geotesting®
STUDII GEOTEHNICE ȘI GEOFIZICE

Profilul ~~Santului~~ Forajului Nr. S4-FD-1016
~~Pit~~ Borehole 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 : 462888.44 Y: 417138.94
DATA / DATE	01.09.2016

Cota fata de: 0.00 Foraj / Level vs: 0.00 Borehole (pit)

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

Cota (m)	Grosimea stratului / Stratum thickness (m)	Adancimea apei subterane / Underground water depth (m)	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)
0.10	0.10		Pamant vegetal.
1.10	1.00		Nisip cafeniu.
3.85	2.75	2.55	Pietris si bolovanis cu nisip galbui.
6.00	2.15		Argila prafoasa, cenusie, tare.

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 / Depth (m)	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 Un=d60/d10
1 (Stut / Tube)	2.2-2.4		2	3	4	8	18	50	15		>15
2 (Stut / Tube)	4.25-4.45	25	59	9	4	3					

Numarul probelor / Number of samples	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 ρ_s	Greutatea volumica / Unit weight γ kN/m³	Greutatea volumica in stare uscata / Unit dry weight γ_d kN/m³	Porozitatea / Porosity n %	Indicele porilor / Void ratio e	Gradul de umiditate / Degree of saturation Sr
1				1.73							
2	44.0	13.9	30.1	12.7 13.0 12.0	>1		22.5 22.5	19.9 20.1	26.96 26.12	0.37 0.35	0.96 0.92

Contractilitatea / Shrinkage-swelling

Numarul probelor / Number of samples	Umflarea libera / Unconfined swelling U_L	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
2					600

Compresibilitatea / Compressibility

Numarul probelor / Number of samples	Modulul de deformatie edometrica / Oedometer deformation modulus $M_{200-300}$ kPa	Tasare specifica la 200 kPa / Specific settlement at 200 kPa ε_{200} %	Coef. compresibilitate volumica / Coefficient of volume change m_v	Coeficientul de compresibilitate / Coefficient of compressibility $a_{v\,200-300}$ 1/kPa	Sensibilitatea la umezire / Susceptibility to wetting im_{300} %	Efort / Stress σ kPa	Tasare specifica / Specific settlement ε %	Modulul de deformatie edometrica / Oedometer deformation modulus M kPa
2	15853.7 17391.3	2.50 0.85		0.00009 0.00008	5.38			

Rezistenta la forfecare / Shear strength

Numarul probelor / Number of samples	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 %	Penetrarea dinamica standard / Standard penetration test N/30 cm

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