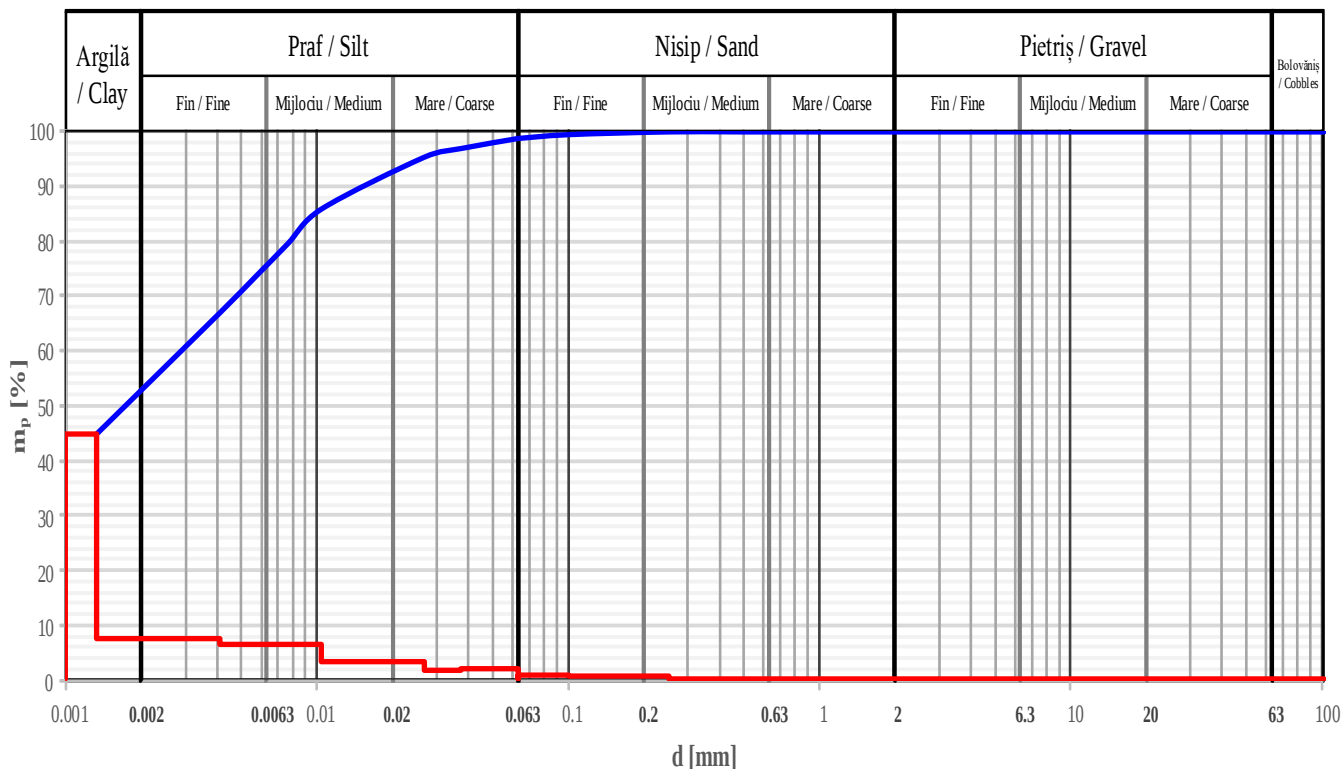


DCC-GEO-TEST CONSULT S.R.L.
 LABORATOR DE ANALIZE ȘI ÎNCERCĂRI
 ÎN CONSTRUCȚII - GRAD II
 Autorizație nr. 2940 din 15.08.2014/24.08.2018

Amplasament / Location: Reabilitarea liniei de cale ferata Roman – Iasi - Frontiera
 Forajul/Borehole: POD 19
 Proba/Sample: PC19
 Adancimea/Depth(m): 19,00

