geotesting®
STUDII GEOTEHNICE ŞI GEOFIZICE

Profilul ~~Forajului~~ Forajului / ~~Santului~~ — Borehole / ~~Pit~~ Profile Nr. S4-FP-19

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 : 464753.45 Y: 412356.91

DATA / DATE: 24.08.2016

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

Adancimea apei subterane / Underground water depth (m): 0.25

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

Cota (m)	Grosimea stratului / Stratum thickness (m)	Denumirea stratului / Stratum description	Numarul probei / 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	Umiditatea / Water content w %	Greutatea volumica / Unit weight γ kN/m³	Greutatea volumica in stare uscata / Unit dry weight γd kN/m³	Porozitatea / Porosity n %	Indicele porilor / Void ratio e	Gradul de umiditate / Degree of saturation Sr	Penetrarea dinamica standard / Standard penetration test N/30 cm
1.15	1.15	Nisip cafeniu, cu rar pietris mic.																			
4.65	3.50	Nisip prafos, galbui, indesat.	1 ☒	2.0-2.25	6	26	12	22	36	10				>15	11.5						
															11.0	20.4	18.4	32.45	0.48	0.63	
																					4.40 R
10.00	5.35	Nisip argilos, galbui, cu pietris, indesat.	2 ☒	6.25-6.45	6	20	9	16	17	12	16	4		>15	8.48						
																					8.35 R
		Nisip, prafos la partea superioara, galbui - cafeniu, cu pietris, indesat.	3 ☒	10-10.2	1	14	11	19	13	21	21			>15	7.27						
																					12.00 R
			4 ☒	14-14.2		4	2	21	49	22	2			<6	13.1						

Other columns (no values recorded): Stratificatia / Stratification; Formatiunea geologica / Geological formation; Limitele Atterberg / Atterberg's limits: Limita de curgere / Liquid limit W_L, Limita de plasticitate / Plastic limit W_P; Indicele de plasticitate / Plasticity index I_P; Indicele de consistenta / Consistency index I_C; Densitatea scheletului mineral / Skeletal mineral density ρ_s; Contractilitatea / Shrinkage-swelling: 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; Compresibilitatea / Compressibility: 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, Indice de recompresiune / Recompression index RSC, Coeficientul de consolidare / Coefficient of consolidation c_v cm²/sec; 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 materii organice / Organic matter content %.

Forajul continua

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STUDII GEOTEHNICE ŞI GEOFIZICE

Profilul ~~Santului~~ Forajului Nr. S4-FP-19 continuare
Borehole ~~Pit~~ Profile continuare

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 : 464753.45 Y: 412356.91
DATA / DATE	24.08.2016

Cota fata de: 16.0 Foraj / Level vs: 16.0 Bore-hole (pit)

Borcan / Jar; Stut / Tube; Carota / Core

Cota fata de / Level vs (m)	Grosimea stratului / Stratum thickness (m)	Adancimea apei subterane / Underground water depth (m)	Stratificatia / Stratification	Formatiunea geologica / Geological formation	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)	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	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 %	Penetrarea dinamica standard / Standard penetration test N/10 cm
					Nisip ... nisip prafos la partea superioara, galbui - cafeniu, cu pietris, indesat.																	16.00 R
						5	18.0-18.2		5	3	21	41	30				6.4				11.0	
																						20.00 R
						6	22.0-22.2		5	11	60	24					<6				17.2	
										26	9	3	5									
																						24.00 R
25.50	15.50																					
					Nisip cenusiu, indesat.	7	26.0-26.2		5	6	46	42	1				<6				15.9	
																						28.00 R
						8	30.0-30.2		4	8	41	44	3				<6				16.2	

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	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	Modulul de deformatie edometrica / Oedometer deformation modulus $M_{200-300}$ kPa	Tasarea 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	Indice de recompresiune / Recompression index RSC	Coeficientul de consolidare / Coefficient of consolidation c_v cm²/sec	Efort / Effective stress σ/τ 1	σ/τ 2	σ/τ 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 %

Contractilitatea / Shrinkage-swelling; Compresibilitatea / Compressibility; Rezistenta la forfecare / Shear strength

Forajul continua

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STUDII GEOTEHNICE ŞI GEOFIZICE

Profilul ~~Forajului~~ / ~~Santului~~ / Borehole / ~~Pit~~ Profile — Nr. S4-FP-19 continuare

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 : 464753.45 Y: 412356.91

DATA / DATE: 24.08.2016

Cota lata de: 32.0 Foraj / Level vs: 32.0 Bore-hole (plt)

Borcan / Jar; Stut / Tube; Carota / Core

Grosimea stratului / Stratum thickness	Adancimea apei subterane / Underground water depth	Stratificatia / Stratification	Formatiunea geologica / Geological formation	DENUMIREA STRATULUI (conform Stas 1243-88 si SR EN ISC 14688/2-2005) / STRATUM DESCRIPTION (according to Stas 1243-88 and SR EN ISO 14688/2-2005)	Numarul probelor / Number and type of samples	Adancimea / Depth	Compozitie granulometrica (d. in mm) SR EN ISO 14688/2-2005 / Particle size distribution SR EN ISO 14688/2-2005: 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 Unidec C10
m	m					m										
35.00 9.50				Nisip cenusiu, indesat.	9 ⊠	34.0-34.2	4	7	43	43	3				<6	

Limitele Atterberg / Atterberg's limits: 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
14.2							

Contractilitatea / Shrinkage-swelling: Umflarea libera / Unconfined swelling U_L; Suctiunea 15 bari / Suction 15 bars w_{15}; Contractia volumica / Volume shrinkage C_v (Tub. / Netulb.); Limita de contractie / Shrinkage limit w_s; Presiunea de umflare / Swelling pressure Pu kPa

Compresibilitatea / Compressibility: Modulul de deformatie edometrica / Oedometer deformation modulus $M_{200-100}$ kPa; Tasare specifica la 200 kPa / Specific settlement at 200 kPa ε_{200} %; Coef. compresibilitate volumica / Coefficient of volume change m_v 1/kPa; Coeficientul de compresibilitate / Coefficient of compressibility $a_{1\,200-100}$ 1/kPa; Sensibilitatea la umezire / Susceptibility to wetting Is_{300} %; Efort / Stress σ kPa; Indice de recompresiune / Recompression index RSC; Coeficientul de consolidare / Coefficient of consolidation c cm²/sec

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 m/s; Continutul in materii organice / Organic matter content %; Penetrarea dinamica standard / Standard penetration test $\frac{N}{10\,cm}$

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