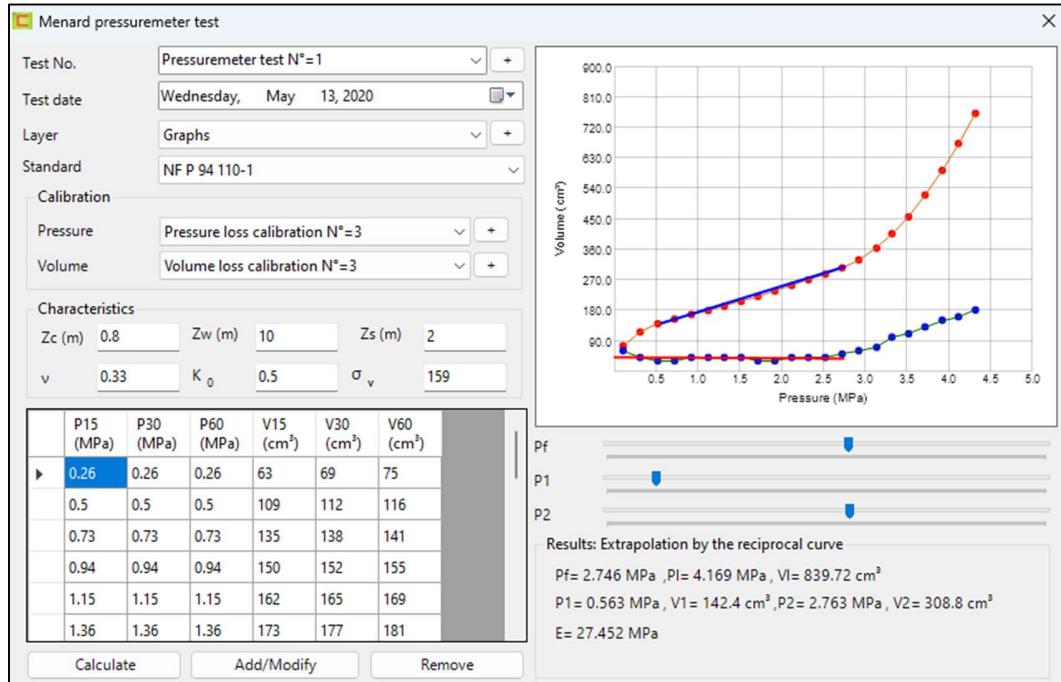
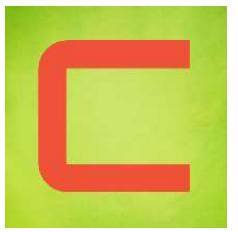
I-2- Test Data:

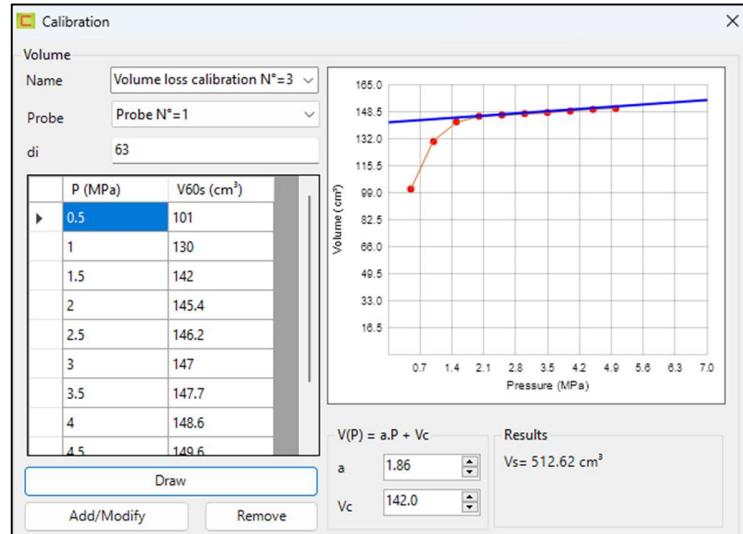
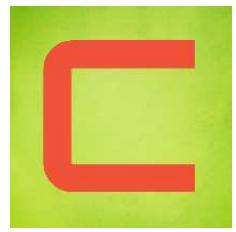


