


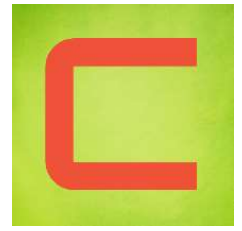


User Manual

CIVILAB 2023
ATTERBERG LIMITS TEST

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How to use CiviLab to perform the Atterberg limits test?

Both, Casagrande method and cone penetrometer method are available in CiviLab 2023. To perform the test, the user need to click on the "Laboratory tests" tab then click on the "Data" button in the "Atterberg limits" panel (Fig 1), and input the following information (Fig 2):

- 1. Test Name Selection:** Utilize this Combobox to either input a new test name or select an existing one.
- 2. Test Information Window:** Click this button to access the Test Information window (Fig3). In this window, you'll find seven text fields to input the necessary information for it to be displayed on the test sheet.
- 3. Test Date Input:** Utilize the date picker to enter the test date.
- 4. Layer Selection:** Employ this Combobox to choose the appropriate layer for use in the drawing process.
- 5. Layer Editor:** Click this button to open the Layer Editor, where you can either create a new layer or modify an existing one.
- 6. Test type:** use this to select the test type (Casagrande method or cone penetrometer method)
- 7. Standard Selection:** Utilize this dropdown menu to choose the applicable standard from three options (**For Casagrande method:** ASTM D4318-17E01, NF P94-051, and BS 1377-2:2022. **For cone penetrometer method:** NA 16213, NF P94-052-1, and BS 1377-2:2022).
- 8. The plasticity chart :** the following charts are available : Casagrande 1948 , BS 5930:2015, and ASTM D2487-17)



9. The plastic limit WP: input the value of WP or the data relating to the plastic limit: wet mass, dry mass and container mass;

10.

For Casagrande method: To compute the Liquid limit WL input the test outcomes

- Number of blows;
- Moisture content (or moisture content data: wet mass, dry mass and container mass).

For cone penetrometer method: To compute the Liquid limit WL input the test outcomes

- Penetration values;
- Moisture content (or moisture content data: wet mass, dry mass and container mass).

