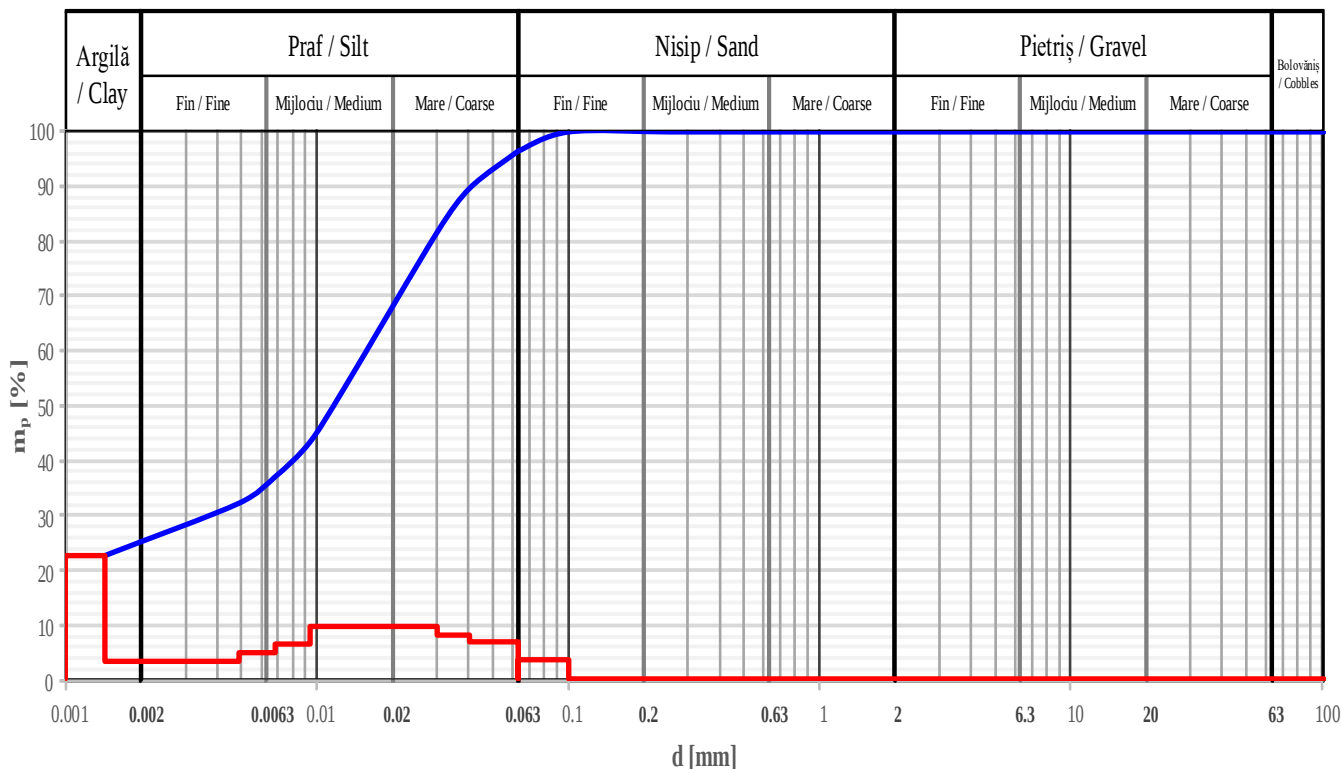


DCC-GEO-TEST CONSULT S.R.L.
 LABORATOR DE ANALIZE ȘI ÎNCERCĂRI
 ÎN CONSTRUCȚII - GRAD II
 Autorizație nr. 2940 din 15.08.2014/24.08.2018

Amplasament / Location: Reabilitarea liniei de cale ferata Roman – Iasi - Frontiera
 Forajul/Borehole: FTN 45
 Proba/Sample: PNT 2
 Adancimea/Depth(m): 2,00

Raport de incercare nr. / Test report no. 75 950



Curba granulometrica / Granulometric curve

Identificarea si clasificarea pamanturilor SR EN ISO 14688/2-2018 / SR EN ISO 14688/2-2018 / STAS 1913/5-85											
Argila prafoasa / Silty clay (Si.Cl) cafeniu-negricioasaUn = #N/A											
Conform SR EN ISO 14688/2- 2005, la cerinta beneficiar ului	Pamant fin / Fine				Pamant grosier / Coarse						Pamant foarte grosier /
	Argila (CI)	Praf (Si)			Nisip (Sa)			Pietris (Gr)			Bolovanis (Co)
		Fin (fSi)	Mediu (mS)	Mare (cSi)	Fin (fSa)	Mediu (mSa)	Mare (cSa)	Fin (fGr)	Mediu (mGr)	Mare (cGr)	
	24	73			3			0			0
	< 0,002	< 0,0063	< 0,02	< 0,063	< 0,2	< 0,63	< 2	< 6,3	< 20	< 63	< 200mm
%	24	12	32	29	3	0	0	0	0	0	0