Click on the "Curves" button in the "Pressuremeter test" panel, then input:

- The test name;
- The test date;
- The layer which should be used in the drawing process;
- The standard used;
- The pressure loss calibration (You can add /edit the pressure loss calibration);
- The volume loss calibration (You can add /edit the volume loss calibration);
- The altitude difference between natural terrain and the control unit;
- The altitude difference between natural terrain and groundwater;
- The altitude difference between natural terrain and the probe;
- The Poisson's ratio;
- The coefficient of earth pressure at rest;
- The vertical stress;
- The test readings (volume variation based on controlled pressure).





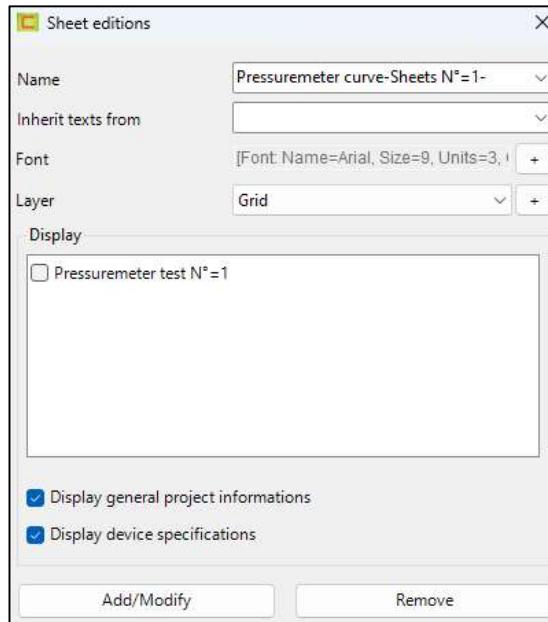
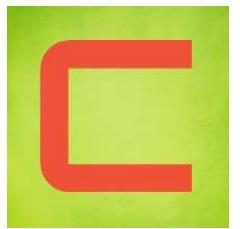


I-3- Add a sheet :

Click on the "Sheets" button in the "Pressuremeter test" panel and input:

- The sheet name;
- Select the font;
- Select the layer used in the background drawing;
- Select the tests;
- To display general project information's check the corresponding box;
- To display the test data check the corresponding box.

