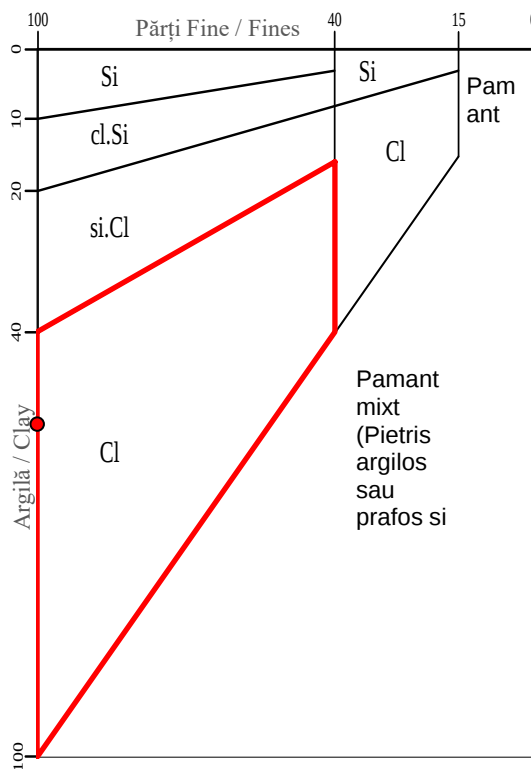
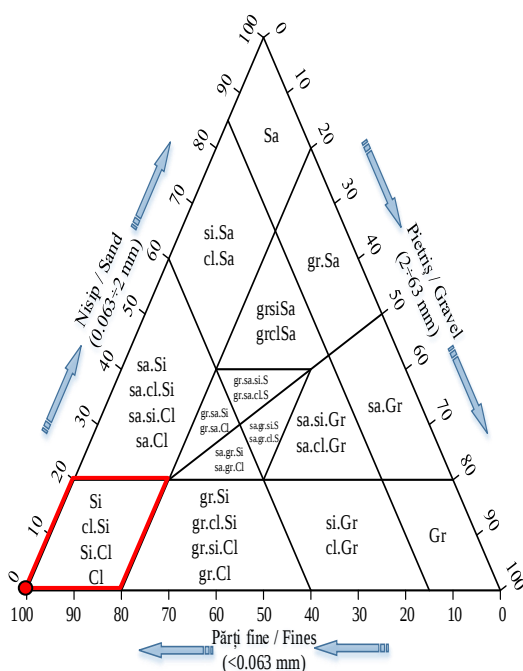


| Amplasament /<br>Location | Reabilitarea liniei de cale ferata<br>Roman – Iasi - Frontiera |
|---------------------------|----------------------------------------------------------------|
| Forajul/Borehole:         | POD 22                                                         |
| Proba/Sample:             | PNT 3                                                          |
| Adancimea/Depth(m):       | 3,00-3,40                                                      |

**Raport de incercare nr. / Test report no.75 265**

|             | d (mm) | mp (%) |
|-------------|--------|--------|
| CERNERE     | 100    | 100.0  |
|             | 100    | 100.0  |
|             | 100    | 100.0  |
|             | 100    | 100.0  |
|             | 100    | 100.0  |
|             | 100    | 100.0  |
|             | 100    | 100.0  |
|             | 90     | 100.0  |
|             | 63     | 100.0  |
|             | 45     | 100.0  |
|             | 31.5   | 100.0  |
|             | 22.4   | 100.0  |
|             | 16     | 100.0  |
|             | 11.2   | 100.0  |
|             | 5.6    | 100.0  |
|             | 3.15   | 100.0  |
| SEDIMENTARE | 2      | 100.0  |
|             | 0.5    | 100.0  |
|             | 0.25   | 100.0  |
|             | 0.10   | 100.0  |
|             | 0.063  | 100.0  |
|             | 0.063  | #####  |
|             | 0.037  | 99.42  |
|             | 0.026  | 98.47  |
|             | 0.019  | 95.31  |
|             | 0.014  | 92.15  |
|             | 0.010  | 88.98  |
|             | 0.008  | 82.66  |
|             | 0.006  | 74.75  |
|             | 0.004  | 68.42  |
|             | 0.003  | 61.57  |
|             | 0.002  | 54.72  |
|             | 0.001  | 47.87  |



