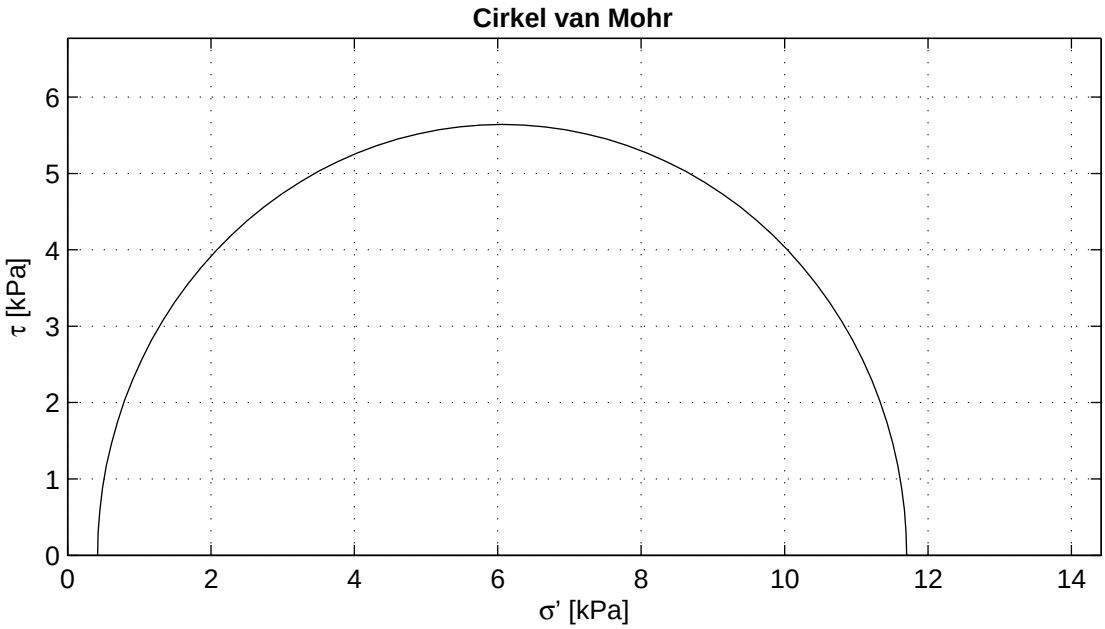


Cirkels criterium	maximale t
c_u [kPa]	5.6
c_u at 25% strain [kPa]	5.5
Nummer Boring	B1
Monsternaam	1
Diepte NAP [m]	−3.34/−3.54
NEN5104 code	Ks1 plantenresten
m_i [g]	684.8
D_i [mm]	67.2
h_i [mm]	144.5
w_i [%]	138.1
$\rho_{i,bulk}$ [kg/m^3]	1336
$\rho_{i,dry}$ [kg/m^3]	561
Grondsoort	klei

Voor beproeving

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datum	get.
2016−07−18	konstadi

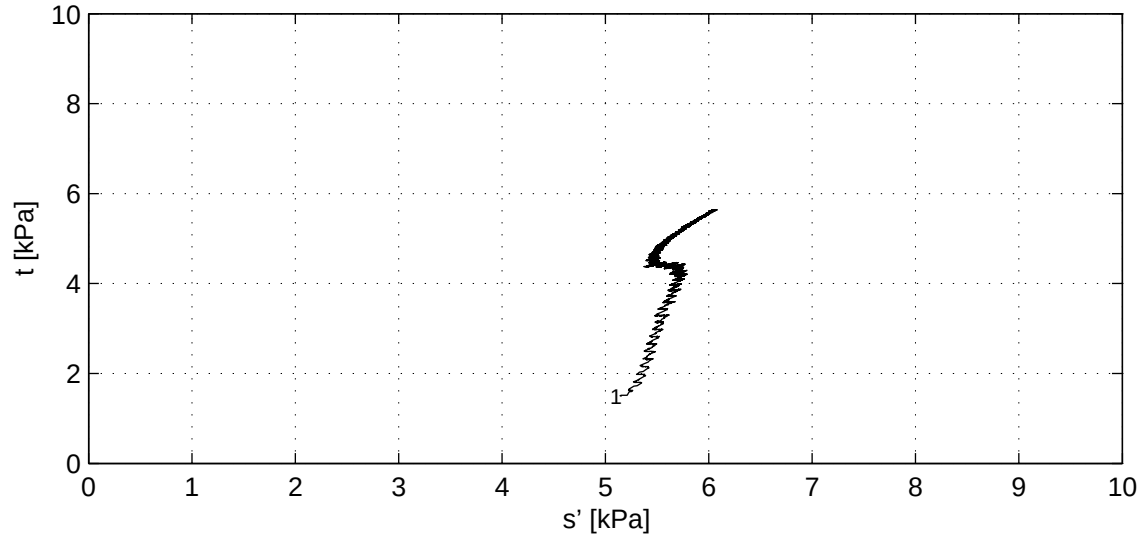
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_1

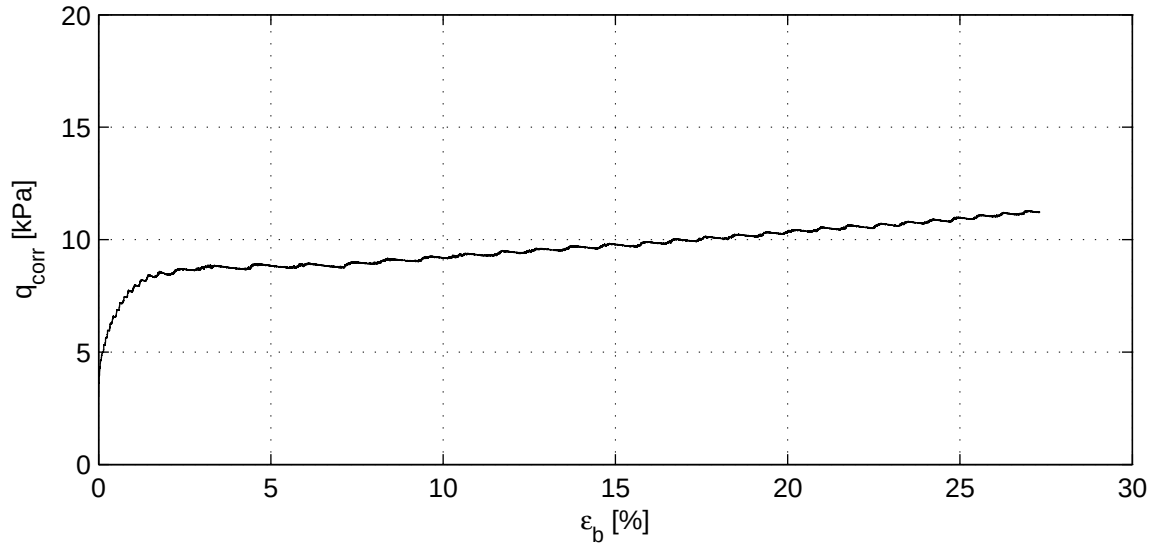
project	Versie
1230694.0	1.4

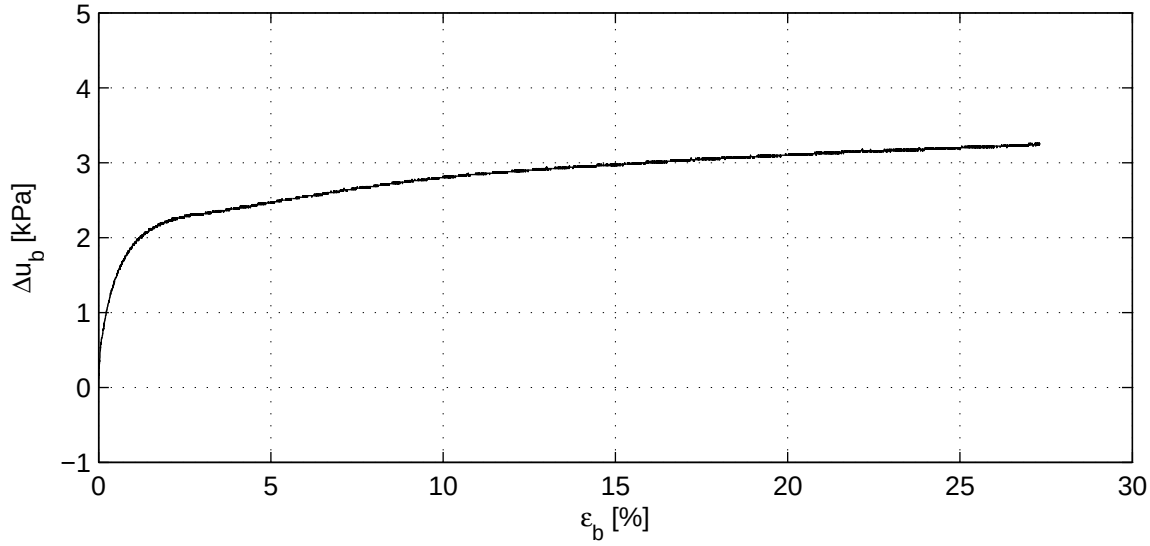
CU Triaxiaalproef (Singlestage) volgens NEN 5117

bijlage	pag.
TX1	1

*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

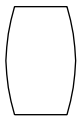






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Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_1				project 1230694.0	Versie 1.4
CU Triaxiaalproef (Singlestage) volgens NEN 5117				bijlage TX1	pag. 2

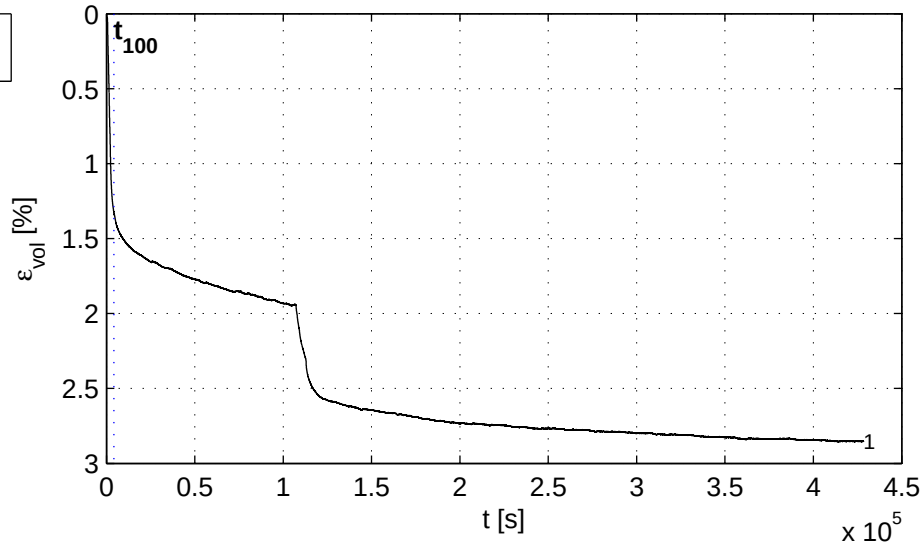
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

	Belastingsfase	1	2	3
Verzadigingsfase	B_0 [−]	0.99		
	B_1 [−]	1.00		
Consolidatiefase	$\sigma'_{1,c}$ [kPa]	7.1		
	t_{100} [min]	69		
	h_c [mm]	142.30		
	V_c [cm^3]	497.89		
	$\rho_{n,c}$ [kg/m^3]	1346		
	w_c [%]	133.0		
	u_{bk} [kPa]	299		
	P [−]	2.20		
	v_{max} [%/h]	2.0		
	v [%/h]	0.95		
Belastingsfase	Corr method	Deltares		
	Stopcriterium	ε_b 15%		
	q_u [kPa]	11.3		
	f_{undr} [kPa]	5.6		
Na beproeving	$\varepsilon_{b,50}$ [%]	0.62		
	E_{50} [MPa]	0.7		
	w_e [%]	133.0		
	Bezwijkfiguur			

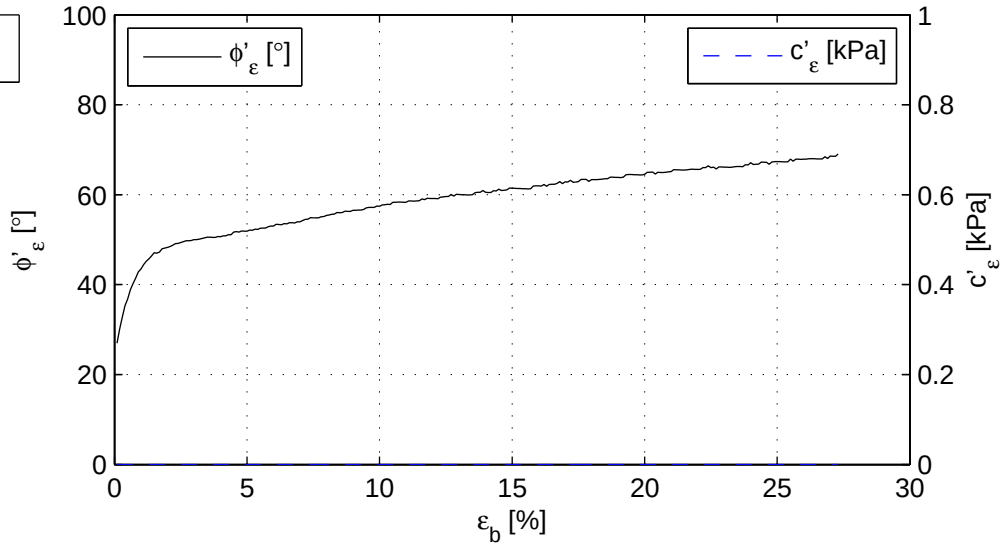
Verticale rek [%]	s' [kPa]			t [kPa]				c_u [kPa]
2.0	5.7			4.2				4.2
5.0	5.6			4.4				4.4
10.0	5.5			4.6				4.6
t_{max} [kPa]	6.1			5.6				5.6

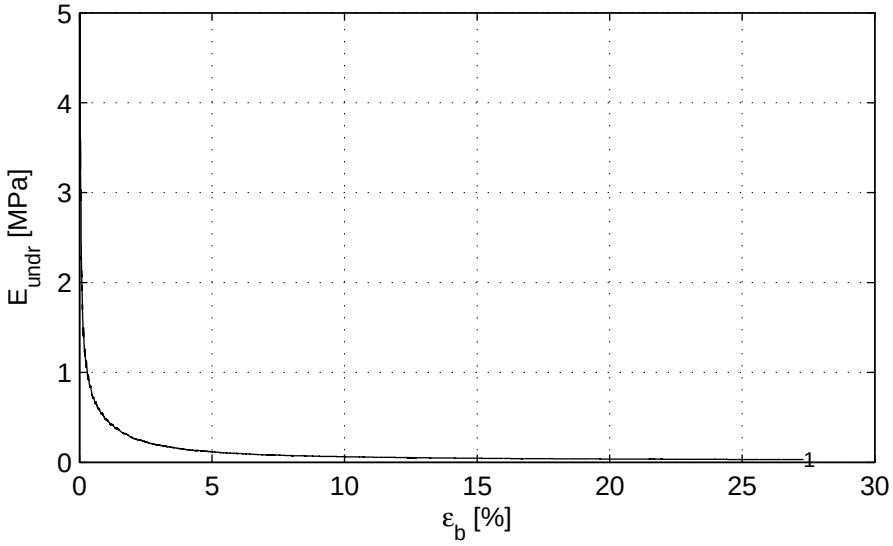
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

Consolidatiefase



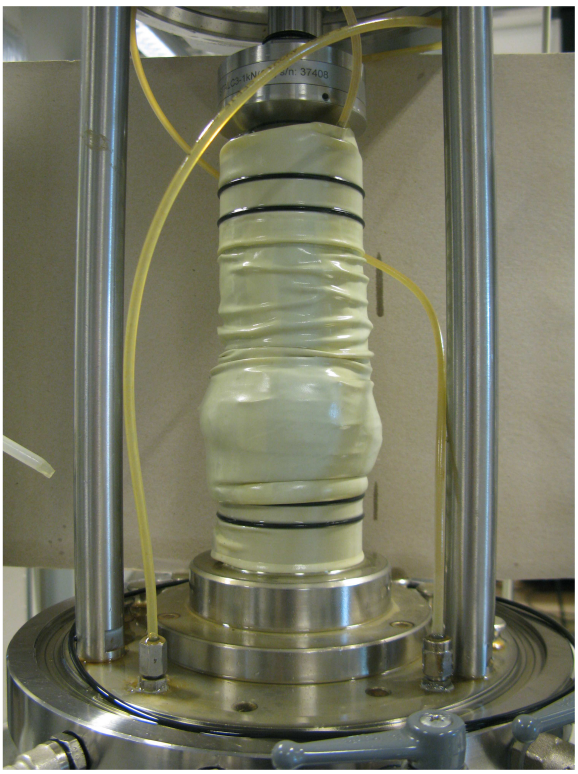
Belastingsfase



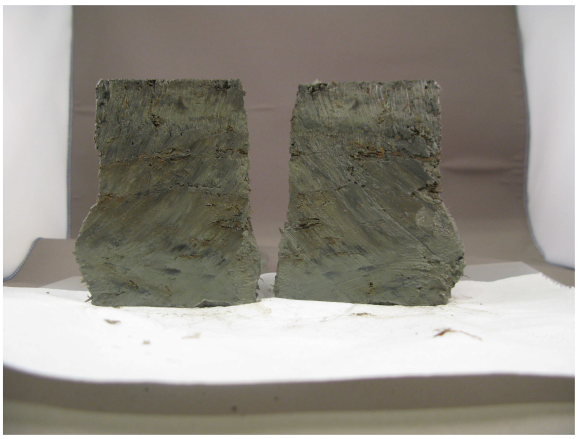


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Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_1				project 1230694.0	Versie 1.4
CU Triaxiaalproef (Singlestage) volgens NEN 5117				bijlage TX1	pag. 4

*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

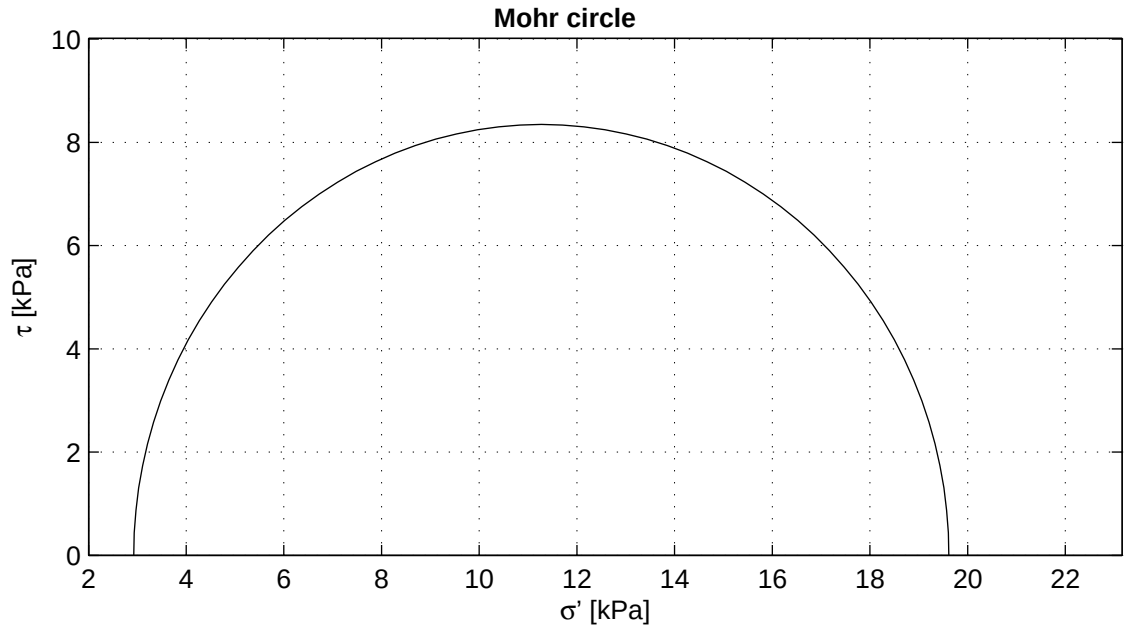








*) Gecontroleerd en vrijgegeven door grw op 2016-07-26



Criterion	maximale t
c_u [kPa]	8.3
c_u at 25% strain [kPa]	7.1
Nummer Boring	B1
Sample name	2
Depth NAP [m]	−4.45/−4.65
NEN5104 code	Ks1
m_i [g]	698.2
D_i [mm]	66.8
h_i [mm]	141.5
w_i [%]	106.6
$\rho_{i,bulk}$ [kg/m^3]	1408
$\rho_{i,dry}$ [kg/m^3]	681
Material	Clay

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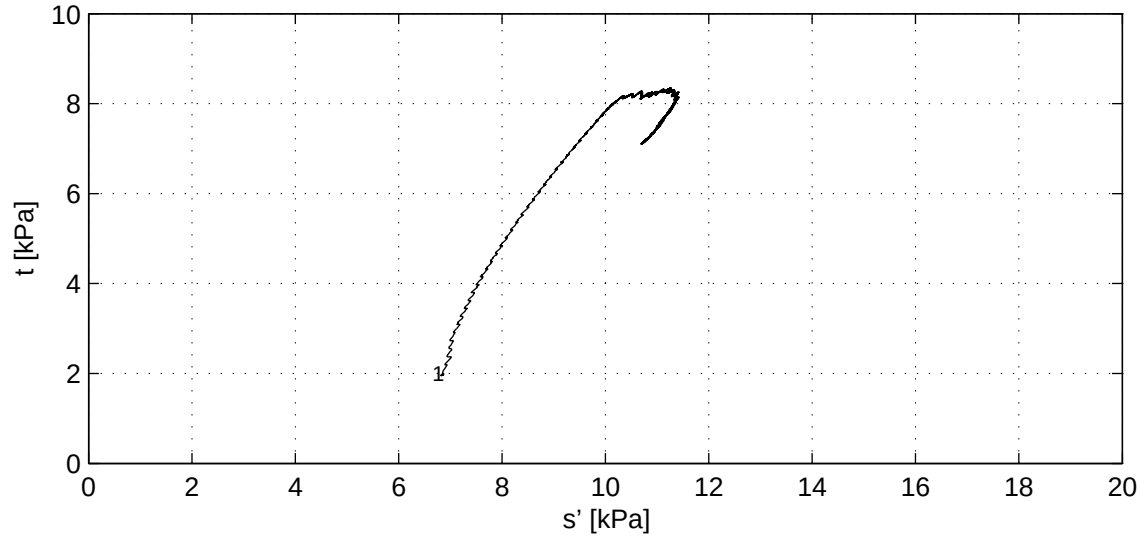
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_2

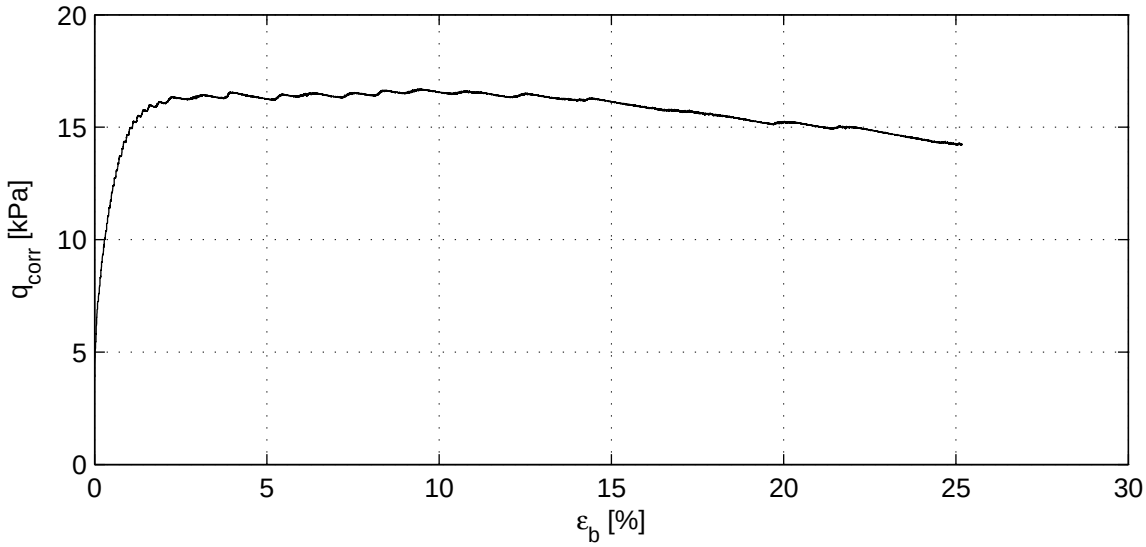
project	Version
1230694.0	1.4

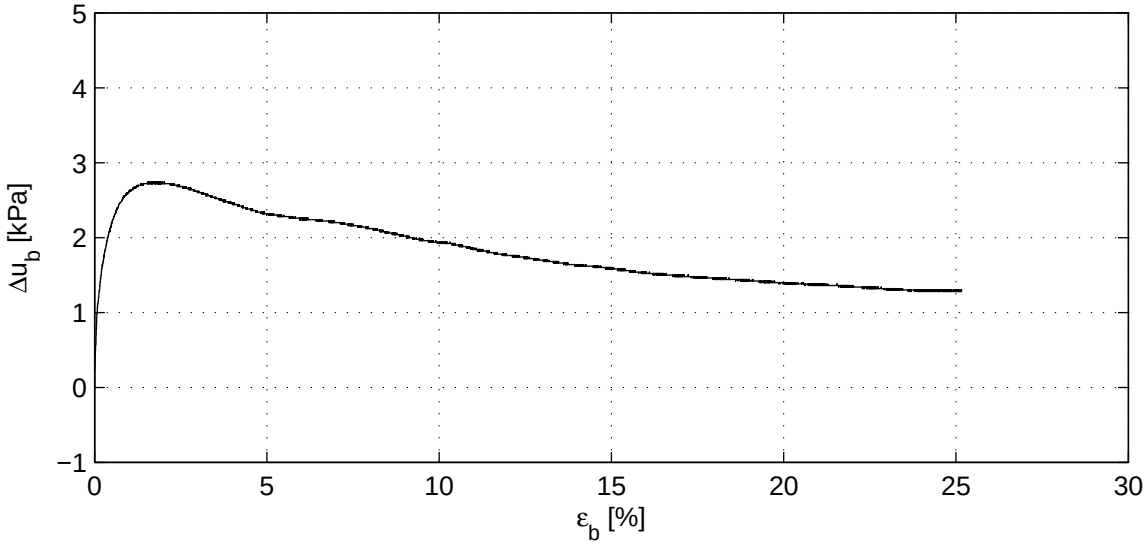
CU Triaxiaalproef (Singlestage) volgens NEN 5117

