geotesting®
STUDII GEOTEHNICE ȘI GEOFIZICE

Profilul ~~Forajului~~ ~~Santului~~ Nr. S4-FD-1012
~~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 : 463129.70 Y: 416820.61

DATA DATE: 02.09.2016

Borcan / Stut / Carota

Compozitie granulometrica (d. in mm) SR EN ISO 14688/2-2005: Argila <0.002; Praf 0.063; Nisip fin 0.2; Nisip mediu 0.63; Nisip mare 2; Pietris mic 6.3; Pietris mediu 20; Pietris mare 63; Bolovanis 200

Limitele Atterberg: Limita de curgere w_L %; Limita de plasticitate w_P %; Indicele de plasticitate I_P %

Coeficientul de neuniformitate $U_n = d_{60}/d_{10}$

Umiditatea w %; Indicele de consistenta I_c; Densitatea scheletului mineral ρ_s kN/m³; Greutatea volumica γ kN/m³; Greutatea volumica in stare uscata γ_d kN/m³; Porozitatea n %; Indicele porilor e; Gradul de umiditate Sr

Contractilitatea: Umflarea libera U_L; Sucsiunea 15 bari w_{15}; Contractia volumica Tulb. / Netulb. C_v; Limita de contractie w_s; Presiunea de umflare P_u kPa

Compresibilitatea: Modulul de deformatie edometrica $M_{200-300}$ kPa; Tasare specifica la 200 kPa ε_{200} %; Coef. compresibilitate volumica m_v 1/kPa; Coeficientul de compresibilitate $a_{v\ 200-300}$ 1/kPa; Sensibilitatea la umezire Im_{300} %; Efort σ kPa; Tasare specifica ε %; Modulul de deformatie edometrica M kPa

Rezistenta la forfecare: Efort σ/τ 1 2 3; Unghiul de frecare Int. Φ °; Coeziunea c kPa

Felul determinarii; Rezistenta la compresiune cu deformatie laterala libera P_c kPa; Coeficient de permeabilitate k m/s; Continutul in CaCO3 %; Penetrarea dinamica standard $\frac{N}{10\ cm}$

Cota fata de: 0.00 Foraj

Grosimea stratului (m); Adancimea apei subterane (m); Stratificatia; Formatiunea geologica

DENUMIREA STRATULUI (conform Stas 1243-88 si SR EN ISO 14688/2-2005)

Numarul probelor; Adancimea (m)

Jar / Tube / Core

Particle size distribution SR EN ISO 14688/2-2005: Clay; Silt; Fine sand; Medium sand; Coarse sand; Small gravel; Medium gravel; Coarse gravel; Cobbles; Non-uniformity coefficient

Atterberg's limits: I Liquid limit; Plastic limit; Plasticity index

Water content; Consistency index; Skeletal mineral density; Unit weight; Unit dry weight; Porosity; Void ratio; Degree of saturation

Shrinkage-swelling: Unconfined swelling; Suction 15 bars; Dist. / Undist. Volume shrinkage; Shrinkage limit; Swelling pressure

Compressibility: Oedometer deformation modulus; Specific settlement at 200 kPa; Coefficient of volume change; Coefficient of compressibility; Susceptibility to wetting; Stress; Specific settlement; Oedometer deformation modulus

Shear strength: Effective stress σ/τ 1 2 3; Angle of int. friction; Cohesion

Type of test; Unconfined compressive strength; Permeability coefficient; CaCO3 content; Standard penetration test

Level vs: 0.00 Borehole (pit)

Stratum thickness; Underground water depth; Stratification; Geological formation

STRATUM DESCRIPTION (according to Stas 1243-88 and SR EN ISO 14688/2-2005)

Number and type of samples; Depth

Cota fata de	Stratum thickness	Underground water depth	Stratification	Geological formation	STRATUM DESCRIPTION	Number and type of samples	Depth
0.10	0.10				Pamant vegetal.		
0.95	0.85	1.05			Nisip calcariu.		
2.85	1.90				Pietris cu nisip calcariu si rar bolovanis.	1	1.6-1.8
6.00	3.15				Nisip prafos, cenusiu.	2	4.8-5.0

Sample	Clay	Silt	Fine sand	Medium sand	Coarse sand	Small gravel	Medium gravel	Coarse gravel	Cobbles	Non-uniformity coefficient	Water content	Unit weight	Unit dry weight	Porosity	Void ratio	Degree of saturation
1	5	3	10	10	17	34	21			>15	6.42					
2	2	15	18	25	37	3				>15	11.0					
											10.1	21.8	19.8	25.26	0.34	0.79

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