Then click on "Add/Modify" button



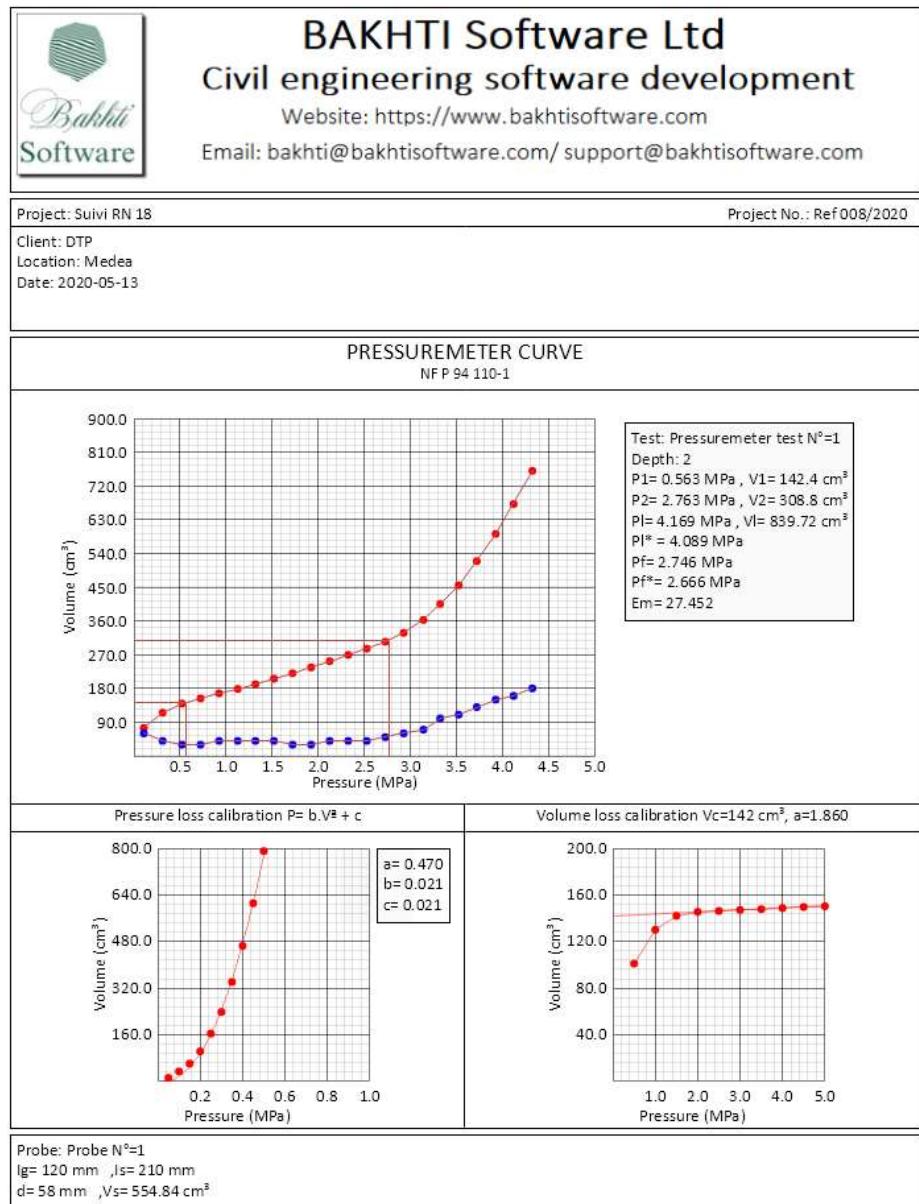
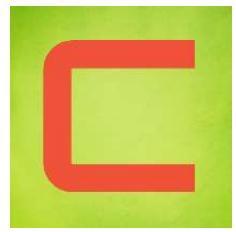
I-4- Display the report

To display the report, click on the sheet name in the tree view

To export or print the report, click on "Home" tab, then click the appropriate button in the outputs panel (Print or Export button)



A- Test report :



a. Sheet Header Presentation: To import or modify the sheet header, go to the "Home" tab and select the "Header" button.





b. Project Name and Reference: These details can be entered from the project's general information found in the File menu.

c. Area for Displaying Test Information: Test information can be input within this area from the Test Information window (to show it click on the "+" button next to the name of the test on Data window) and project's general information window.

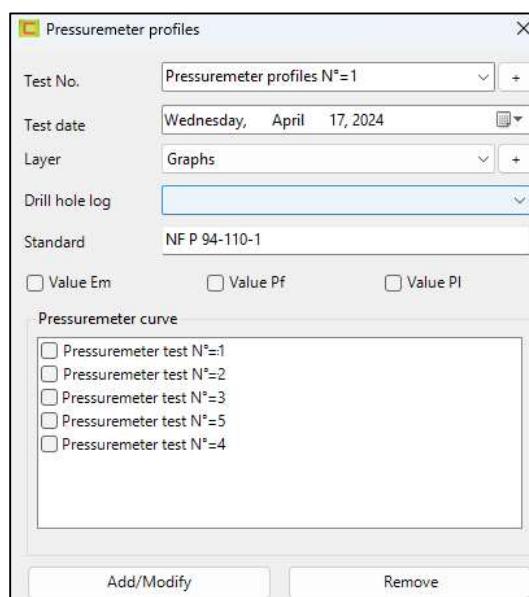
d. Area for Plotting Curves: this area is designated to visualize curves and the test results.