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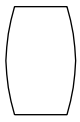
*) Gecontroleerd en vrijgegeven door grw op 2016-07-28







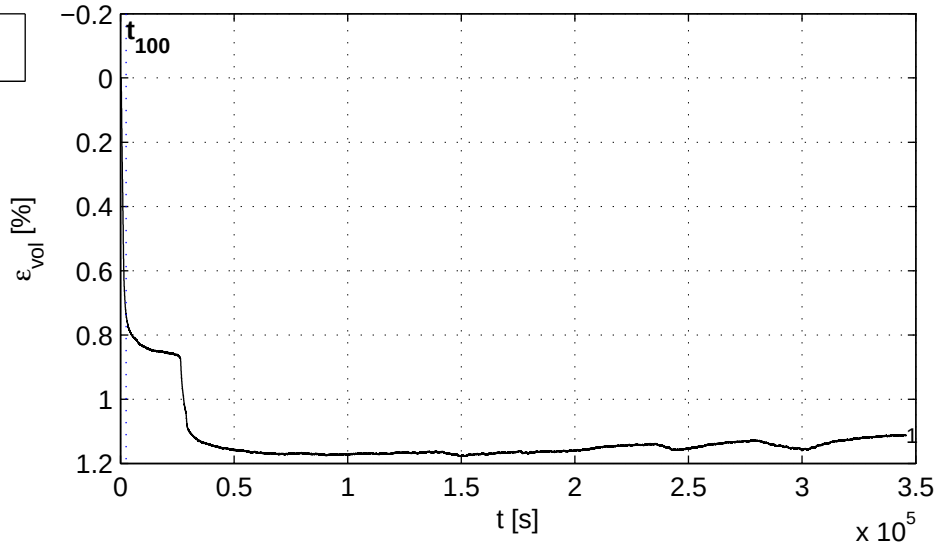
*) Gecontroleerd en vrijgegeven door grw op 2016-07-28

	Loading stage	1	2	3
Saturation stage	B_0 [−]	0.99		
	B_1 [−]	1.00		
Consolidation stage	$\sigma'_{1,c}$ [kPa]	9.3		
	t_{100} [min]	41		
	h_c [mm]	140.52		
	V_c [cm^3]	490.39		
	$\rho_{n,c}$ [kg/m^3]	1413		
	w_c [%]	105.0		
	u_{bk} [kPa]	299		
	P [−]	2.20		
	v_{max} [%/h]	3.3		
	v [%/h]	0.97		
Shear stage	Corr method	Deltares		
	Stop criterion	ε_b 15%		
	q_u [kPa]	16.7		
	f_{undr} [kPa]	8.3		
After testing	$\varepsilon_{b,50}$ [%]	0.32		
	E_{50} [MPa]	2.0		
	w_e [%]	105.0		
	Fail figure			

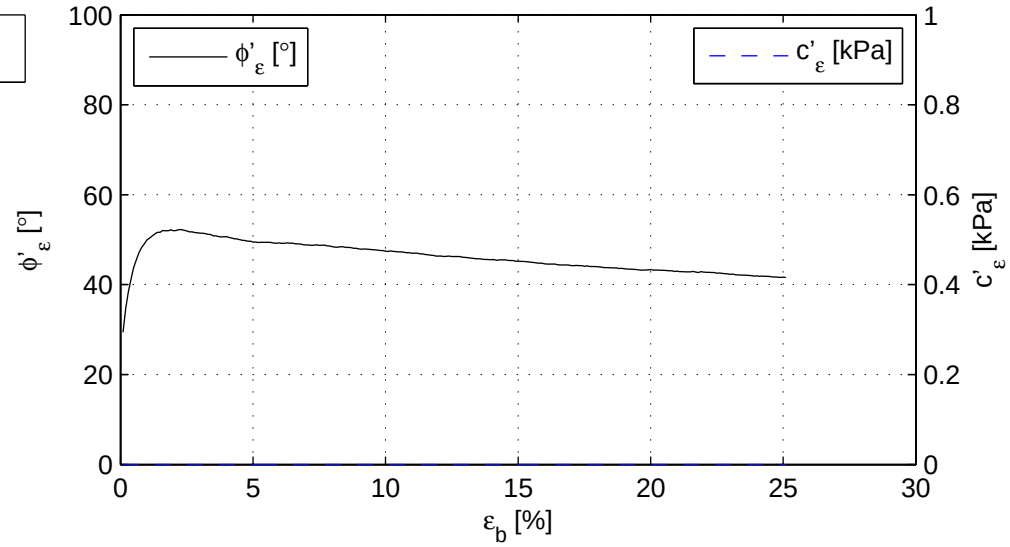
Vertical strain [%]	s' [kPa]			t [kPa]				c_u [kPa]
2.0	10.2			8.0				8.0
5.0	10.7			8.1				8.1
10.0	11.2			8.3				8.3
t_{max} [kPa]	11.3			8.3				8.3

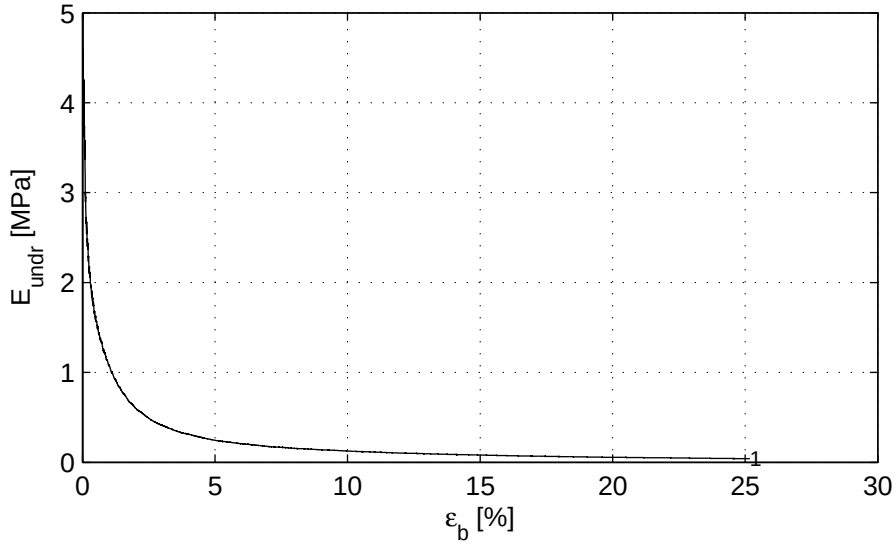
*) Gecontroleerd en vrijgegeven door grw op 2016-07-28

Consolidation st..



Shear stage





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Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_2			project 1230694.0	Version 1.4
CU Triaxiaalproef (Singlestage) volgens NEN 5117			appendix TX2	page 4

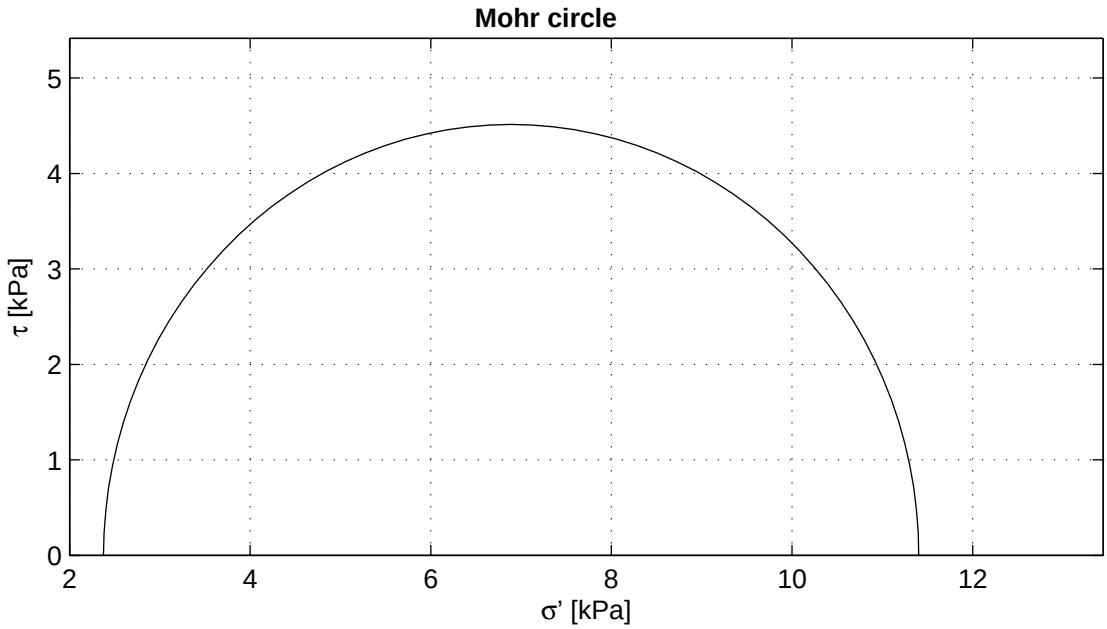
*) Gecontroleerd en vrijgegeven door grw op 2016-07-28







*) Gecontroleerd en vrijgegeven door grw op 2016-07-28



Criterion	maximale t
c_u [kPa]	4.5
Eindwaarde c_u [kPa]	3.5
Nummer Boring	B2
Sample name	3
Depth NAP [m]	−3.20/−3.40
NEN5104 code	Ks1
m_i [g]	682.4
D_i [mm]	66.6
h_i [mm]	142.0
w_i [%]	113.5
$\rho_{i,bulk}$ [kg/m^3]	1379
$\rho_{i,dry}$ [kg/m^3]	646
Material	Clay

Start testing

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2016−07−20	konstadi

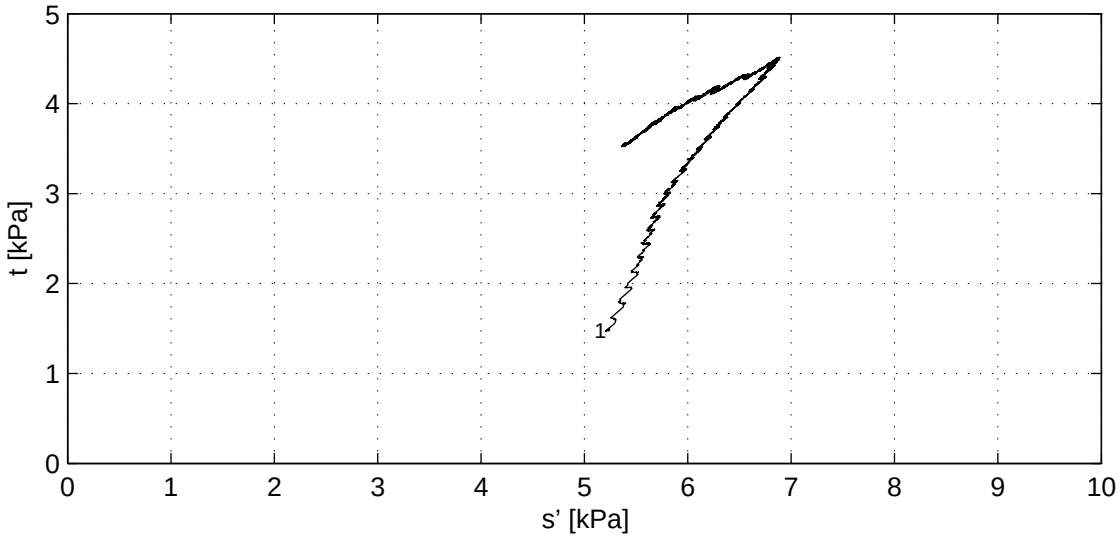
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_3

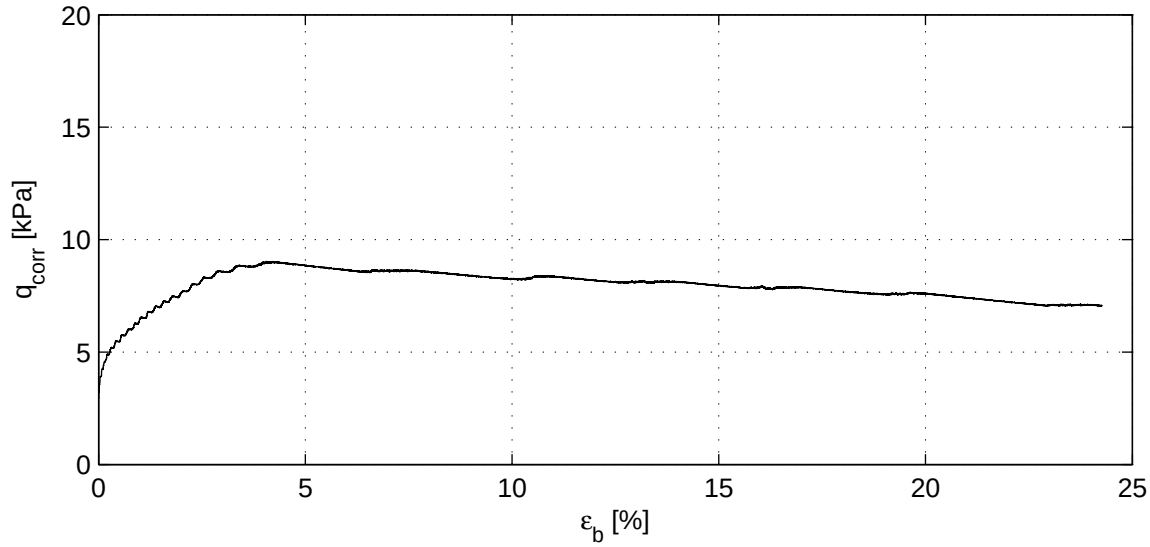
project	Version
1230694.0	1.4

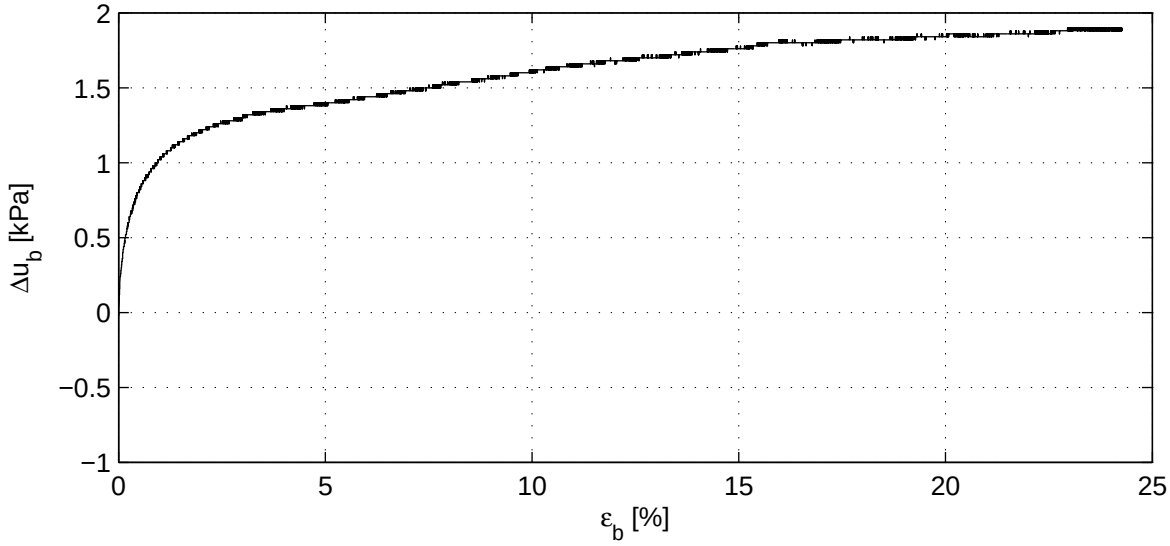
CU Triaxiaalproef (Singlestage) volgens NEN 5117

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date	signed
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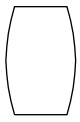
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_3

project	Version
1230694.0	1.4

CU Triaxiaalproef (Singlestage) volgens NEN 5117

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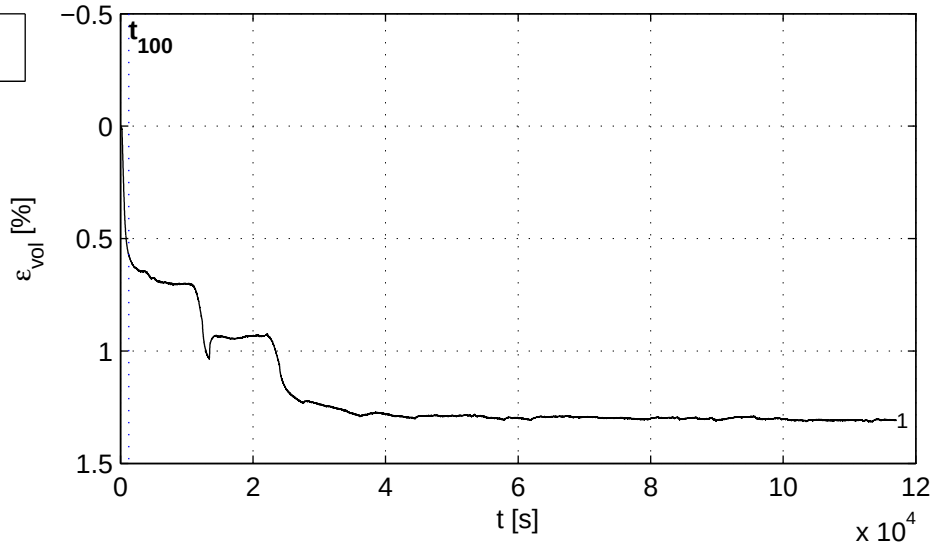
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

	Loading stage	1	2	3
Saturation stage	B_0 [−]	0.99		
	B_1 [−]	1.00		
Consolidation stage	$\sigma'_{1,c}$ [kPa]	5.3		
	t_{100} [min]	21		
	h_c [mm]	140.62		
	V_c [cm^3]	488.21		
	$\rho_{n,c}$ [kg/m^3]	1384		
	w_c [%]	111.5		
	u_{bk} [kPa]	300		
	P [−]	2.20		
	v_{max} [%/h]	6.5		
	v [%/h]	0.97		
Shear stage	Corr method	Deltares		
	Stop criterion	ε_b 15%		
	q_u [kPa]	9.0		
	f_{undr} [kPa]	4.5		
After testing	$\varepsilon_{b,50}$ [%]	0.71		
	E_{50} [MPa]	0.4		
	w_e [%]	111.5		
	Fail figure			

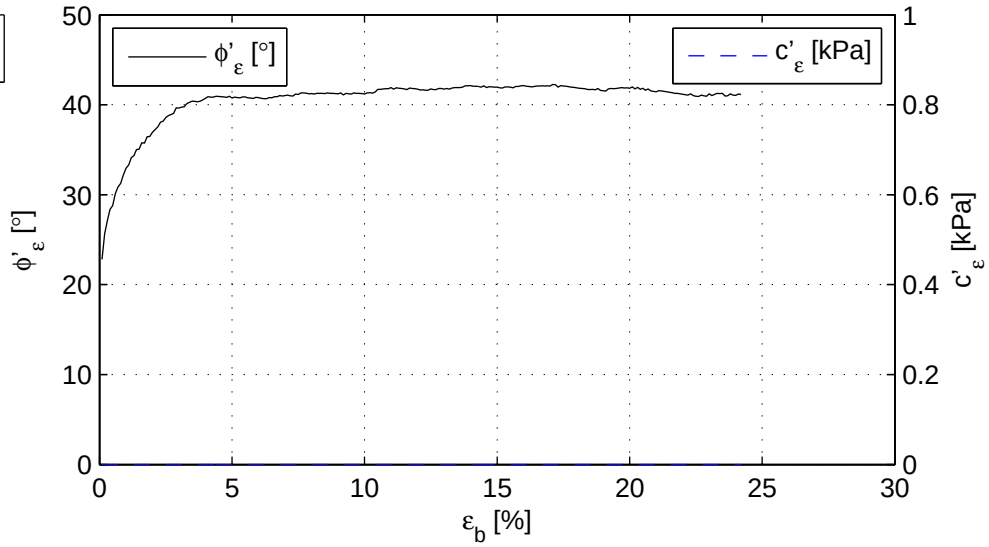
Vertical strain [%]	s' [kPa]			t [kPa]				c_u [kPa]
2.0	6.4			3.8				3.8
5.0	6.8			4.4				4.4
10.0	6.3			4.1				4.1
t_{max} [kPa]	6.9			4.5				4.5

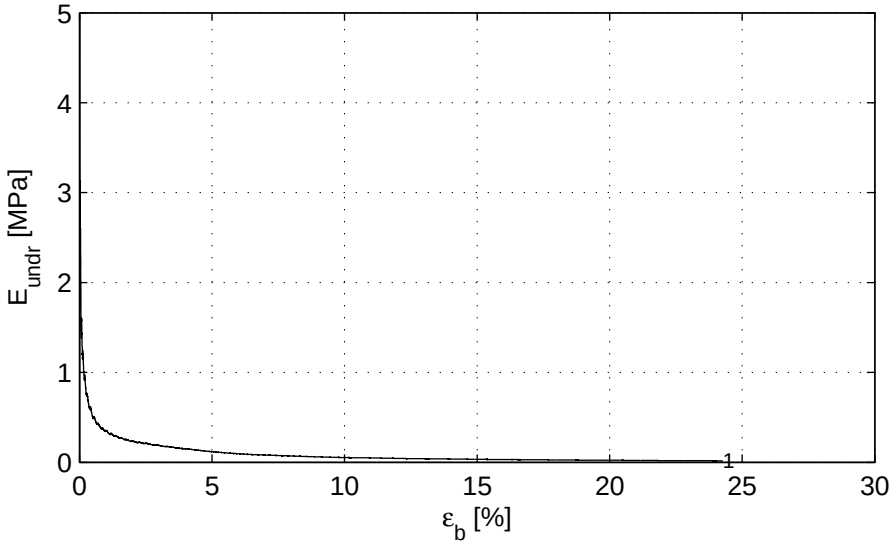
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

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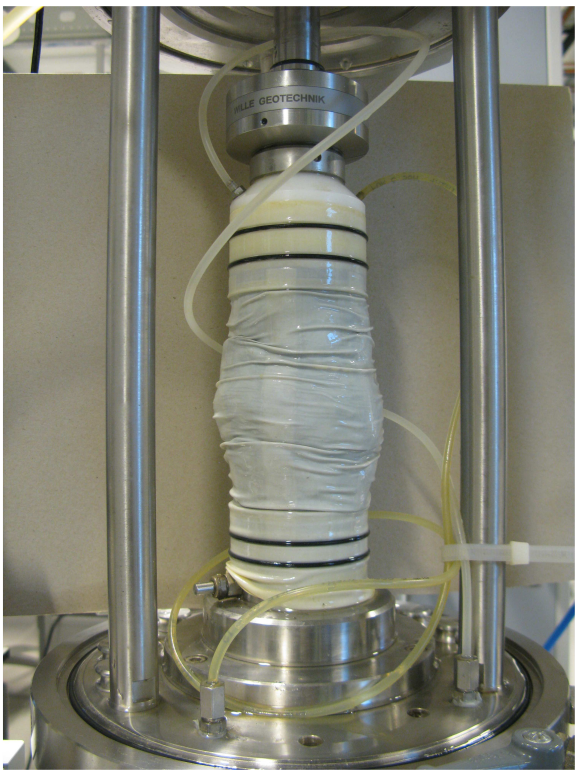


Shear stage

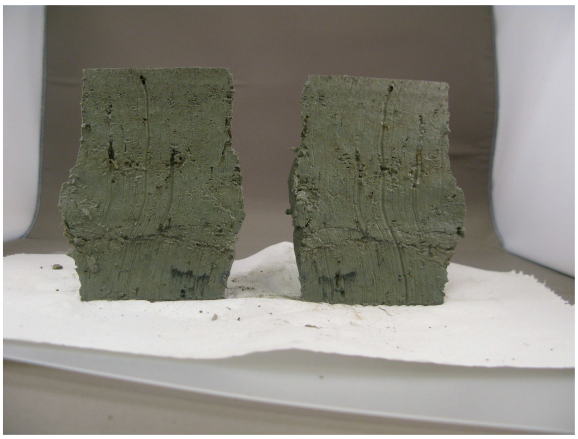




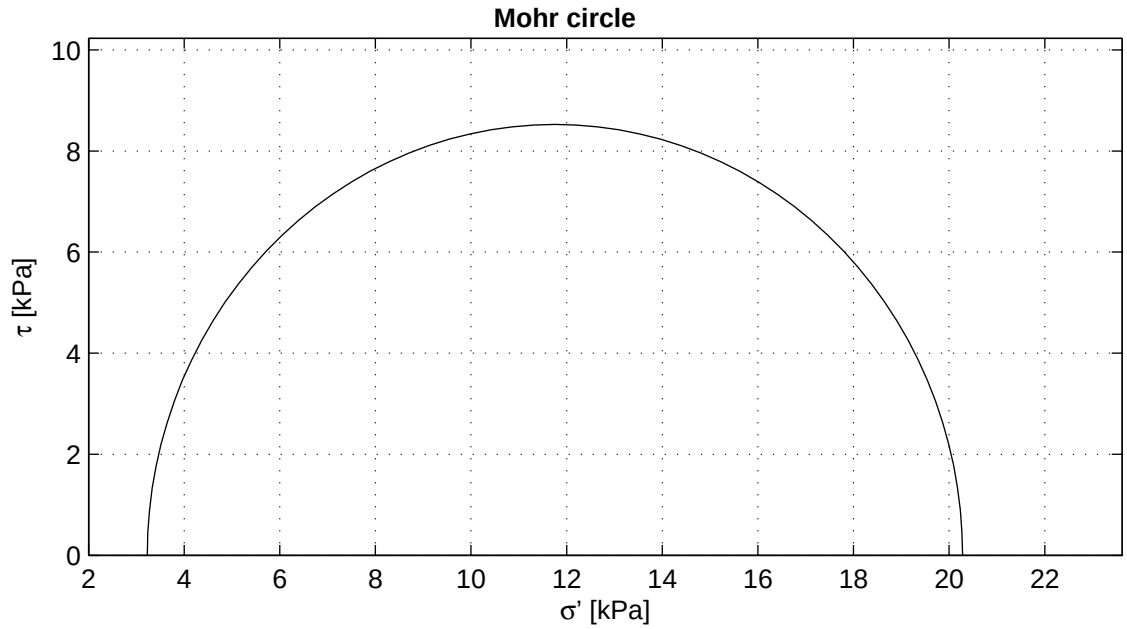
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26