11. Save/Modify test: Click this button to save or modify all data associated with the selected test.

12. Delete test: Use this button to delete the chosen test.

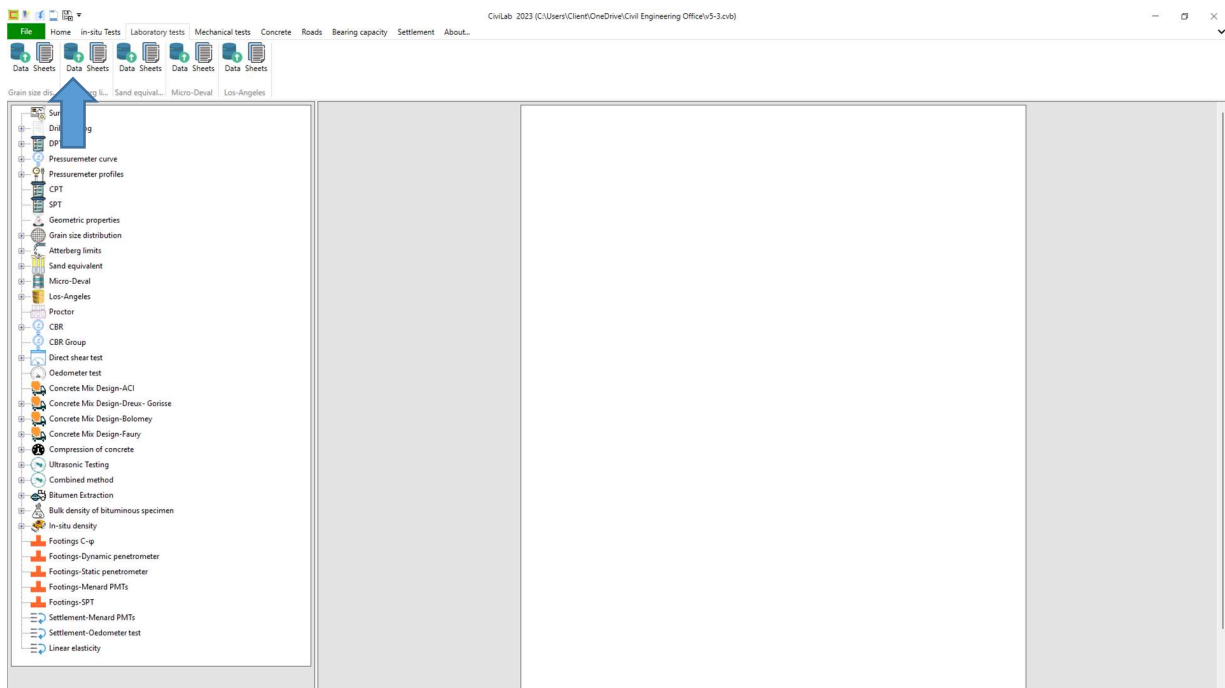


Fig1: Screenshot of CiviLab 2023



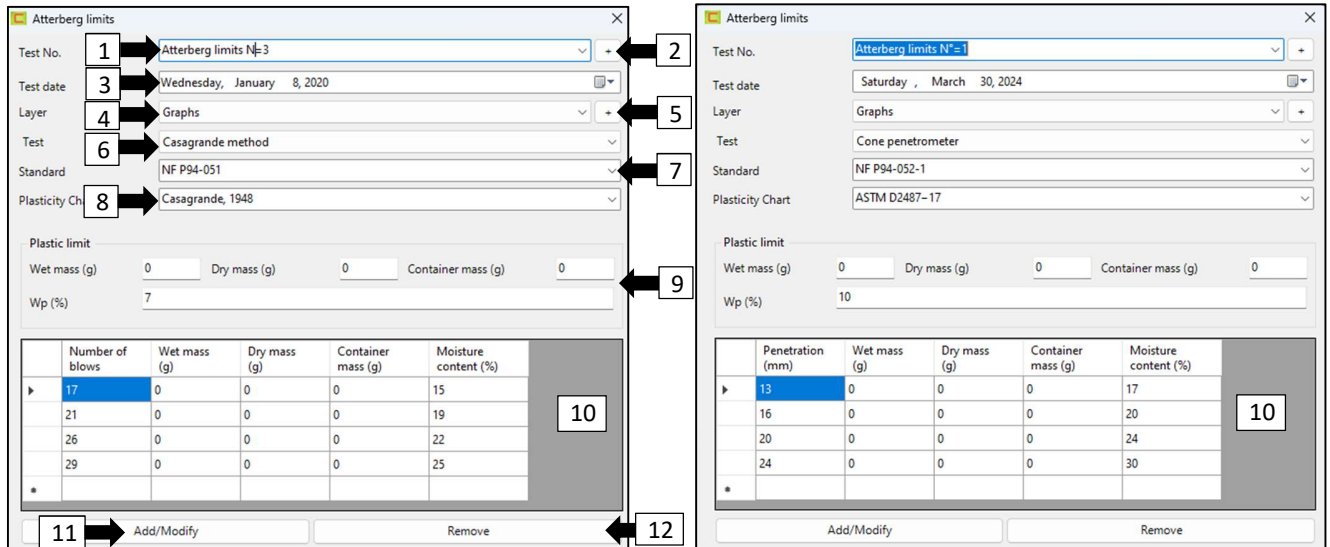
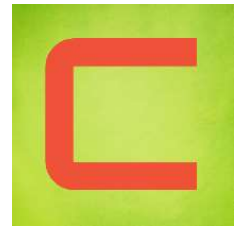


Fig2: Test Data window

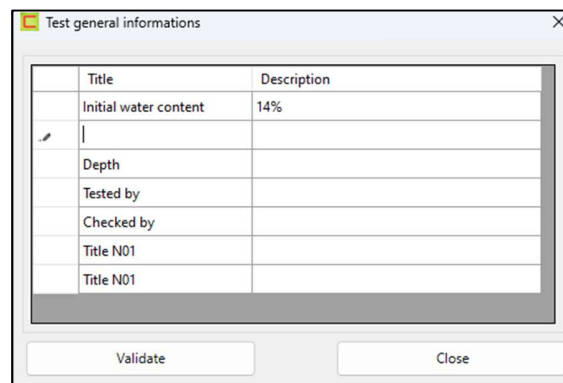


Fig3: Screenshot of test information window

Add a sheet: Click on the "Sheets" button in the "Atterberg limits" panel and input (Fig 4):