Raport de incercare nr. / Test report no. 75 883



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 / Clay (Cl)								cenusie		Un = #N/A	
Conform SR EN ISO 14688/2- 2005, la cerinta beneficiar ului	Pamant fin / Fine				Pamant grosier / Coarse						Pamant foarte grosier /
	Argila (Cl)	Praf (Si)			Nisip (Sa)			Pietris (Gr)			Bolovanis (Co)
		Fin (fSi)	Mediu (mSi)	Mare (cSi)	Fin (fSa)	Mediu (mSa)	Mare (cSa)	Fin (fGr)	Mediu (mGr)	Mare (cGr)	
		50	49			1			0		
	< 0,002	< 0,0063	< 0,02	< 0,063	< 0,2	< 0,63	< 2	< 6,3	< 20	< 63	< 200mm
%	50	25	18	6	1	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: 08.01.2021

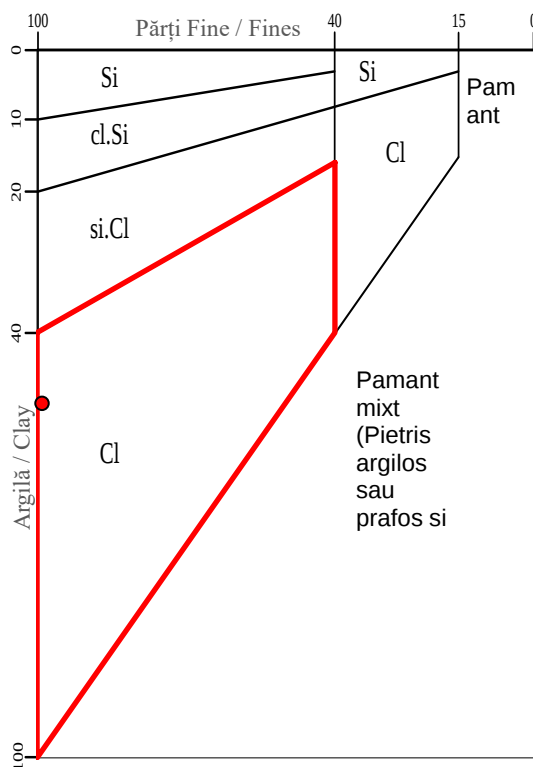
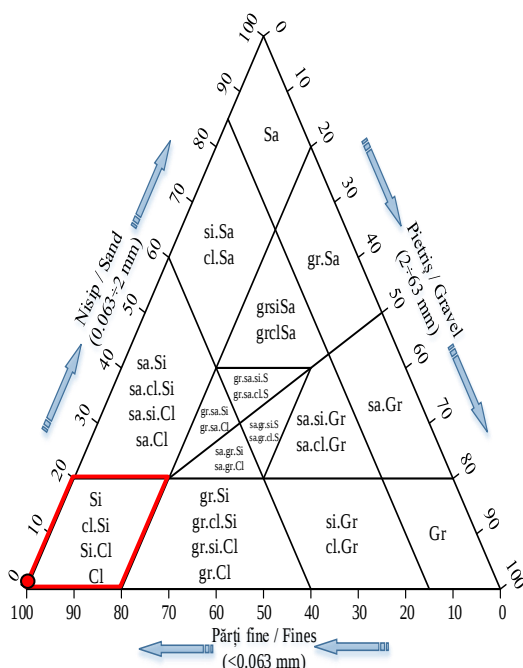
COD PROBA 75 883

Raport de incercare nr. / Test report no. 75 883

	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	99,5
	0,063	98,8
	0,063	98,80
	0,037	96,96
	0,027	95,37
	0,019	92,21
	0,014	89,05
	0,010	85,89
	0,008	79,56
	0,006	73,24
	0,004	66,91
	0,003	59,53
	0,002	52,15
	0,001	44,77

CERNERE

SEDIMENTARE



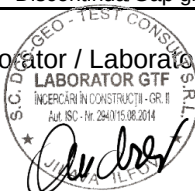
Clasificarea pamantului dupa SR EN ISO 14688-1:2018 / SR EN ISO 14688-2:2018

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	50	<3	< 1	Foarte uniforma / Very uniform	#N/A	#####
	Praf	Si	49					
Pamant grosier / Coarse	Nisip	Sa	1	3---6	< 1	Uniforma / Uniform		
	Pietris	Gr	0	6---15	< 1	Uniformitate medie / Medium uniformity		
Pamant foarte grosier / Very coarse	Bolovanis	Co		>15	1---3	Neuniforma / Non-uniform		
				>15	<0,5	Discontinua/Gap graded		

