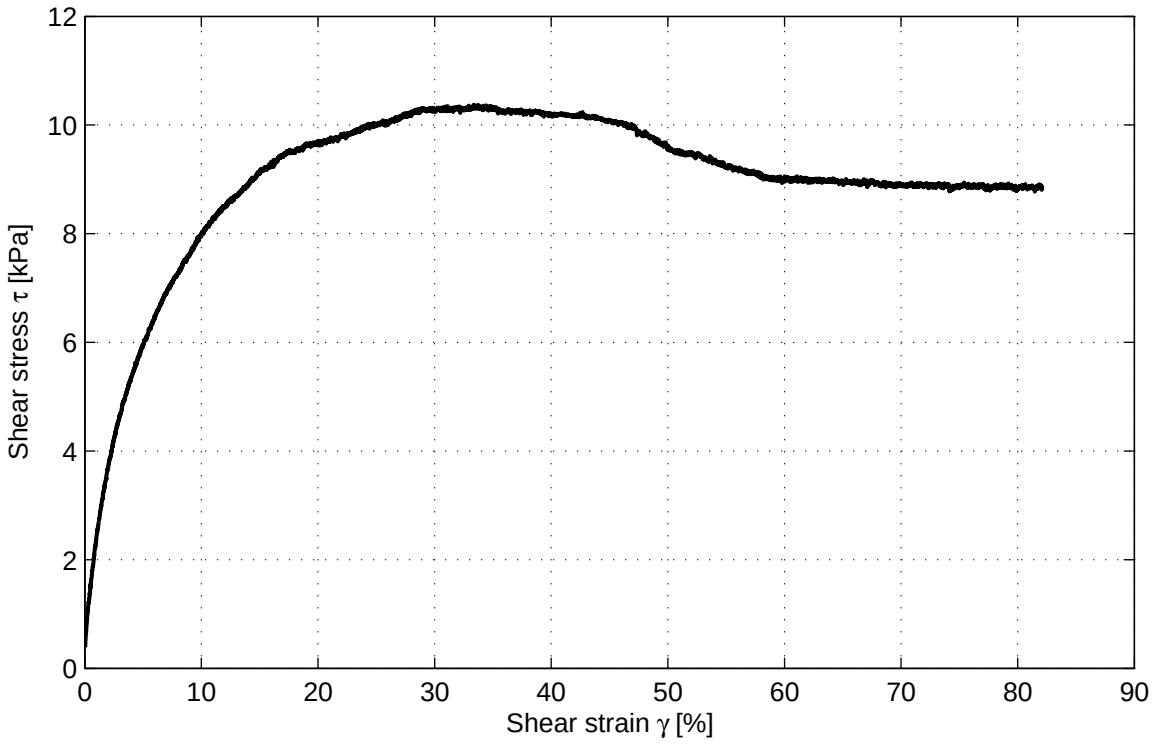


Description of soil sample:

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−D
Sample name	21
Bore code	MB−02
Depth top [m]	−3.30
Depth bottom [m]	−3.35
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	1.00
w_0 [%]	538.0
w_{final} [%]	447.5
Consolidation stress [kPa]	9.8
Consolidation strain [%]	10.11
Strain rate [%/h]	8.0
Max shear stress [kPa]	10.4
Vert. stress at max shear stress [kPa]	12.2
Shear strain at max shear stress [kPa]	33.3
σ_v at γ = 40% [kPa]	12.5
τ at γ = 40% [kPa]	10.2
Sample Disturbance Index [%]	–
SDI qualification	–

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POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

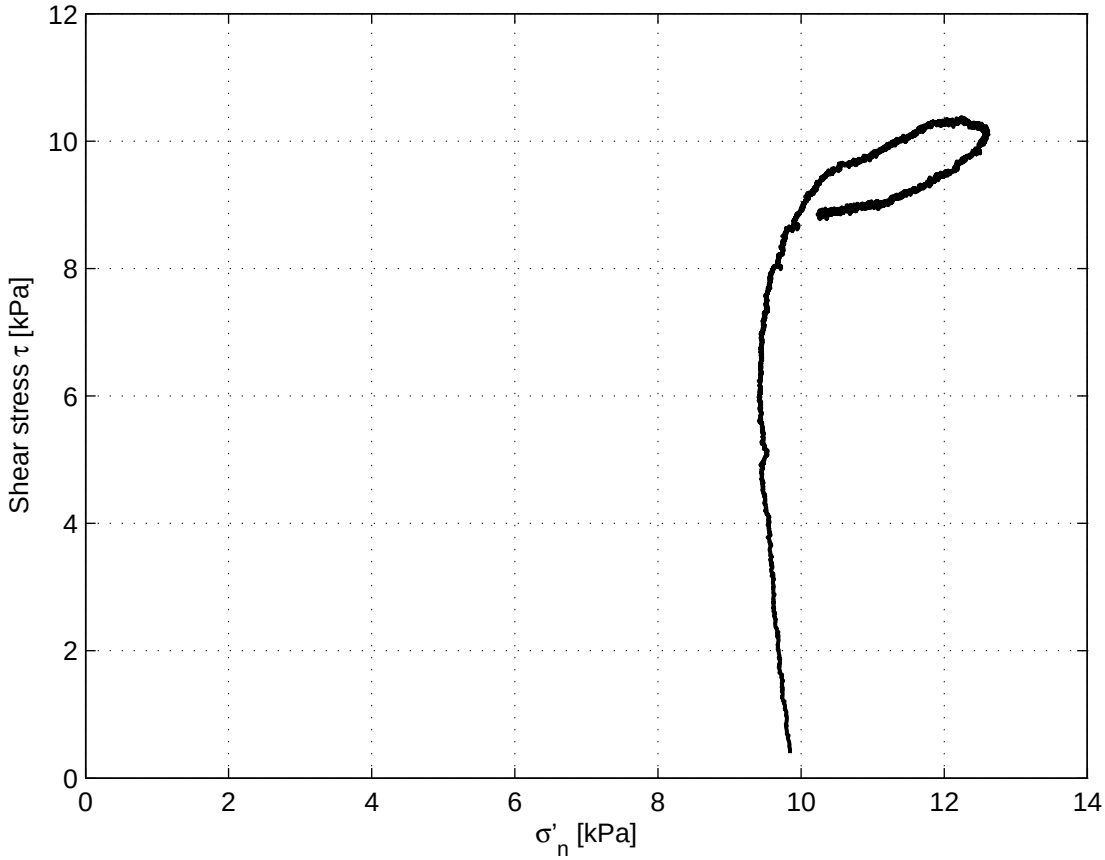
Direct Simple Shear test on sample 21

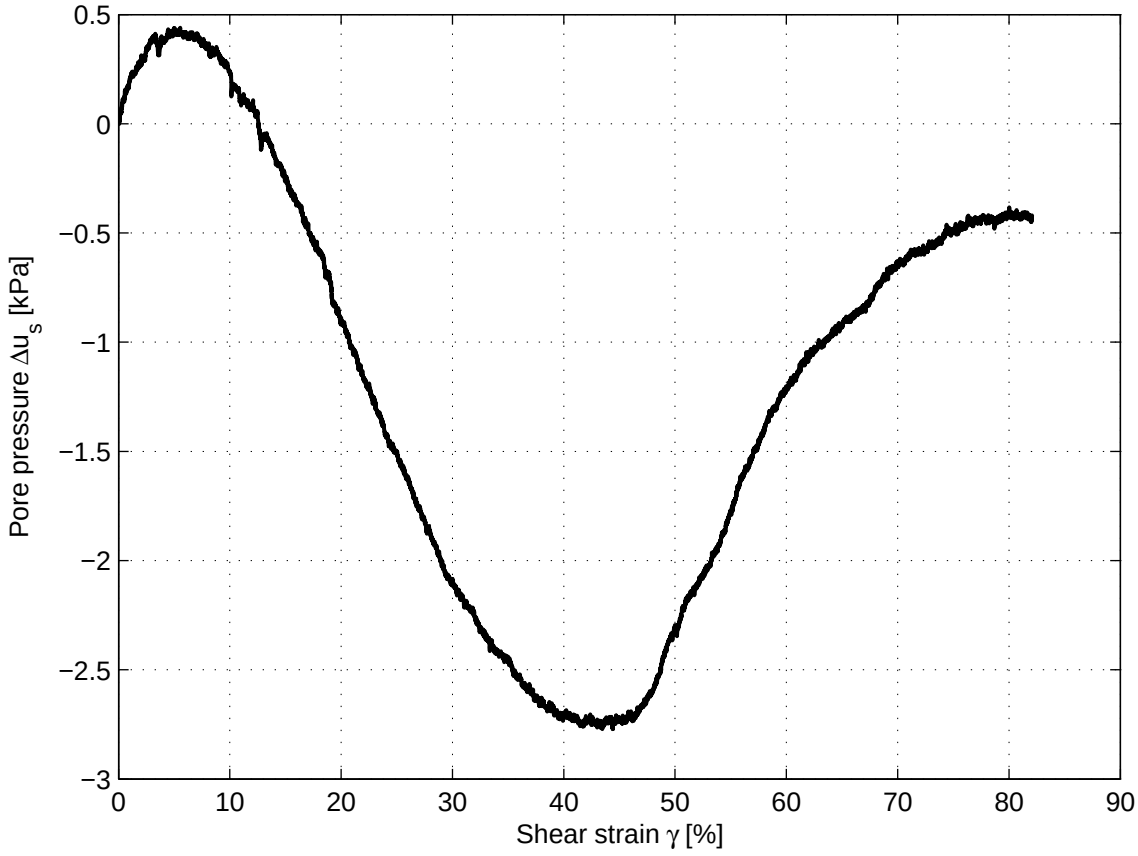
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Direct Simple Shear Test

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*) Gecontroleerd en vrijgegeven door grw op 2016-07-25





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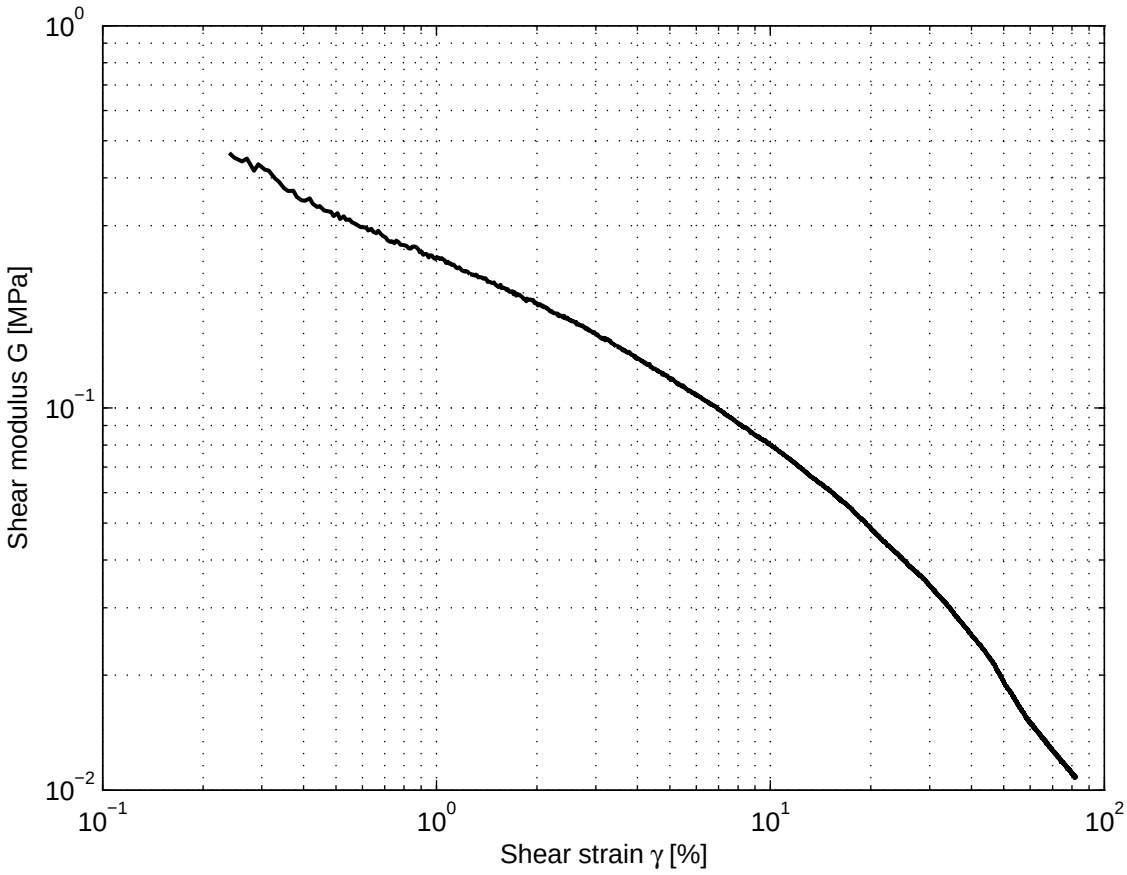
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

Direct Simple Shear test on sample 21

Direct Simple Shear Test

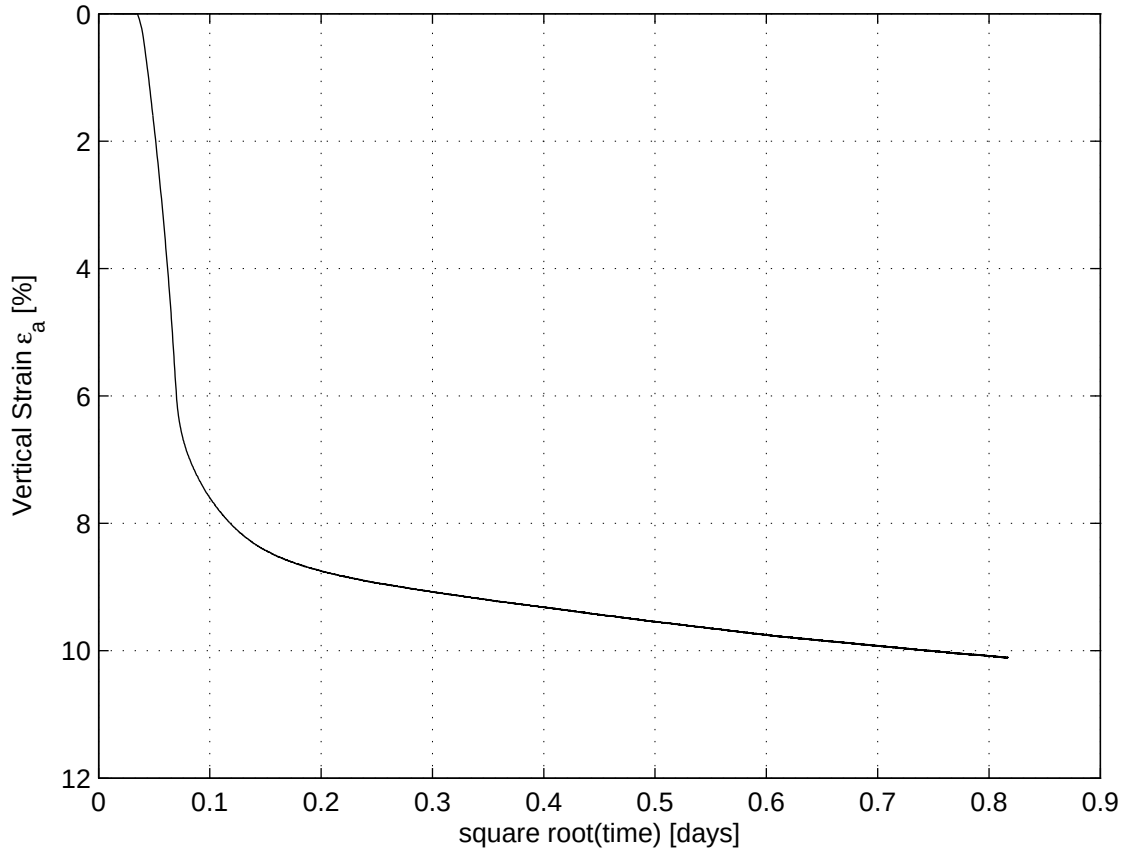
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*) Gecontroleerd en vrijgegeven door grw op 2016-07-25



γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	5.9	N.A	9.4	0.4	0.1
15% deformation	9.1	N.A	10.1	−0.3	0.1
30% deformation	10.2	N.A	12.0	−2.1	0.0
Maximum strain	8.8	N.A	10.3	−0.4	0.0
Maximum τ	10.4	0.00	12.2	−2.4	0.0

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POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

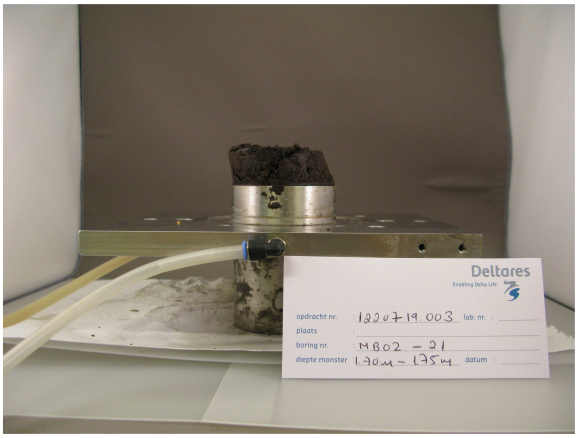
Direct Simple Shear test on sample 21

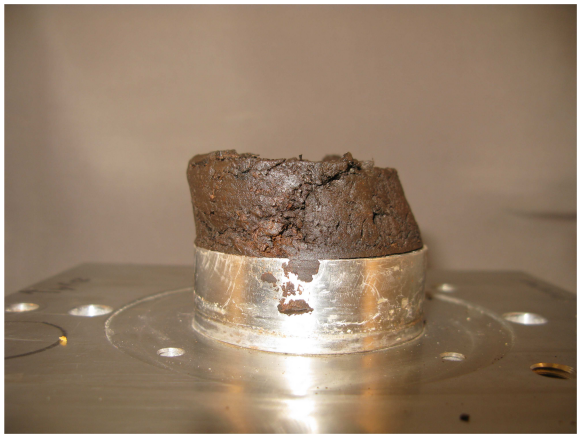
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1220719.3	1.3

