**geotesting®** STUDII GEOTEHNICE ŞI GEOFIZICE

# Profilul Forajului ~~Santului~~ Nr. S4-FD-38
# Borehole ~~Pit~~ Profile

## REZULTATELE ANALIZELOR DE LABORATOR
## LABORATORY TEST RESULTS

**LUCRAREA / DESIGN:** Studiu geotehnic pentru revizuirea Studiului de fezabilitate Autostrada Sibiu-Pitesti - Sectiunea 4 (Valeni-Curtea de Arges)

**AMPLASAMENT / LOCATION:** Autostrada Sibiu-Pitesti
X : 464511.90 Y: 414190.29

**DATA / DATE:** 02.08.2016

Cota fata de / Level vs: 0.00 — Foraj / Bore-hole (pit)

Probe: ☐ Borcan / Jar; ☒ Stut / Tube; ■ Carota / Core

| Adancime (m) / Depth | Grosimea stratului (m) / Stratum thickness | Adancimea apei subterane (m) / Underground water depth | DENUMIREA STRATULUI (conform Stas 1243-88 si SR EN ISO 14688/2-2005) / STRATUM DESCRIPTION (according to Stas 1243-88 and SR EN ISO 14688/2-2005) |
|---|---|---|---|
| 0.20 | 0.20 | | Pamant vegetal. |
| 1.50 | 1.30 | | Bolovanis cu pietris si nisip galbui - cafeniu. |
| 6.00 | 4.50 | 1.90 | Praf argilos... praf argilos nisipos, cafeniu - cenusiu - cenusiu ... cenusiu, plastic vartos; in baza plastic consistent. |

Compozitie granulometrica (d. in mm) SR EN ISO 14688/2-2005 / Particle size distribution SR EN ISO 14688/2-2005

| Numarul probelor / Number and type of samples | Adancimea (m) / Depth | Argila / Clay <0.002 | Praf / Silt 0.063 | Nisip fin / Fine sand 0.2 | Nisip mediu / Medium sand 0.63 | Nisip mare / Coarse sand 2 | Pietris mic / Small gravel 6.3 | Pietris mediu / Medium gravel 20 | Pietris mare / Coarse gravel 63 | Bolovanis / Cobbles 200 | Coeficientul de neuniformitate / Non-uniformity coefficient $U_n = d_{60}/d_{10}$ | Limita de curgere / Liquid limit $W_L$ | Limita de plasticitate / Plastic limit $W_P$ | Indicele de plasticitate / Plasticity index $I_P$ | Umiditatea / Water content w % | Indicele de consistenta / Consistency index $I_C$ | Densitatea scheletului mineral / Skeletal mineral density $\rho_s$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.8-2.0 | 17 | 74 | 3 | 2 | 3 | 1 | | | | | 35.6 | 14.9 | 20.7 | 19.5 / 18.9 | 0.78 | |
| 2* | 4.0-4.26 | 9 | 60 | 26 | 5 | | | | | | >15 | 28.1 | 12.1 | 16.0 | 14.6 / 15.5 | 0.84 | |
| 3 | 5.0-5.5 | 11 | 53 | 33 | 3 | | | | | | | 28.4 | 13.0 | 15.4 | 18.3 / 18.7 | 0.66 | |

| Numarul probelor / Sample | Greutatea volumica / Unit weight $\gamma$ (kN/m³) | Greutatea volumica in stare uscata / Unit dry weight $\gamma_d$ (kN/m³) | Porozitatea / Porosity n % | Indicele porilor / Void ratio e | Gradul de umiditate / Degree of saturation Sr | Umflarea libera / Unconfined swelling $U_L$ | Modulul de deformatie edometrica / Oedometer deformation modulus $M_{200-300}$ (kPa) | Tasare specifica la 200 kPa / Specific settlement at 200 kPa $\varepsilon_{200}$ % | Coef. compresibilitate volumica / Coefficient of volume change $m_v$ | Coeficientul de compresibilitate / Coefficient of compressibility $a_{v\,200-300}$ (1/kPa) | Penetrarea dinamica standard / Standard penetration test N/30 cm |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 20.3 | 17.0 | 37.36 | 0.60 | 0.86 | 100 | | | | | 2.00 R |
| 2* | 21.2 | 18.3 | 32.63 | 0.48 | 0.87 | 43.3 | 19892.9 | 2.49 | | 0.00008 | |
| 3 | 20.7 | 17.4 | 35.93 | 0.56 | 0.91 | | | | | | |

Other columns (no values recorded): Contractilitatea / Shrinkage-swelling (Suctiunea 15 bari / Suction 15 bars $w_{15}$; Contractia volumica / Volume shrinkage $C_v$ (Tulb./Netulb. – Dist./Undist.); Limita de contractie / Shrinkage limit $w_s$; Presiunea de umflare / Swelling pressure Pu kPa); Compresibilitatea / Compressibility (Sensibilitatea la umezire / Susceptibility to wetting $im_{200}$ %; Efort / Stress σ kPa; Tasare specifica / Specific settlement ε %; Modulul de deformatie edometrica / Oedometer deformation modulus M kPa); Rezistenta la forfecare / Shear strength (Efort / Effective stress σ/τ 1, 2, 3; Unghiul de frecare int. / Angle of int. friction Φ °; Coeziunea / Cohesion c kPa); Felul determinarii / Type of test; Rezistenta la compresiune cu deformatie laterala libera / Unconfined compressive strength $p_c$ kPa; Coeficient de permeabilitate / Permeability coefficient k; Continutul in CaCO3 / CaCO3 content %.

Nota:
(*) - Esantion comparabil PNT (proba netulburata) - rezultat informativ

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