CLASIFICAREA PĂMÂNTURILOR / SR Pământ fin / Fine soil
 EN ISO 14688/2-2018 / SR EN ISO 14688/2-2018 #N/A

Executat de / Performed by:
 ing. Nina IOSIF

Nina IOSIF

Sef Laborator / Laboratory head: Constanta ANDREI

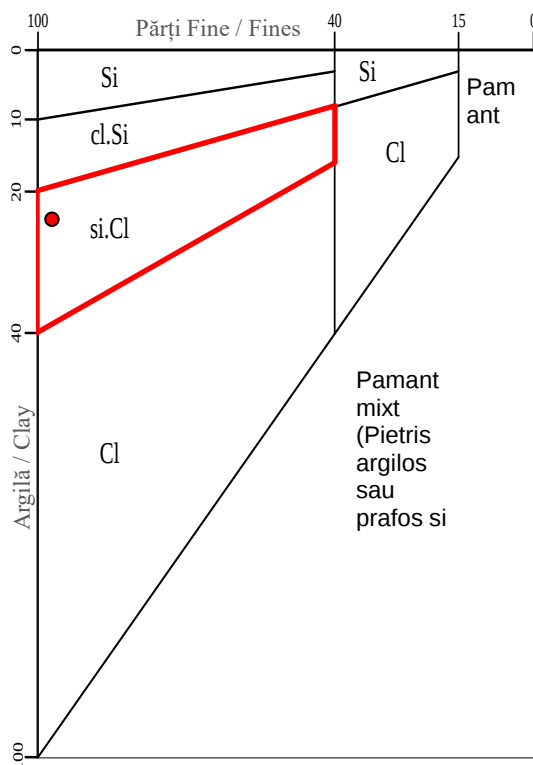
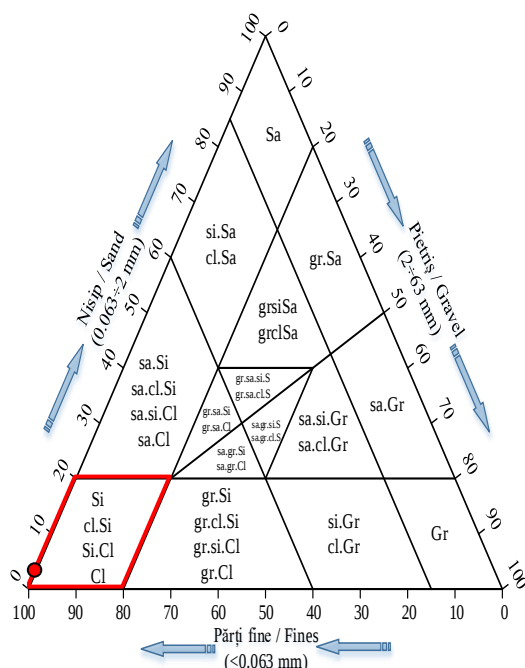


Data / Date: 17.12.2020

COD PROBA 75 950

Raport de incercare nr. / Test report no. 75 950

	d (mm)	mp (%)
	100	100,0
	100	100,0
	100	100,0
	100	100,0
	100	100,0
	100	100,0
	90	100,0
	63	100,0
	45	100,0
	31,5	100,0
	22,4	100,0
	16	100,0
	11,2	100,0
	5,6	100,0
	3,15	100,0
	2	100,0
	0,5	100,0
	0,25	100,0
	0,10	100,0
	0,063	96,5
	0,063	96,50
	0,040	89,70
	0,030	81,70
	0,022	72,11
	0,017	62,52
	0,013	52,92
	0,009	43,33
	0,007	36,94
	0,005	32,14
	0,004	28,94
	0,003	25,74
	0,001	22,55



Clasificarea pamantului dupa SR EN ISO 14688-1:2018 / SR EN ISO 14688-2:2018

Tip pamant / Soil group	Tip fractiune	%	C _u (Un)	C _c	Forma curbei granulometrice / Shape of grading curve	C _u (Un)	C _c
Pamant fin / Fine	Argila	Cl	<3	<1	Foarte uniforma / Very uniform	#N/A	#####
	Praf	Si					
Pamant grosier / Coarse	Nisip	Sa	3---6	<1	Uniforma / Uniform	#N/A	#####
	Pietris	Gr	6---15	<1	Uniformitate medie / Medium uniformity		
Pamant foarte grosier / Very coarse	Bolovanis	Co	>15	1---3	Neuniforma / Non-uniform	#N/A	#####
			>15	<0,5	Discontinua / Gap graded		

