geotesting®
STUDII GEOTEHNICE ȘI GEOFIZICE

Profilul ~~Forajului~~ ~~Santului~~ Nr. S4-FD-1015
~~Borehole~~ ~~Pit~~ Profile

REZULTATELE ANALIZELOR DE LABORATOR
LABORATORY TEST RESULTS

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

AMPLASAMENT / LOCATION: Autostrada Sibiu-Pitesti
X : 462944.24 Y: 417056.69

DATA / DATE: 01.09.2016

Cota fata de: 0.00 Foraj / Bore-hole (plt)

Nivel vs: 0.00 Foraj / Bore-hole (plt)

Borcan / Stut / Carota — Jar / Tube / 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 ISO 14688/2-2005) / STRATUM DESCRIPTION (according to Stas 1243-88 and SR EN ISO 14688/2-2005)
m	m			
0.15	4.60			Pamant vegetal.
2.25				Nisip cafeniu cu pietris.
1.60				Nisip cenusiu.
2.00				Argila prafoasa, cenusie, plastic vartoasa.

Numarul probelor / Number and type of samples	Adancimea / Depth
m	m
1	1.5-1.7
2	4.35-4.7

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

Argila / Clay	Praf / Silt	Nisip fin / Fine sand	Nisip mediu / Medium sand	Nisip mare / Coarse sand	Pietris mic / Small gravel	Pietris mediu / Medium gravel	Pietris mare / Coarse gravel	Bolovanis / Cobbles	Coeficientul de neuniformitate / Non-uniformity coefficient
<0.002	0.063	0.2	0.63	2	6.3	20	63	200	$U = \frac{d_{60}}{d_{10}}$
25	66	6	3						45.3
9	9	30	34	14	4				9.8

Limitele Atterberg / Atterberg's limits

Limita de curgere / Liquid limit	Limita de plasticitate / Plastic limit	Indicele de plasticitate / Plasticity index
W_L	W_P	I_P
15.1	30.2	

Umiditatea / Water content	Indicele de consistenta / Consistency index	Densitatea scheletului mineral / Skeletal mineral density	Greutatea volumica / Unit weight	Greutatea volumica in stare uscata / Unit dry weight	Porozitatea / Porosity	Indicele porilor / Void ratio	Gradul de umiditate / Degree of saturation
w / g^g	I_C	ρ_S	kN/m³ γ	kN/m³ γ_d	n %	e	Sr
3.69							
21.9	0.78		20.0	15.3	40.14	0.67	0.93
23.2			20.0	15.3	40.24	0.67	0.94

Contractilitatea / Shrinkage-swelling

Umflarea libera / Unconfined swelling	Succiunea 15 bari / Suction 15 bars	Contractia volumica / Volume shrinkage	Tulb. / Netulb.	Limita de contractie / Shrinkage limit	Presiunea de umflare / Swelling pressure
U_L	w_{15}	C_v		w_L	Pu kPa
					170

Compresibilitatea / Compressibility

Modulul de deformatie edometrica / Oedometer deformation modulus	Tasare specifica la 200 kPa / Specific settlement at 200 kPa	Coef. compresibilitate volumica / Coefficient of volume change	Coeficientul de compresibilitate / Coefficient of compressibility	Sensibilitatea la umezire / Susceptibility to wetting	Efort / Stress	Tasare specifica / Specific settlement	Modulul de deformatie edometrica / Oedometer deformation modulus
$M_{200\text{-}300}$ kPa	c_{200} %	m_v / $a_{v\ 200\text{-}300}$ 1/kPa	$a_{v\ 200\text{-}300}$ 1/kPa	Im_{300} %	σ kPa	c %	M kPa
11016.9	3.81		0.00015	-2.97			
8000.0	0.50		0.00020				

Rezistenta la forfecare / Shear strength

Efort / Effective stress σ/τ: 1 | 2 | 3

Unghiul de frecare int. / Angle of int. friction	Coeziunea / Cohesion
Φ °	c kPa

Felul determinarii / Type of test	Rezistenta la compresiune cu deformatie laterala libera / Unconfined compressive strength	Coeficient de permeabilitate / Permeability coefficient	Continutul in CaCO3 / CaCO3 content	Penetrarea dinamica standard / Standard penetration test
	p_c kPa	k m/s	CaCO3 %	n / 30 cm

Intocmit: ing. V. Marin

Verificat: ing. A. Diaconu