*) Gecontroleerd en vrijgegeven door grw op 2016-07-26



Criterion	maximale t
c_u [kPa]	8.5
Eindwaarde c_u [kPa]	7.4
Nummer Boring	B2
Sample name	4
Depth NAP [m]	−3.99/−4.19
NEN5104 code	Ks1
m_i [g]	720.6
D_i [mm]	66.6
h_i [mm]	144.5
w_i [%]	98.2
$\rho_{i,bulk}$ [kg/m^3]	1431
$\rho_{i,dry}$ [kg/m^3]	722
Material	Clay

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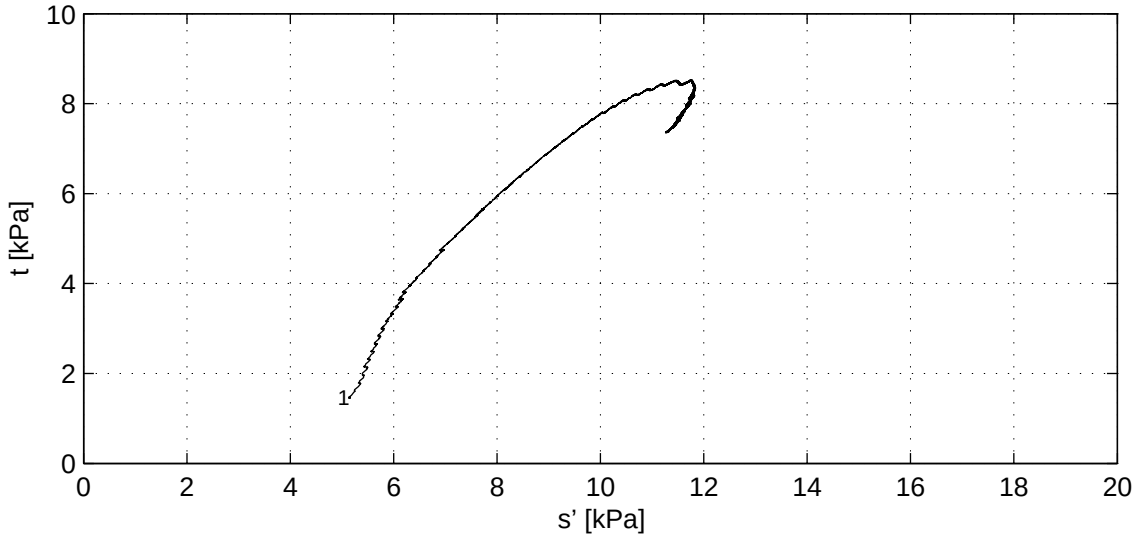
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_4

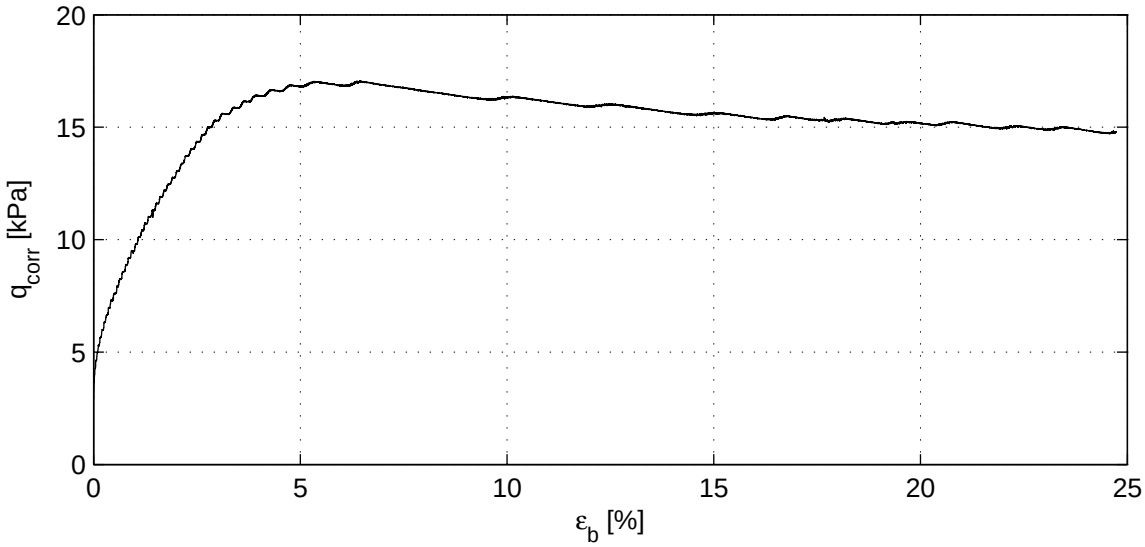
project	Version
1230694.0	1.4

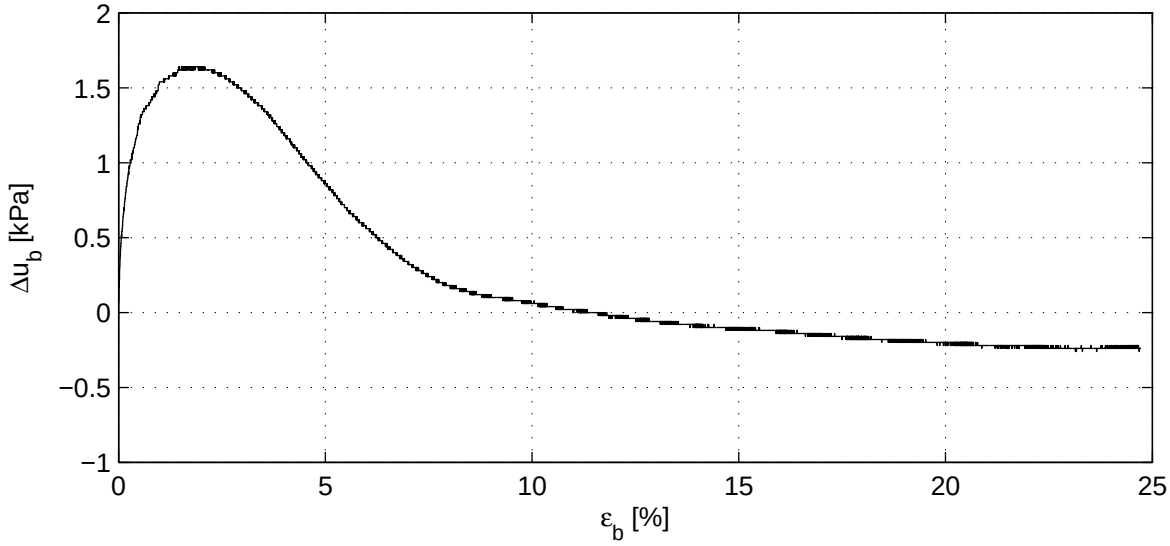
CU Triaxiaalproef (Singlestage) volgens NEN 5117

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date	signed
2016−07−20	konstadi

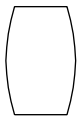
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_4

project	Version
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CU Triaxiaalproef (Singlestage) volgens NEN 5117

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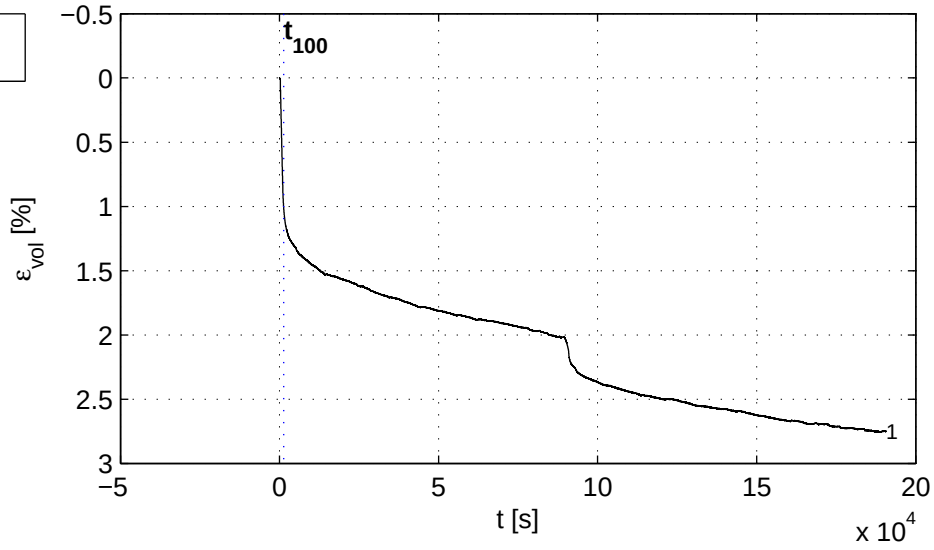
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

	Loading stage	1	2	3
Saturation stage	B_0 [−]	0.98		
	B_1 [−]	1.00		
Consolidation stage	$\sigma'_{1,c}$ [kPa]	5.3		
	t_{100} [min]	22		
	h_c [mm]	143.46		
	V_c [cm^3]	489.54		
	$\rho_{n,c}$ [kg/m^3]	1444		
	w_c [%]	94.4		
	u_{bk} [kPa]	300		
	P [−]	2.20		
	v_{max} [%/h]	6.3		
	v [%/h]	0.95		
Shear stage	Corr method	Deltares		
	Stop criterion	ε_b 15%		
	q_u [kPa]	17.1		
	f_{undr} [kPa]	8.5		
After testing	$\varepsilon_{b,50}$ [%]	1.07		
	E_{50} [MPa]	0.7		
	w_e [%]	94.4		
	Fail figure			

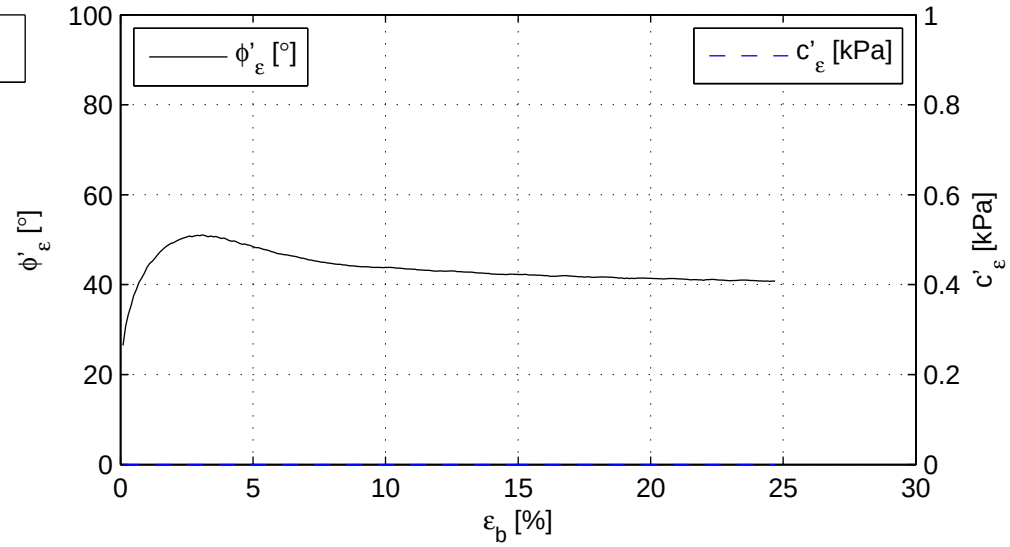
Vertical strain [%]	s' [kPa]			t [kPa]				c_u [kPa]
2.0	8.6			6.5				6.5
5.0	11.2			8.4				8.4
10.0	11.8			8.2				8.2
t_{max} [kPa]	11.8			8.5				8.5

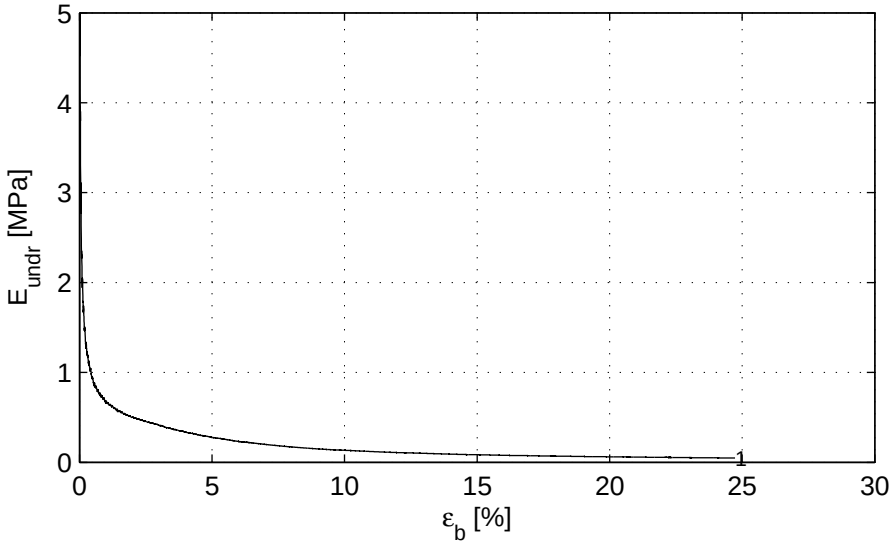
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

Consolidation st..



Shear stage





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date	signed
2016−07−20	konstadi

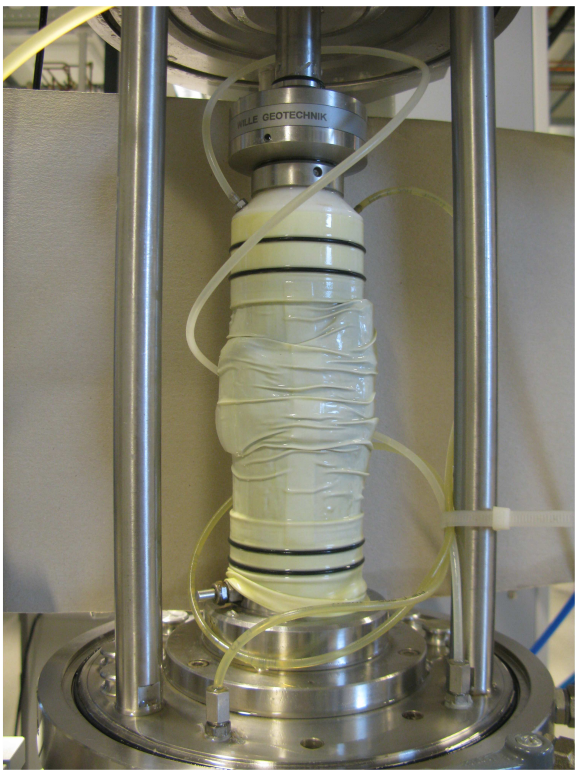
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_4

project	Version
1230694.0	1.4

CU Triaxiaalproef (Singlestage) volgens NEN 5117

appendix	page
TX4	4

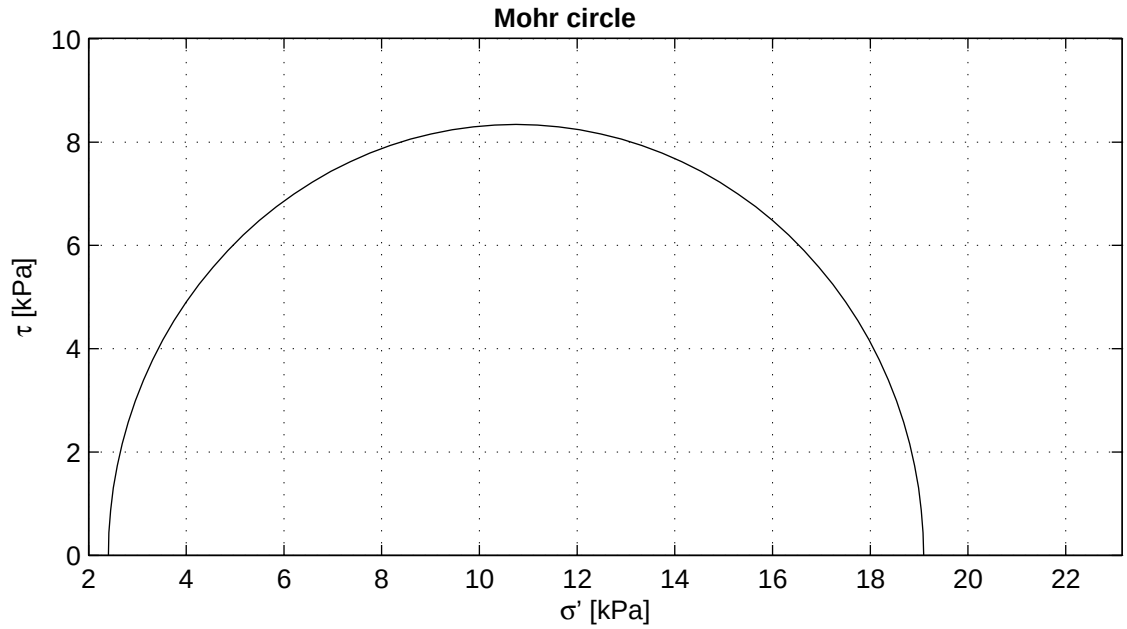
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26







*) Gecontroleerd en vrijgegeven door grw op 2016-07-26



Criterion	maximale t
c_u [kPa]	8.3
c_u at 25% strain [kPa]	5.7
Nummer Boring	B2
Sample name	5
Depth NAP [m]	−4.19/−4.39
NEN5104 code	Ks1
m_i [g]	689.0
D_i [mm]	67.0
h_i [mm]	143.8
w_i [%]	129.8
$\rho_{i,bulk}$ [kg/m^3]	1359
$\rho_{i,dry}$ [kg/m^3]	591
Material	Clay

Start testing

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date	signed
2016−07−20	konstadi

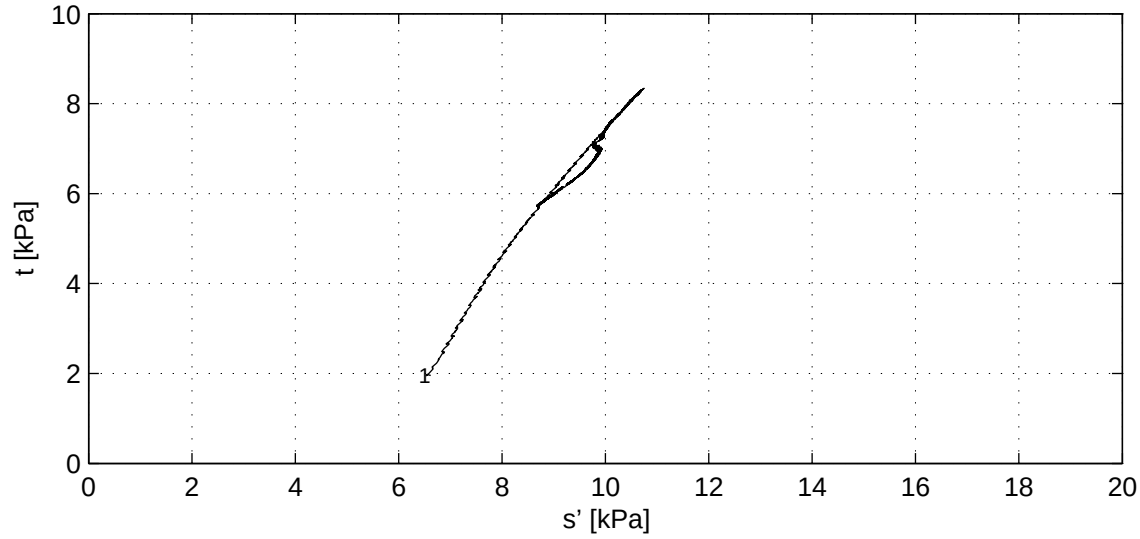
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_5

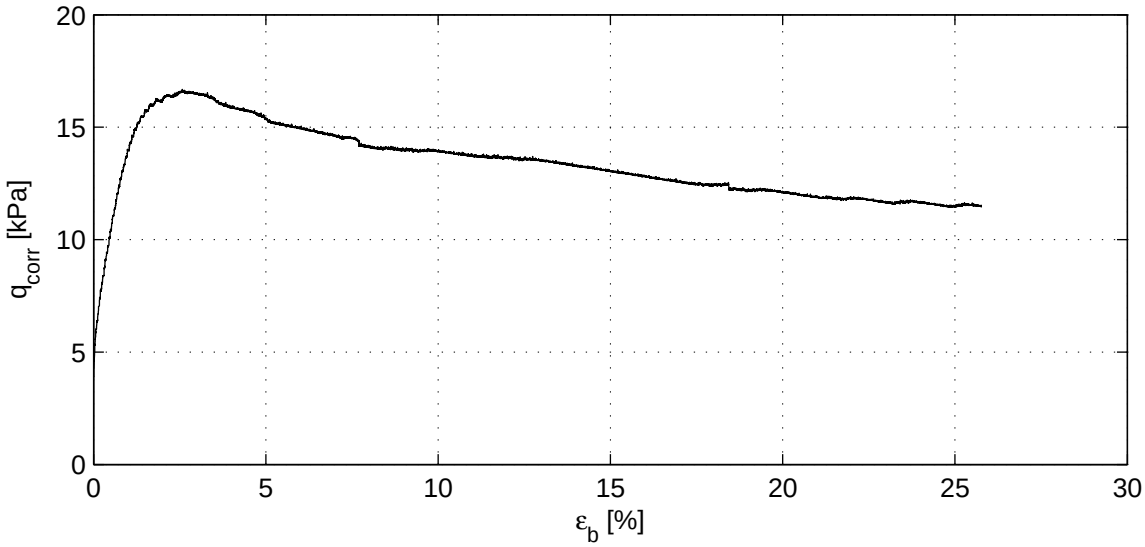
project	Version
1230694.0	1.4

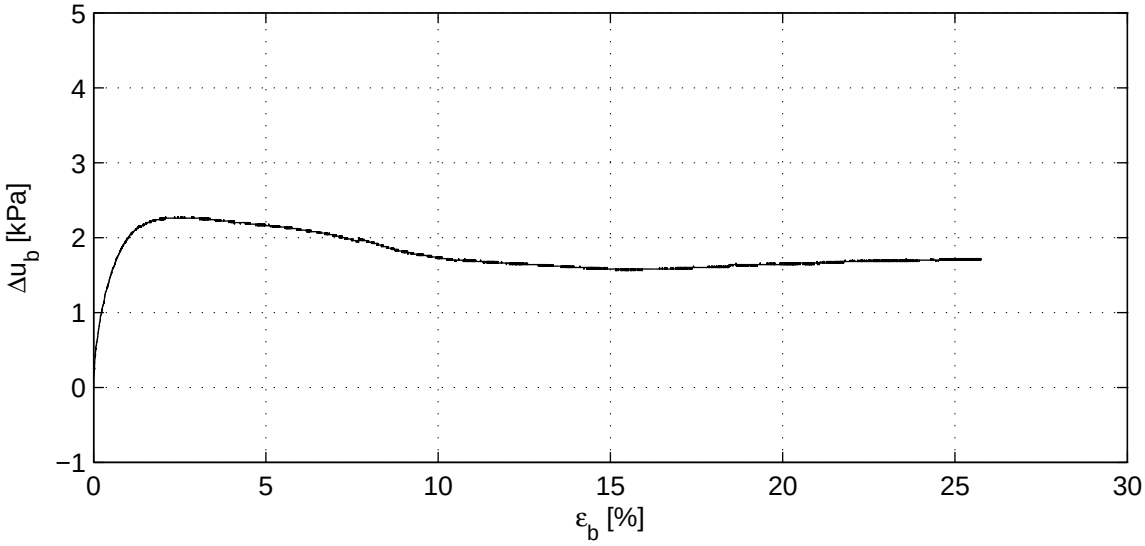
CU Triaxiaalproef (Singlestage) volgens NEN 5117

appendix	page
TX5	1

*) Gecontroleerd en vrijgegeven door grw op 2016-07-26







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date	signed
2016−07−20	konstadi