- 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



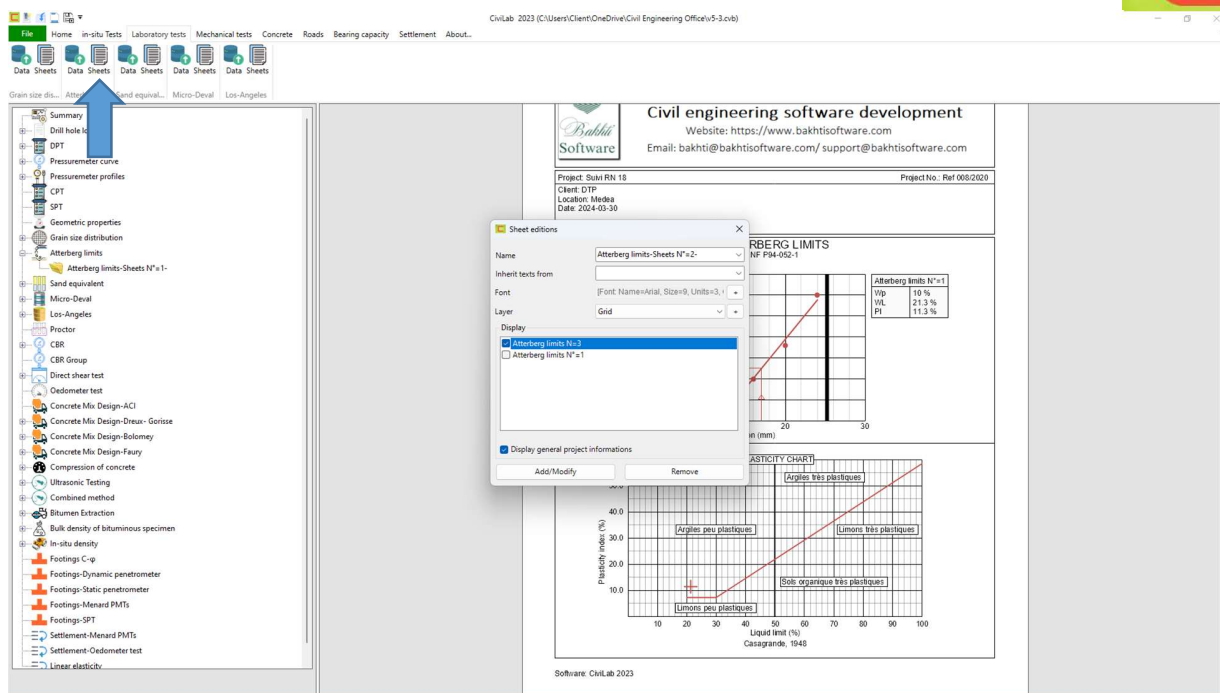
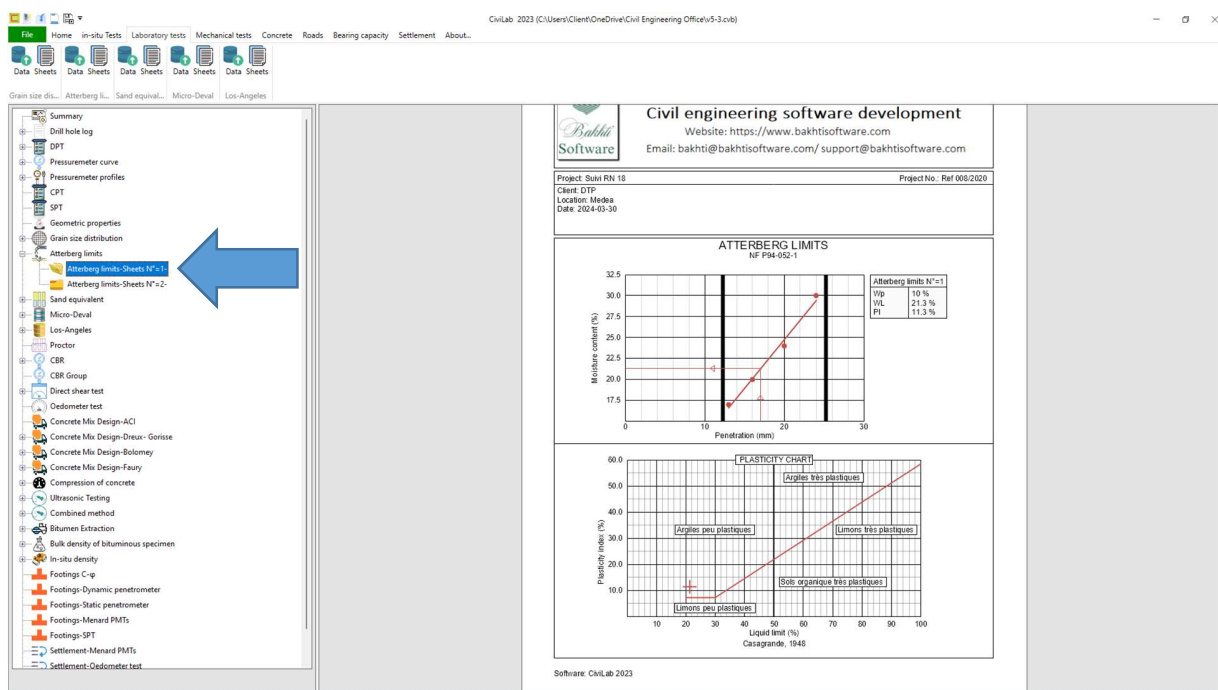