II- Pressuremeter profile

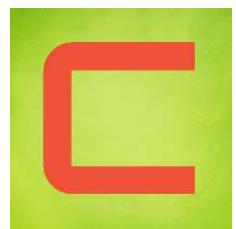
II-1- Test Data:

Click on the "In-situ tests" tab, then click on the "Profiles" button in the "Pressuremeter test" panel and input:

- The test name;
- The test date;
- The layer which should be used in the drawing process;
- The drill hole log which to be used;
- The standard used;
- The Pressuremeter test curves.
- To display the value of Em or/and Pf or/and PI select the corresponding box.



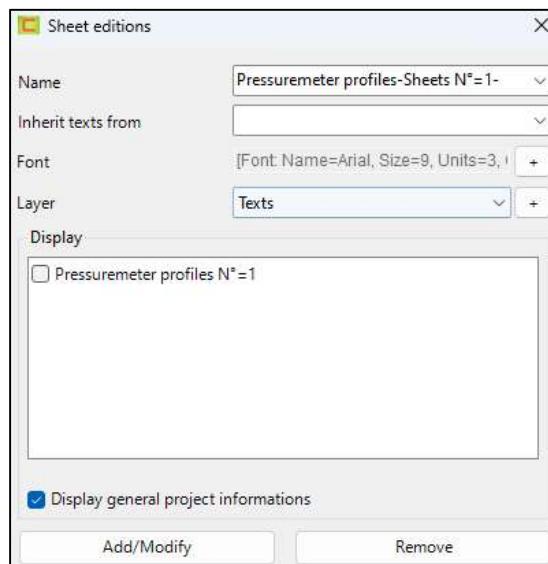
II-2- Add sheet

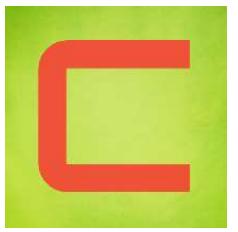


Click on the "Sheets" button in the "Pressuremeter test" panel and input:

- The sheet name;
- Select the font;
- Select the layer used in the background drawing;
- Select the tests;
- To display general project information's check the corresponding box;