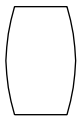
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_5

project	Version
1230694.0	1.4

CU Triaxiaalproef (Singlestage) volgens NEN 5117

appendix	page
TX5	2

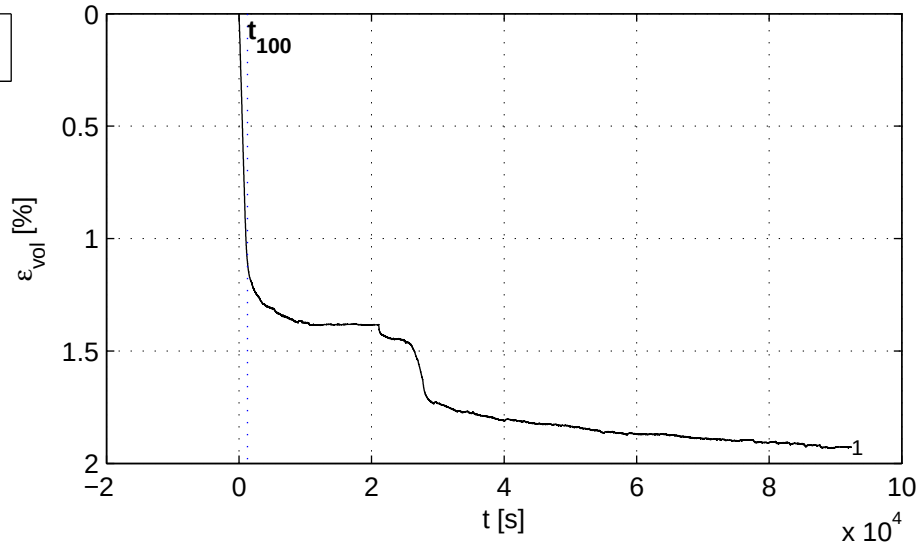
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

	Loading stage	1	2	3
Saturation stage	B_0 [−]	0.99		
	B_1 [−]	1.00		
Consolidation stage	$\sigma'_{1,c}$ [kPa]	7.1		
	t_{100} [min]	21		
	h_c [mm]	142.74		
	V_c [cm^3]	497.21		
	$\rho_{n,c}$ [kg/m^3]	1366		
	w_c [%]	126.5		
	u_{bk} [kPa]	300		
	P [−]	2.20		
	v_{max} [%/h]	6.4		
	v [%/h]	0.96		
Shear stage	Corr method	Deltares		
	Stop criterion	ε_b 15%		
	q_u [kPa]	16.7		
	f_{undr} [kPa]	8.3		
After testing	$\varepsilon_{b,50}$ [%]	0.48		
	E_{50} [MPa]	1.3		
	w_e [%]	126.5		
	Fail figure			

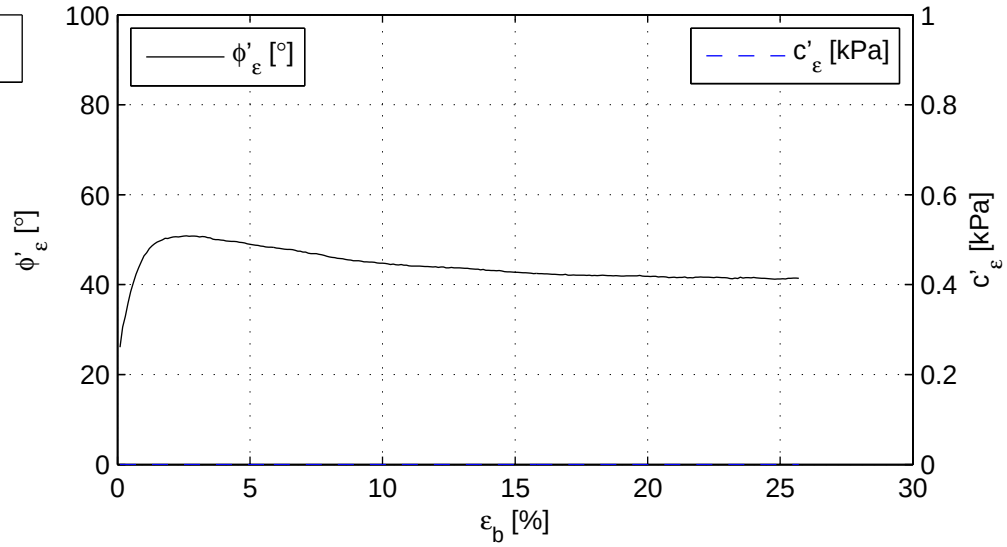
Vertical strain [%]	s' [kPa]			t [kPa]				c_u [kPa]
2.0	10.5			8.1				8.1
5.0	10.2			7.7				7.7
10.0	9.9			7.0				7.0
t_{max} [kPa]	10.7			8.3				8.3

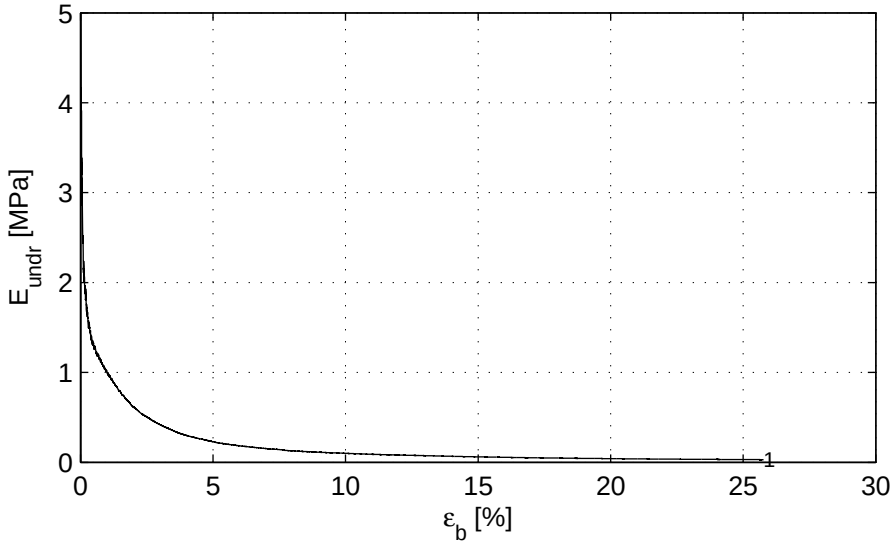
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26

Consolidation st..



Shear stage

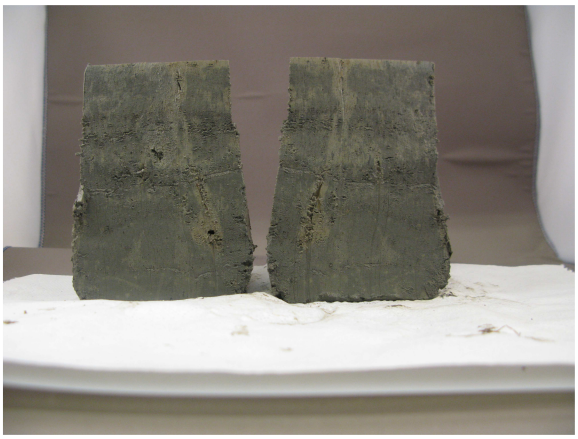




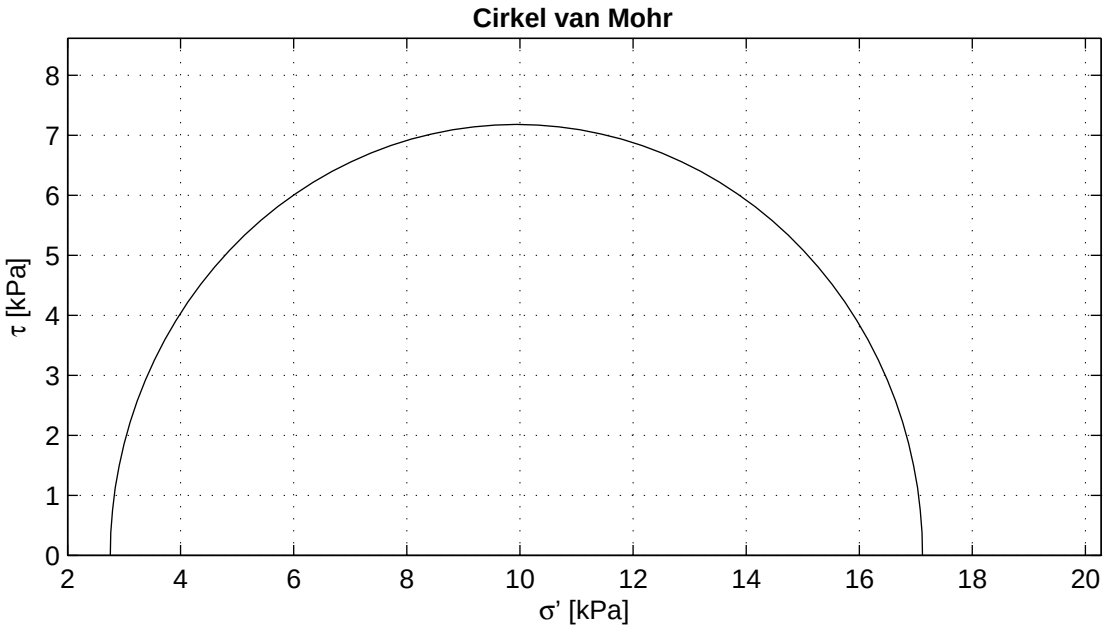
*) Gecontroleerd en vrijgegeven door grw op 2016-07-26







*) Gecontroleerd en vrijgegeven door grw op 2016-07-26



Cirkels criterium	maximale t
c_u [kPa]	7.2
Eindwaarde c_u [kPa]	4.2
Nummer Boring	B2
Monsternaam	6
Diepte NAP [m]	−4.54/−4.74
NEN5104 code	Ks1 plantenresten
m_i [g]	694.7
D_i [mm]	66.8
h_i [mm]	144.0
w_i [%]	125.4
$\rho_{i,bulk}$ [kg/m^3]	1377
$\rho_{i,dry}$ [kg/m^3]	611
Grondsoort	klei

Voor beproeving

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datum	get.
2016−08−31	luije_sa

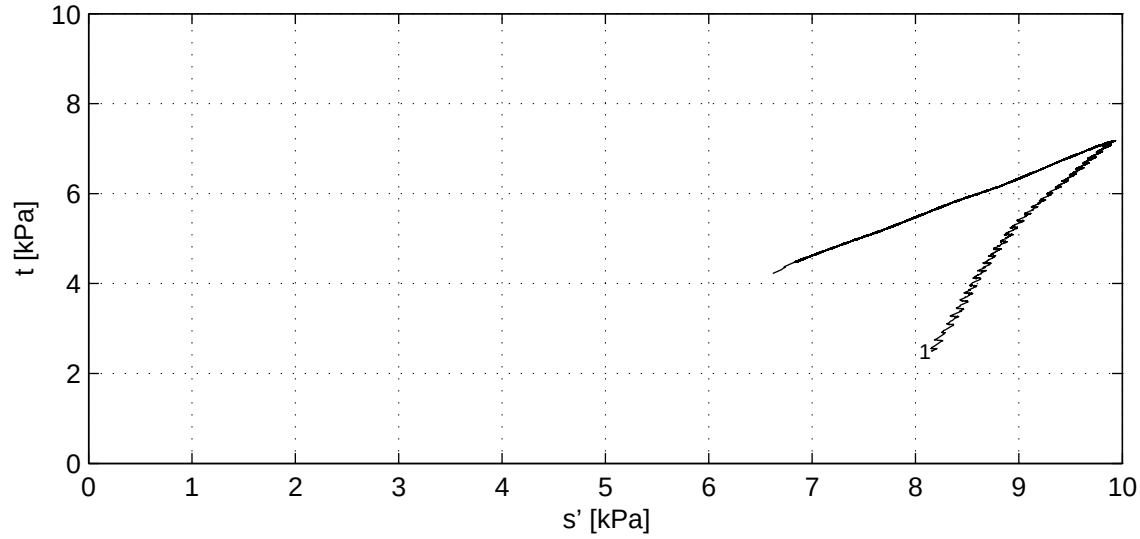
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_6

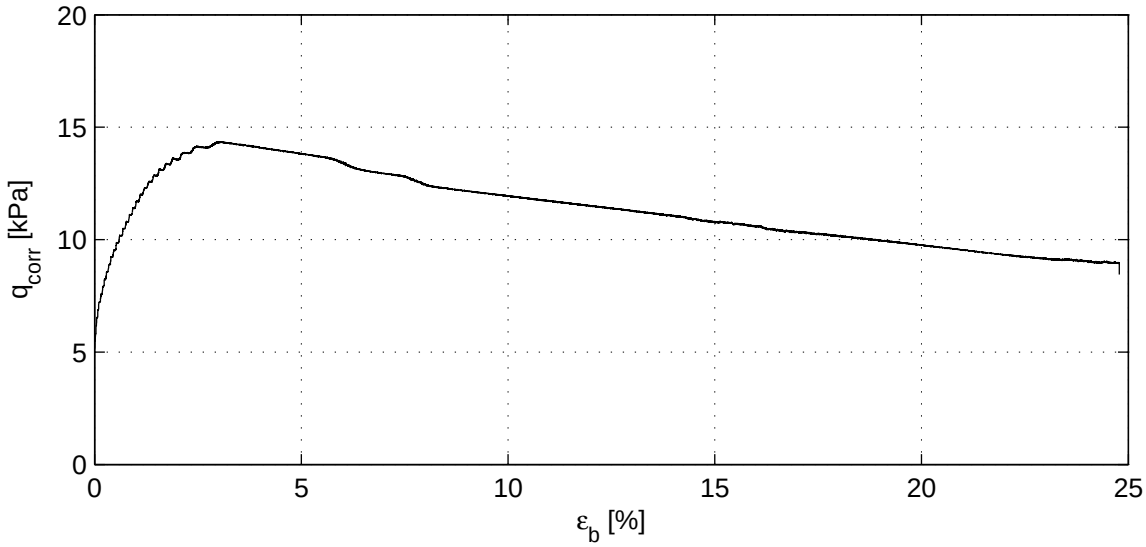
project	Versie
1230694.0	1.4

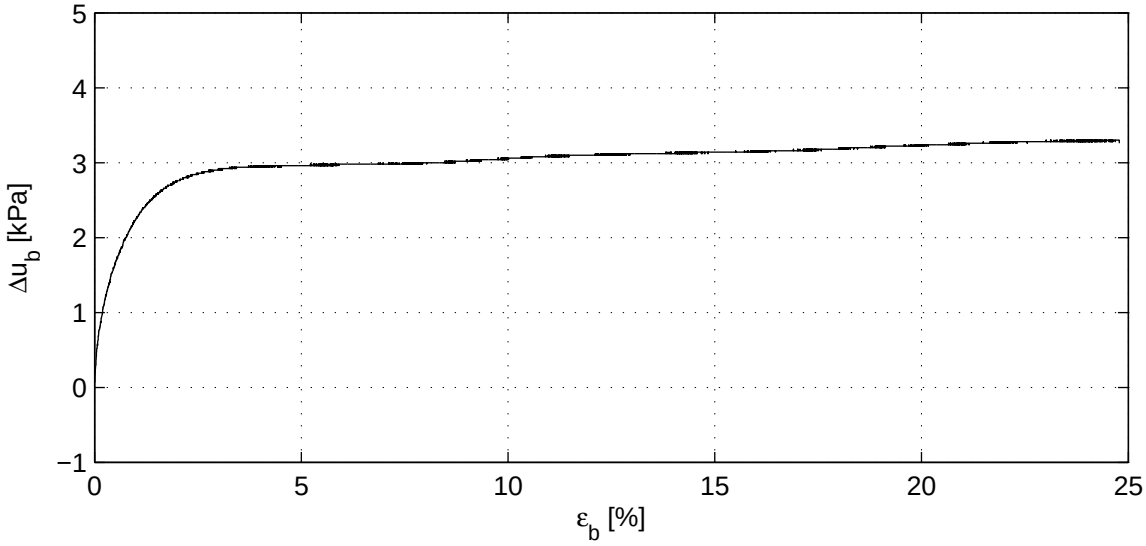
CU Triaxiaalproef (Singlestage) volgens NEN 5117

bijlage	pag.
TX6	1

*) Gecontroleerd en vrijgegeven door ess op 2016-08-31



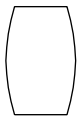




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	datum	get.
	2016−08−31	luije_sa
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_6	project	Versie
	1230694.0	1.4
CU Triaxiaalproef (Singlestage) volgens NEN 5117	bijlage	pag.
	TX6	2

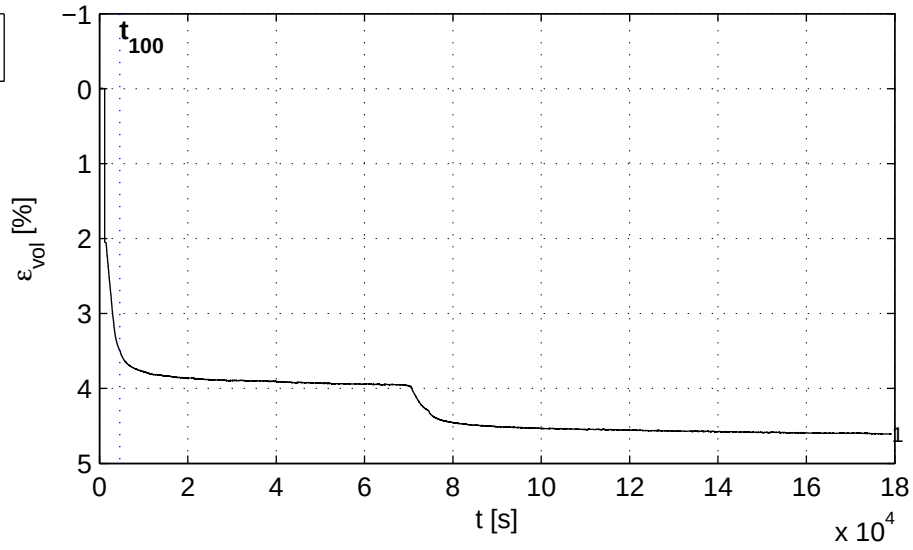
*) Gecontroleerd en vrijgegeven door ess op 2016-08-31

	Belastingsfase	1	2	3
Verzadigingsfase	B_0 [−]	0.99		
	B_1 [−]	1.00		
Consolidatiefase	$\sigma'_{1,c}$ [kPa]	11.0		
	t_{100} [min]	77		
	h_c [mm]	141.87		
	V_c [cm^3]	481.41		
	$\rho_{n,c}$ [kg/m^3]	1395		
	w_c [%]	117.8		
	u_{bk} [kPa]	299		
	P [−]	2.20		
	v_{max} [%/h]	1.8		
	v [%/h]	0.95		
Belastingsfase	Corr method	Deltares		
	Stopcriterium	$\Delta q < 1$ kPa		
	q_u [kPa]	14.4		
	f_{undr} [kPa]	7.2		
Na beproeving	$\varepsilon_{b,50}$ [%]	0.52		
	E_{50} [MPa]	0.9		
	w_e [%]	116.7		
	Bezwijkfiguur			

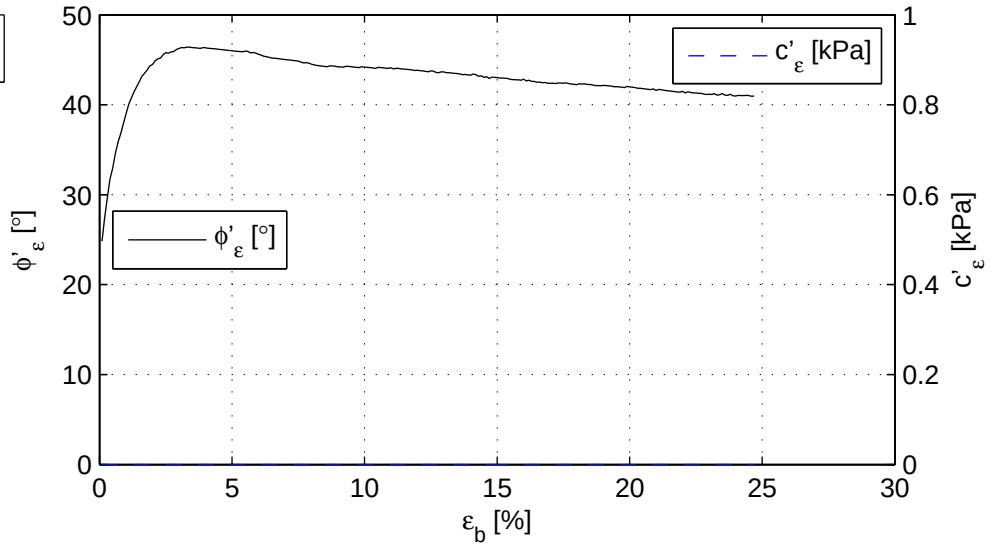
Verticale rek [%]	s' [kPa]			t [kPa]				c_u [kPa]
2.0	9.7			6.8				6.8
5.0	9.6			6.9				6.9
10.0	8.6			6.0				6.0
t_{max} [kPa]	9.9			7.2				7.2

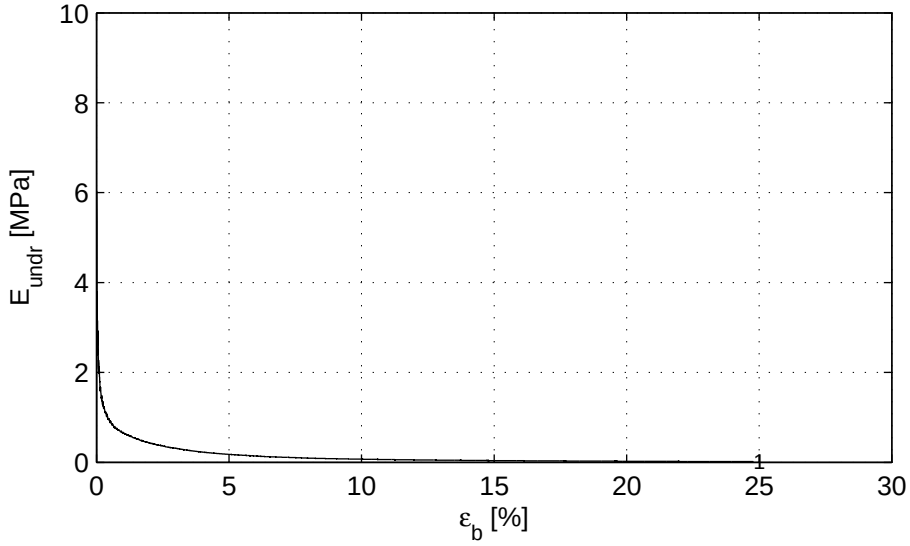
*) Gecontroleerd en vrijgegeven door ess op 2016-08-31

Consolidatiefase



Belastingsfase





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Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS CU_6

project	Versie
1230694.0	1.4

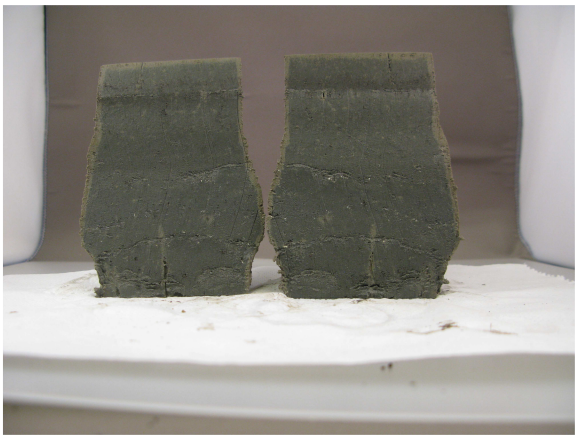
CU Triaxiaalproef (Singlestage) volgens NEN 5117

bijlage	pag.
TX6	4

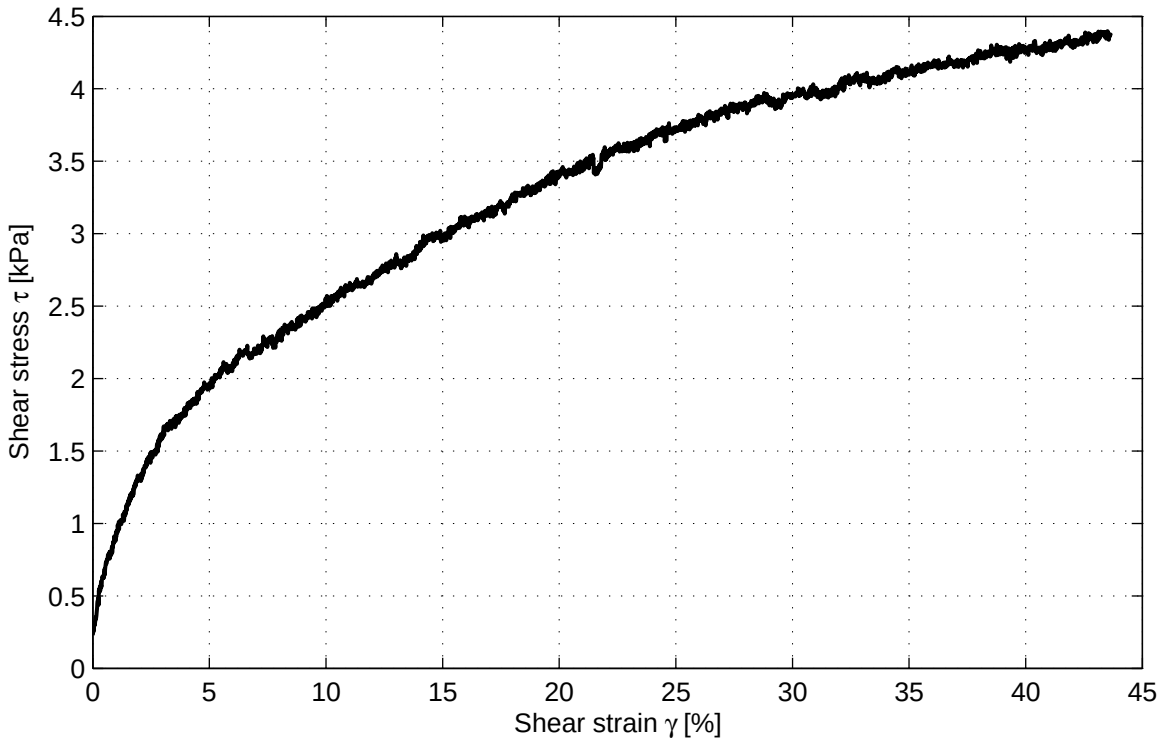
*) Gecontroleerd en vrijgegeven door ess op 2016-08-31







