

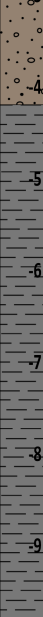


Company: ICS BUSINESS INTERNATIONAL SRL  
Site: Turda, Cluj county, Romania  
Operators: Păun Marius, Răgălie Mihai  
Location (Stereo 70): X(N)= 563294.27 Y(E)= 411672.66

LOG SHEET FOR GEOTECHNICAL WELL F9  
(0.00 - 10.00 m)

Start date: 21.06.2022  
End date: 21.06.2022

| ALTITUDE    | DEPTH | THICKNESS | LITHOLOGIC COLUMN  | GROUND WATER | LITHOLOGICAL DESCRIPTION  | SAMPLE NO.<br>(Disturbed/Undisturbed) | Sample Depth | GRANULOMETRY            |       |      |        |          |  | w     | w <sub>L</sub> | w <sub>P</sub> | I <sub>p</sub> | I <sub>c</sub> | ρ <sub>n</sub> | ρ <sub>d</sub> | n  | e  | S <sub>r</sub> | UL | ρ <sub>S</sub> | OEDOMETER COMPRESSIBILITY |                |                 |                             | SHEAR RESISTANCE |     |    | CHEMICAL ANALYSIS |                 |       | DETAILS |  |
|-------------|-------|-----------|--|--------------|---|---------------------------------------|--------------|-------------------------|-------|------|--------|----------|--|-------|----------------|----------------|----------------|----------------|----------------|----------------|----|----|----------------|----|----------------|---------------------------|----------------|-----------------|-----------------------------|------------------|-----|----|-------------------|-----------------|-------|---------|--|
|             |       |           |  |              |   |                                       |              | PERCENTAGE DISTRIBUTION |       |      |        |          | C <sub>u</sub> =<br>d <sub>60</sub> /<br>d <sub>10</sub> |       |                |                |                |                |                |                |    |    |                |    |                | M <sub>200-300</sub>      | ε <sub>2</sub> | i <sub>m3</sub> | av                          | φ                | c   | pH | Cl                | SO <sub>4</sub> |       |         |  |
|             |       |           |  |              |   |                                       |              | Clay                    | Silt  | Sand | Gravel | Boulders |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
| m           | m     | m         | -  | m            |   | -                                     | m            | Clay                    | Silt  | Sand | Gravel | Boulders | -  | %     | %              | %              | %              | -              | g/cm³          | g/cm³          | %  | -  | -              | %  | g/cm³          | kPa                       | daN/cm²        | %               | 10 <sup>-4</sup> *<br>1/kPa | grade            | kPa |    |                   | mg/kg           | mg/kg |         |  |
| 1           | 2     | 3         | 4  | 5            | 6   | 7                                     | 8            | 9                       | 10    | 11   | 12     | 13       | 14   | 15    | 16             | 17             | 18             | 19             | 20             | 21             | 22 | 23 | 24             | 25 | 26             | 27                        | 28             | 29              | 30                          | 31               | 32  | 33 | 34                | 35              | 36    | 37      |  |
| 307,00      | 0,20  | 0,20      |           |              | Vegetable soil  |                                       |              |                         |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
| 303,00      | 4,20  | 4,00      | <br>▼3,00 |              | Sand with gravel  |                                       |              |                         |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
|             |       |           |  |              |   |                                       |              |                         |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
| 297,20      | 10,00 | 5,80      |          |              | Gray clay,<br>with hard consistency,<br>with very high plasticity | P91                                   | 6,00         | 50,00                   | 44,00 | 6,00 |        |          |  | 19,03 | 57,43          | 21,60          | 35,83          | 1,072          |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
|             |       |           |  |              |   |                                       |              |                         |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
|             |       |           | -10  |              |   |                                       |              | Author                  |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
|             |       |           |  |              |   |                                       |              | IACOB CEZAR, PhD        |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |
| Appendix 12 |       |           |  |              |   |                                       |              |                         |       |      |        |          |  |       |                |                |                |                |                |                |    |    |                |    |                |                           |                |                 |                             |                  |     |    |                   |                 |       |         |  |