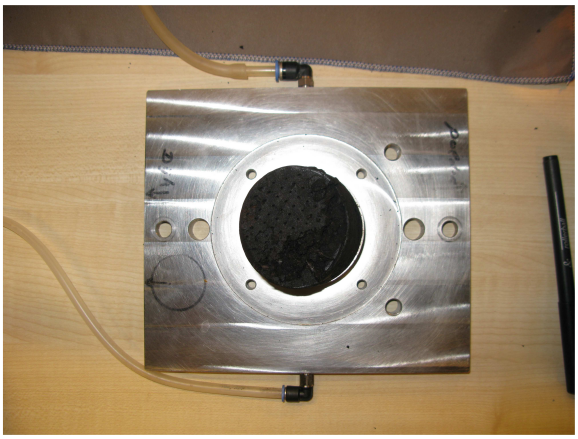
Direct Simple Shear Test

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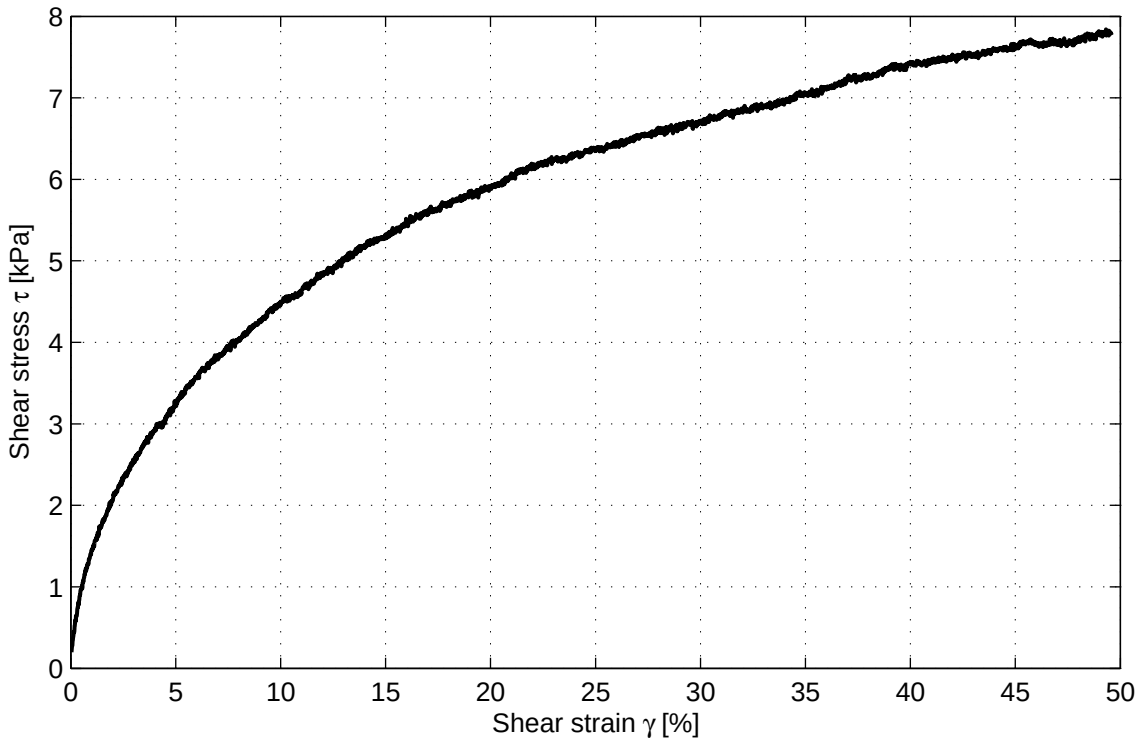
*) Gecontroleerd en vrijgegeven door grw op 2016-07-25







*) Gecontroleerd en vrijgegeven door grw op 2016-07-25



Description of soil sample:

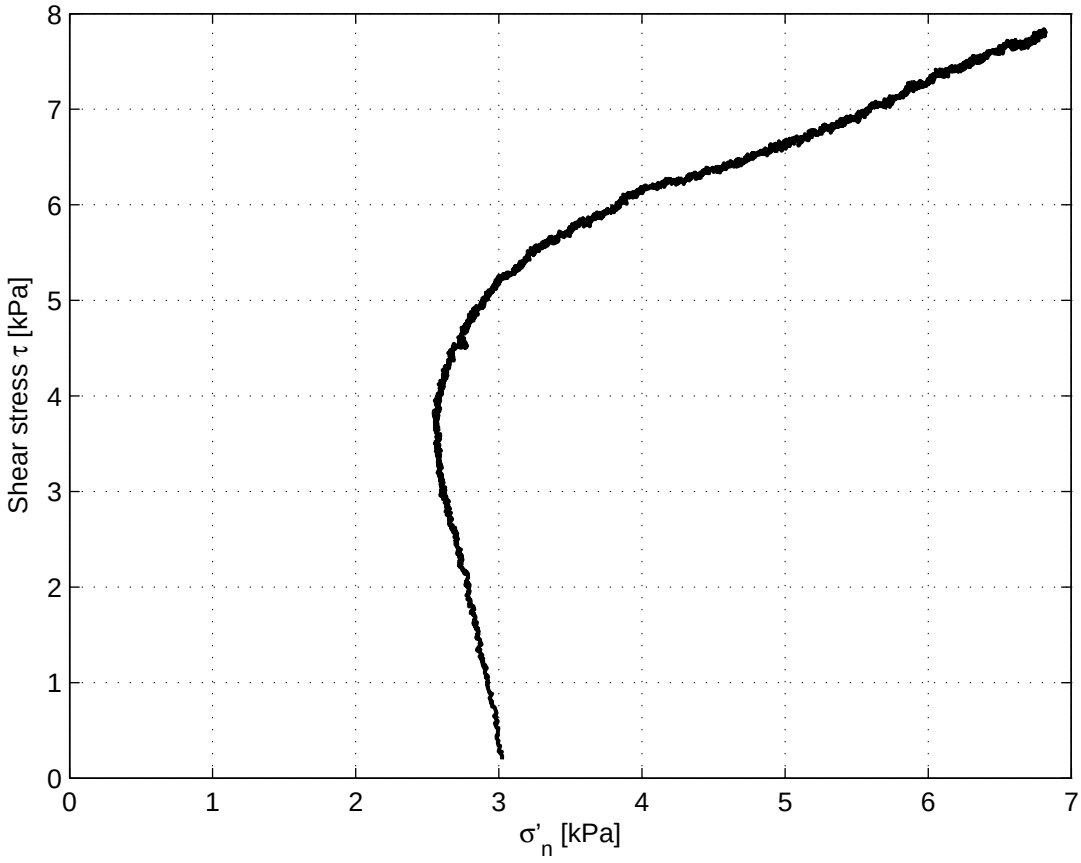
Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.5
Test type	Constant height
Apparatus code	DSS−D
Sample name	22
Bore code	MB−02
Depth top [m]	−3.40
Depth bottom [m]	−3.45
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	1.00
w_0 [%]	505.1
w_{final} [%]	478.6
Consolidation stress [kPa]	2.9
Consolidation strain [%]	4.46
Strain rate [%/h]	8.0
Max shear stress [kPa]	7.8
Vert. stress at max shear stress [kPa]	6.8
Shear strain at max shear stress [kPa]	49.3
σ_v at γ = 40% [kPa]	6.2
τ at γ = 40% [kPa]	7.4
Sample Disturbance Index [%]	–
SDI qualification	–

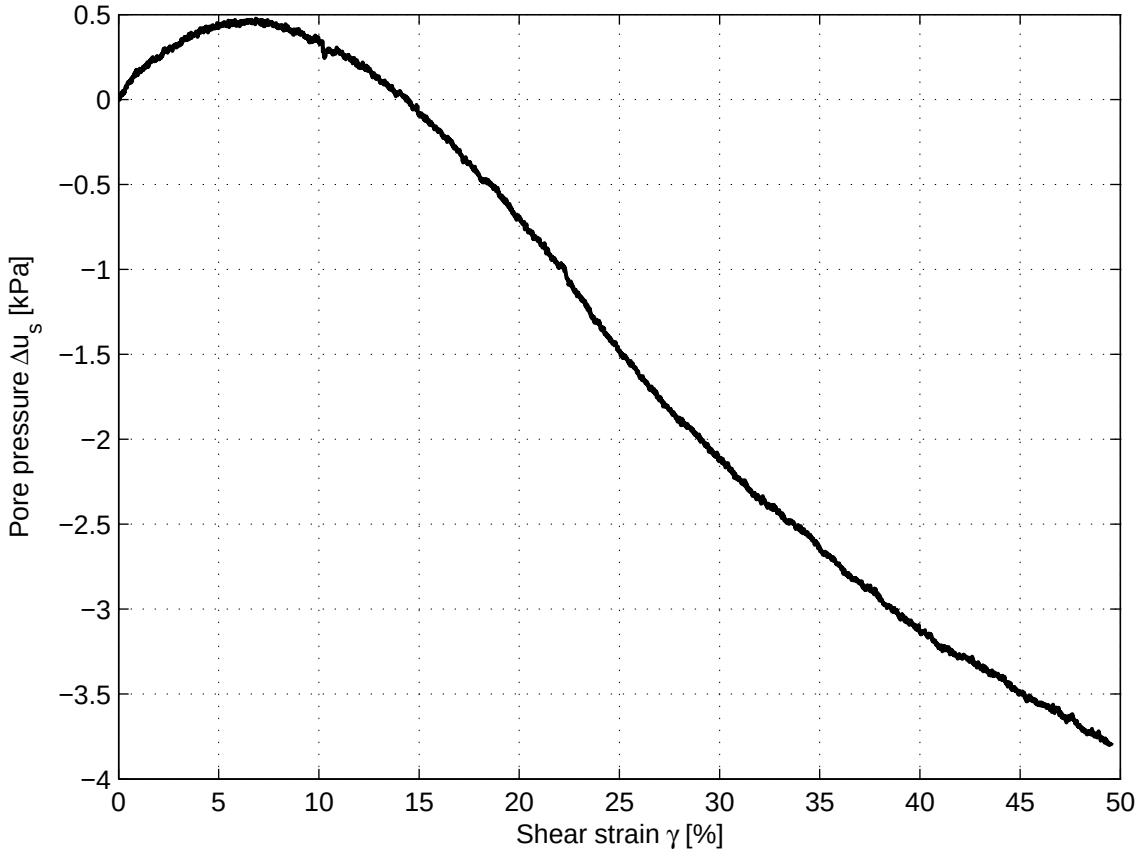
According to the test specifications the sample should have been consolidated under a vertical stress of 9.8 kPa. Instead, due to a mistake, the consolidation stress applied is 3 kPa.

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	date	signed
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POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten	project	version
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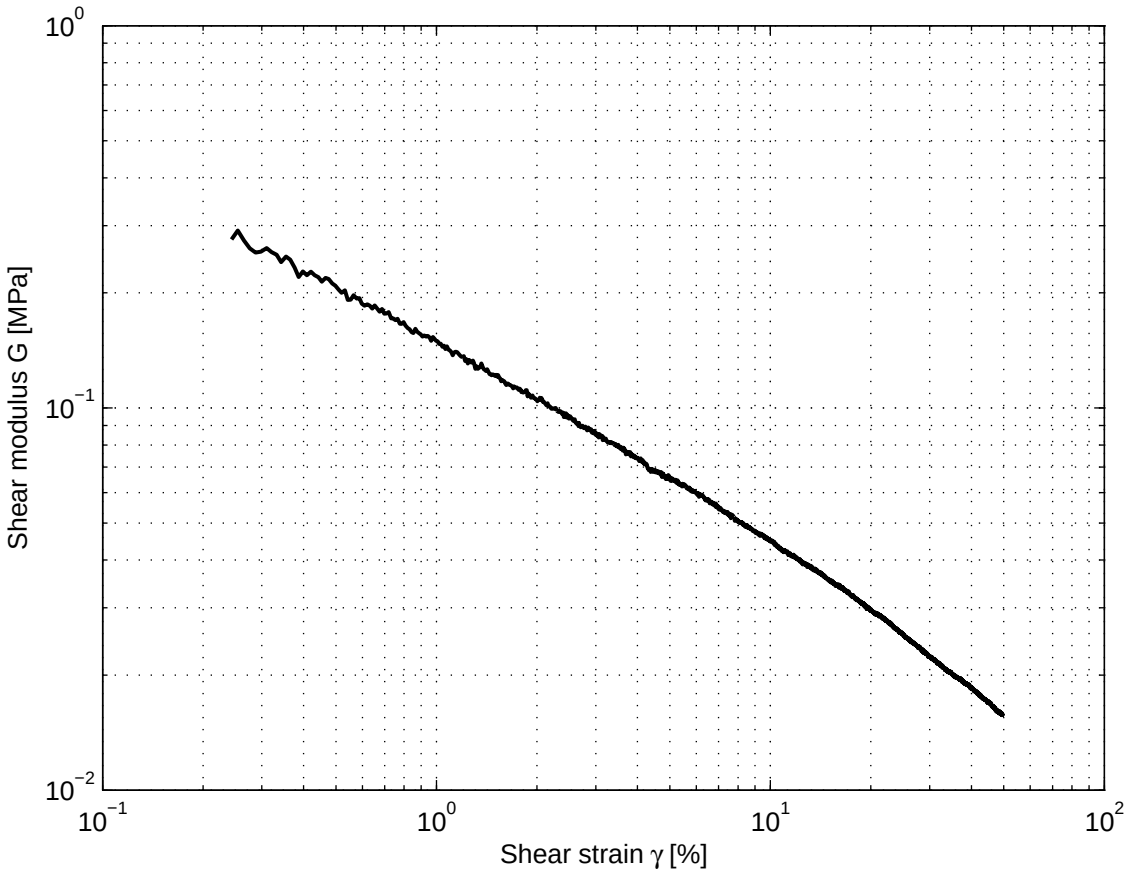
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

Direct Simple Shear test on sample 22

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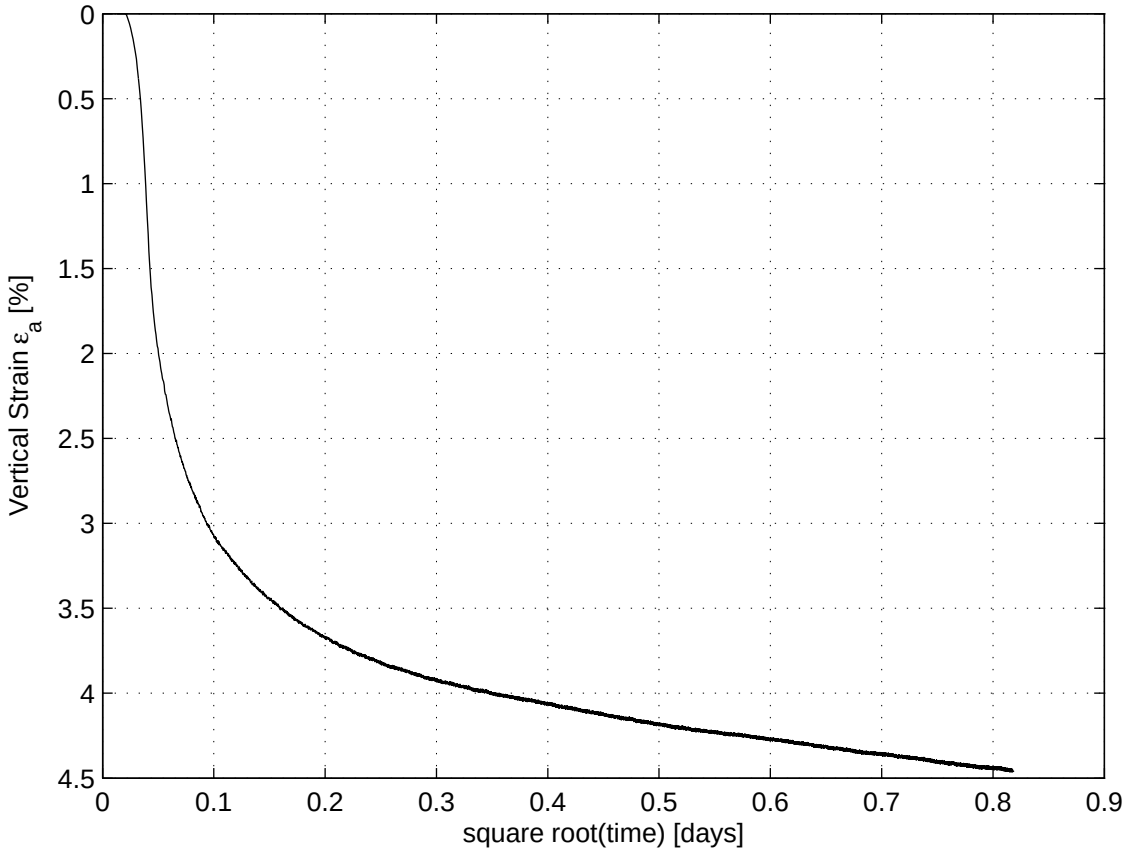
Direct Simple Shear Test

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γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	3.3	N.A	2.6	0.4	0.1
15% deformation	5.3	N.A	3.1	−0.1	0.0
30% deformation	6.7	N.A	5.1	−2.1	0.0
Maximum strain	7.8	N.A	6.8	−3.8	0.0
Maximum τ	7.8	0.00	6.8	−3.8	0.0

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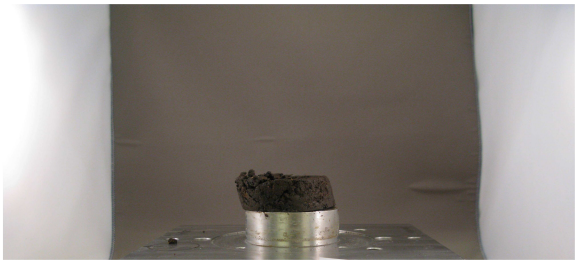
Direct Simple Shear test on sample 22