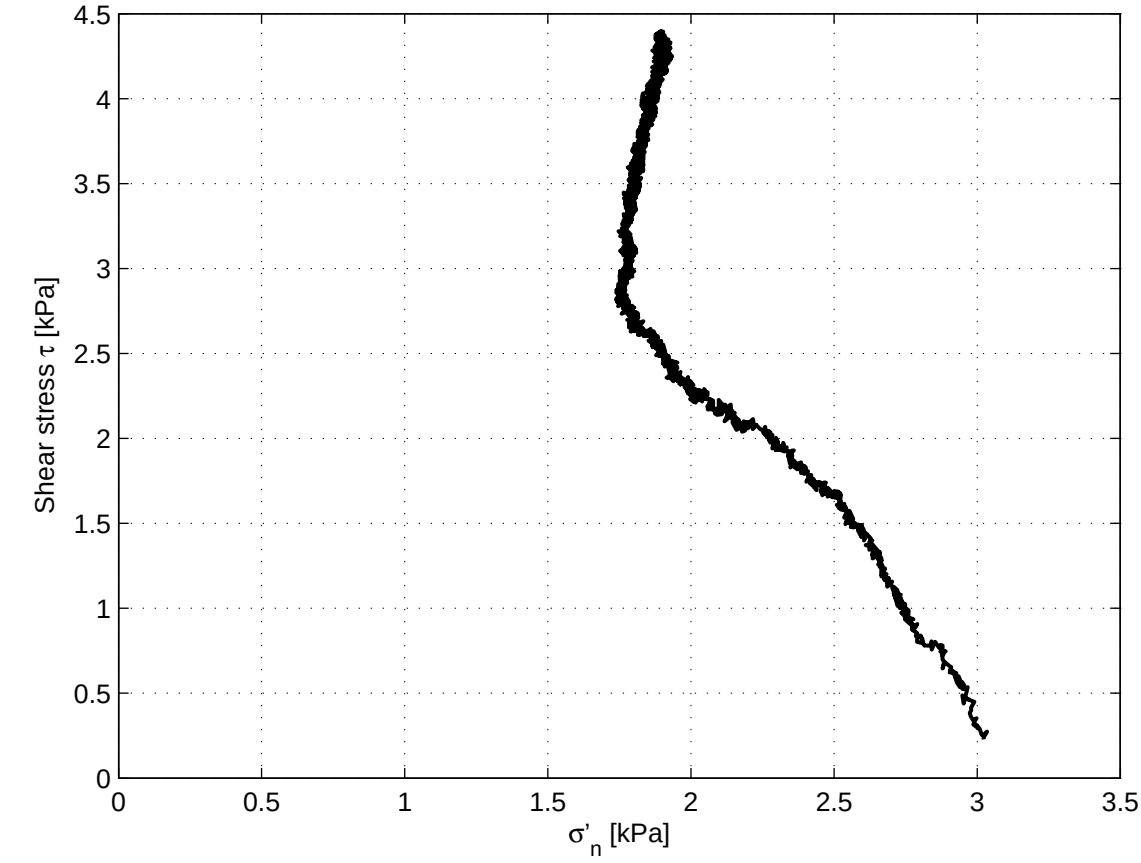
*) Gecontroleerd en vrijgegeven door ess op 2016-08-31

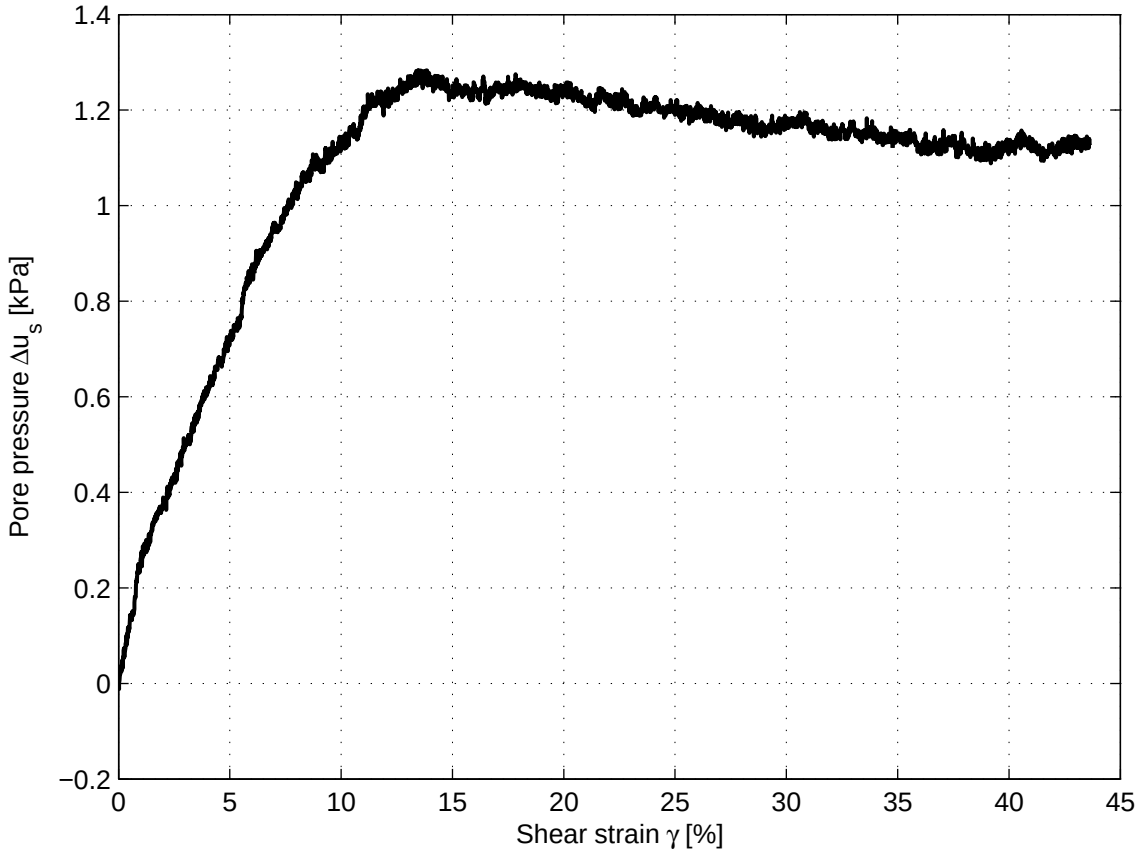


Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.9
Test type	Constant height
Apparatus code	DSS−D
Sample name	12
Bore code	B4
Depth top [m]	−2.59
Depth bottom [m]	−2.64
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	0.9
S_0 [%]	–
Void ratio start shear [−]	0.89
w_0 [%]	1177.2
w_{final} [%]	1149.5
Consolidation stress [kPa]	3.0
Consolidation strain [%]	4.98
Strain rate [%/h]	8.0
Max shear stress [kPa]	4.4
Vert. stress at max shear stress [kPa]	1.9
Shear strain at max shear stress [kPa]	43.5
σ_v at γ = 40% [kPa]	1.9
τ at γ = 40% [kPa]	4.3
Sample Disturbance Index [%]	–
SDI qualification	–

*) Gecontroleerd en vrijgegeven door grw op 2016-08-29





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2016−07−13	konstadi

Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

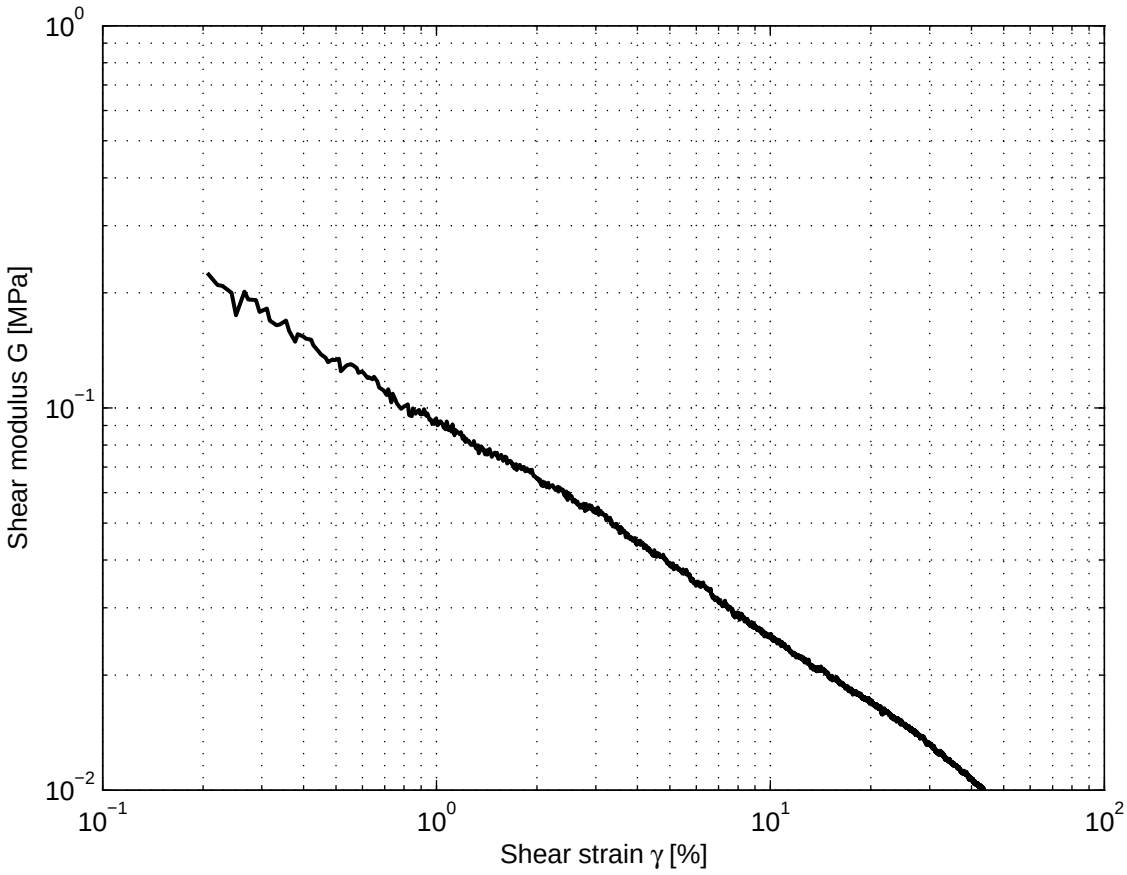
Direct Simple Shear test on sample 12

project	version
1230694.0	1.3

Direct Simple Shear Test

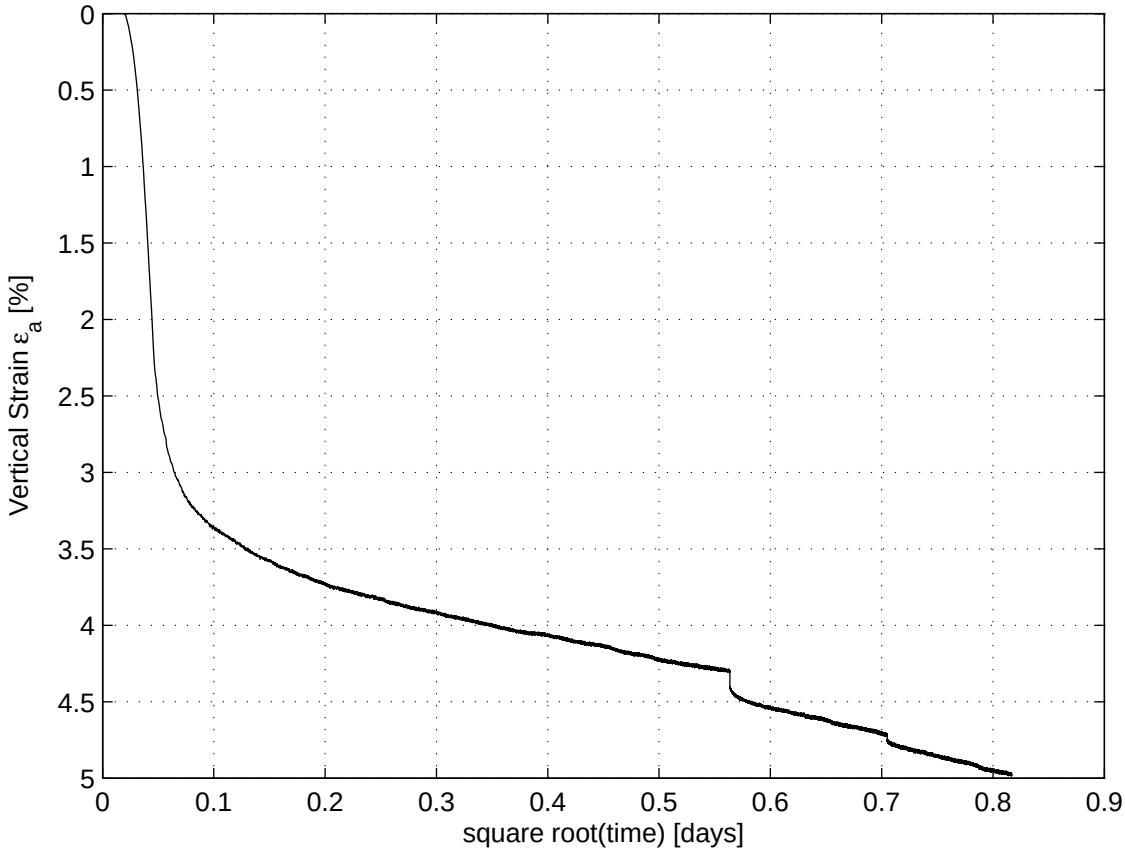
appendix	page
12	2

*) Gecontroleerd en vrijgegeven door grw op 2016-08-29

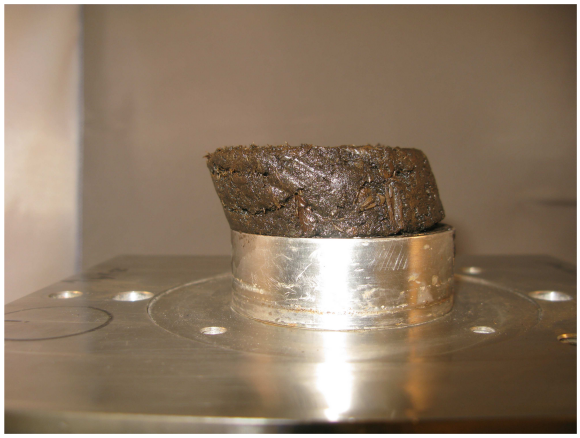


γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	2.0	N.A	2.3	0.7	0.0
15% deformation	3.0	N.A	1.8	1.3	0.0
30% deformation	4.0	N.A	1.9	1.2	0.0
Maximum strain	4.4	N.A	1.9	1.1	0.0
Maximum τ	4.4	0.00	1.9	1.1	0.0

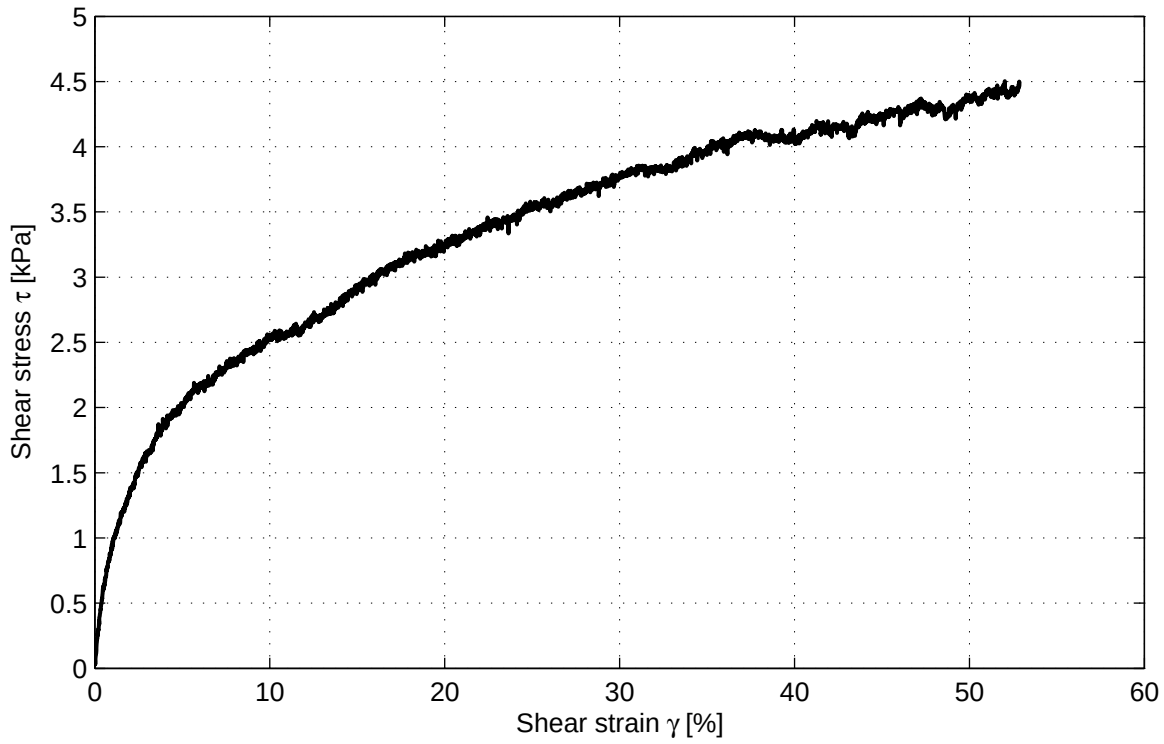
*) Gecontroleerd en vrijgegeven door grw op 2016-08-29


Vertical Strain ε_a [%]
square root(time) [days]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9





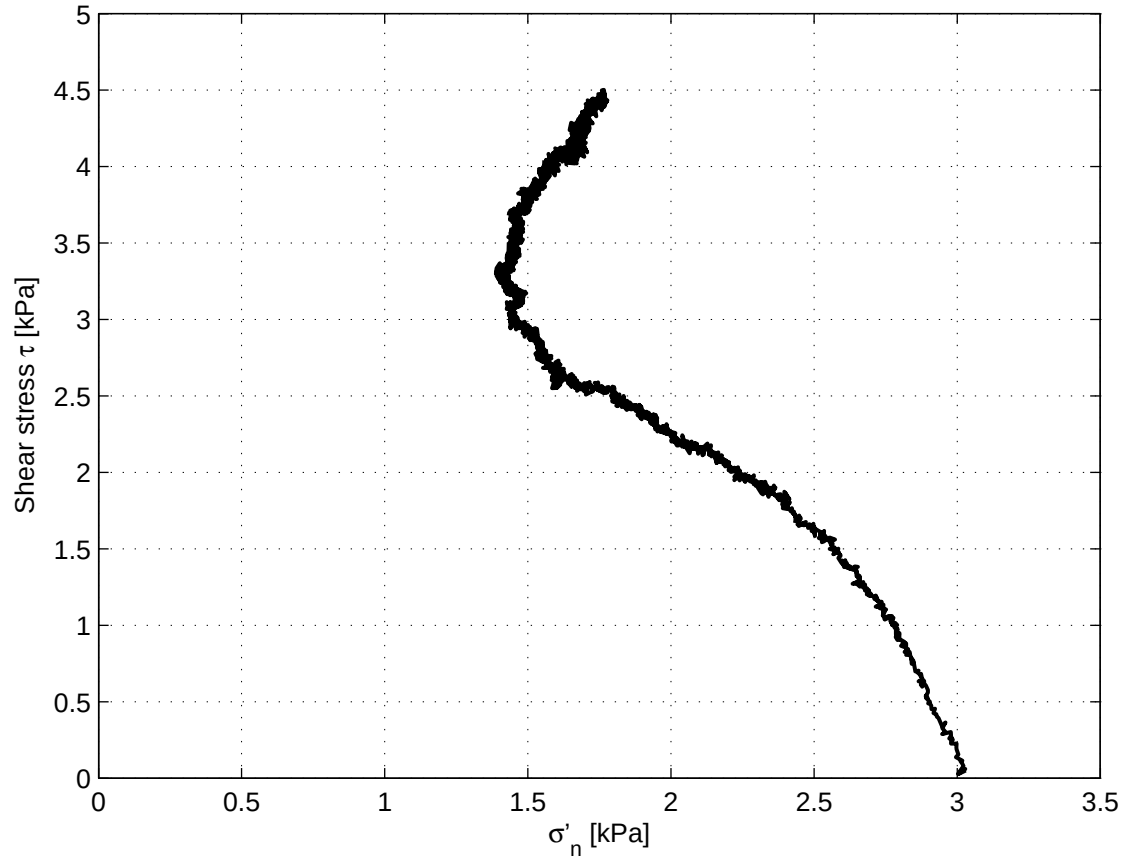
*) Gecontroleerd en vrijgegeven door grw op 2016-08-29

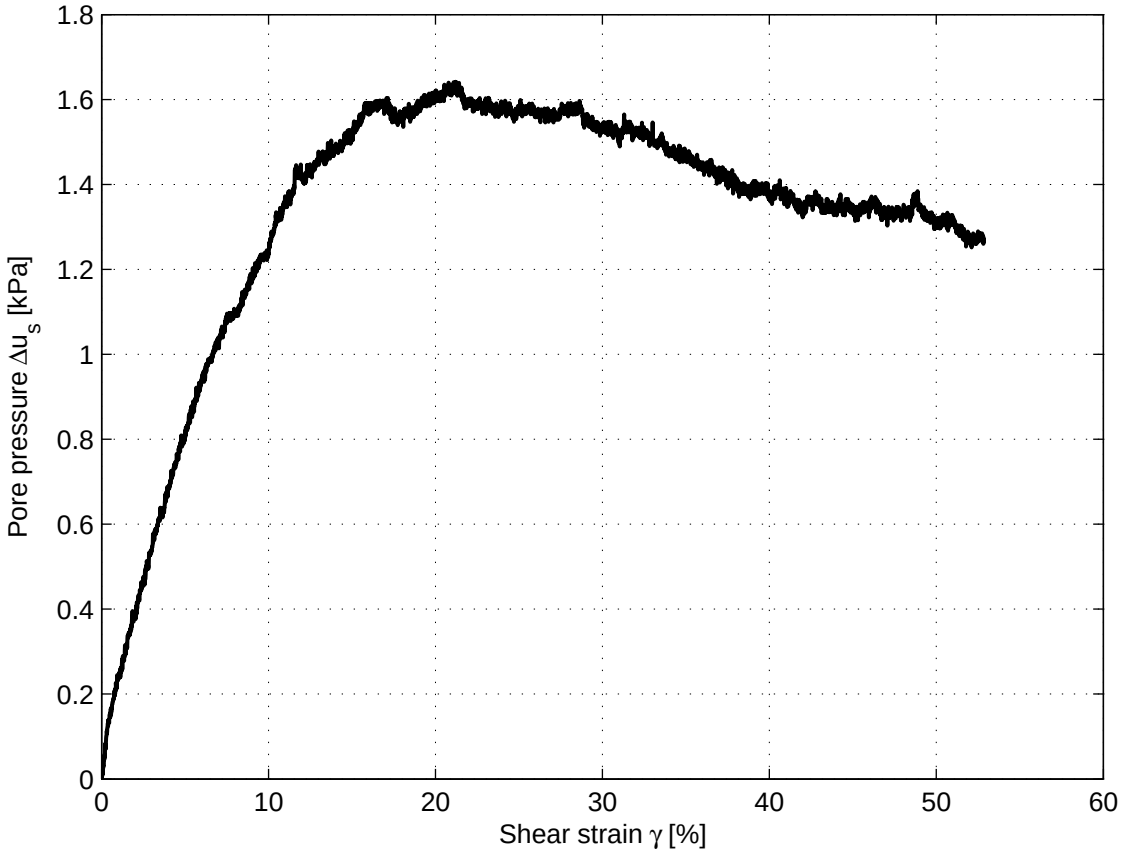


Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	22.0
Test type	Constant height
Apparatus code	DSS−C
Sample name	11
Bore code	B4
Depth top [m]	−2.54
Depth bottom [m]	−2.59
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	0.9
S_0 [%]	–
Void ratio start shear [−]	0.93
w_0 [%]	1122.5
w_{final} [%]	1066.7
Consolidation stress [kPa]	2.9
Consolidation strain [%]	5.50
Strain rate [%/h]	8.0
Max shear stress [kPa]	4.5
Vert. stress at max shear stress [kPa]	1.8
Shear strain at max shear stress [kPa]	52.0
σ_v at γ = 40% [kPa]	1.7
τ at γ = 40% [kPa]	4.0
Sample Disturbance Index [%]	–
SDI qualification	–