Executat de / Performed by :
 ing. Nina IOSIF

Nina IOSIF

Sef Laborator / Laboratory head: Constanta ANDREI



COD PROBA 75 950

Raport de incercare nr. / Test report no. 75 951

**DETERMINAREA LIMITELOR DE PLASTICITATE /
DETERMINATION OF ATTEBERG LIMITS
STAS 1913/4-86**

Nr. de caderi ale cupei (N)	25	UMIDITATE NATURALA NATURAL MOISTURE STAS 1913/1-82			LIMITA DE CURGERE LIQUID LIMIT W _L %				LIMITA DE FRAMANTARE PLASTIC LIMIT W _P %		
Adancimea de patrundere a conului (S) mm	10				Metoda cu cupa						
					41	31	21	14			
PROBA UMEDA + TARA A (gr)		150,00			26,61	28,44	26,92	29,22	17,27	17,45	18,05
PROBA USCATA + TARA B (gr)		124,28			22,38	23,77	22,46	24,14	16,67	16,79	17,35
TARA C (gr)					11,52	12,54	12,30	13,11	12,97	12,86	13,14
A - B		25,72			4,23	4,67	4,46	5,08	0,60	0,66	0,69
B - C		124,28			10,86	11,23	10,16	11,03	3,71	3,94	4,22
W(%) = (A-B)/(B-C)*100		20,70			38,90	41,55	43,91	46,07	16,23	16,64	16,46
W(%) MEDIU		20,70			42,96				16,45		

DESCRIEREA PROBEI /
DESCRIPTION OF THE SOIL:

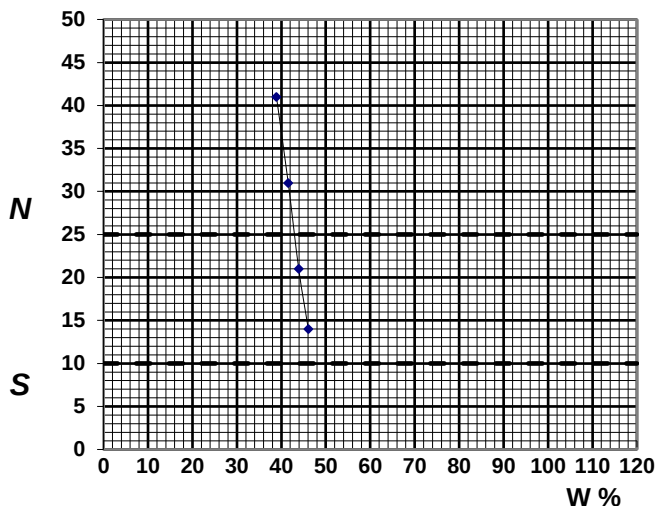
Argila prafoasa cafeniu-negricioasa cu FeO plastic vartoasa / stiff consistency

SR EN ISO 14688/1/2-2018

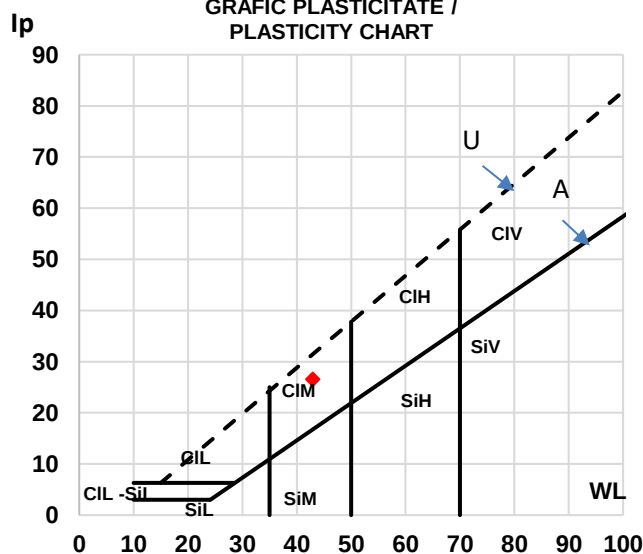
Pamant fin cu plasticitate medie / Fine soil, medium plasticity

CIM

GRAFICUL LIMITEI SUPERIOARE DE PLASTICITATE
UPPER LIMIT OF PLASTICITY CHART



GRAFIC PLASTICITATE /
PLASTICITY CHART



					SR EN ISO 14688/2-2018		
LIMITA DE FRAMANTARE / PLASTIC LIMIT	W _P =	16,45	%	Tip pamant / Type of Soil	Plasticitate / Plasticity	Limita de curgere / Liquid limit	
UMIDIT. NATUR. / NATURAL MOISTURE	W =	20,70	%	Cl	Clay	Low	redusa
LIMITA DE CURGERE / LIQUID LIMIT	W _L =	42,96	%	Si	Silt	Medium	medie
INDICE DE PLASTICIT./PLASTICITY INDEX	I _P =W _L -W _P	26,51	%			Heigh	mare
INDICE DE CONSISTENȚĂ / CONSISTENCY INDEX	I _C = (W _L - W) / I _P	0,84				Very heigh	foarte mare
INDICE DE LICHIDITATE/ LIQUIDITY INDEX	I _L = (W - W _P) / I _P	0,16				O	organica