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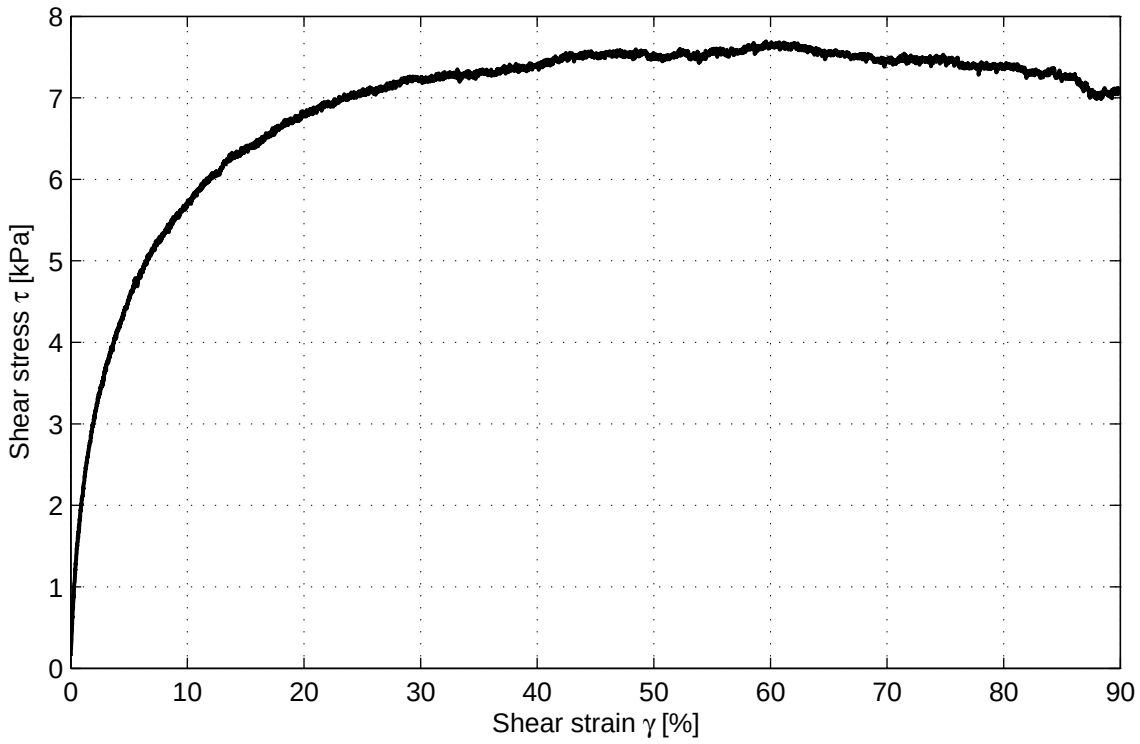
Direct Simple Shear Test

*) Gecontroleerd en vrijgegeven door grw op 2016-07-25





*) Gecontroleerd en vrijgegeven door grw op 2016-07-25



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	24
Bore code	MB−02
Depth top [m]	−4.20
Depth bottom [m]	−4.25
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	0.96
w_0 [%]	515.2
w_{final} [%]	489.5
Consolidation stress [kPa]	10.1
Consolidation strain [%]	14.08
Strain rate [%/h]	8.0
Max shear stress [kPa]	7.7
Vert. stress at max shear stress [kPa]	6.5
Shear strain at max shear stress [kPa]	59.6
σ_v at γ = 40% [kPa]	7.2
τ at γ = 40% [kPa]	7.4
Sample Disturbance Index [%]	–
SDI qualification	–

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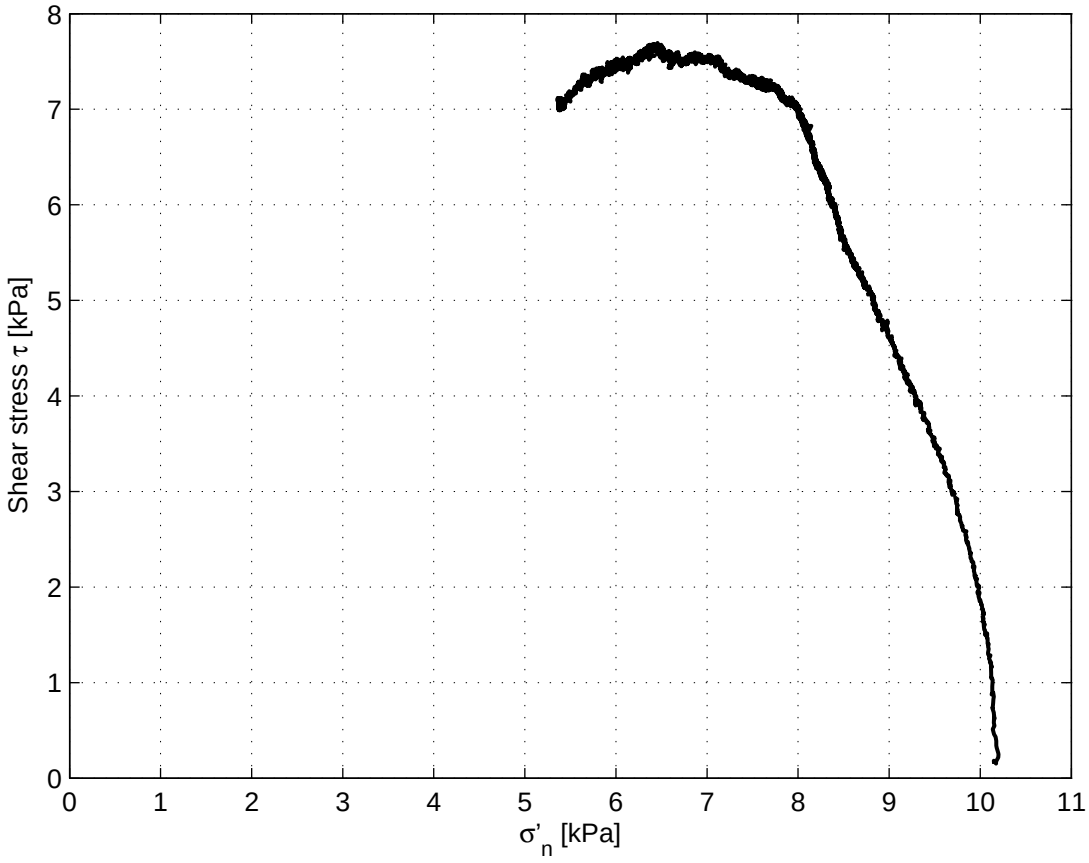
Direct Simple Shear test on sample 24

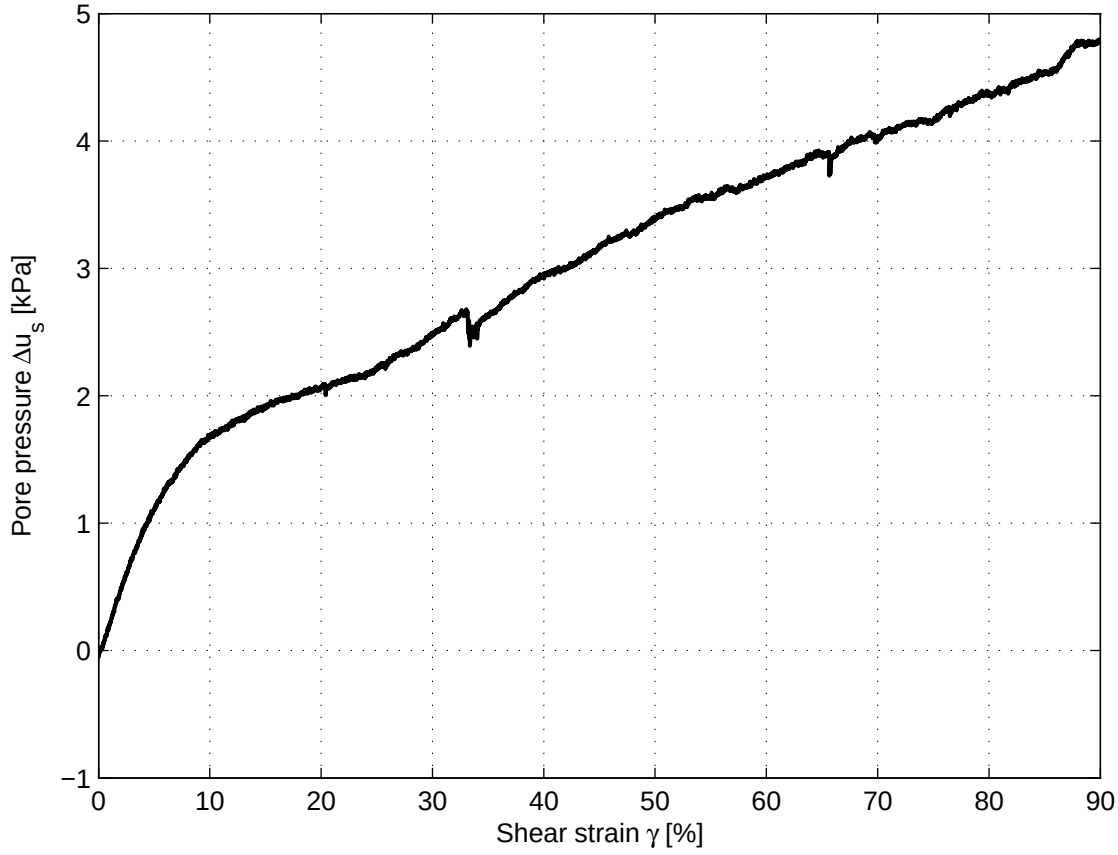
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Direct Simple Shear Test

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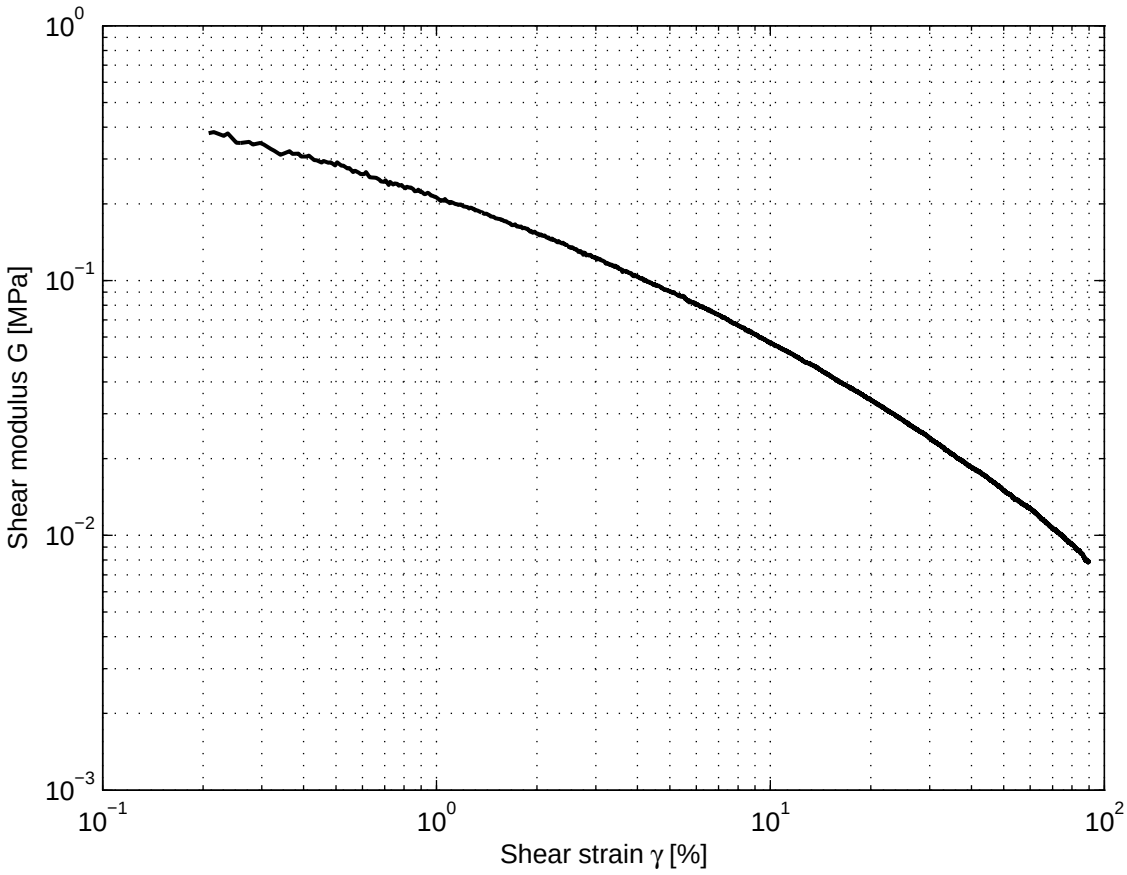
Direct Simple Shear test on sample 24

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1220719.3	1.3

Direct Simple Shear Test

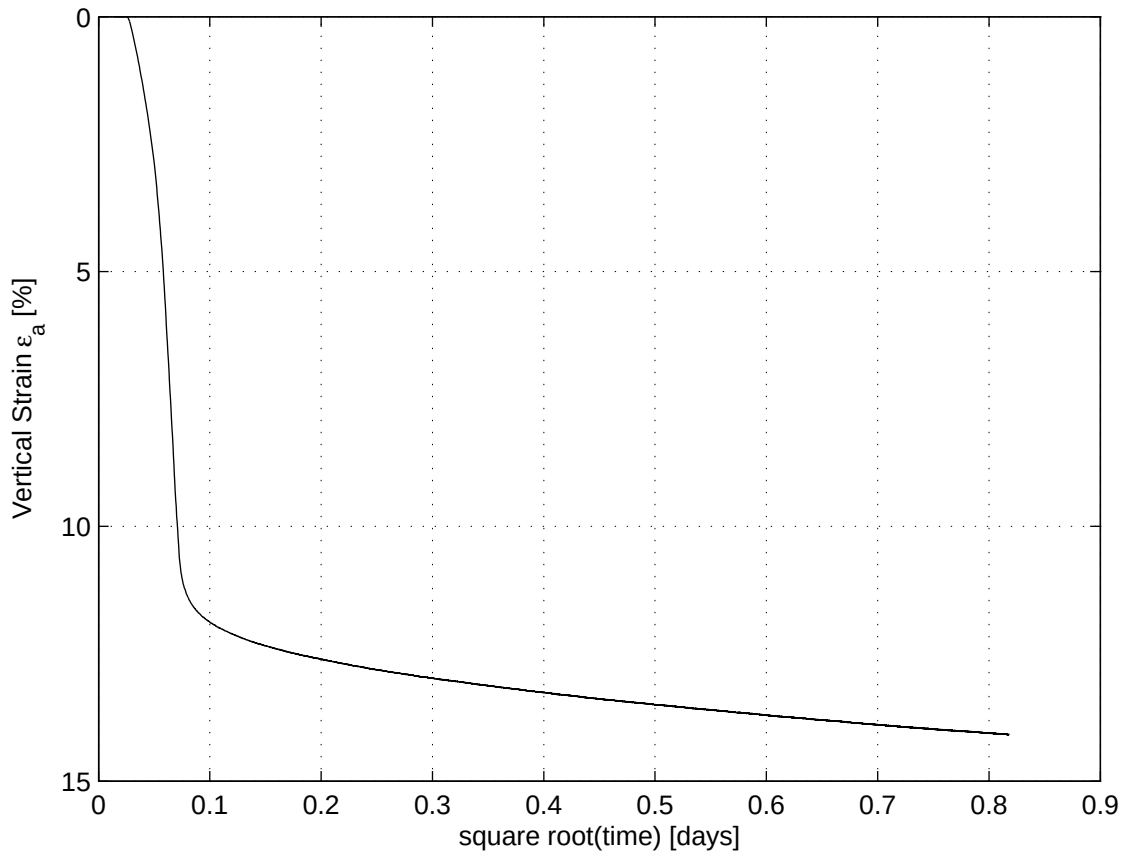
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*) Gecontroleerd en vrijgegeven door grw op 2016-07-25



γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	4.5	N.A	9.0	1.1	0.1
15% deformation	6.4	N.A	8.2	1.9	0.0
30% deformation	7.2	N.A	7.7	2.5	0.0
Maximum strain	7.1	N.A	5.4	4.8	0.0
Maximum τ	7.6	−0.00	6.5	3.7	0.0

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Direct Simple Shear test on sample 24

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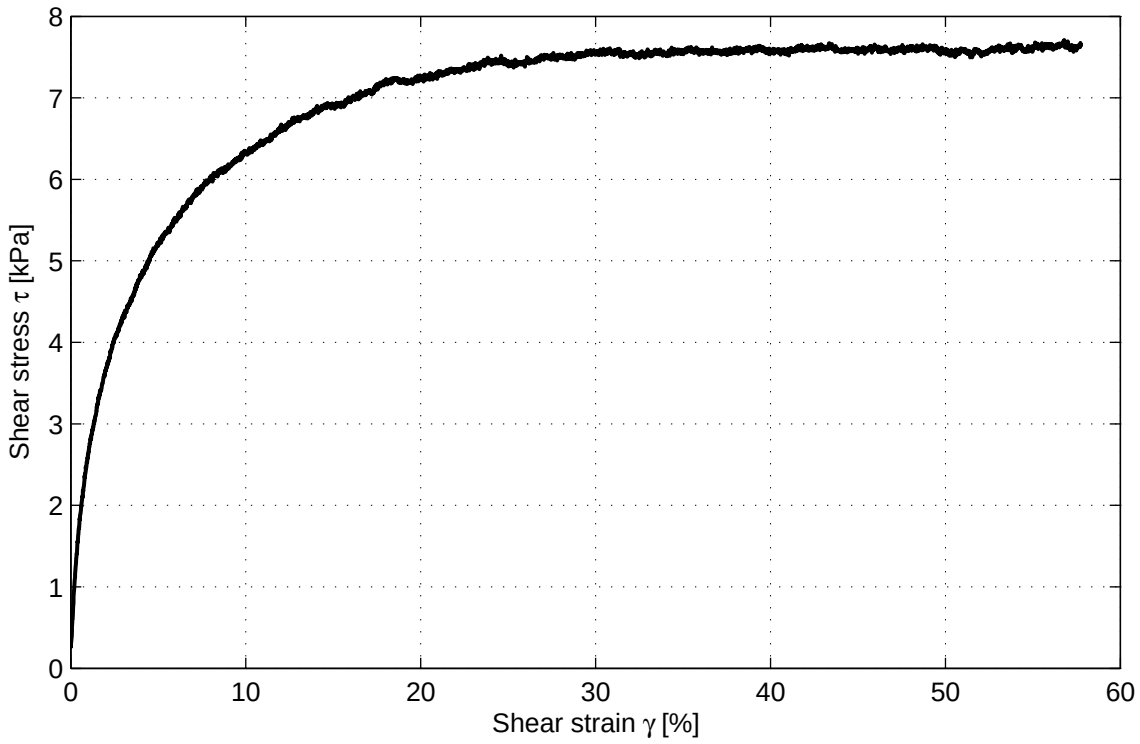
*) Gecontroleerd en vrijgegeven door grw op 2016-07-25







*) Gecontroleerd en vrijgegeven door grw op 2016-07-25



Description of soil sample:

Soil classification	Peat, low−mineral content
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.7
Test type	Constant height
Apparatus code	DSS−D
Sample name	27
Bore code	MB−02
Depth top [m]	−4.70
Depth bottom [m]	−4.75
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.1
S_0 [%]	–
Void ratio start shear [−]	1.07
w_0 [%]	308.4
w_{final} [%]	308.1
Consolidation stress [kPa]	10.2
Consolidation strain [%]	9.14
Strain rate [%/h]	8.0
Max shear stress [kPa]	7.7
Vert. stress at max shear stress [kPa]	7.1
Shear strain at max shear stress [kPa]	56.8
σ_v at γ = 40% [kPa]	7.5
τ at γ = 40% [kPa]	7.6
Sample Disturbance Index [%]	–
SDI qualification	–

Formation of a shearing plane (refer to sample's photos).