*) Gecontroleerd en vrijgegeven door ess op 2016-08-15

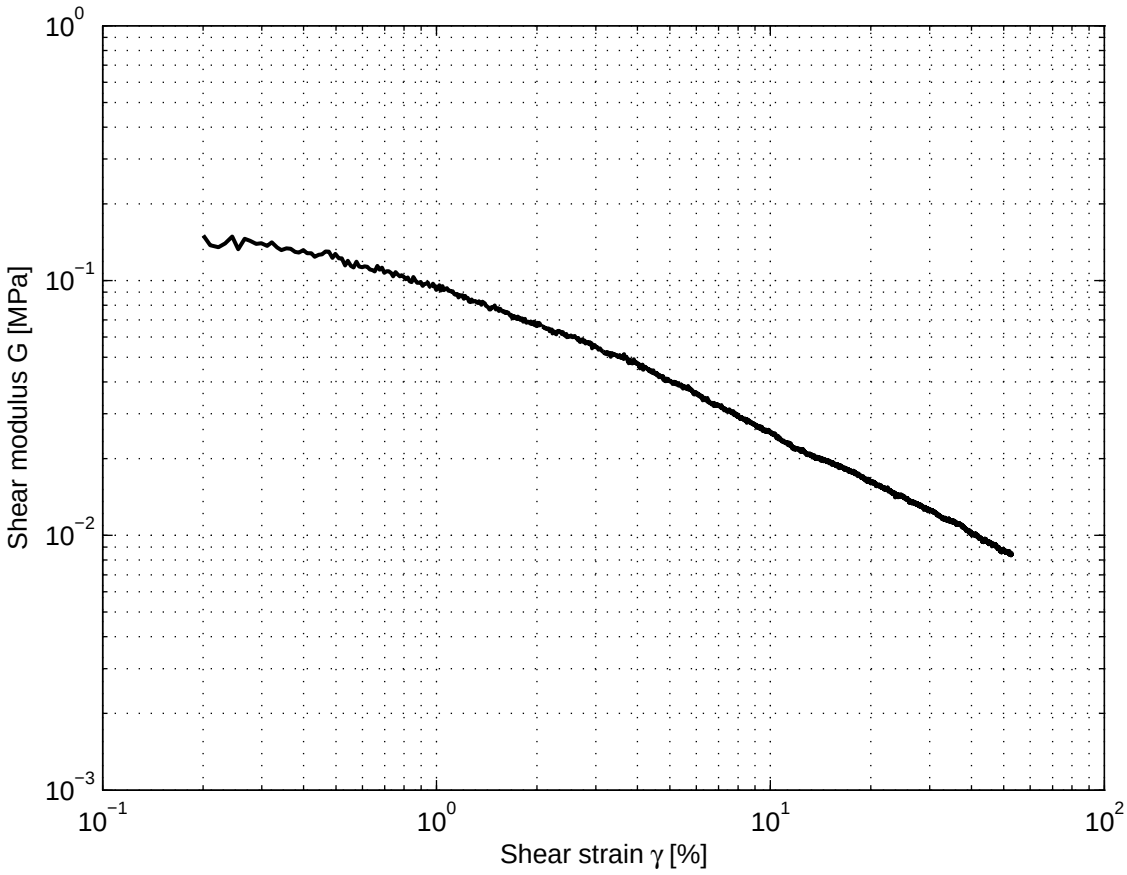




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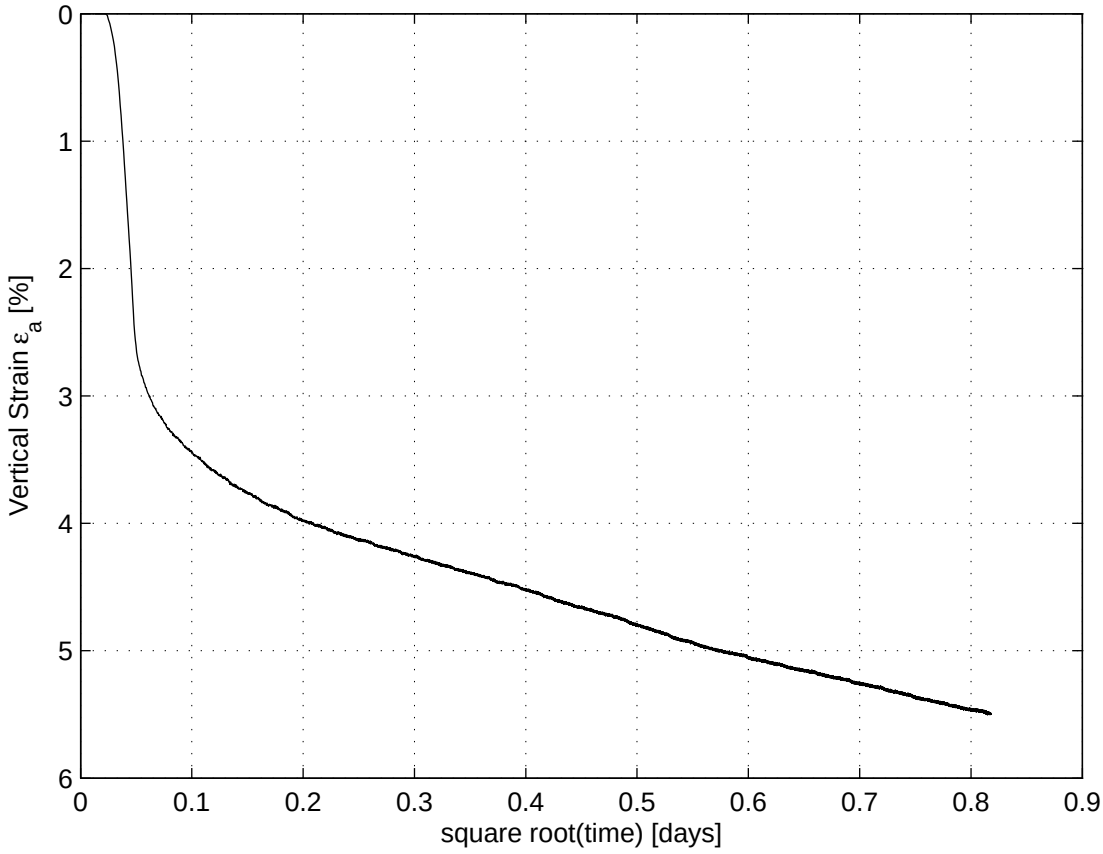
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	2016−07−13	konstadi
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS	project	version
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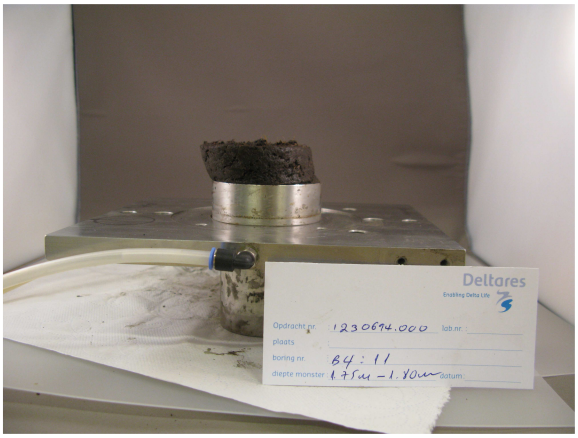
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15

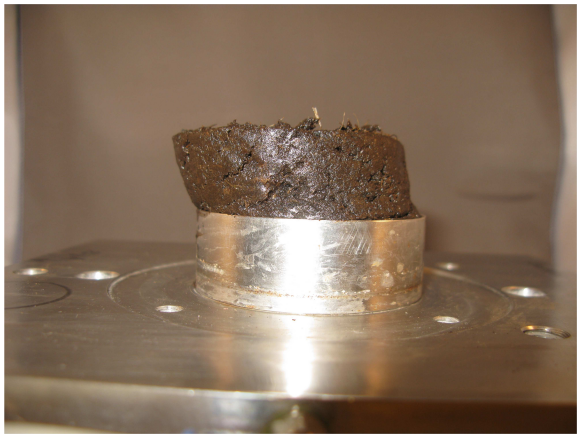


γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	2.0	N.A	2.2	0.8	0.0
15% deformation	2.9	N.A	1.5	1.5	0.0
30% deformation	3.8	N.A	1.5	1.5	0.0
Maximum strain	4.5	N.A	1.8	1.3	0.0
Maximum τ	4.5	0.00	1.8	1.3	0.0

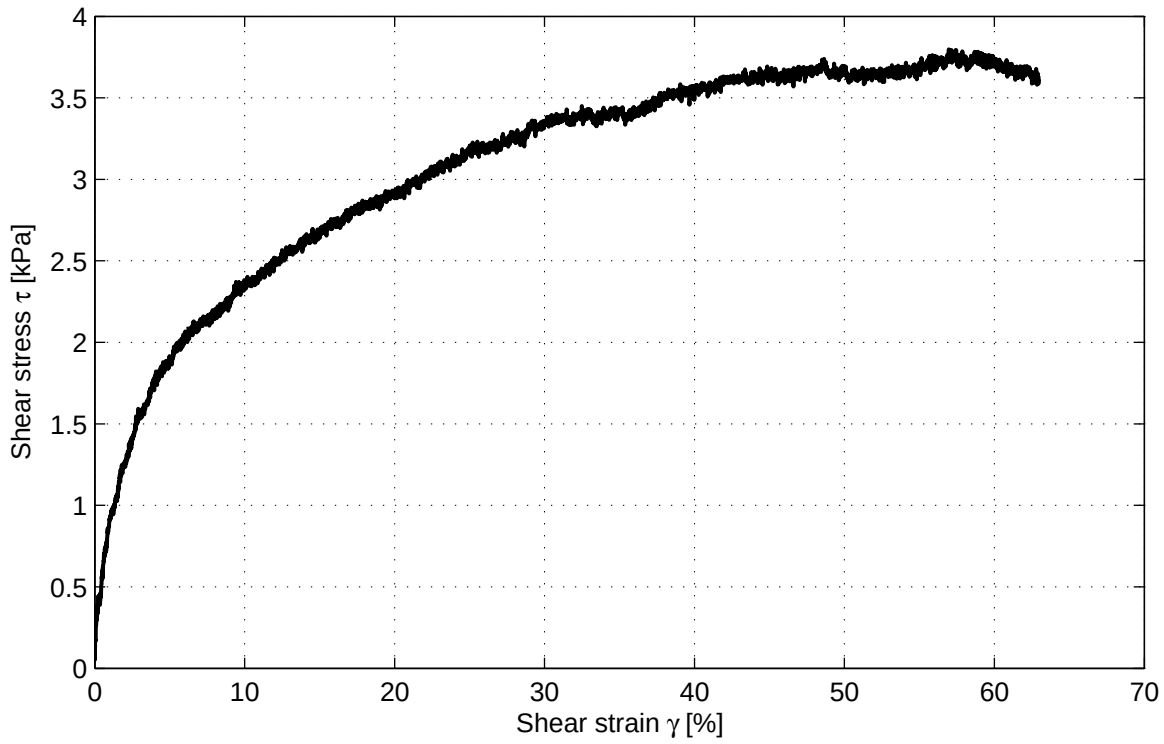
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15


Vertical Strain ε_a [%]
square root(time) [days]
0
1
2
3
4
5
6
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9





*) Gecontroleerd en vrijgegeven door ess op 2016-08-15



Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.8
Test type	Constant height
Apparatus code	DSS−D
Sample name	10
Bore code	B4
Depth top [m]	−2.49
Depth bottom [m]	−2.54
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	0.9
S_0 [%]	–
Void ratio start shear [−]	0.93
w_0 [%]	1049.1
w_{final} [%]	1121.8
Consolidation stress [kPa]	3.0
Consolidation strain [%]	4.65
Strain rate [%/h]	8.0
Max shear stress [kPa]	3.8
Vert. stress at max shear stress [kPa]	0.6
Shear strain at max shear stress [kPa]	57.0
σ_v at γ = 40% [kPa]	0.7
τ at γ = 40% [kPa]	3.6
Sample Disturbance Index [%]	–
SDI qualification	–

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2016−07−13	konstadi

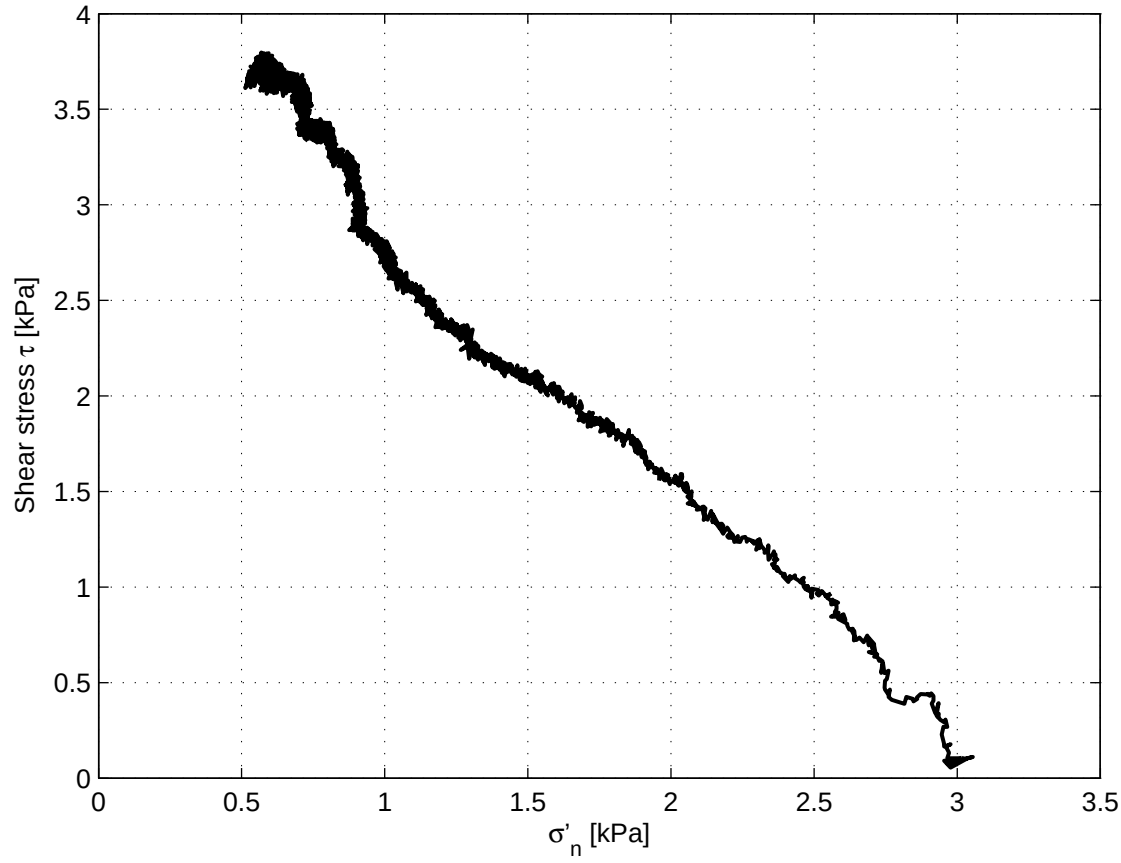
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

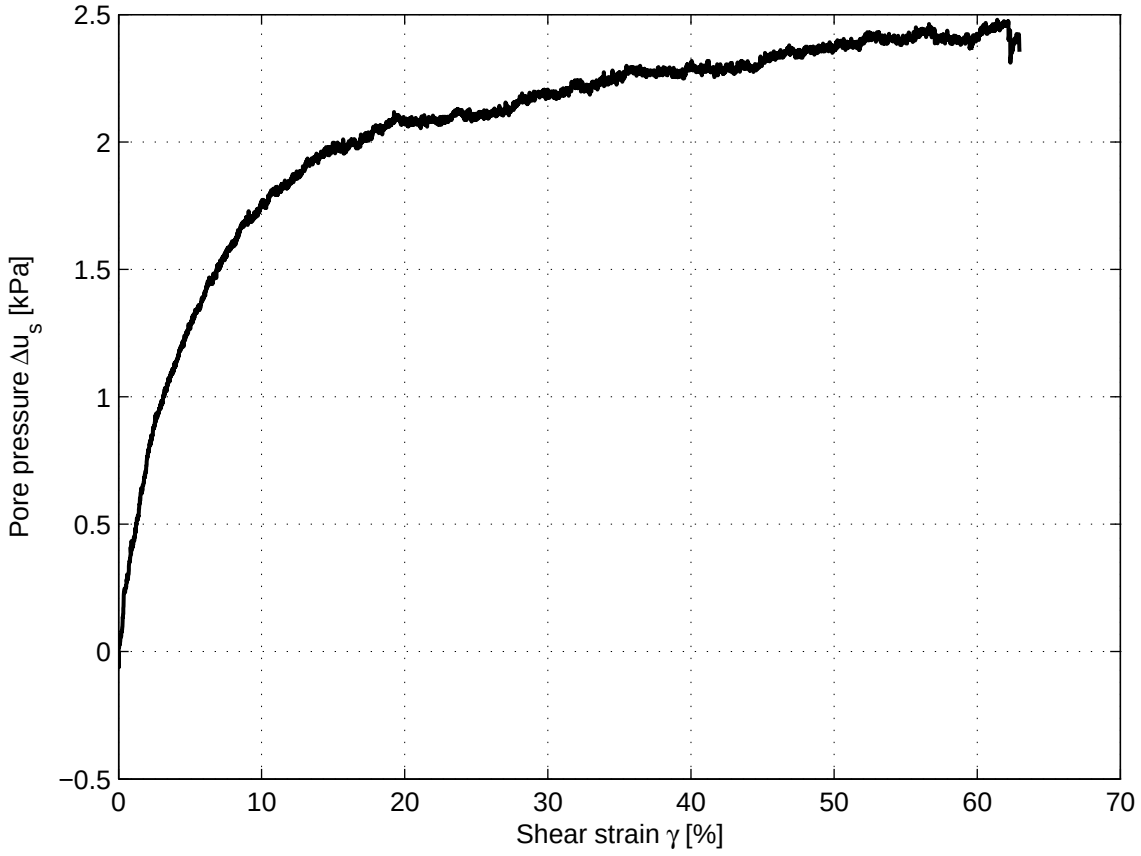
Direct Simple Shear test on sample 10

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Direct Simple Shear Test

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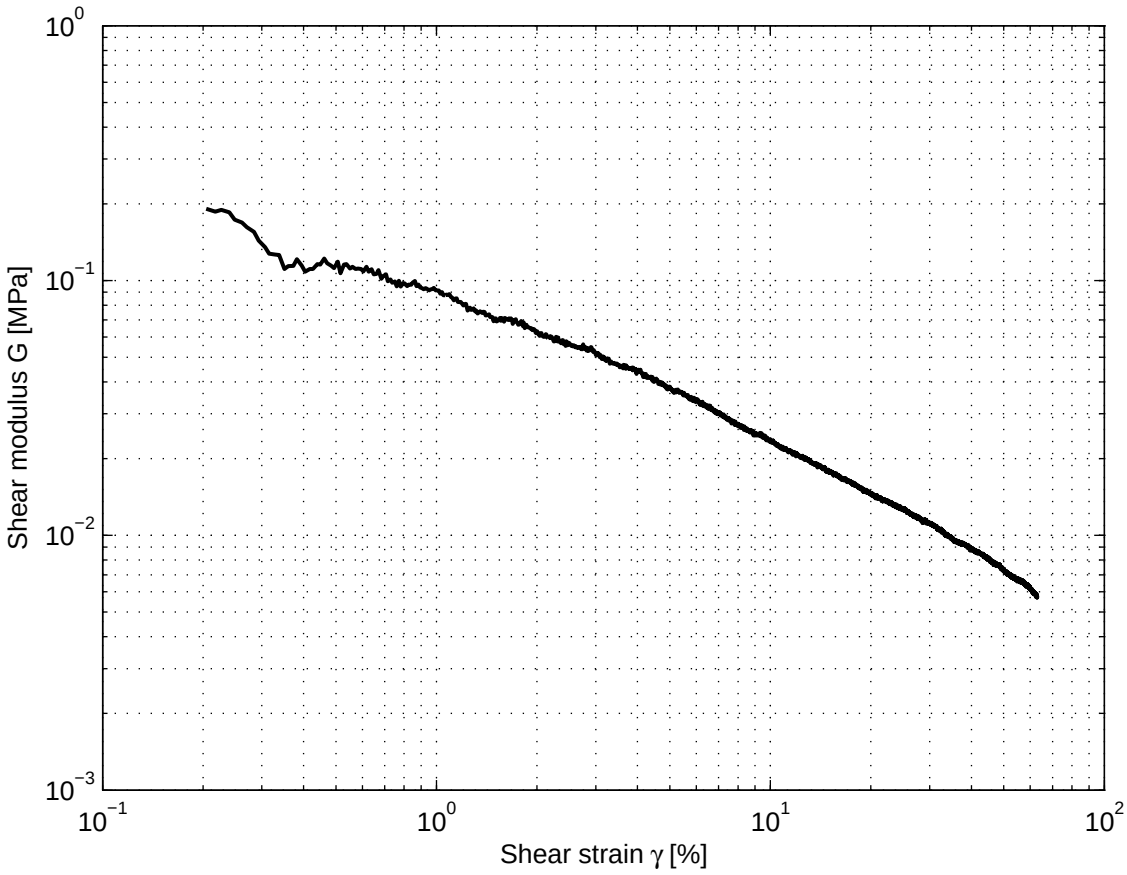
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

Direct Simple Shear test on sample 10

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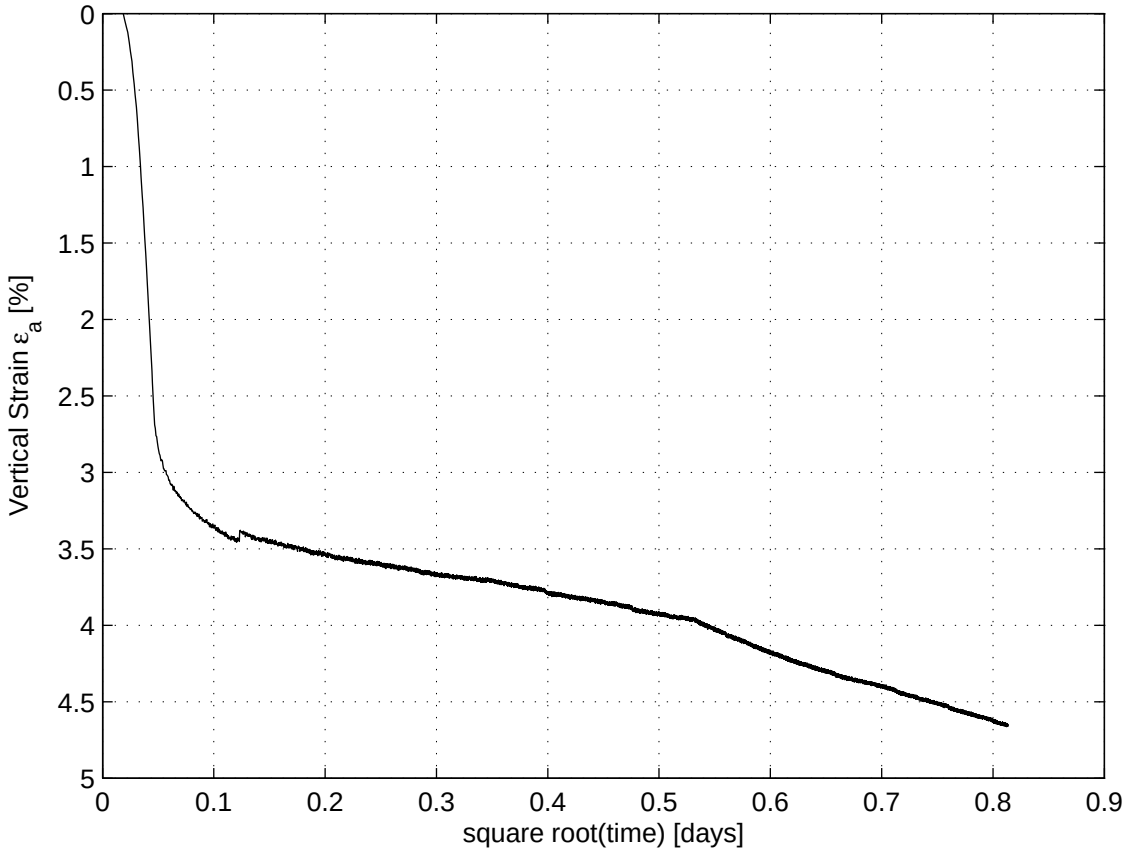
Direct Simple Shear Test

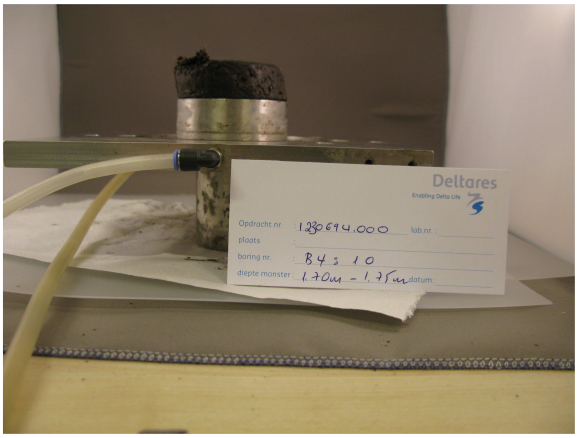
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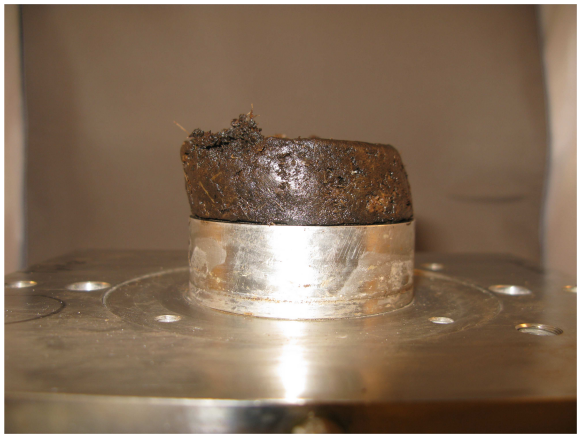


γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	1.9	N.A	1.7	1.3	0.0
15% deformation	2.7	N.A	1.0	2.0	0.0
30% deformation	3.3	N.A	0.8	2.2	0.0
Maximum strain	3.6	N.A	0.6	2.4	0.0
Maximum τ	3.8	−0.00	0.6	2.4	0.0