Executat de / Performed by :
 ing. Nina IOSIF

Nina IOSIF

Sef Laborator / Laboratory head: Constanta ANDREI



COD PROBA 75 883

Raport de incercare nr. / Test report no. 75 884

**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						
					46	32	23	16			
PROBA UMEDA + TARA A (gr)		150,00			30,80	32,77	30,88	33,48	19,14	19,33	19,95
PROBA USCATA + TARA B (gr)		123,68			23,56	24,95	23,64	25,32	18,32	18,44	19,00
TARA C (gr)					13,41	14,43	14,19	15,00	14,86	14,75	15,03
A - B		26,32			7,24	7,82	7,24	8,16	0,82	0,89	0,95
B - C		123,68			10,16	10,53	9,46	10,33	3,47	3,70	3,98
W(%) = (A-B)/(B-C)*100		21,28			71,30	74,25	76,57	78,99	23,69	24,10	23,98
W(%) MEDIU		21,28			76,05				23,92		

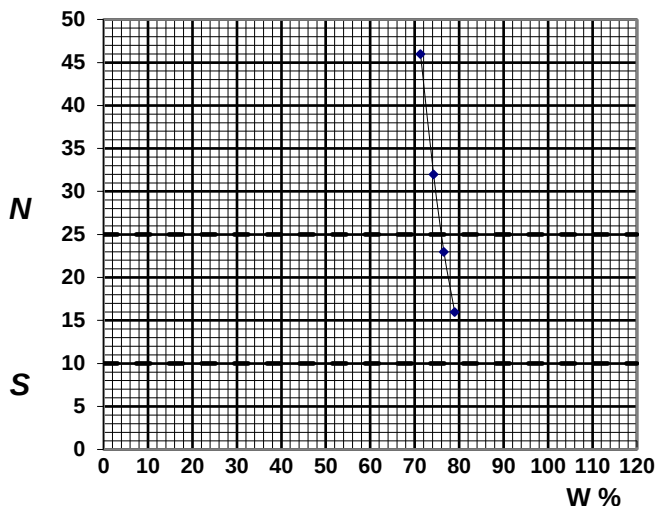
DESCRIEREA PROBEI /
DESCRIPTION OF THE SOIL:

Argila cenusie tare / very stiff consistency

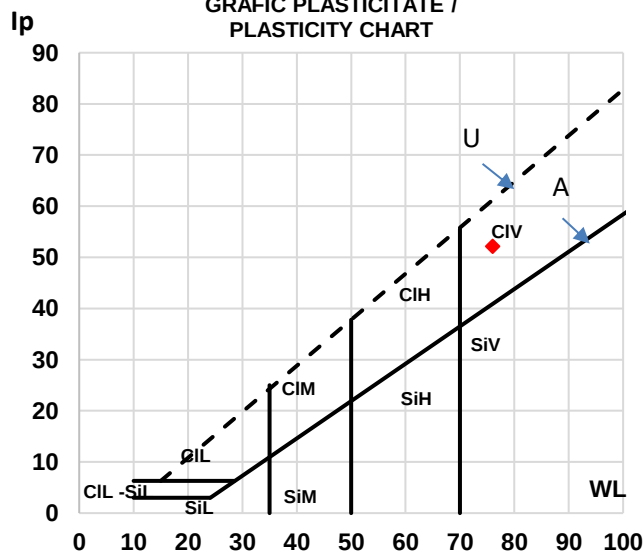
SR EN ISO 14688/1/2-2018 Pamant fin cu plasticitate foarte mare / Fine soil, very high plasticity

CIV

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 =	23,92	%		Tip pamant / Type of Soil	Plasticitate / Plasticity	Limita de curgere / Liquid limit		
UMIDIT. NATUR. / NATURAL MOISTURE	W =	21,28	%		Cl	Clay	Low	redusa	<35
LIMITA DE CURGERE / LIQUID LIMIT	W _L =	76,05	%		Si	Silt	Medium	medie	35----50
INDICE DE PLASTICIT./PLASTICITY INDEX	I _P =W _L -W _P	52,13	%				Heigh	mare	50----70
INDICE DE CONSISTENȚĂ / CONSISTENCY INDEX	I _C = (W _L - W) / I _P	1,05					Very heigh	foarte mare	>70
INDICE DE LICHIDITATE/ LIQUIDITY INDEX	I _L = (W - W _P) / I _P	-0,05					O	organici	