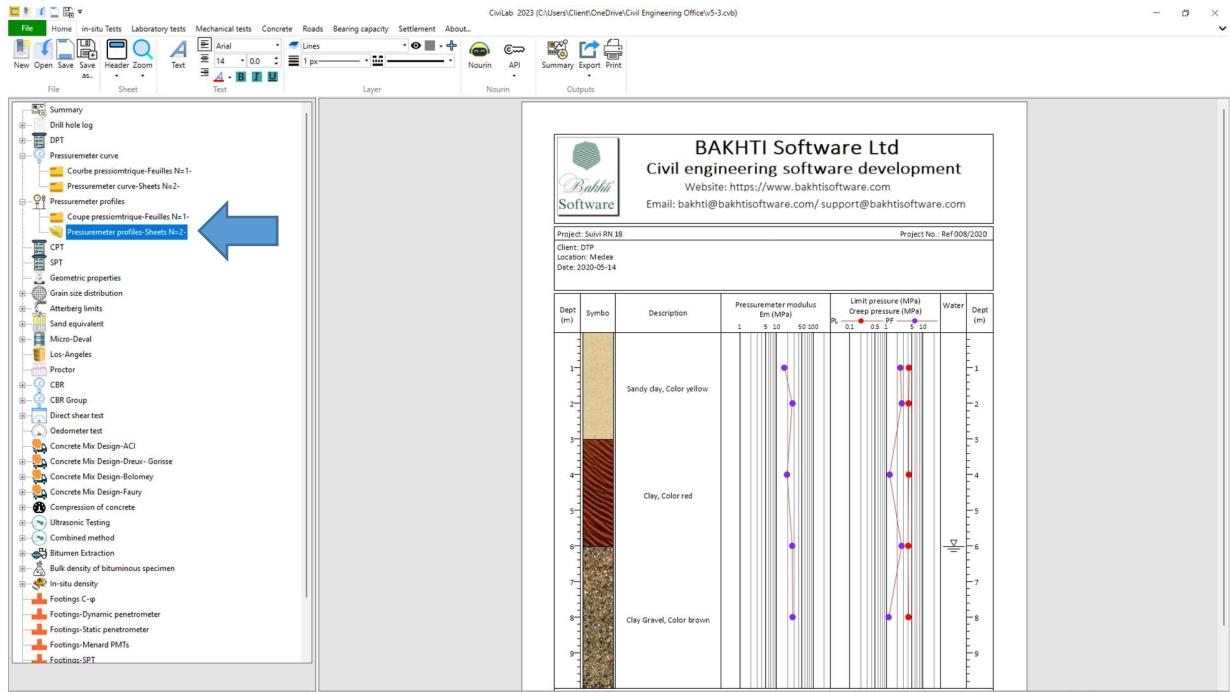
Then click on "Add/Modify" button



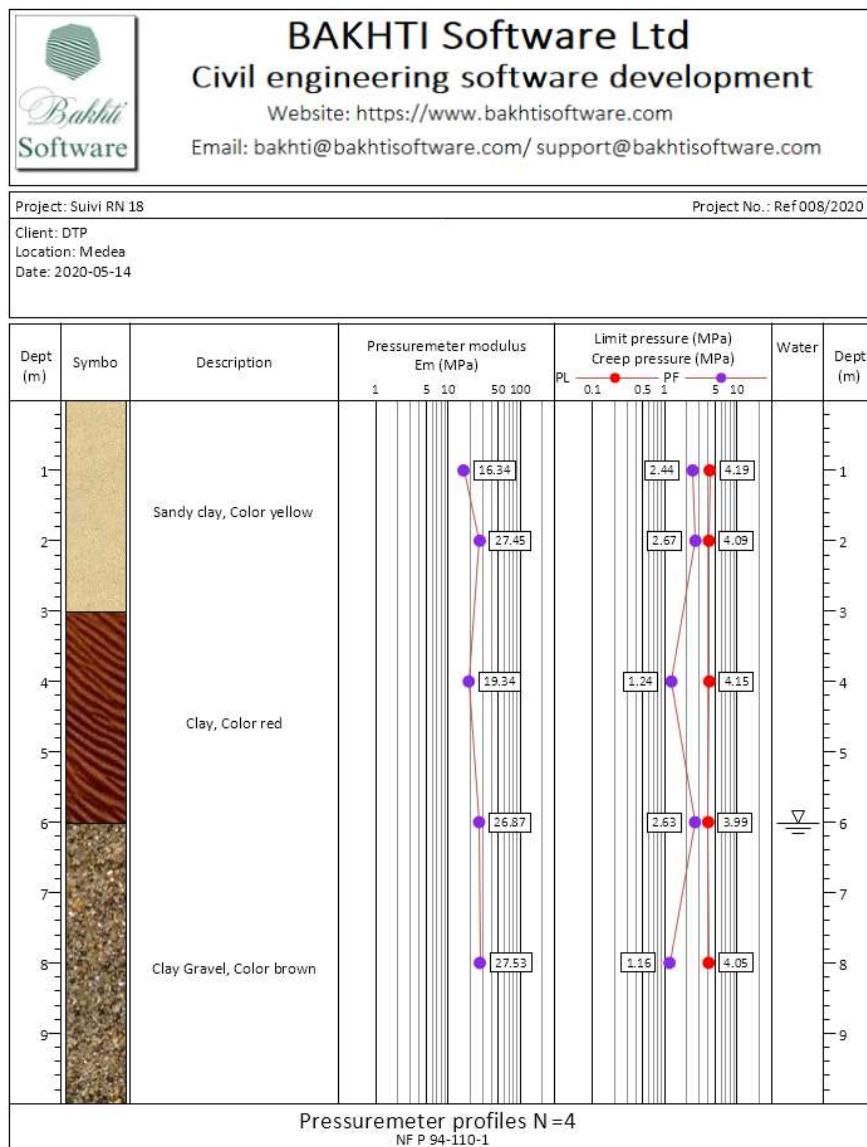
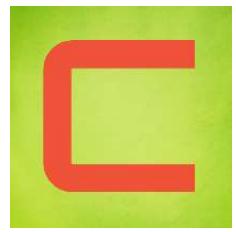


II-3- Display report

To display the report, click on the sheet name in the tree view



II-4- Test report :



Software: CivilLab 2023