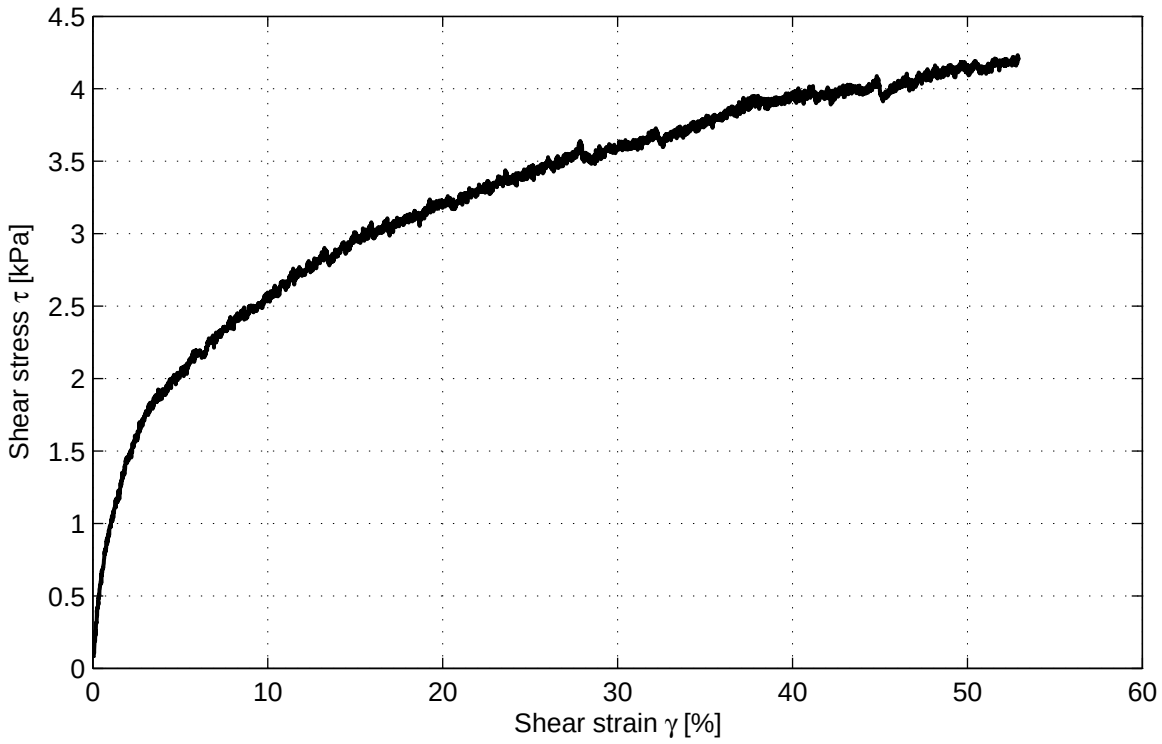
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15


Vertical Strain ε_a [%]
square root(time) [days]
0
0.5
1
1.5
2
2.5
3
3.5
4
4.5
5
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9





*) Gecontroleerd en vrijgegeven door ess op 2016-08-15



Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.6
Test type	Constant height
Apparatus code	DSS−D
Sample name	8
Bore code	B1
Depth top [m]	−2.32
Depth bottom [m]	−2.37
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	0.9
S_0 [%]	–
Void ratio start shear [−]	0.94
w_0 [%]	1027.3
w_{final} [%]	901.3
Consolidation stress [kPa]	2.9
Consolidation strain [%]	6.01
Strain rate [%/h]	8.0
Max shear stress [kPa]	4.2
Vert. stress at max shear stress [kPa]	2.8
Shear strain at max shear stress [kPa]	52.9
σ_v at γ = 40% [kPa]	2.6
τ at γ = 40% [kPa]	4.0
Sample Disturbance Index [%]	–
SDI qualification	–

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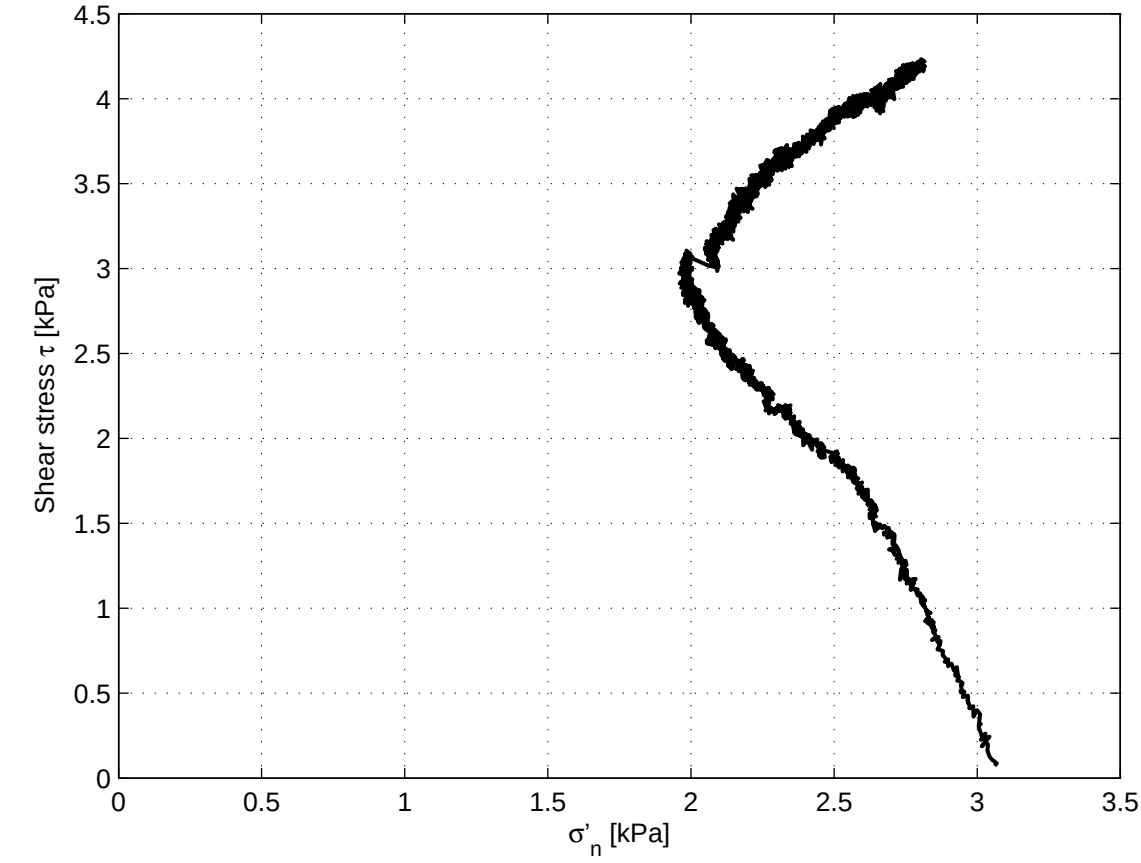
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

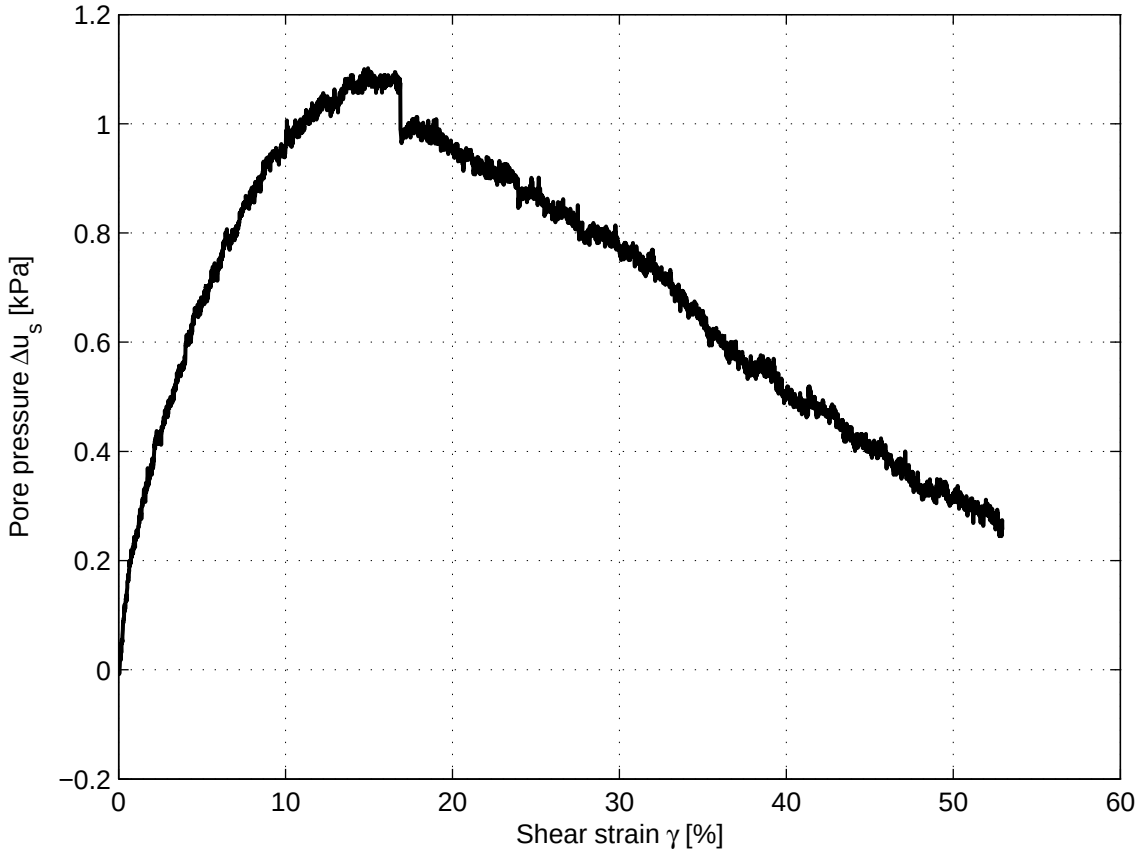
Direct Simple Shear test on sample 8

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Direct Simple Shear Test

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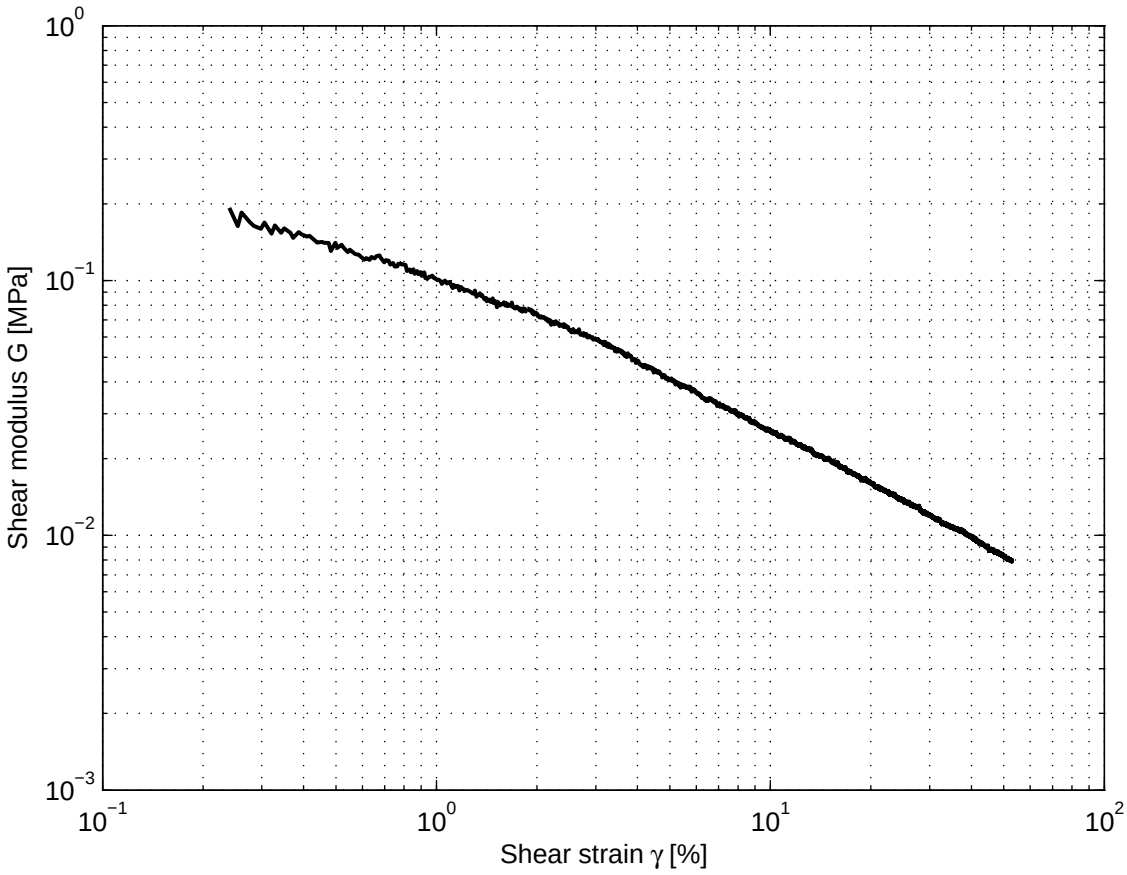
Direct Simple Shear test on sample 8

project	version
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Direct Simple Shear Test

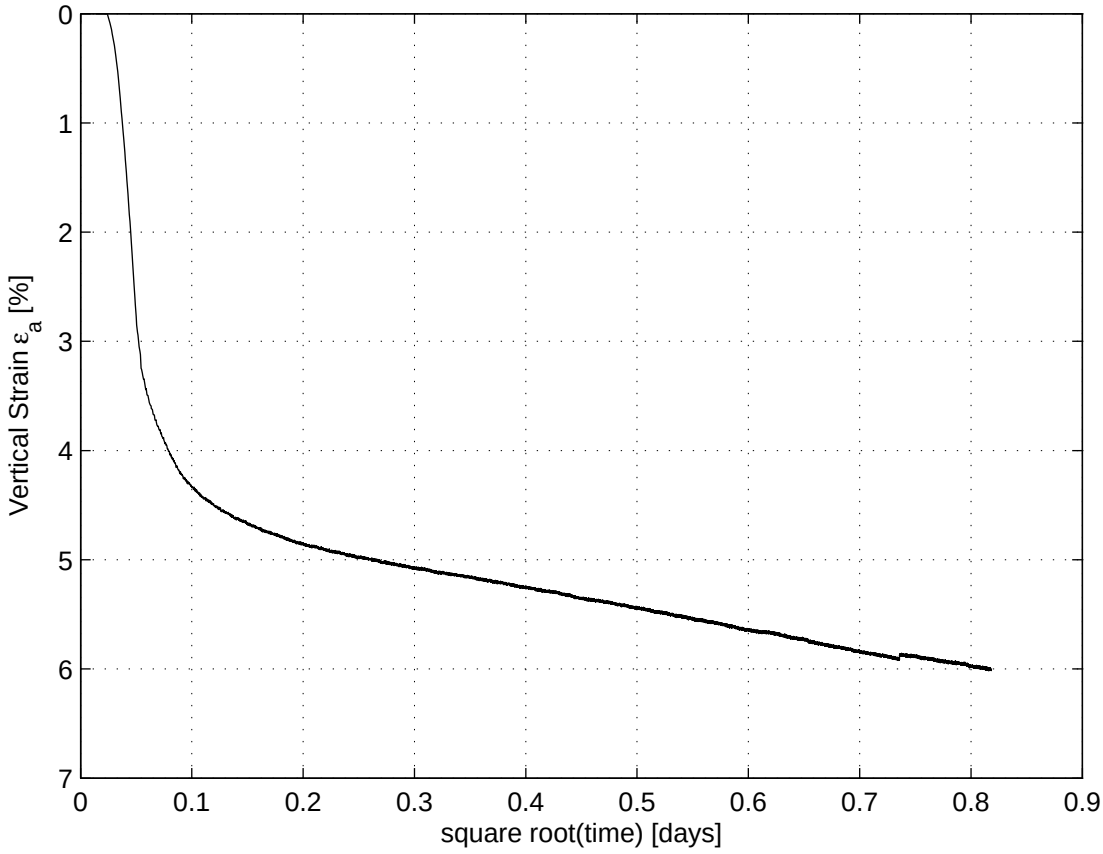
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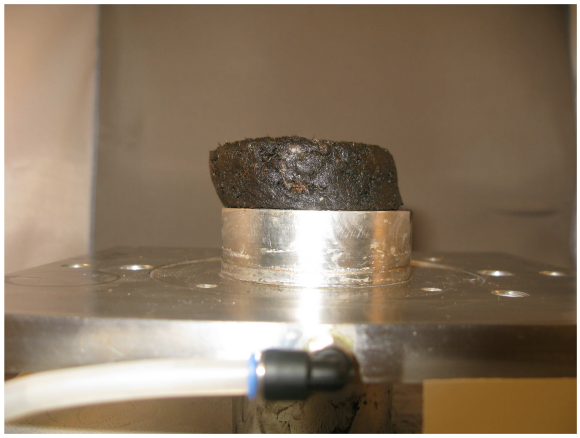


γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	2.0	N.A	2.4	0.7	0.0
15% deformation	3.0	N.A	2.0	1.1	0.0
30% deformation	3.6	N.A	2.3	0.8	0.0
Maximum strain	4.2	N.A	2.8	0.3	0.0
Maximum τ	4.2	0.00	2.8	0.3	0.0

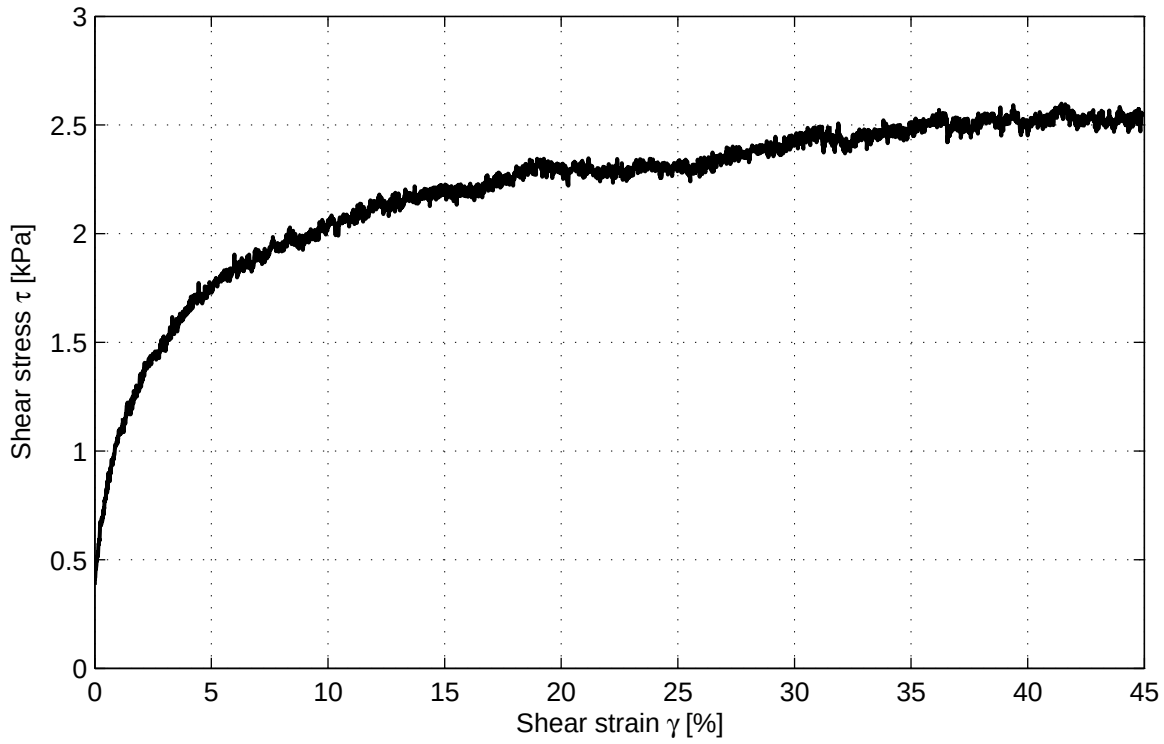
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15


Vertical Strain ε_a [%]
square root(time) [days]
0
1
2
3
4
5
6
7
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9





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Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.5
Test type	Constant height
Apparatus code	DSS−D
Sample name	9
Bore code	B2
Depth top [m]	−2.34
Depth bottom [m]	−2.39
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	0.9
S_0 [%]	–
Void ratio start shear [−]	0.88
w_0 [%]	1003.5
w_{final} [%]	916.1
Consolidation stress [kPa]	3.0
Consolidation strain [%]	10.58
Strain rate [%/h]	8.0
Max shear stress [kPa]	2.6
Vert. stress at max shear stress [kPa]	1.2
Shear strain at max shear stress [kPa]	41.5
σ_v at γ = 40% [kPa]	1.2
τ at γ = 40% [kPa]	2.5
Sample Disturbance Index [%]	–
SDI qualification	–

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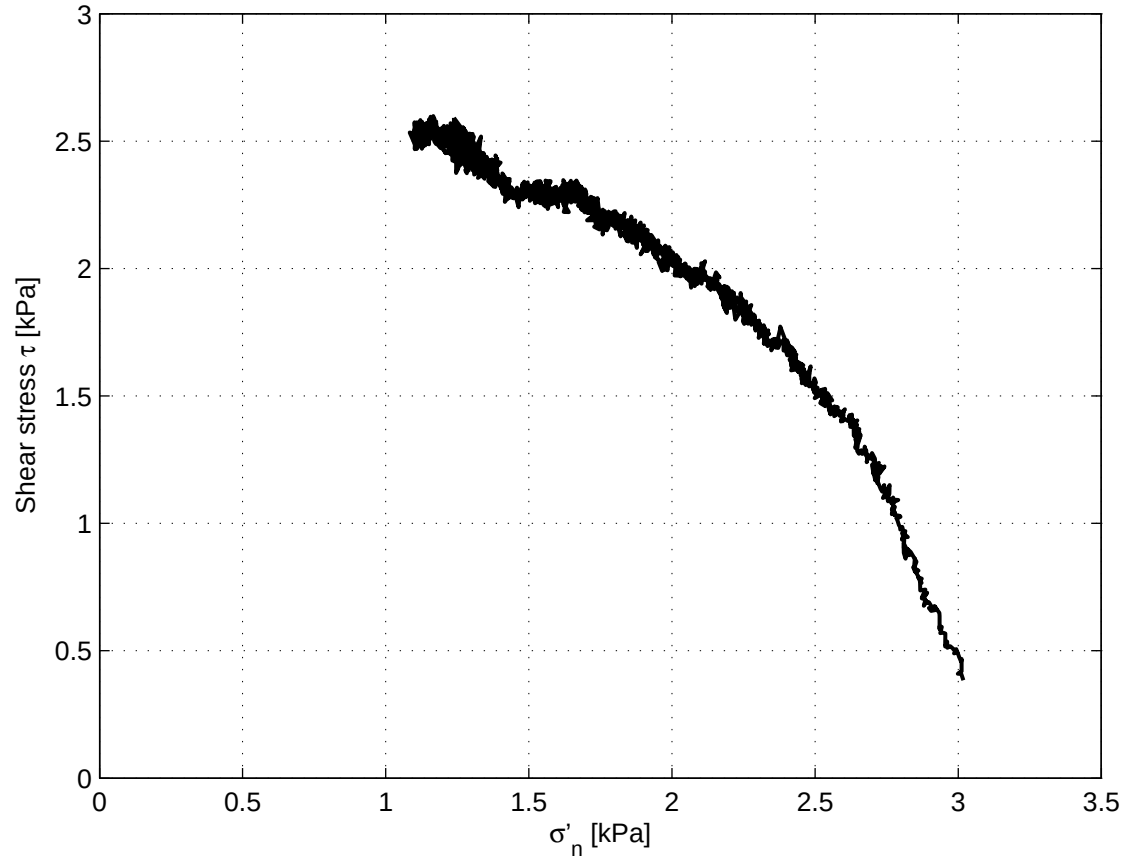
Direct Simple Shear test on sample 9

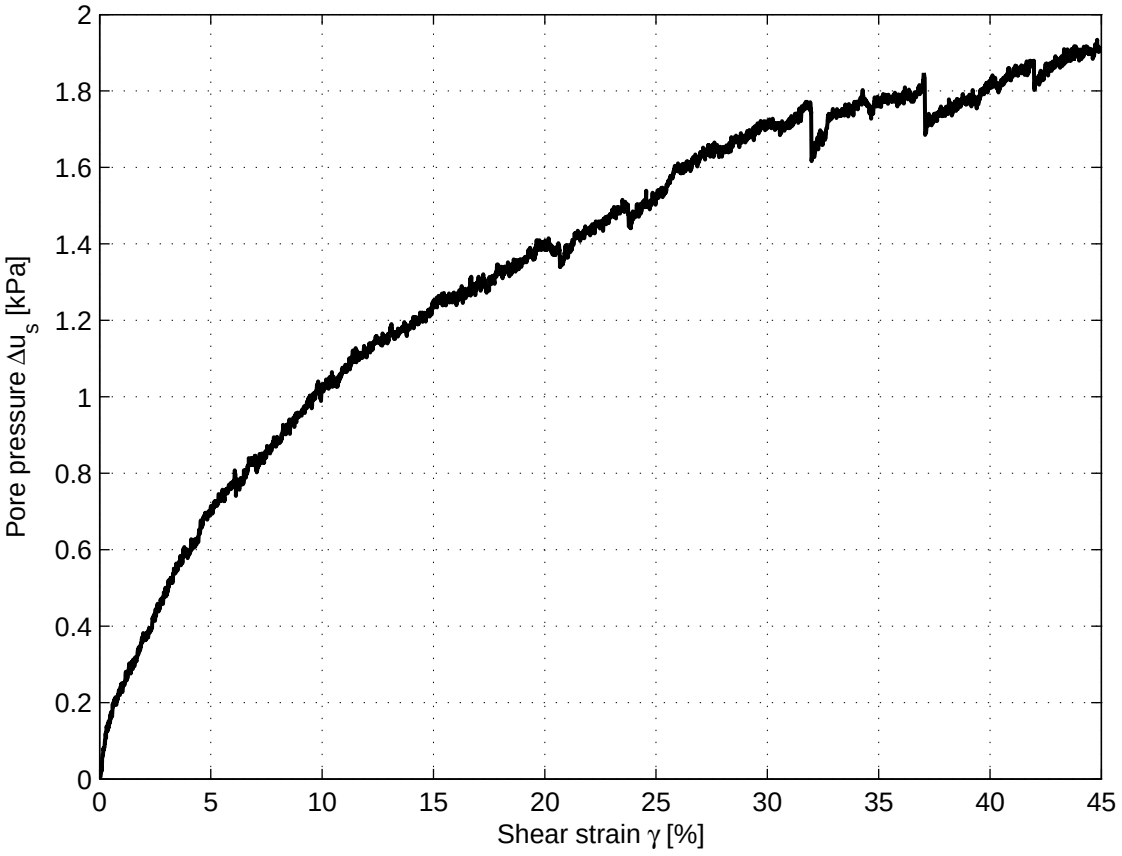
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Direct Simple Shear Test