Executat de / Performed by: Laborant Emilia Dumitru

Data / Date: 08.01.2021

COD PROBA 75

884

Sef Laborator / Laboratory head: Constanta ANDREI



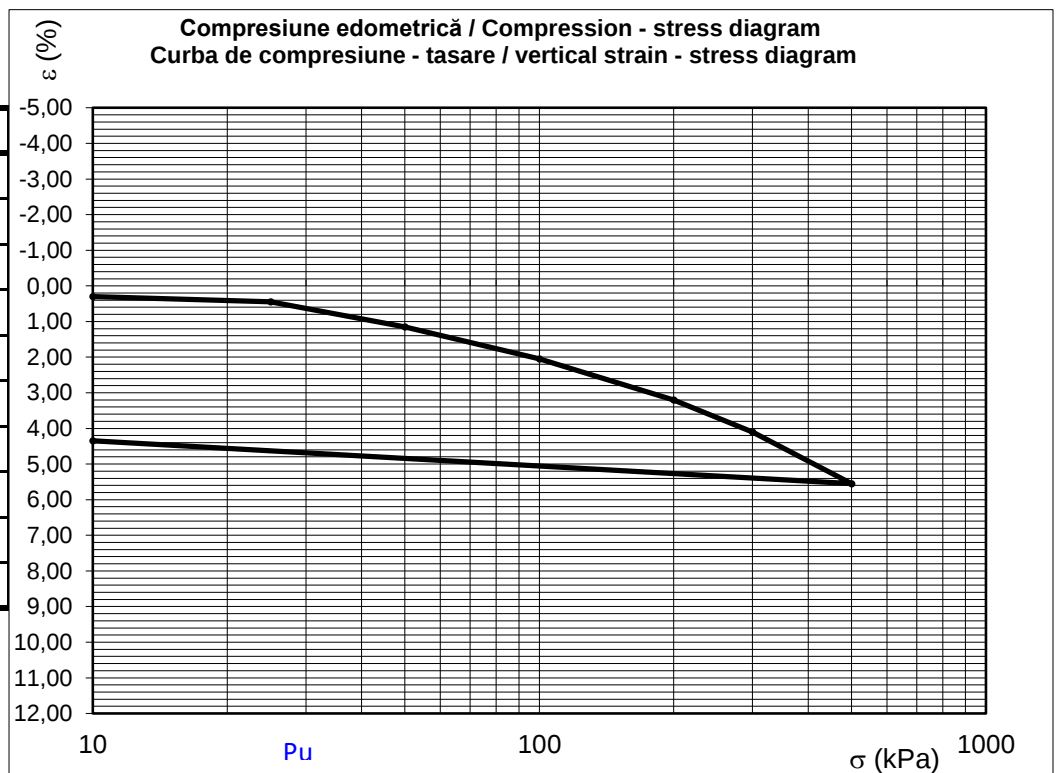
Raport de incercare nr. / Test report no. 75 885

DETERMINAREA COMPRESIBILITATII PAMANTURILOR PRIN INCERCAREA IN EDOMETRU

INCREMENTAL LOADING OEDOMETER TEST

STAS 8942/1-89

Indici fizici	INITIAL	FINAL
$m_u(g)$	166,51	165,10
$m_d(g)$	136,18	136,18
$V(cm^3)$	76,31	72,65
$w(%)$	22,27	21,24
$r(g/cm^3)$	2,18	2,27
$r_d(g/cm^3)$	1,78	1,87
$r_s(g/cm^3)$	2,72	2,72
$n(%)$	34,39	31,09
$e(-)$	0,524	0,451
$S(-)$	1,00	1,00



$s(kPa)$	$e(%)$	$M(kPa)$	$mv(1/kPa)$	$av(1/kPa)$
10	0,30			
25	0,45			
50	1,15			
100	2,05			
200	3,20			
300	4,10	11111,1	9,00E-05	1,37E-04
500	5,55	13793,1	7,25E-05	1,11E-04
10	4,35			

DESCRIEREA PROBEI /
DESCRIPTION OF THE SOIL:

Argila cenusie

tare / very stiff consistency

Executat de / Performed by:

ing. Nina IOSIF

COD PROBA 75 885

Data / Date: 08.01.2021

SEF LABORATOR / LABORATORY HEAD

Constanta ANDREI