**Clasificarea pamantului dupa SR EN ISO 14688-1:2018 / SR EN ISO 14688-2:2018**

| Tip pamant / Soil group             | Tip fractiune |    | %  | C <sub>u</sub> (Un) | C <sub>c</sub> | Forma curbei granulometrice / Shape of grading curve | C <sub>u</sub> (Un) | C <sub>c</sub> |
|-------------------------------------|---------------|----|----|---------------------|----------------|------------------------------------------------------|---------------------|----------------|
| Pamant fin / Fine                   | Argila        | Cl | 53 | <3                  | <1             | Foarte uniformă / Very uniform                       | #N/A                | #####          |
|                                     | Praf          | Si | 47 |                     |                | Uniformă / Uniform                                   |                     |                |
| Pamant grosier / Coarse             | Nisip         | Sa | 0  | 3---6               | <1             | Uniformitate medie / Medium uniformity               |                     |                |
|                                     | Pietris       | Gr | 0  | 6---15              | <1             | Neuniformă / Non-uniform                             |                     |                |
| Pamant foarte grosier / Very coarse | Bolovanis     | Co |    | >15                 | 1---3          | Discontinua / Gap graded                             |                     |                |
|                                     |               |    |    | >15                 | <0,5           |                                                      |                     |                |

Executat de / Performed by :  
 ing. Nina IOSIF

*Nina IOSIF*

Sef Laborator / Laboratory head: Constanta ANDREI



COD PROBA75 265

Raport de incercare nr. / Test report no.75 266

DETERMINAREA LIMITELOR DE PLASTICITATE /  
DETERMINATION OF ATTEBERG LIMITS

## STAS 1913/4-86

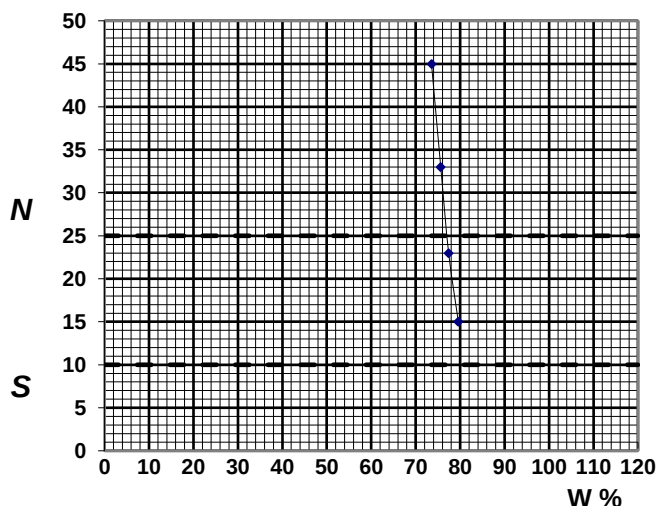
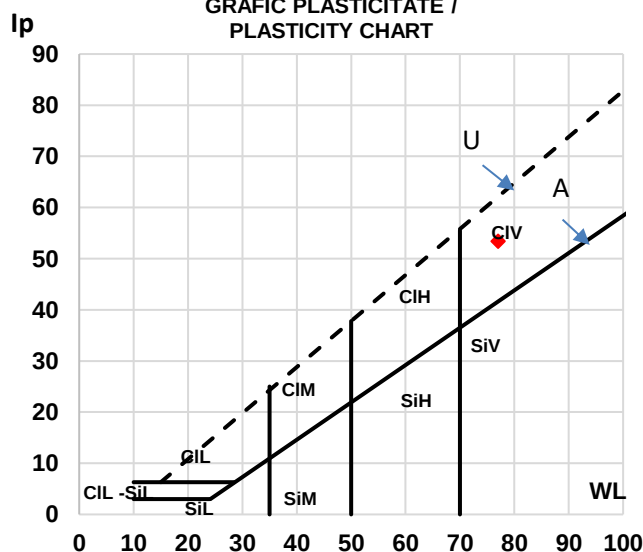
| Nr. de caderi ale cupei (N)                 | 25 | UMIDITATE NATURALA<br>NATURAL MOISTURE<br>STAS 1913/1-82 |  |  | LIMITA DE CURGERE<br>LIQUID LIMIT<br>$W_L$ % |       |       |       | LIMITA DE FRAMANTARE<br>PLASTIC LIMIT<br>$W_P$ % |       |       |
|---------------------------------------------|----|----------------------------------------------------------|--|--|----------------------------------------------|-------|-------|-------|--------------------------------------------------|-------|-------|
| Adancimea de patrundere a<br>conului (S) mm | 10 |                                                          |  |  | Metoda cu cupa                               |       |       |       |                                                  |       |       |
|                                             |    |                                                          |  |  | 45                                           | 33    | 23    | 15    |                                                  |       |       |
| PROBA UMEDA + TARA A (gr)                   |    | 150.00                                                   |  |  | 30.88                                        | 32.77 | 30.82 | 33.40 | 18.74                                            | 18.93 | 19.55 |
| PROBA USCATA + TARA B (gr)                  |    | 110.72                                                   |  |  | 23.28                                        | 24.67 | 23.36 | 25.04 | 17.91                                            | 18.03 | 18.59 |
| TARA C (gr)                                 |    |                                                          |  |  | 12.93                                        | 13.95 | 13.71 | 14.52 | 14.38                                            | 14.27 | 14.55 |
| A - B                                       |    | 39.28                                                    |  |  | 7.61                                         | 8.10  | 7.47  | 8.37  | 0.83                                             | 0.90  | 0.96  |
| B - C                                       |    | 110.72                                                   |  |  | 10.34                                        | 10.71 | 9.64  | 10.51 | 3.53                                             | 3.76  | 4.04  |
| $W(\%) = (A-B)/(B-C)*100$                   |    | 35.48                                                    |  |  | 73.55                                        | 75.63 | 77.41 | 79.59 | 23.42                                            | 23.97 | 23.65 |
| $W(\%)$ MEDIU                               |    | 35.48                                                    |  |  | 77.05                                        |       |       |       | 23.68                                            |       |       |