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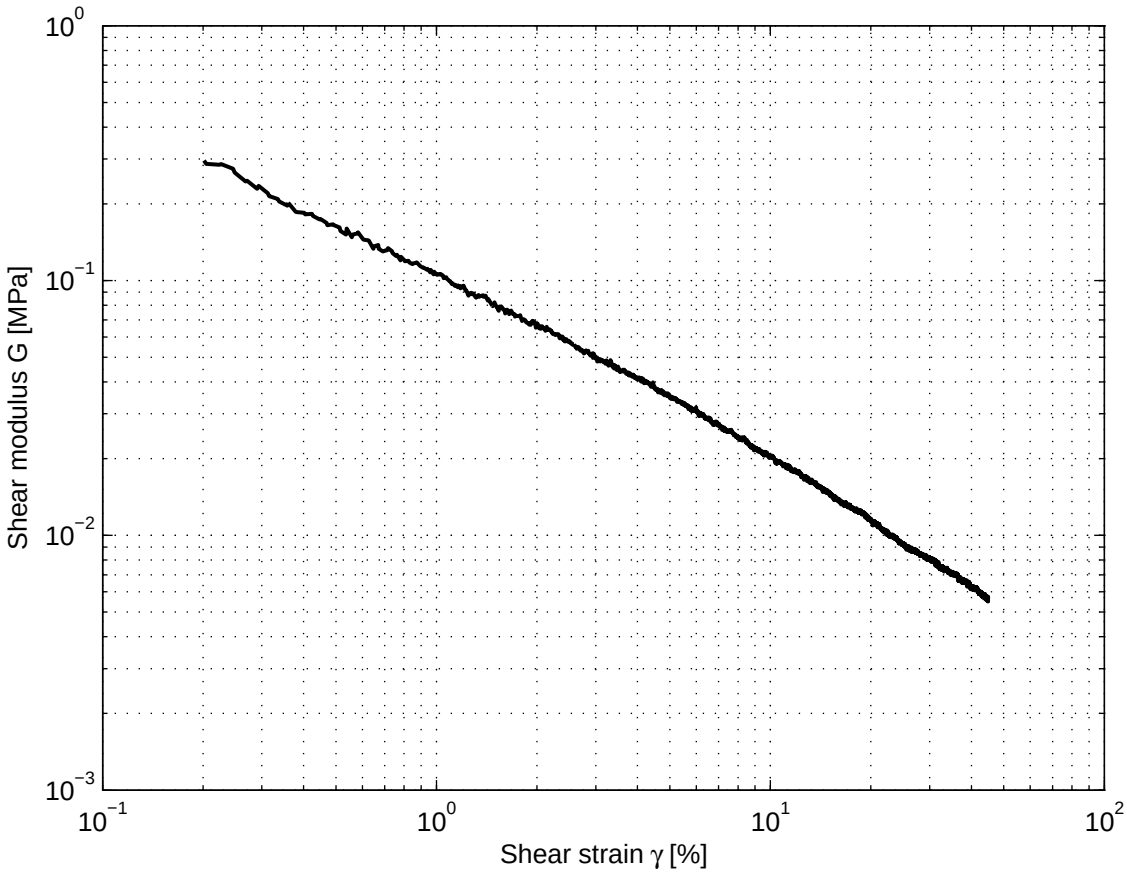
Direct Simple Shear test on sample 9

project	version
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Direct Simple Shear Test

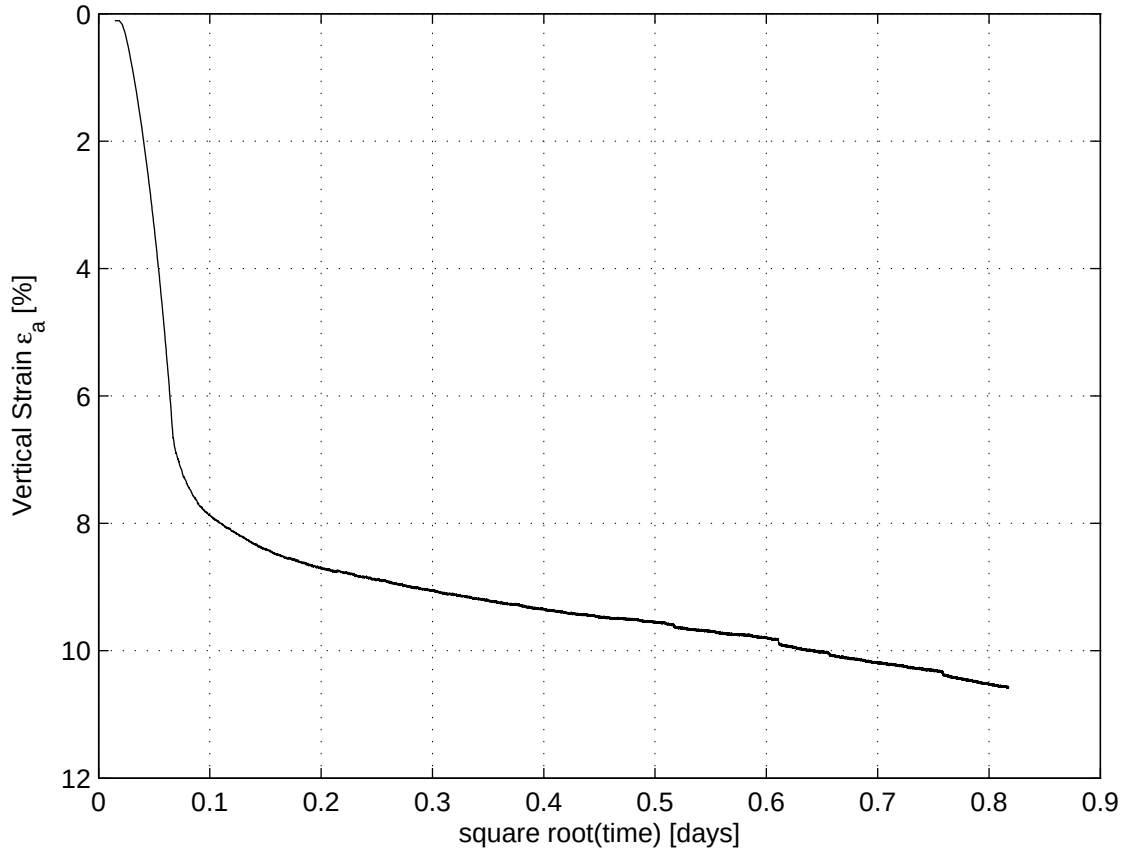
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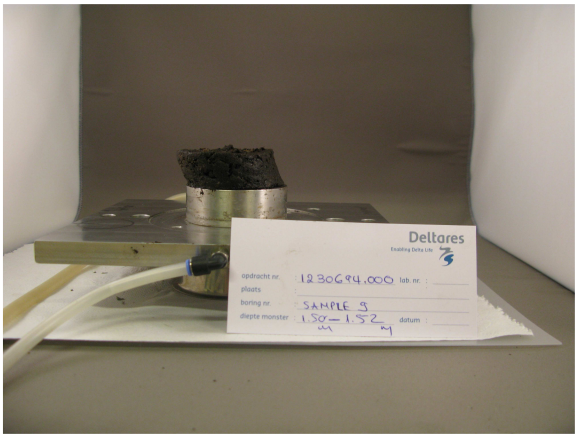
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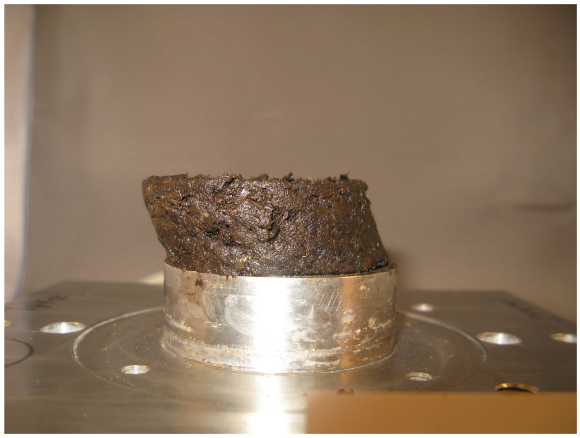


γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	1.7	N.A	2.3	0.7	0.0
15% deformation	2.2	N.A	1.8	1.3	0.0
30% deformation	2.4	N.A	1.3	1.7	0.0
Maximum strain	2.6	N.A	1.1	1.9	0.0
Maximum τ	2.6	0.00	1.2	1.9	0.0

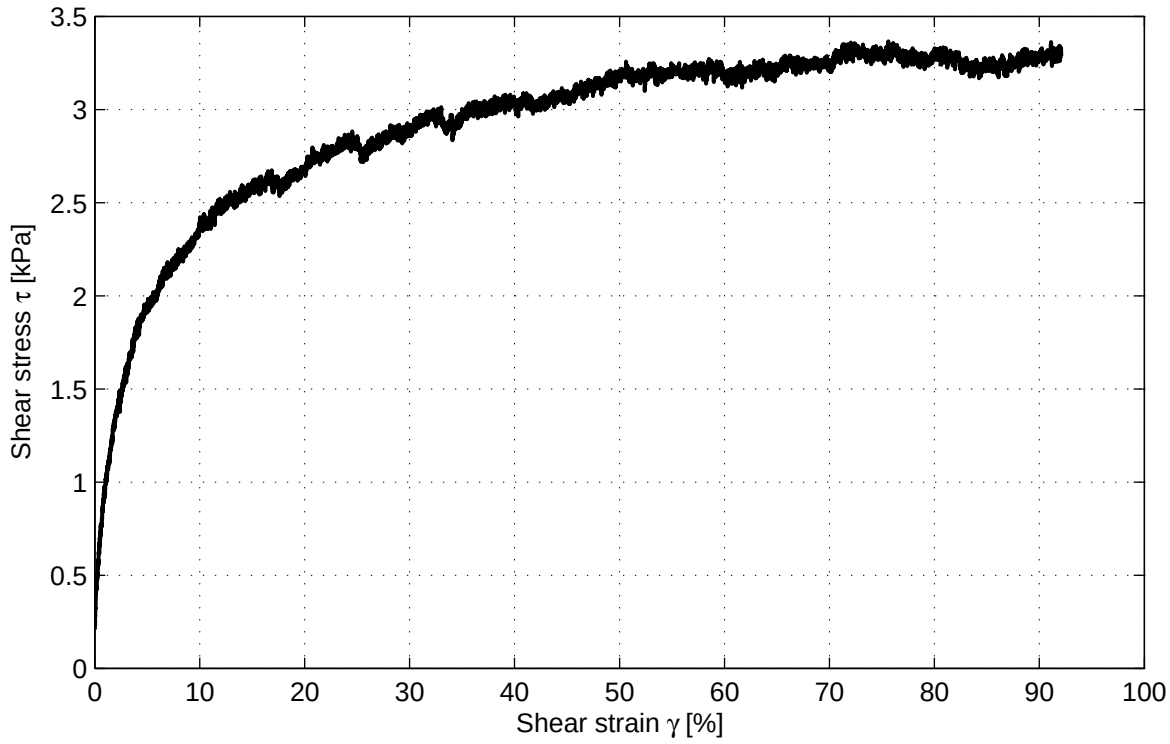
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15


Vertical Strain ε_a [%]
0
2
4
6
8
10
12
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
square root(time) [days]





*) Gecontroleerd en vrijgegeven door ess op 2016-08-15



Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.4
Test type	Constant height
Apparatus code	DSS−D
Sample name	7
Bore code	B2
Depth top [m]	−2.64
Depth bottom [m]	−2.69
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	0.9
S_0 [%]	–
Void ratio start shear [−]	0.93
w_0 [%]	1181.0
w_{final} [%]	877.0
Consolidation stress [kPa]	3.0
Consolidation strain [%]	12.46
Strain rate [%/h]	8.0
Max shear stress [kPa]	3.4
Vert. stress at max shear stress [kPa]	2.6
Shear strain at max shear stress [kPa]	75.6
σ_v at γ = 40% [kPa]	2.3
τ at γ = 40% [kPa]	3.0
Sample Disturbance Index [%]	–
SDI qualification	–

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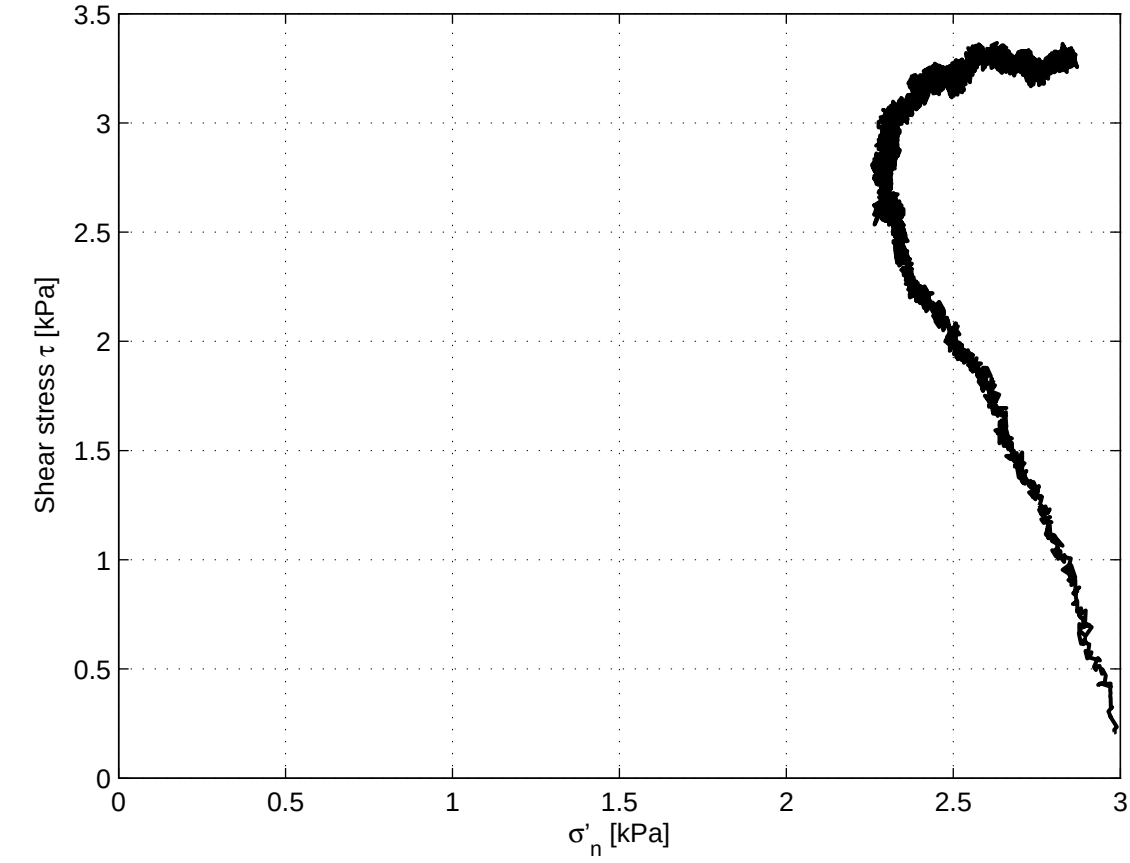
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

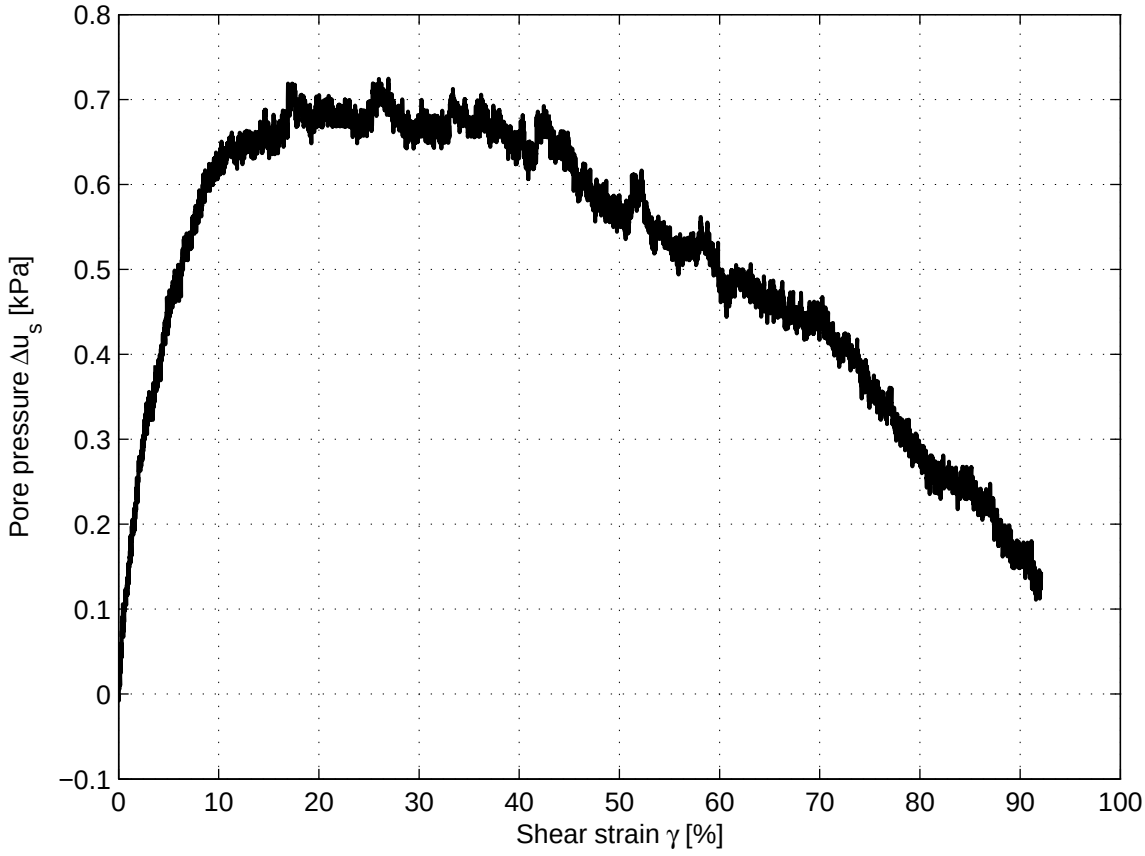
Direct Simple Shear test on sample 7

Direct Simple Shear Test

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7	1

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date	signed
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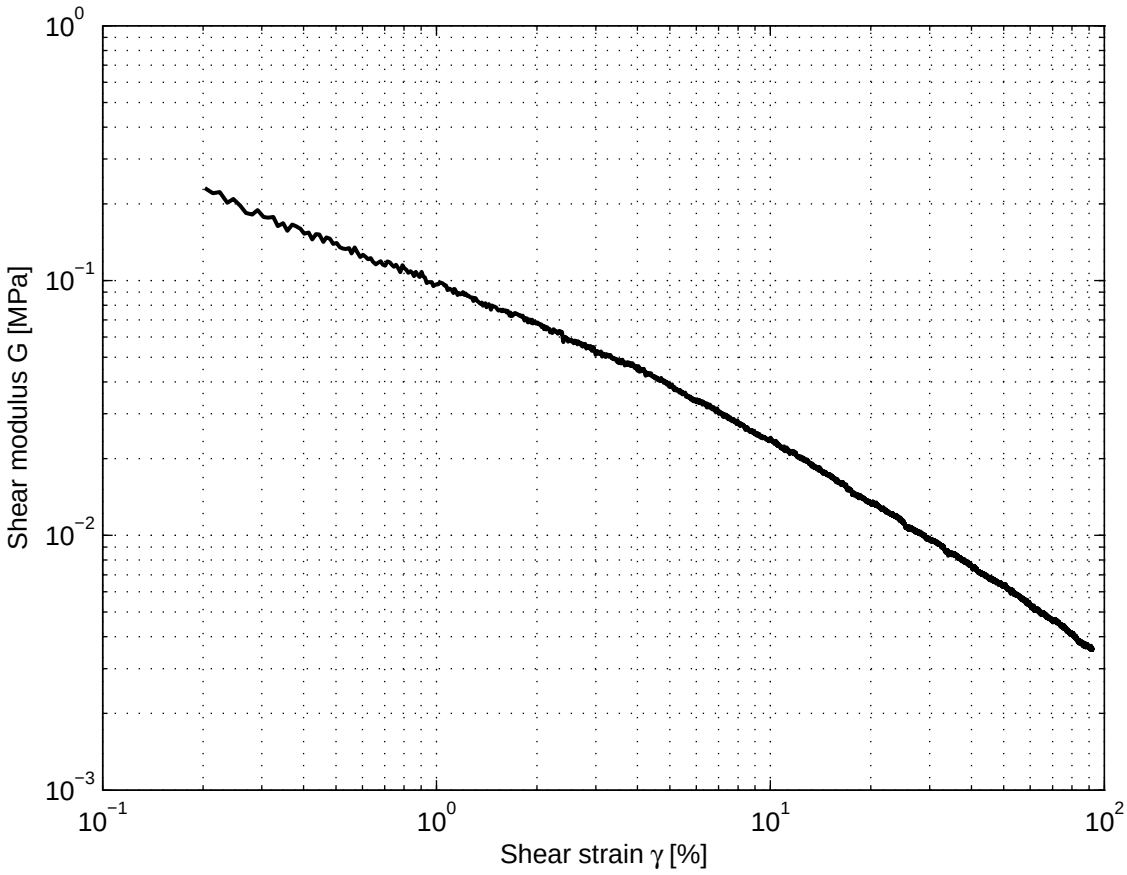
Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

Direct Simple Shear test on sample 7

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appendix	page
7	2

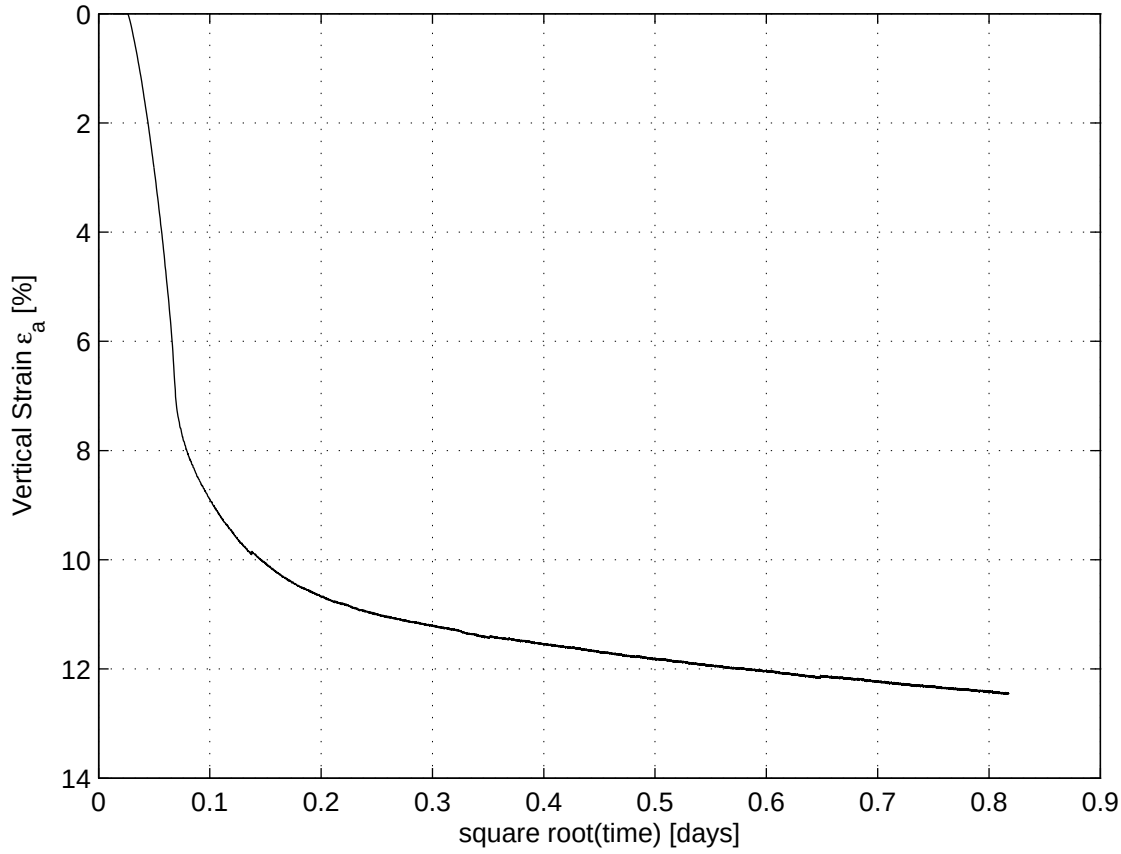
Direct Simple Shear Test

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γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	1.9	N.A	2.5	0.5	0.0
15% deformation	2.6	N.A	2.3	0.7	0.0
30% deformation	2.9	N.A	2.3	0.7	0.0
Maximum strain	3.3	N.A	2.8	0.1	0.0
Maximum τ	3.3	−0.01	2.6	0.4	0.0

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date	signed
2016−07−13	konstadi

Uitvoeren laboratoriumonderzoek vacuumconsolidatie Schardam: CAU en DSS

Direct Simple Shear test on sample 7

project	version
1230694.0	1.3

Direct Simple Shear Test

appendix	page
7	4

*) Gecontroleerd en vrijgegeven door ess op 2016-08-15





*) Gecontroleerd en vrijgegeven door ess op 2016-08-15