Executat de / Performed by: Laborant Emilia Dumitru

Data / Date: 17.12.2020

COD PROBA 75

951

Sef Laborator / Laboratory head: Constanta ANDREI



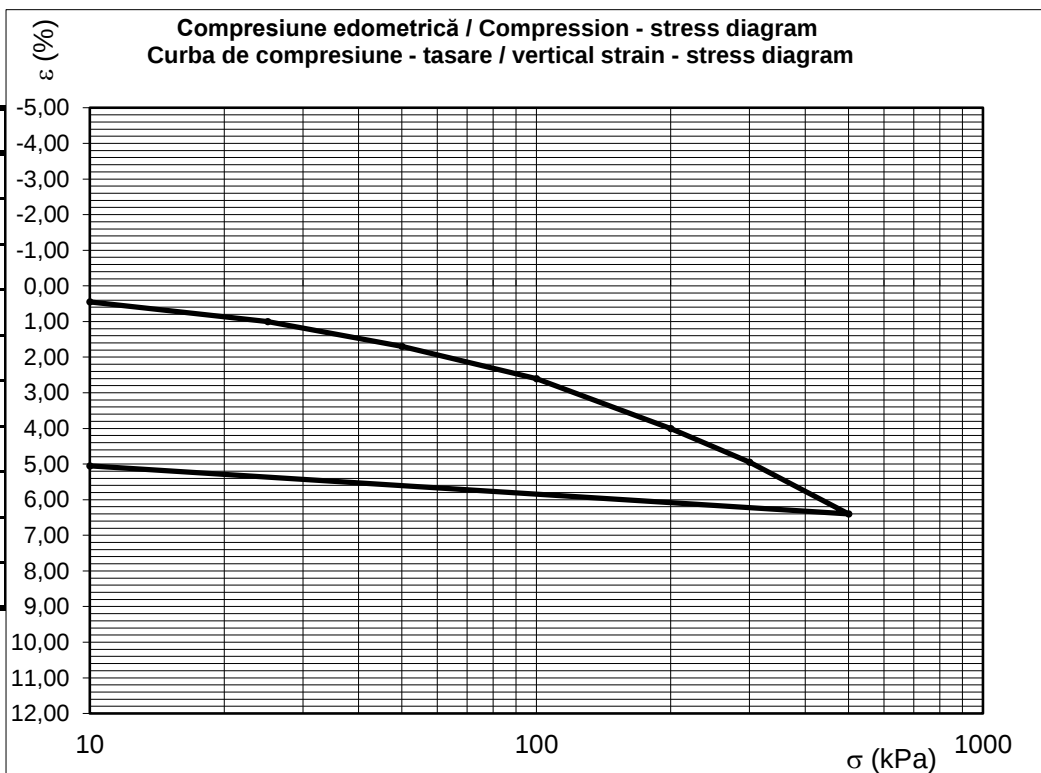
Raport de incercare nr. / Test report no. 75 952

DETERMINAREA COMPRESIBILITATII PAMANTURILOR PRIN INCERCAREA IN EDOMETRU

INCREMENTAL LOADING OEDOMETER TEST

STAS 8942/1-89

Indici fizici	INITIAL	FINAL
$m_u(g)$	164,04	162,04
$m_d(g)$	136,52	136,52
$V(cm^3)$	76,09	72,00
$w(%)$	20,16	18,69
$r(g/cm^3)$	2,16	2,25
$r_d(g/cm^3)$	1,79	1,90
$r_s(g/cm^3)$	2,67	2,67
$n(%)$	32,80	28,98
$e(-)$	0,488	0,408
$S(-)$	1,00	1,00



$s(kPa)$	$e(%)$	$M(kPa)$	$mv(1/kPa)$	$av(1/kPa)$
10	0,45			
25	1,00			
50	1,70			
100	2,60			
200	4,00			
300	4,95	10526,3	9,50E-05	1,41E-04
500	6,40	13793,1	7,25E-05	1,08E-04
10	5,05			

DESCRIEREA PROBEI /
DESCRIPTION OF THE SOIL:

Argila prafoasa cafeniu-negricioasa cu FeO

plastic vartoasa / stiff consistency

Executat de / Performed by:

ing. Nina IOSIF

COD PROBA 75 952

Data / Date: 17.12.2020

SEF LABORATOR / LABORATORY HEAD

Constanta ANDREI