DESCRIEREA PROBEI /  
DESCRIPTION OF THE SOIL:Argila grasa galbui-cenusie cu FeO plastic vartoasa / stiff  
consistency

SR EN ISO 14688/1/2-2018

Pamant fin cu plasticitate foarte mare / Fine soil, very high plasticity

CIV

GRAFICUL LIMITEI SUPERIOARE DE PLASTICITATE  
UPPER LIMIT OF PLASTICITY CHARTGRAFIC PLASTICITATE /  
PLASTICITY CHART

SR EN ISO 14688/2-2018

| LIMITA DE FRAMANTARE /<br>PLASTIC LIMIT      | $W_P =$                 | 23.68 | % | Tip pamant /<br>Type of Soil |      | Plasticitate /<br>Plasticity |                | Limita de curgere /<br>Liquid limit |
|----------------------------------------------|-------------------------|-------|---|------------------------------|------|------------------------------|----------------|-------------------------------------|
| UMIDIT. NATUR. / NATURAL MOISTURE            | $W =$                   | 35.48 | % | Cl                           | Clay | Low                          | redusa         | <35                                 |
| LIMITA DE CURGERE / LIQUID LIMIT             | $W_L =$                 | 77.05 | % | Si                           | Silt | Medium                       | medie          | 35----50                            |
| INDICE DE PLASTICIT./PLASTICITY INDEX        | $I_P = W_L - W_P$       | 53.37 | % |                              |      | Heigh                        | mare           | 50----70                            |
| INDICE DE CONSISTENȚĂ /<br>CONSISTENCY INDEX | $I_C = (W_L - W) / I_P$ | 0.78  |   |                              |      | Very<br>heigh                | foarte<br>mare | >70                                 |
| INDICE DE LICHIDITATE/<br>LIQUIDITY INDEX    | $I_L = (W - W_P) / I_P$ | 0.22  |   |                              |      | O                            | organiz        |                                     |

Executat de / Performed by: Laborant Emilia Dumitru

Data / Date: 07.12.2020

COD PROBA75

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Sef Laborator / Laboratory head: Constanta ANDREI