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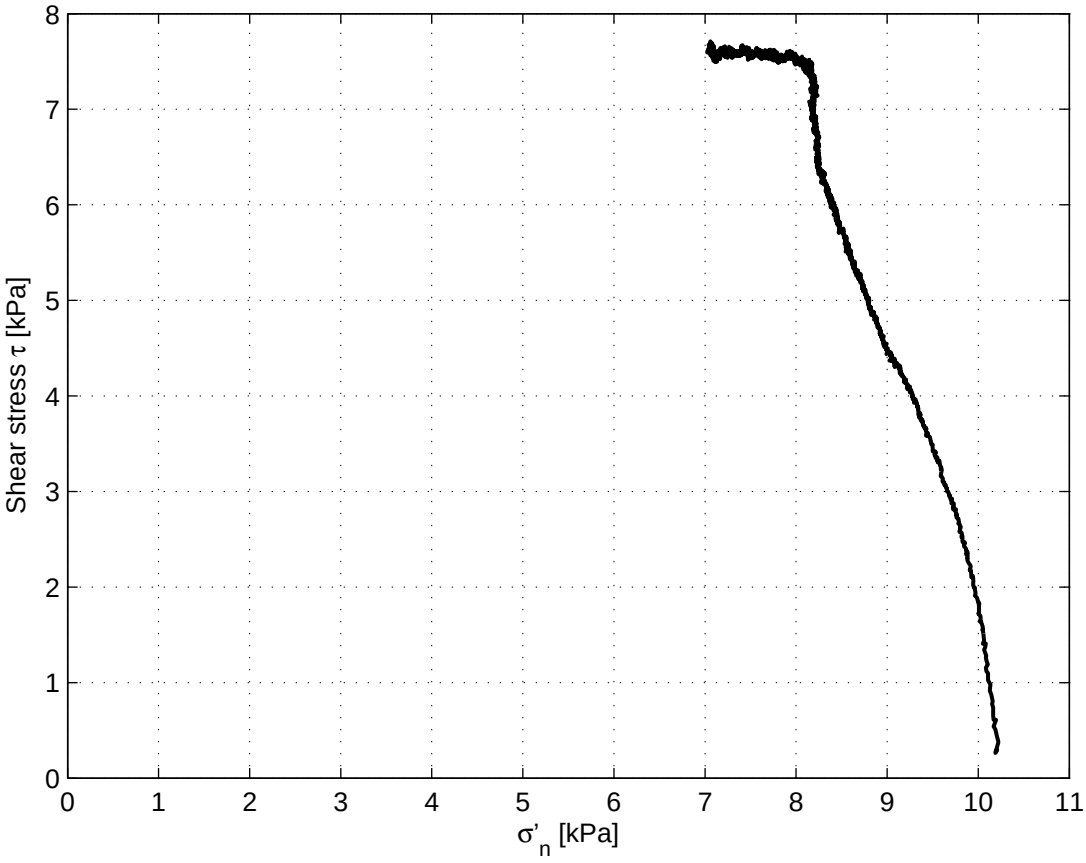
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

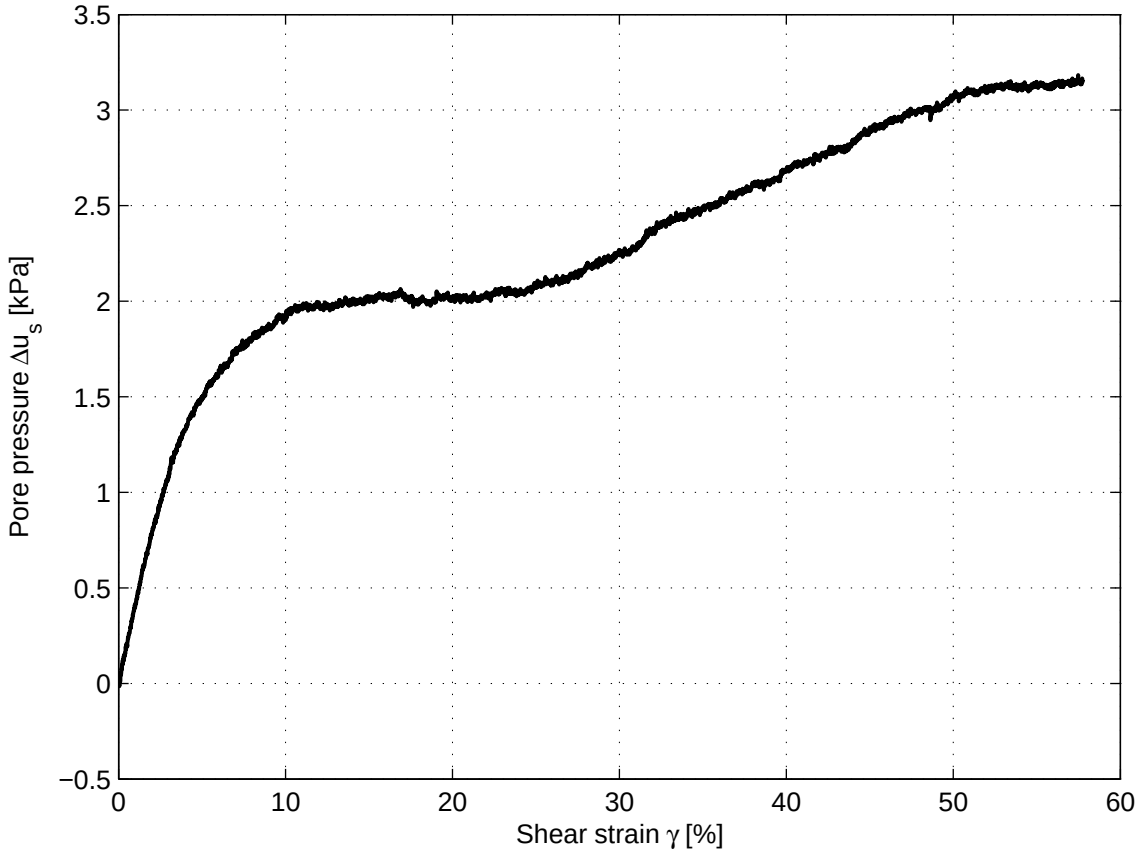
Direct Simple Shear test on sample 27

Direct Simple Shear Test

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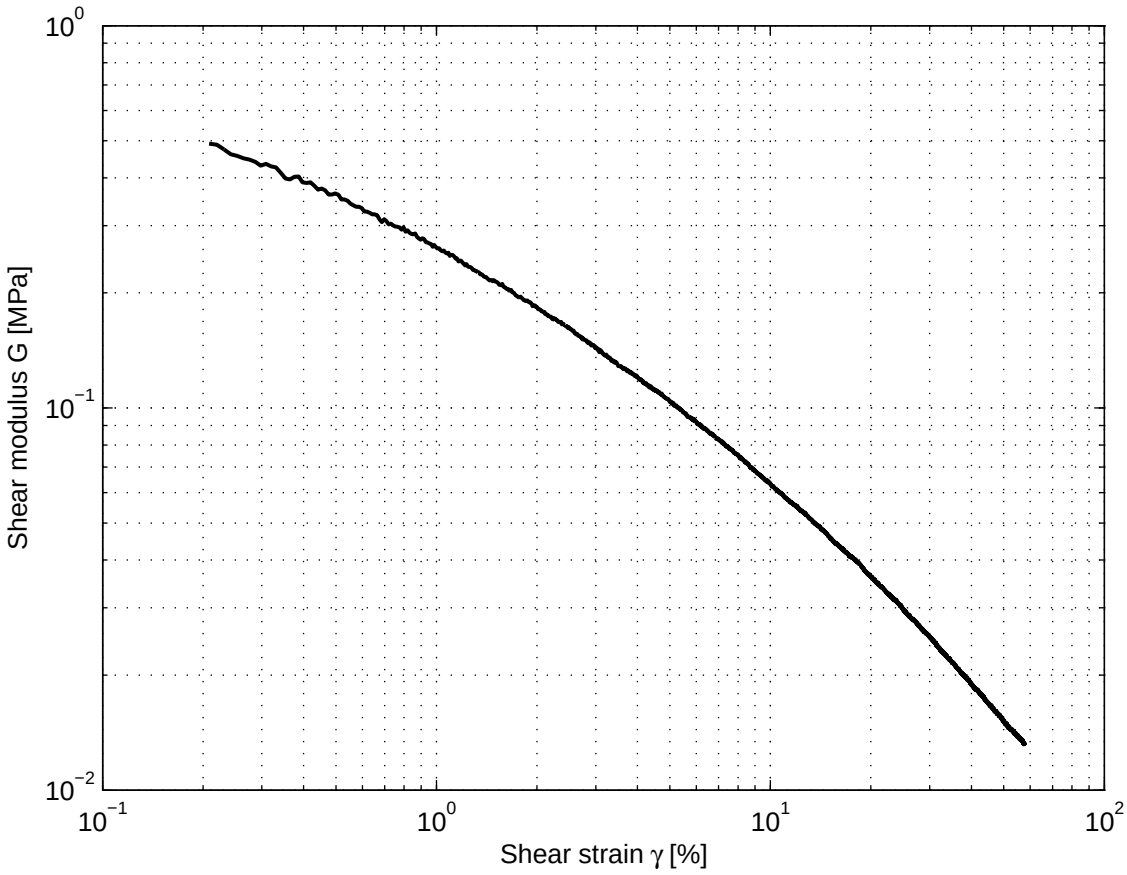
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

Direct Simple Shear test on sample 27

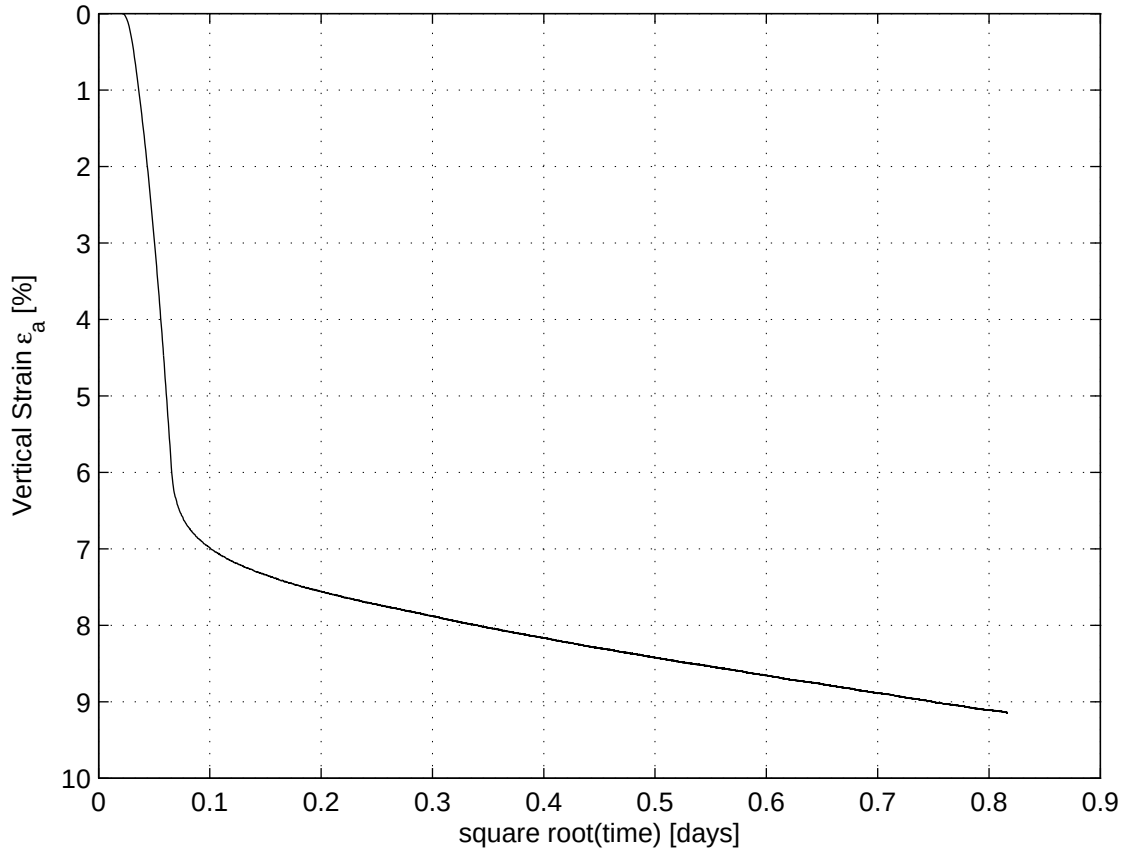
Direct Simple Shear Test

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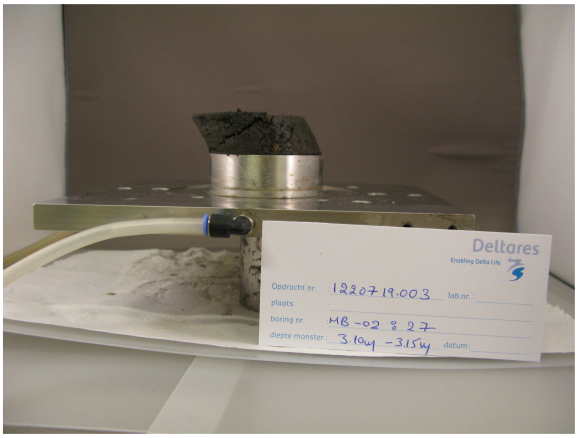
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15

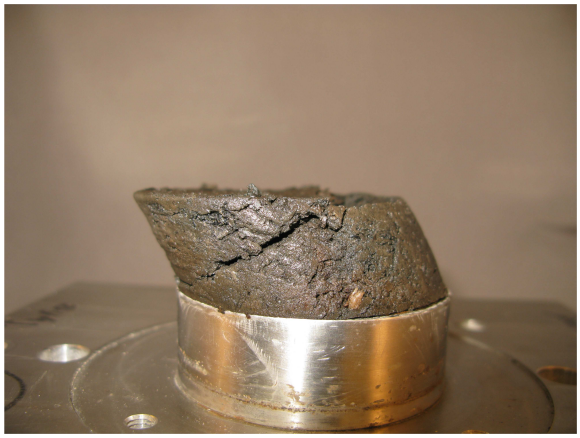


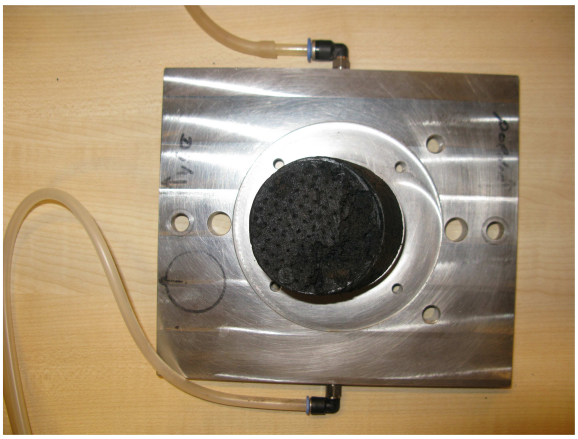
γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	5.2	N.A	8.7	1.5	0.1
15% deformation	6.9	N.A	8.2	2.0	0.0
30% deformation	7.6	N.A	8.0	2.2	0.0
Maximum strain	7.6	N.A	7.0	3.2	0.0
Maximum τ	7.7	−0.00	7.1	3.1	0.0