Fig4: Screenshot of sheet window

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

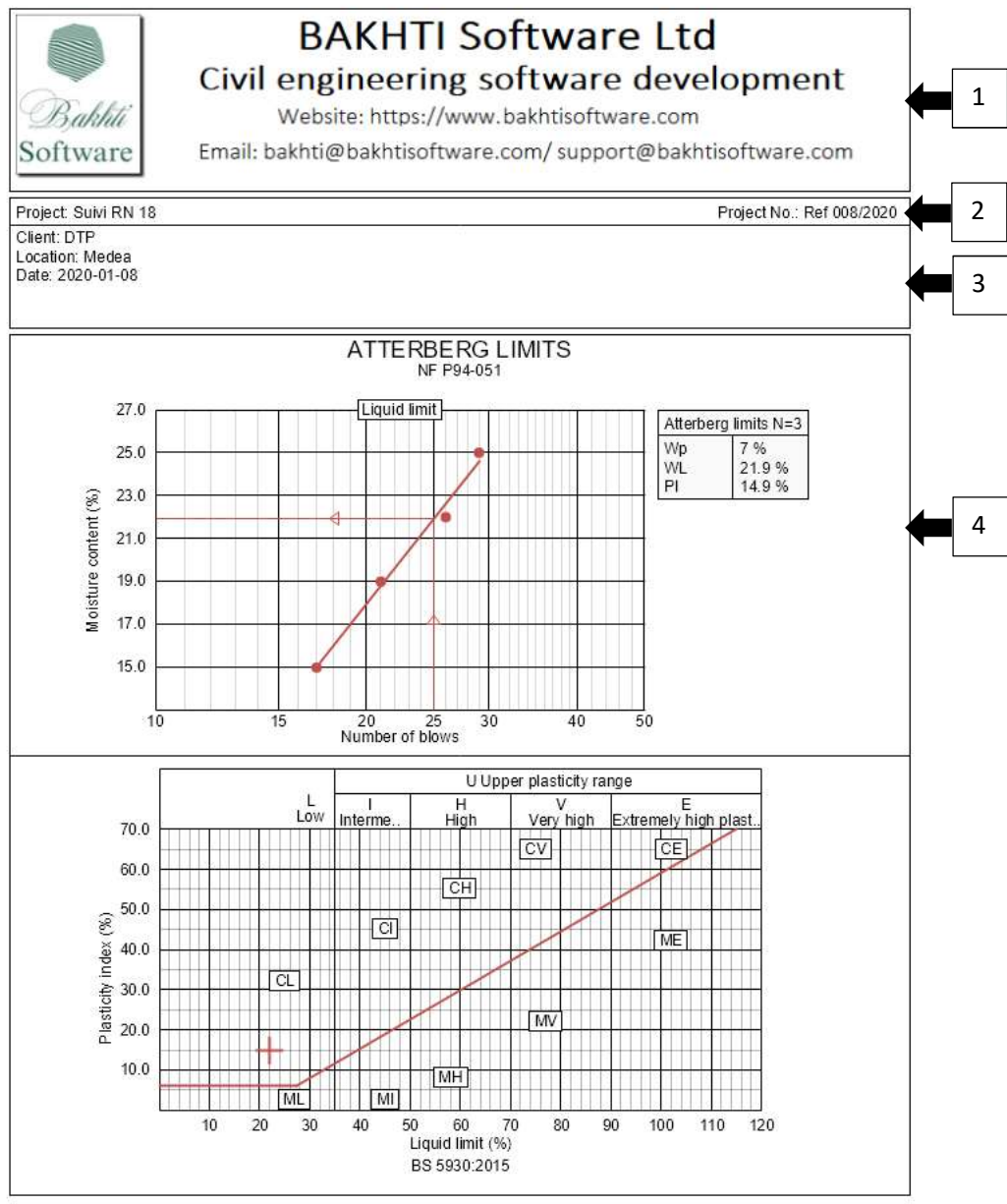


To export or print the report, click on "Home" tab, then click the appropriate button in the outputs panel (Print or Export button)



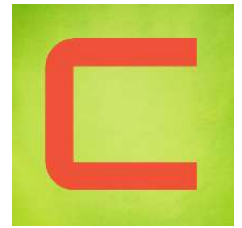


Test report:



- 1. Sheet Header Presentation:** To import or modify the sheet header, go to the "Home" tab and select the "Header" button.
- 2. Project Name and Reference:** These details can be entered from the project's general information found in the File menu.





3. Area for Displaying Test Information: Test information can be input within this area from the Test Information window (Fig3) and project's general information window.

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