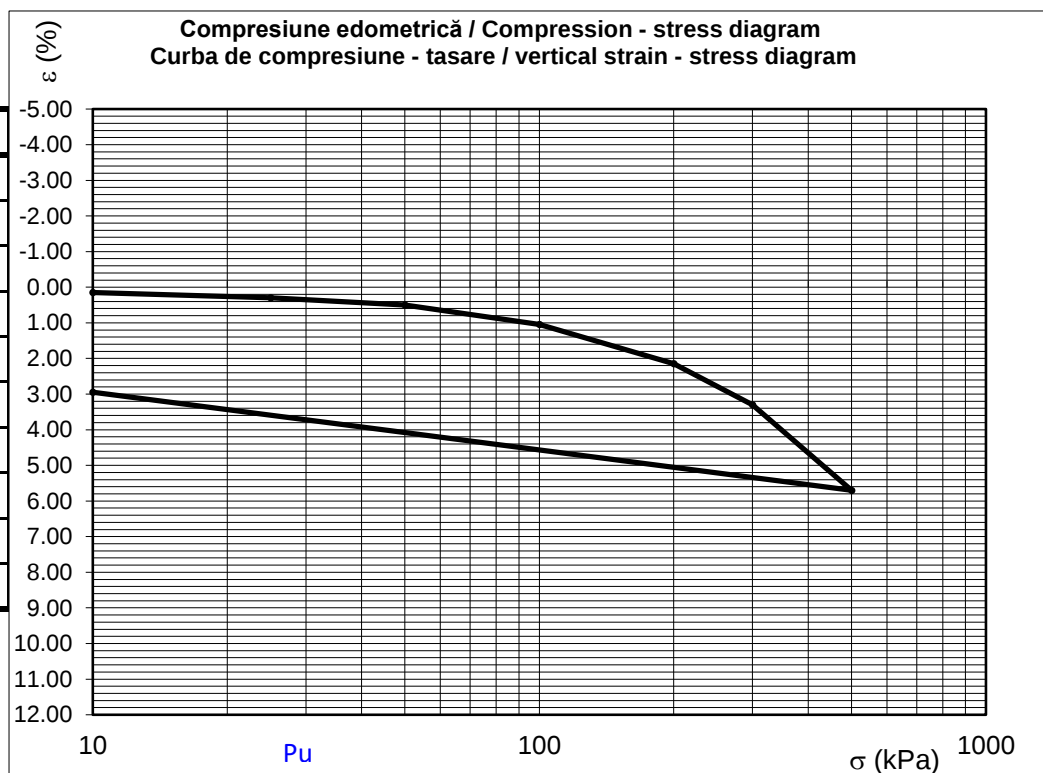
Raport de incercare nr. / Test report no.75 267

## DETERMINAREA COMPRESIBILITATII PAMANTURILOR PRIN INCERCAREA IN EDMETRU

## INCREMENTAL LOADING OEDOMETER TEST

## STAS 8942/1-89

| Indici fizici | INITIAL | FINAL  |
|---------------|---------|--------|
| $m_u(g)$      | 144.96  | 142.56 |
| $m_d(g)$      | 106.94  | 106.94 |
| $V(cm^3)$     | 76.53   | 72.54  |
| $w(\%)$       | 35.55   | 33.31  |
| $r(g/cm^3)$   | 1.89    | 1.97   |
| $r_d(g/cm^3)$ | 1.40    | 1.47   |
| $r_s(g/cm^3)$ | 2.72    | 2.72   |
| $n(\%)$       | 48.63   | 45.80  |
| $e(-)$        | 0.947   | 0.845  |
| $S(-)$        | 1.00    | 1.00   |



| s (kPa) | e (%) | M (kPa) | mv(1/kPa) | av(1/kPa) |
|---------|-------|---------|-----------|-----------|
| 10      | 0.15  |         |           |           |
| 25      | 0.30  |         |           |           |
| 50      | 0.50  |         |           |           |
| 100     | 1.05  |         |           |           |
| 200     | 2.15  |         |           |           |
| 300     | 3.30  | 8695.7  | 1.15E-04  | 2.24E-04  |
| 500     | 5.70  | 8333.3  | 1.20E-04  | 2.34E-04  |
| 10      | 2.95  |         |           |           |

DESCRIEREA PROBEI /  
DESCRIPTION OF THE SOIL:

Argila grasa galbui-cenusie cu FeO

plastic vartoasa / stiff consistency

Executat de / Performed by:

ing. Nina IOSIF

COD PROBA75 267

Data / Date: 07.12.2020

SEF LABORATOR / LABORATORY HEAD

Constanta ANDREI