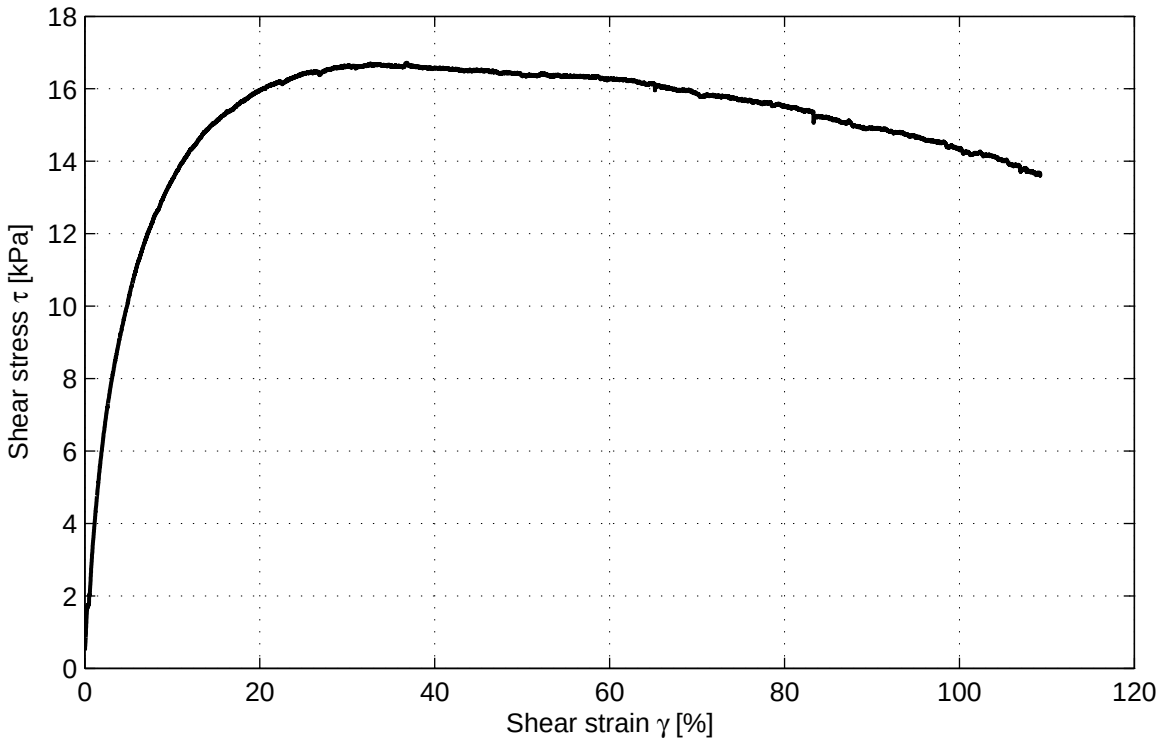
*) Gecontroleerd en vrijgegeven door ess op 2016-08-15







*) 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]	21.7
Test type	Constant height
Apparatus code	DSS−C
Sample name	58
Bore code	MB−04
Depth top [m]	−3.34
Depth bottom [m]	−3.39
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	1.02
w_0 [%]	663.1
w_{final} [%]	542.7
Consolidation stress [kPa]	40.0
Consolidation strain [%]	33.50
Strain rate [%/h]	8.0
Max shear stress [kPa]	16.7
Vert. stress at max shear stress [kPa]	27.3
Shear strain at max shear stress [kPa]	36.8
σ_v at γ = 40% [kPa]	26.7
τ at γ = 40% [kPa]	16.6
Sample Disturbance Index [%]	–
SDI qualification	–

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date	signed
2016−08−16	venema

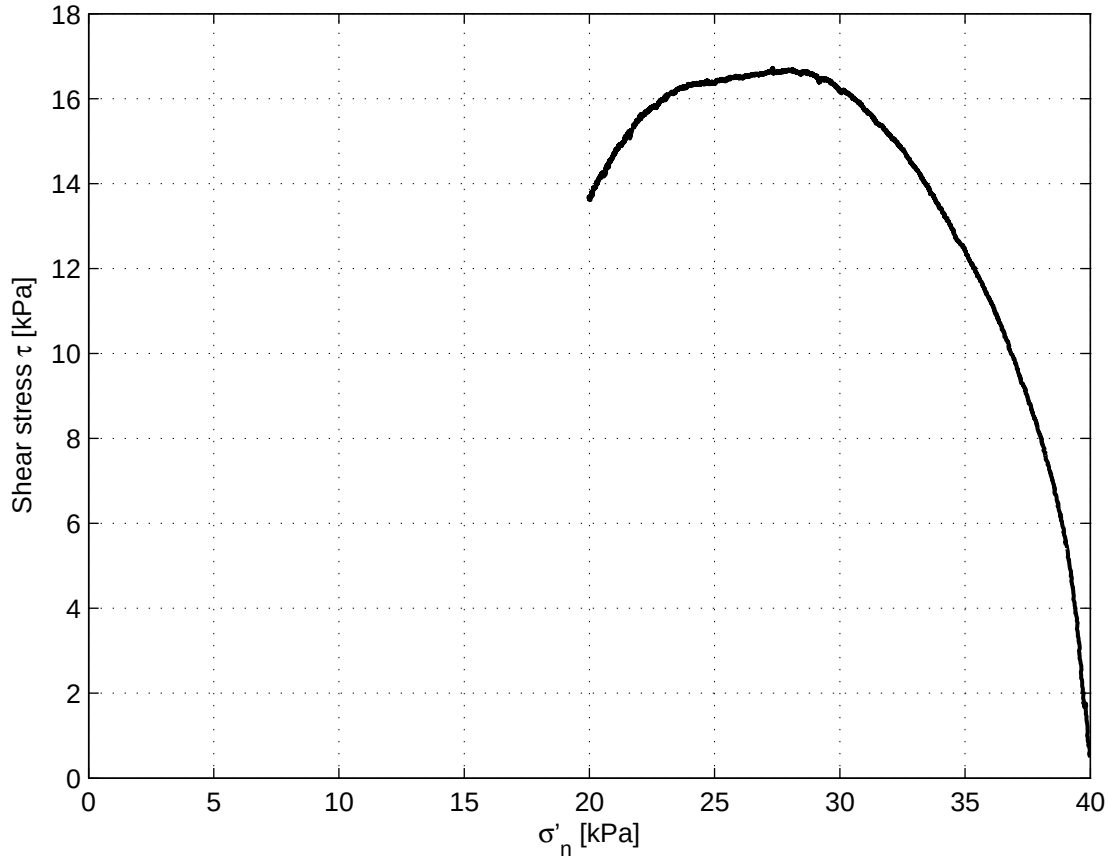
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

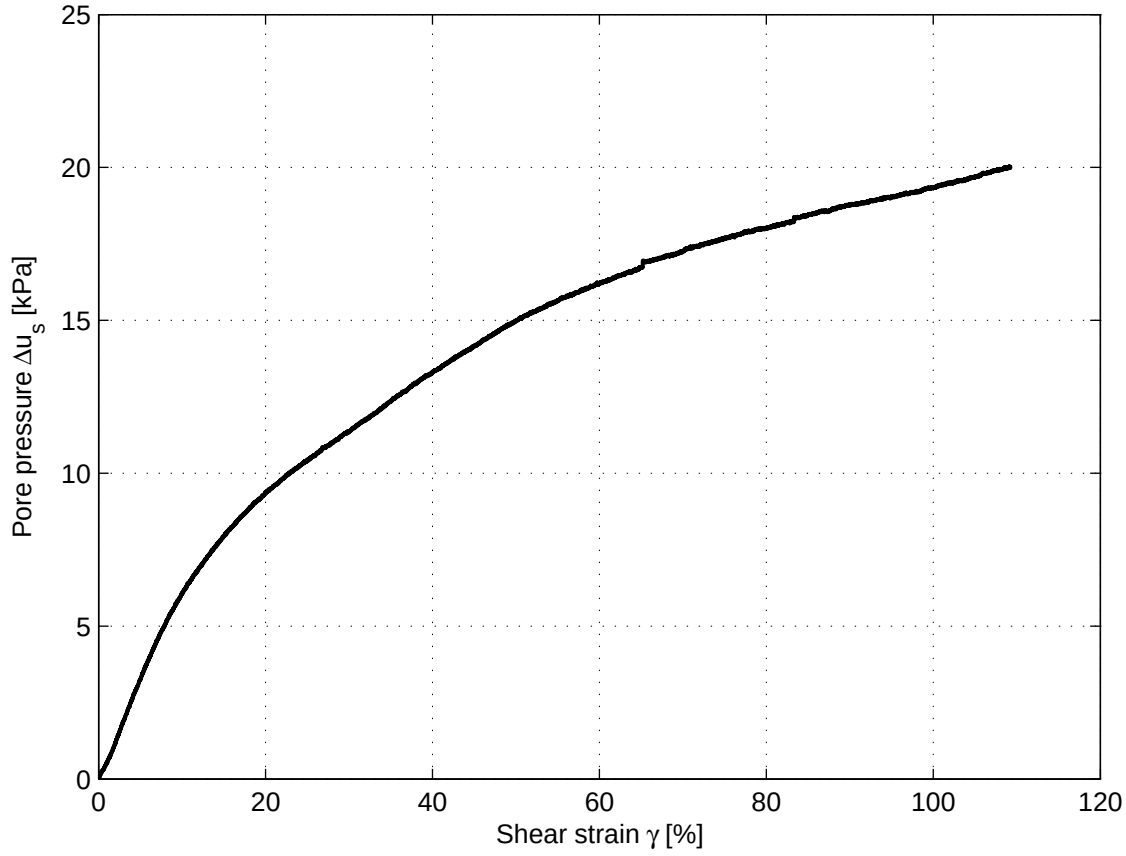
Direct Simple Shear test on sample 58

Direct Simple Shear Test

project	version
1220719.3	1.3
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*) Gecontroleerd en vrijgegeven door ess op 2016-08-23





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date	signed
2016−08−16	venema

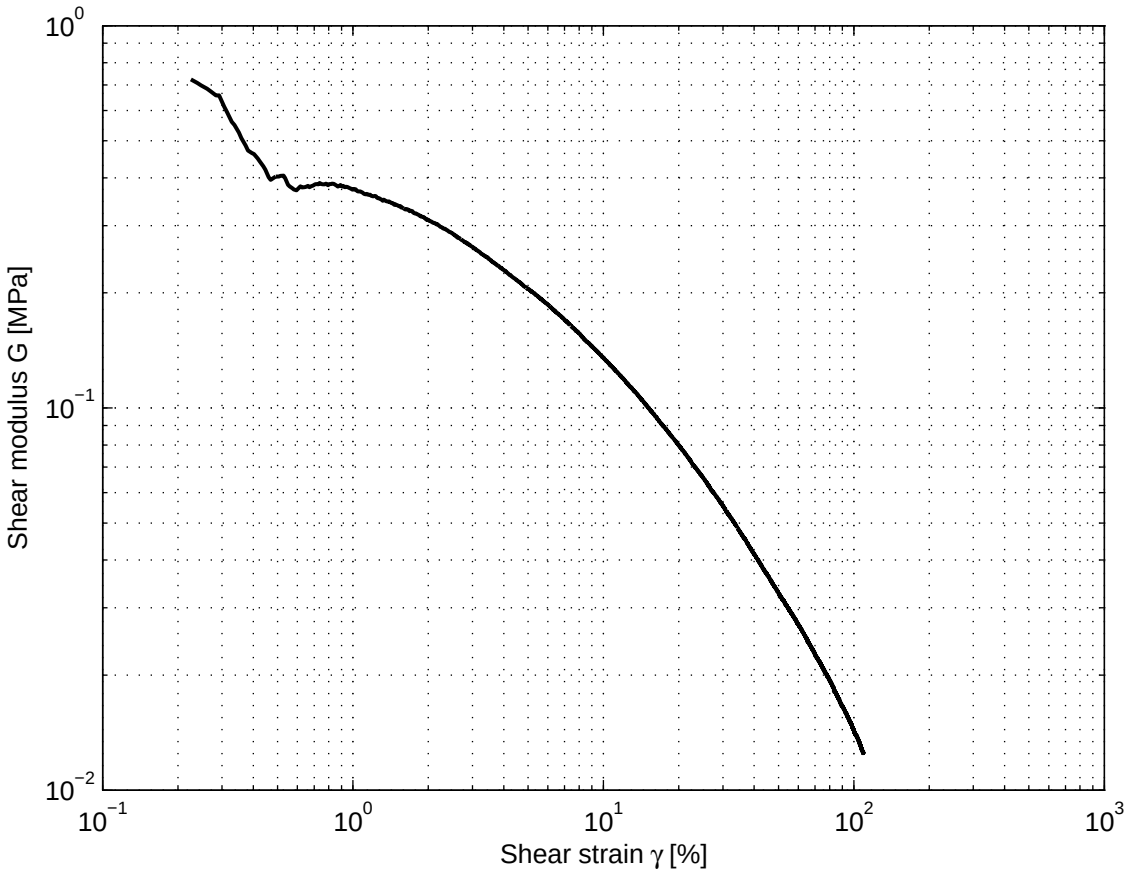
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

Direct Simple Shear test on sample 58

Direct Simple Shear Test

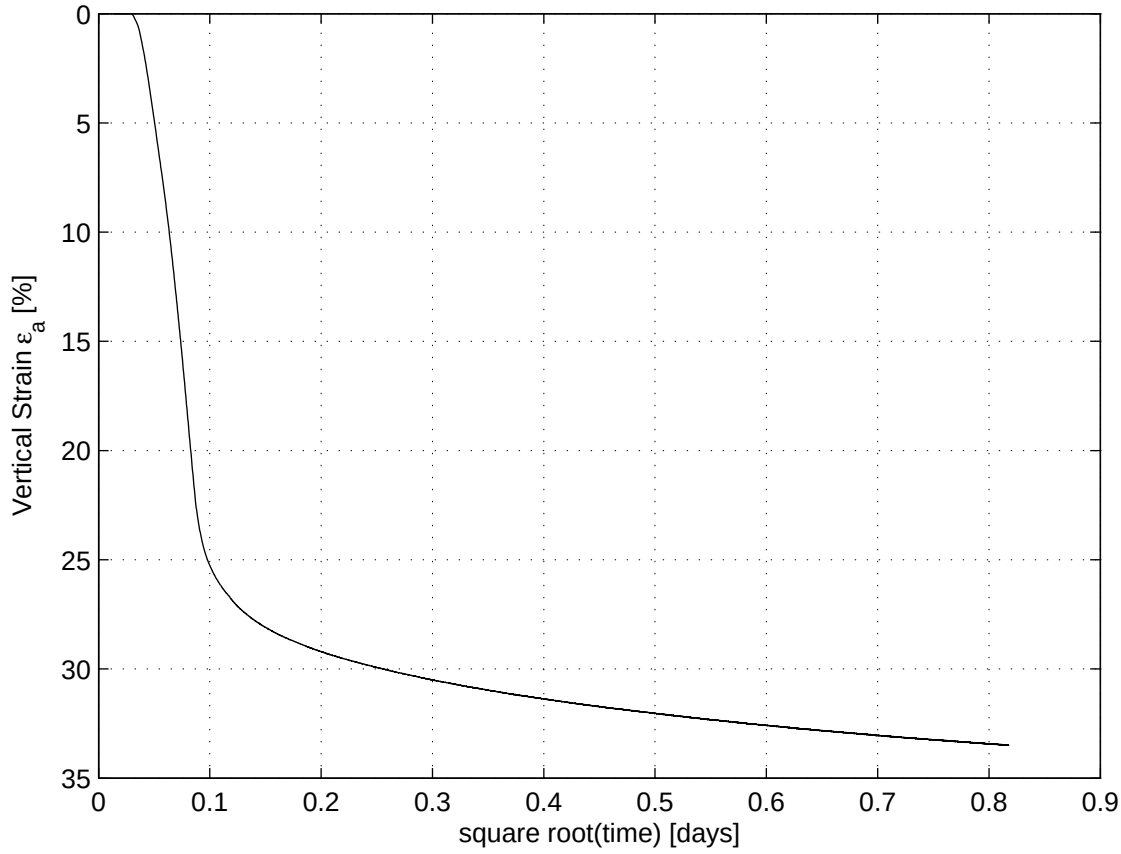
project	version
1220719.3	1.3
appendix	page
DSS58	2

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γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	10.2	N.A	36.7	3.3	0.2
15% deformation	15.1	N.A	32.1	7.9	0.1
30% deformation	16.6	N.A	28.7	11.3	0.1
Maximum strain	13.6	N.A	20.0	20.0	0.0
Maximum τ	16.7	0.00	27.3	12.7	0.0

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2016−08−16	venema

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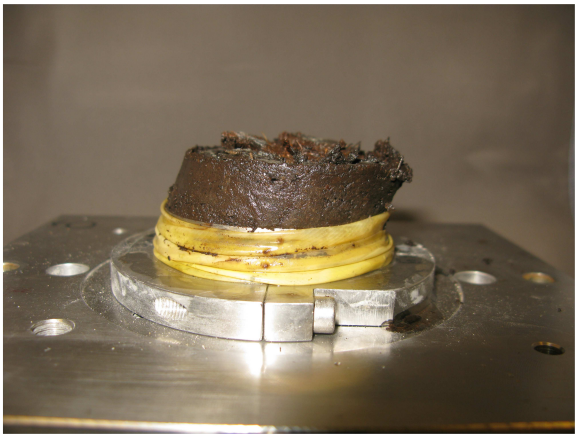
Direct Simple Shear test on sample 58

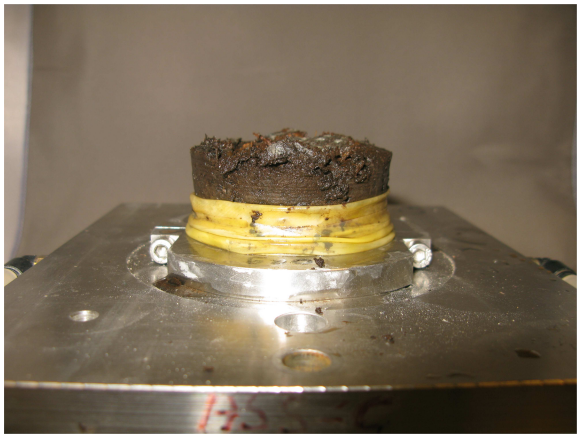
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Direct Simple Shear Test

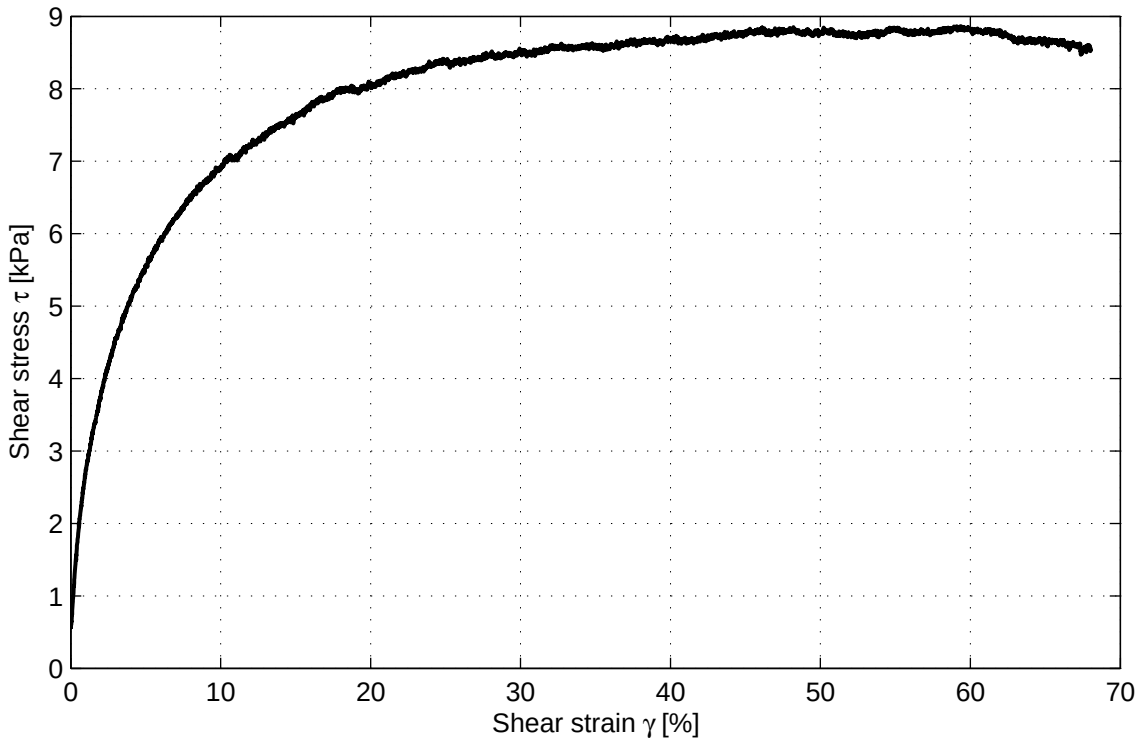
appendix	page
DSS58	4

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*) Gecontroleerd en vrijgegeven door ess op 2016-08-23



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	6
Bore code	MB−01
Depth top [m]	−3.36
Depth bottom [m]	−3.41
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	0.95
w_0 [%]	674.9
w_{final} [%]	553.8
Consolidation stress [kPa]	9.6
Consolidation strain [%]	11.21
Strain rate [%/h]	8.0
Max shear stress [kPa]	8.9
Vert. stress at max shear stress [kPa]	10.6
Shear strain at max shear stress [kPa]	59.0
σ_v at γ = 40% [kPa]	10.1
τ at γ = 40% [kPa]	8.7
Sample Disturbance Index [%]	–
SDI qualification	–

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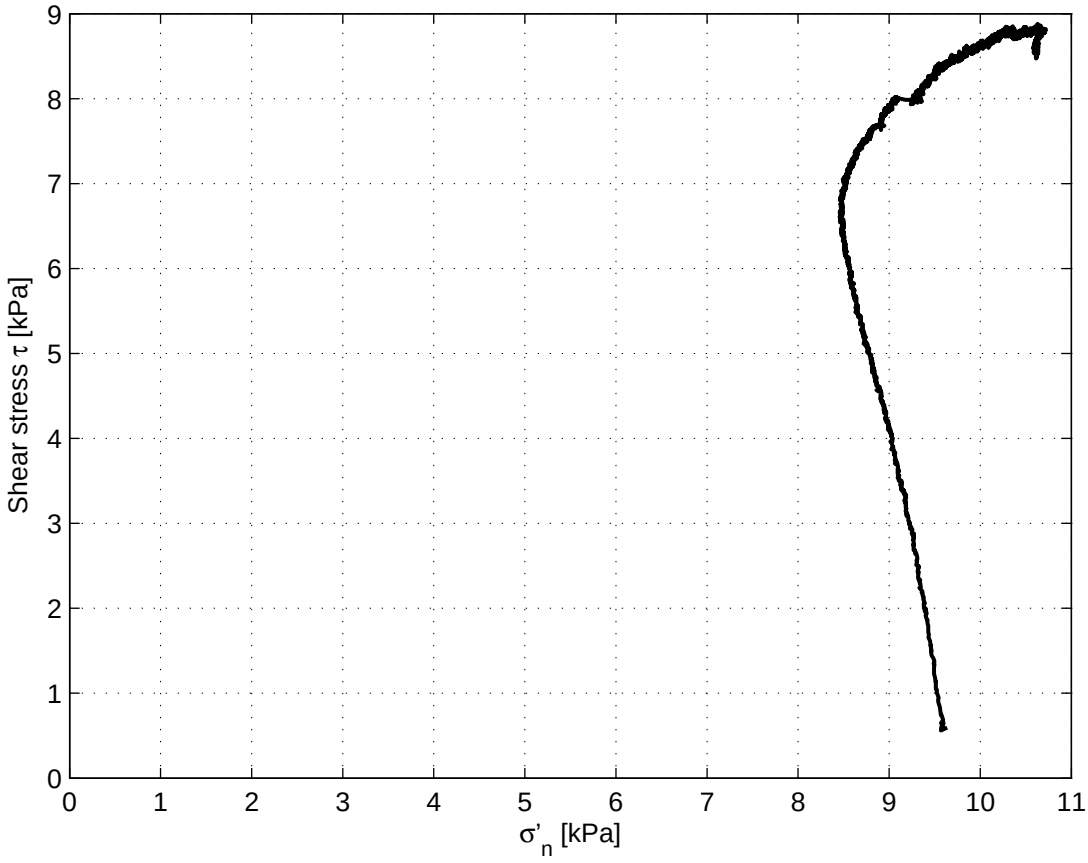
Direct Simple Shear test on sample 6

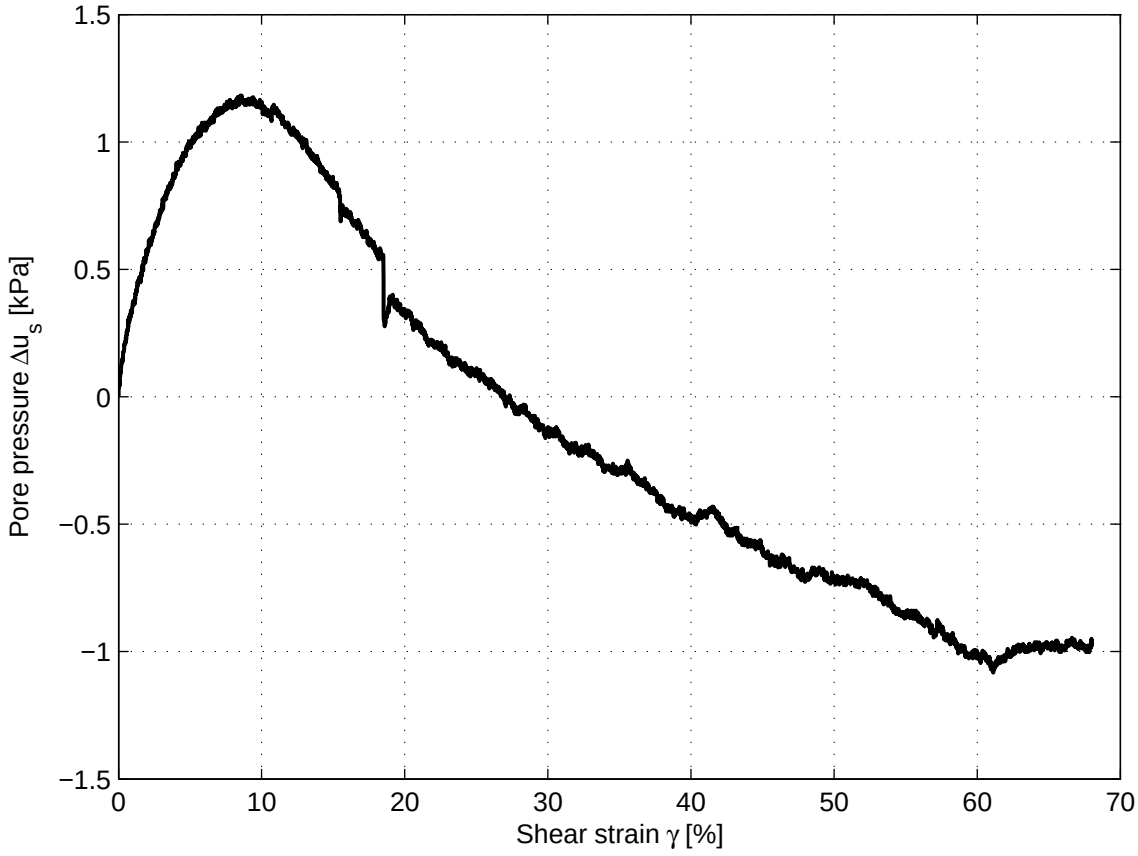
project	version
1220719.3	1.3

Direct Simple Shear Test

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6	1

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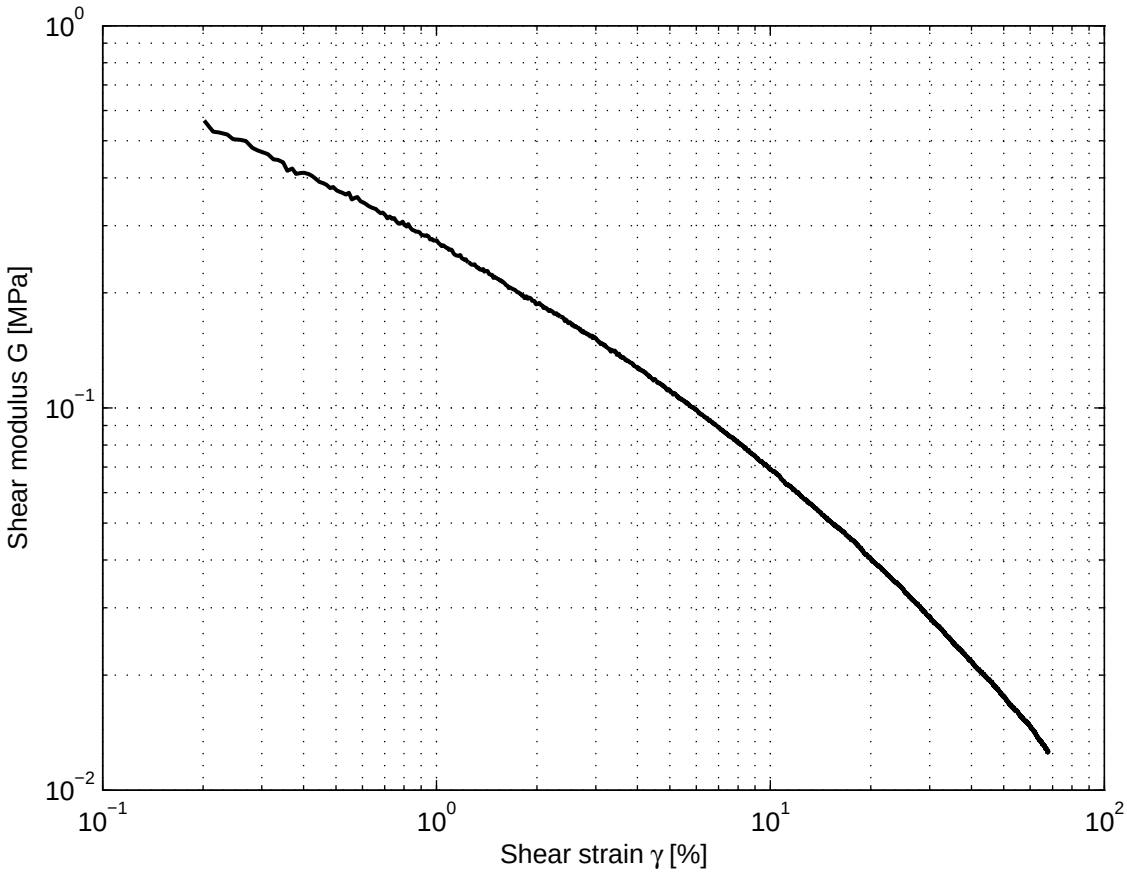
Direct Simple Shear test on sample 6

project	version
1220719.3	1.3

Direct Simple Shear Test

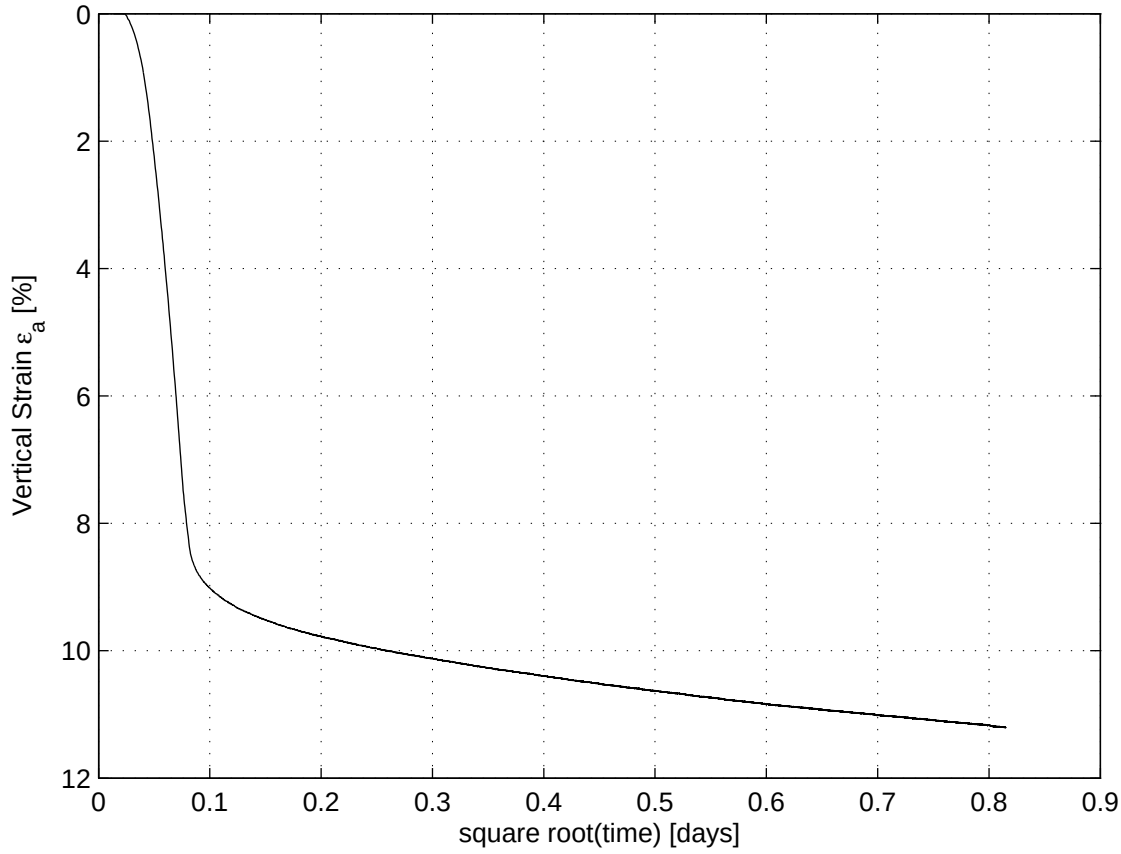
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*) Gecontroleerd en vrijgegeven door ess op 2016-07-04



γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	5.6	N.A	8.7	1.0	0.1
15% deformation	7.6	N.A	8.8	0.8	0.1
30% deformation	8.5	N.A	9.8	−0.1	0.0
Maximum strain	8.5	N.A	10.6	−1.0	0.0
Maximum τ	8.9	−0.00	10.6	−1.0	0.0

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Direct Simple Shear test on sample 6

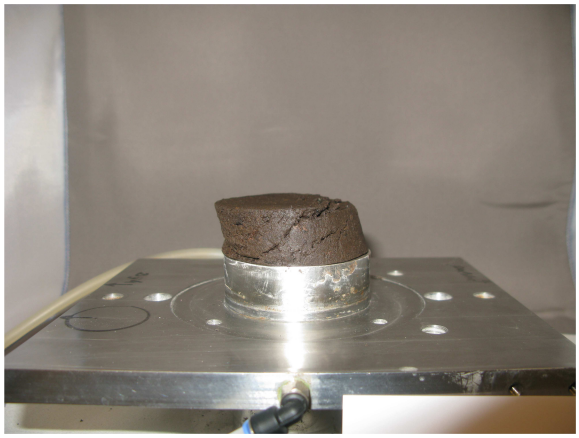
project	version
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Direct Simple Shear Test

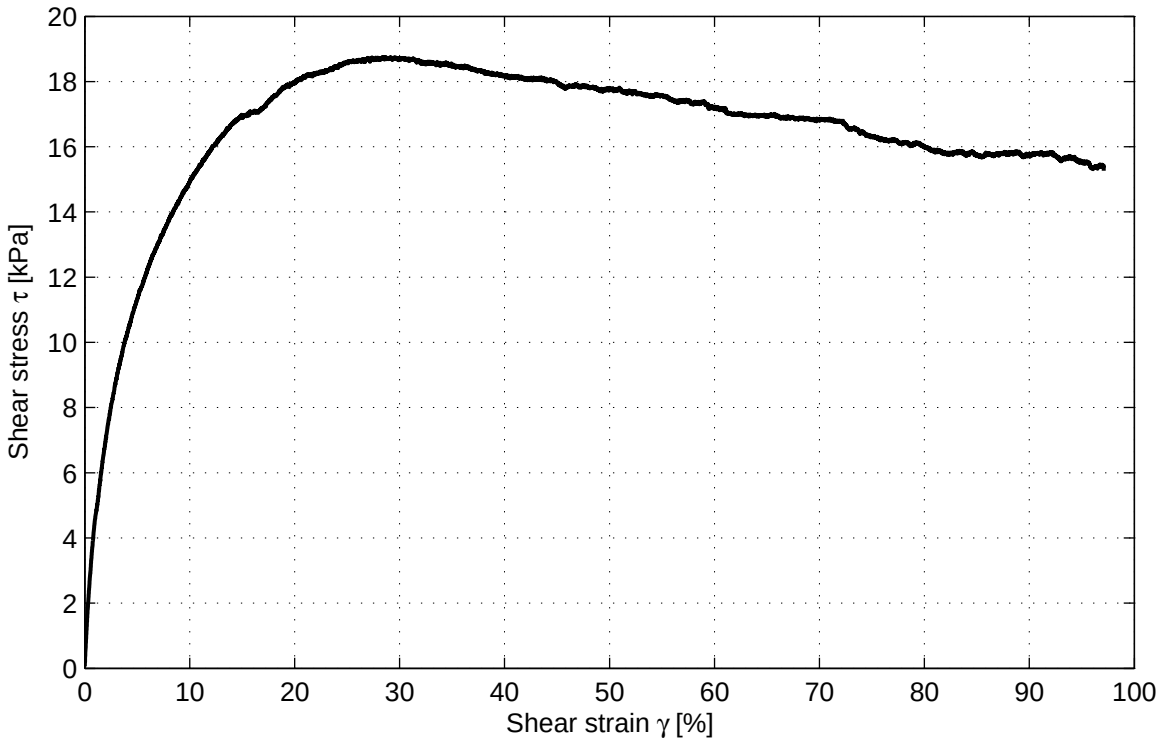
appendix	page
6	4

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*) Gecontroleerd en vrijgegeven door ess op 2016-07-04



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	60
Bore code	MB−04
Depth top [m]	−3.49
Depth bottom [m]	−3.54
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	0.98
w_0 [%]	536.9
w_{final} [%]	455.5
Consolidation stress [kPa]	40.0
Consolidation strain [%]	26.47
Strain rate [%/h]	8.0
Max shear stress [kPa]	18.8
Vert. stress at max shear stress [kPa]	29.0
Shear strain at max shear stress [kPa]	28.5
σ_v at γ = 40% [kPa]	25.8
τ at γ = 40% [kPa]	18.2
Sample Disturbance Index [%]	–
SDI qualification	–

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2016−08−22	venema

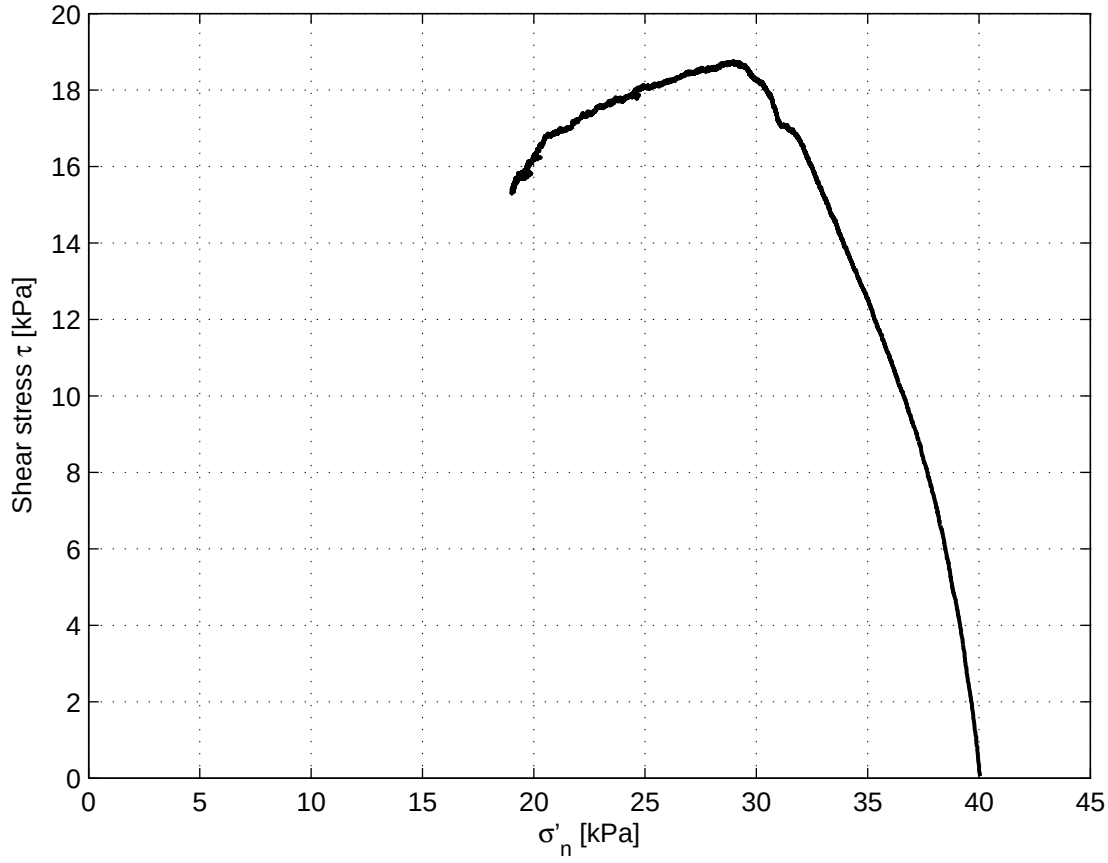
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

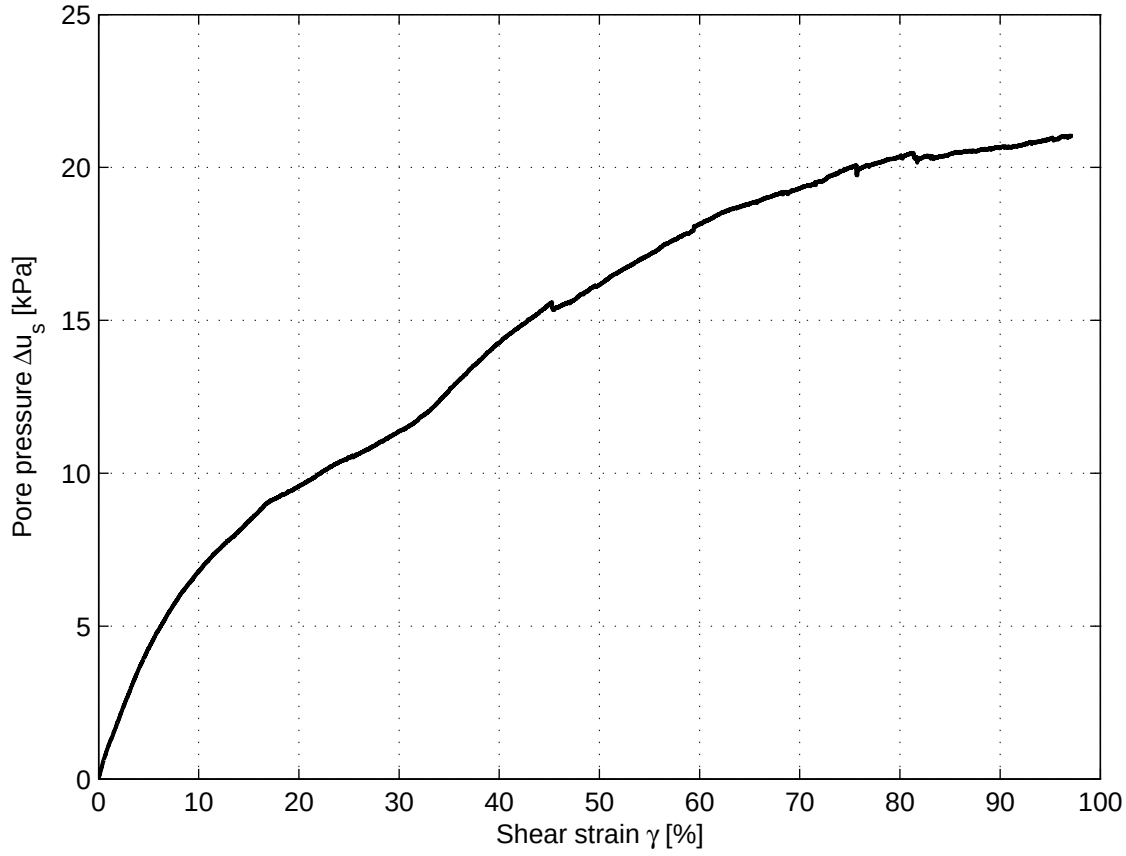
Direct Simple Shear test on sample 60

Direct Simple Shear Test

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appendix	page
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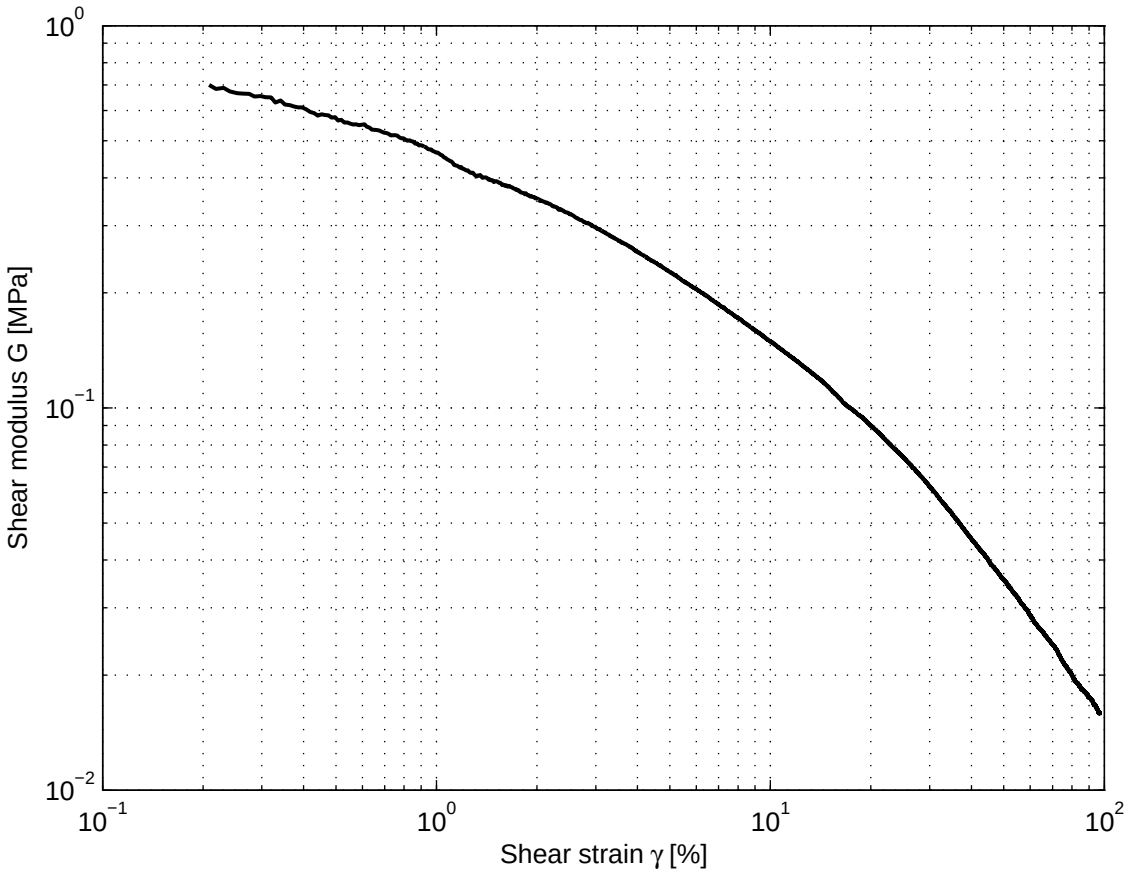
Direct Simple Shear test on sample 60

project	version
1220719.3	1.3

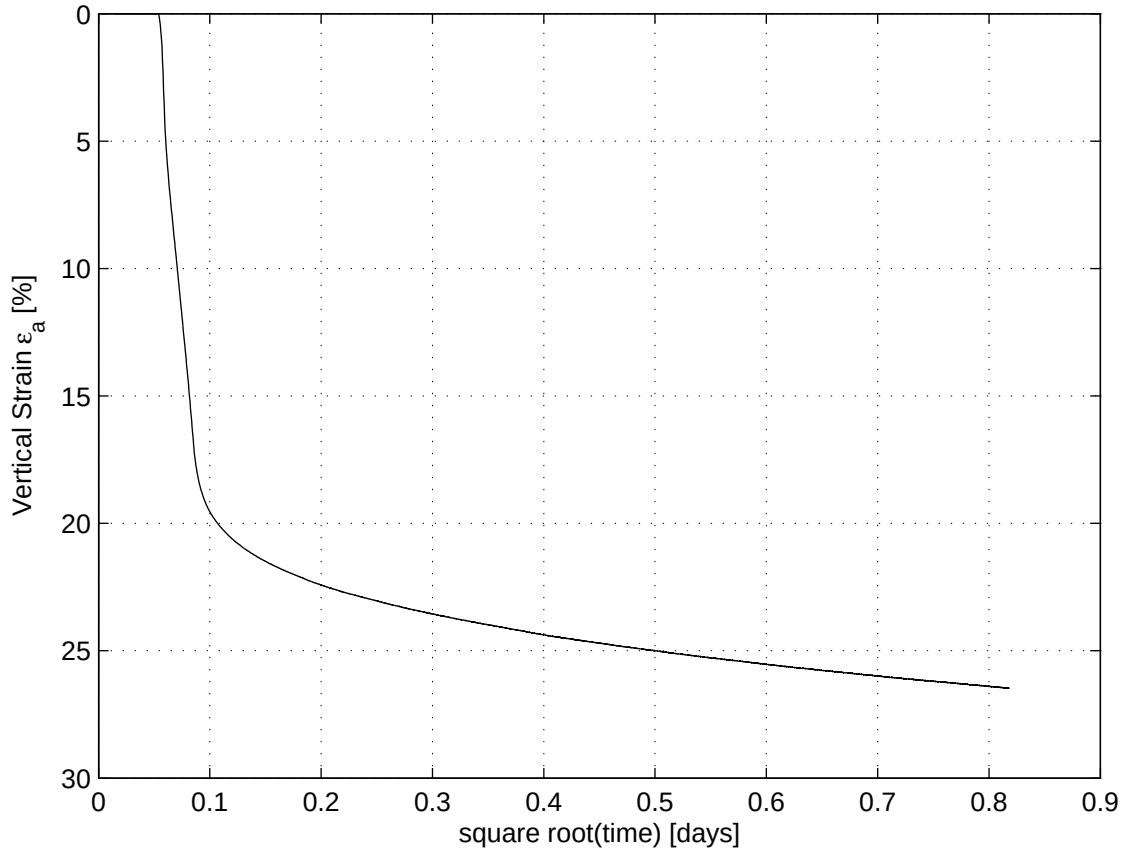
Direct Simple Shear Test

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DSS60	2

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γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	11.3	N.A	35.8	4.3	0.2
15% deformation	16.9	N.A	31.6	8.4	0.1
30% deformation	18.7	N.A	28.7	11.4	0.1
Maximum strain	15.4	N.A	19.0	21.0	0.0
Maximum τ	18.7	0.00	29.0	11.1	0.1



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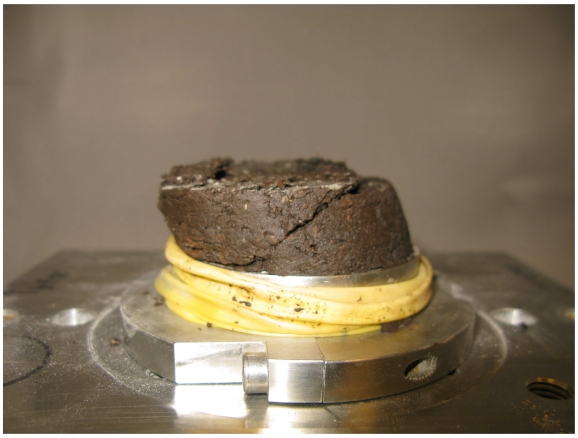
Direct Simple Shear test on sample 60

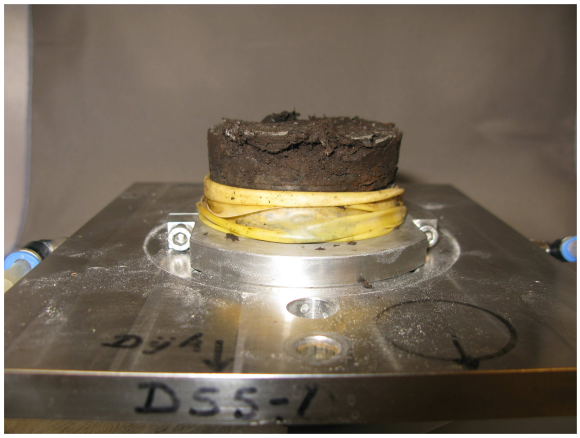
project	version
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Direct Simple Shear Test

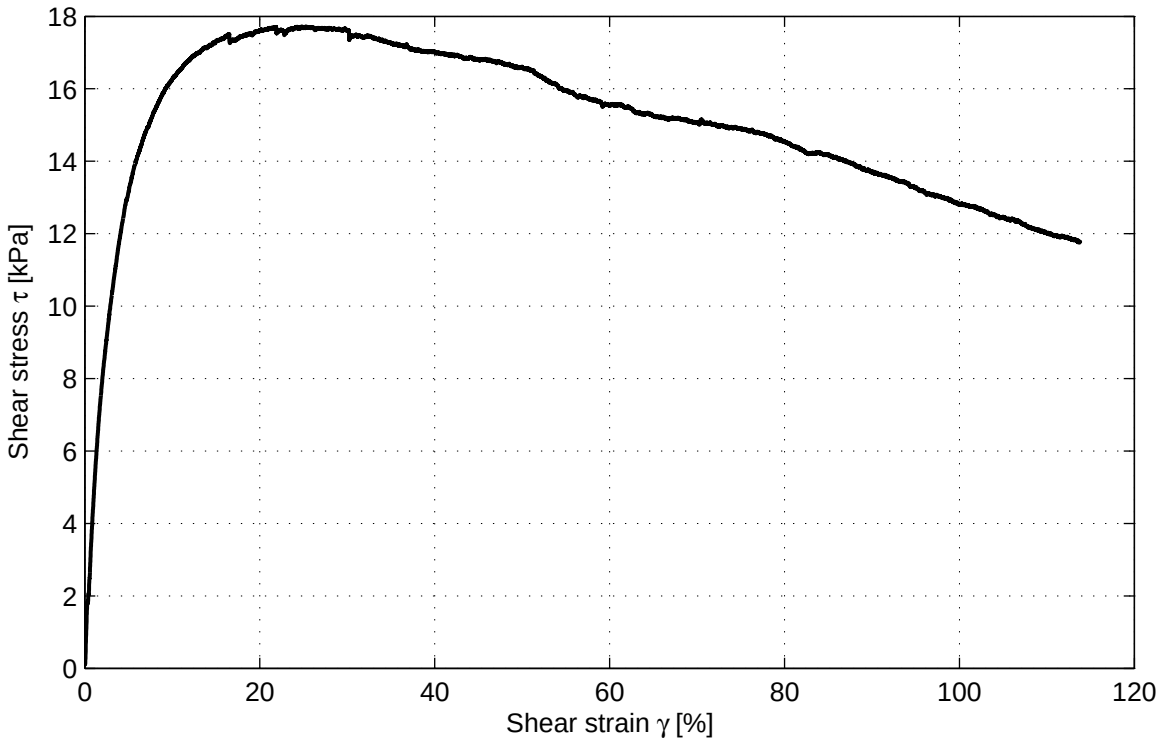
appendix	page
DSS60	4

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Description of soil sample:

Soil classification	Peat, low−mineral content, wood pieces
Pressure area [cm^2]	31.17
Mean temperature during shear [°C]	21.7
Test type	Constant height
Apparatus code	DSS−C
Sample name	62
Bore code	MB−04
Depth top [m]	−3.74
Depth bottom [m]	−3.79
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	1.01
w_0 [%]	404.9
w_{final} [%]	348.1
Consolidation stress [kPa]	40.0
Consolidation strain [%]	28.37
Strain rate [%/h]	8.1
Max shear stress [kPa]	17.7
Vert. stress at max shear stress [kPa]	25.9
Shear strain at max shear stress [kPa]	24.8
σ_v at γ = 40% [kPa]	22.6
τ at γ = 40% [kPa]	17.0
Sample Disturbance Index [%]	–
SDI qualification	–

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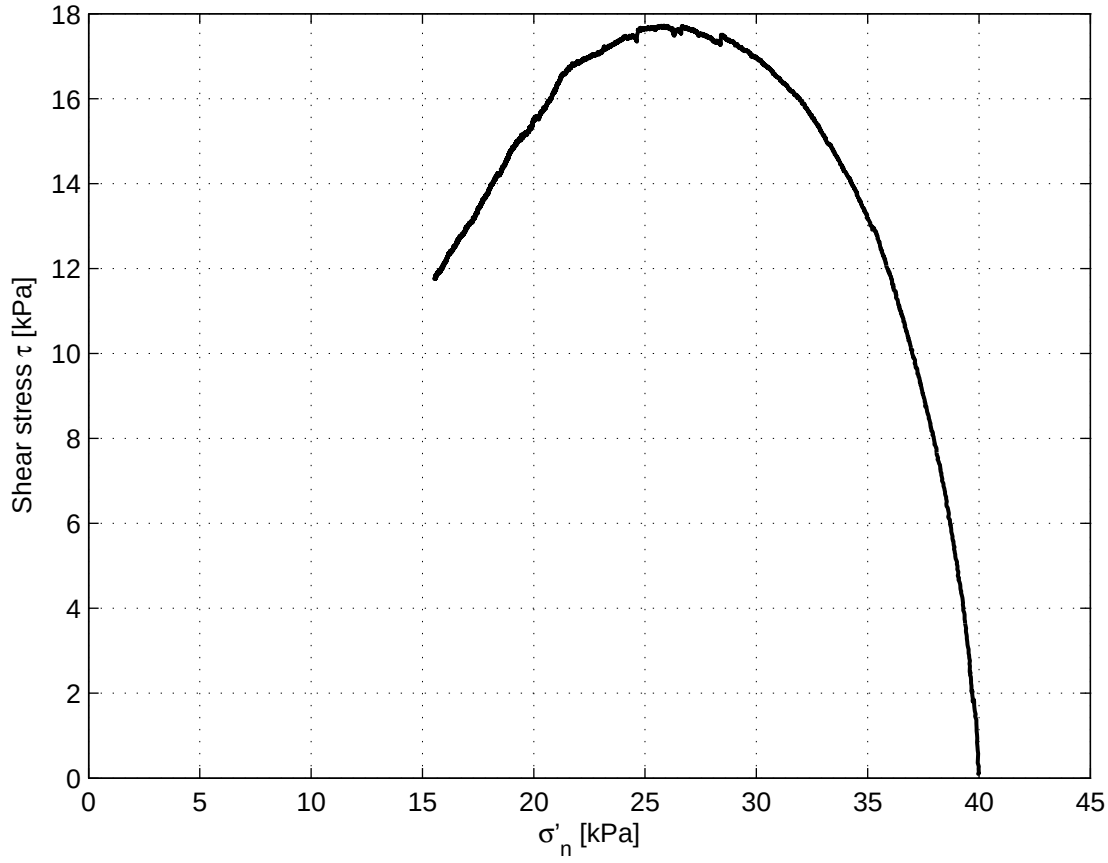
Direct Simple Shear test on sample 62

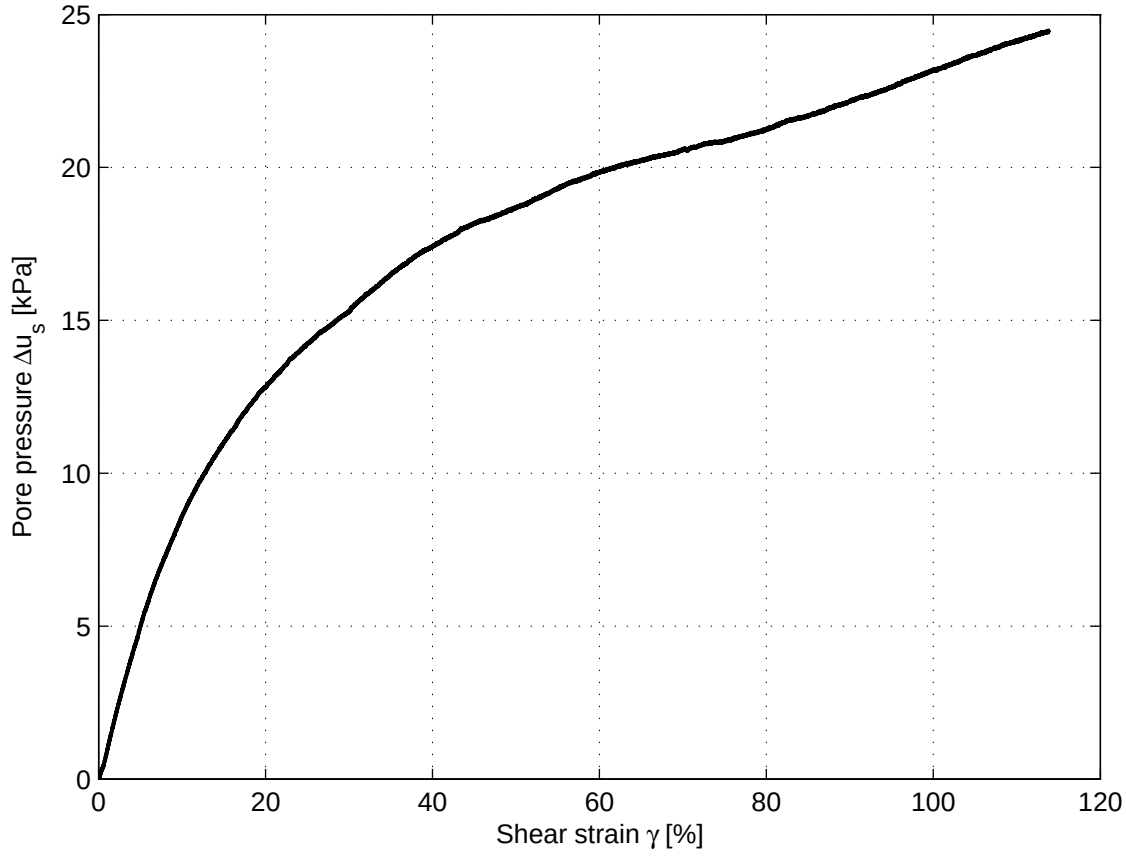
project	version
1220719.3	1.3

Direct Simple Shear Test

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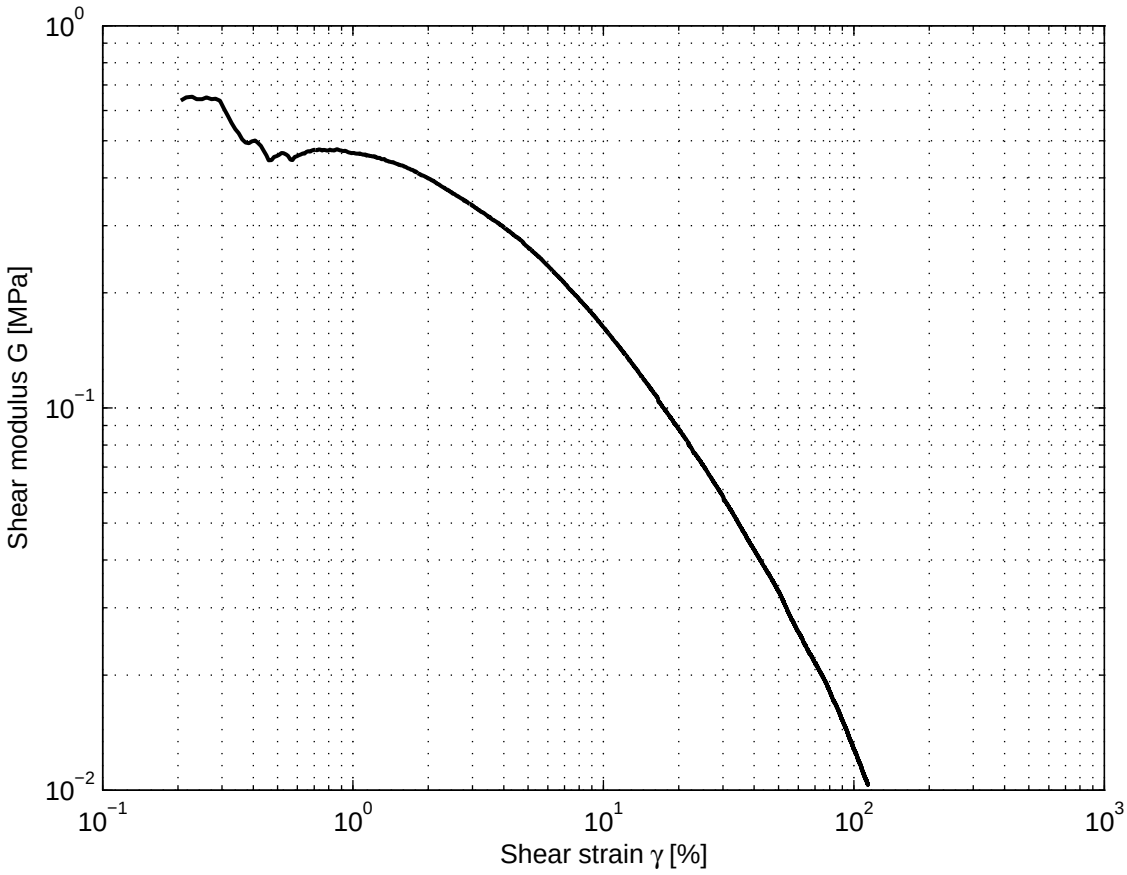
Direct Simple Shear test on sample 62

project	version
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Direct Simple Shear Test

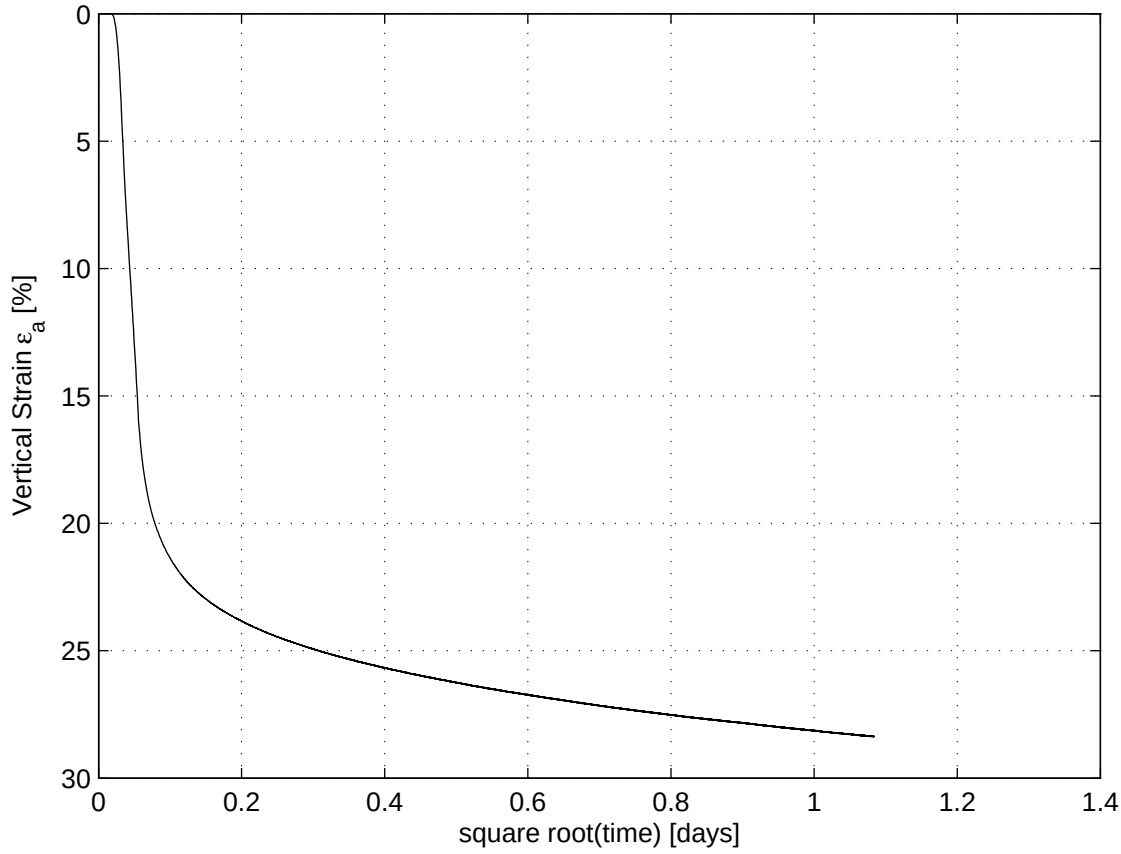
appendix	page
DSS62	2

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γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	13.1	N.A	35.0	5.0	0.3
15% deformation	17.3	N.A	29.0	11.0	0.1
30% deformation	17.6	N.A	24.7	15.3	0.1
Maximum strain	11.8	N.A	15.6	24.5	0.0
Maximum τ	17.7	0.00	25.9	14.2	0.1

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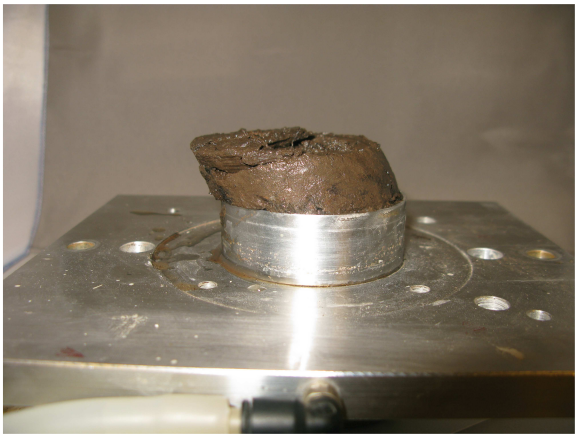
Direct Simple Shear test on sample 62

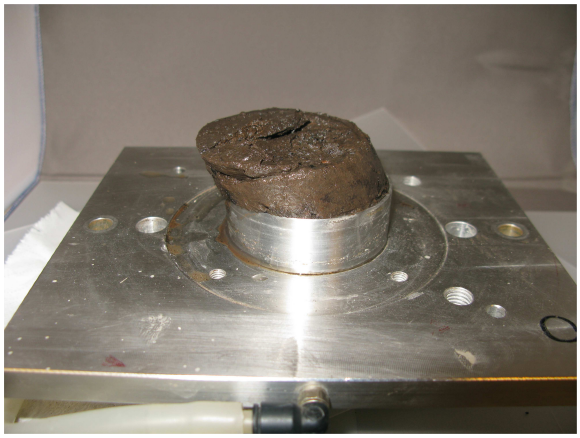
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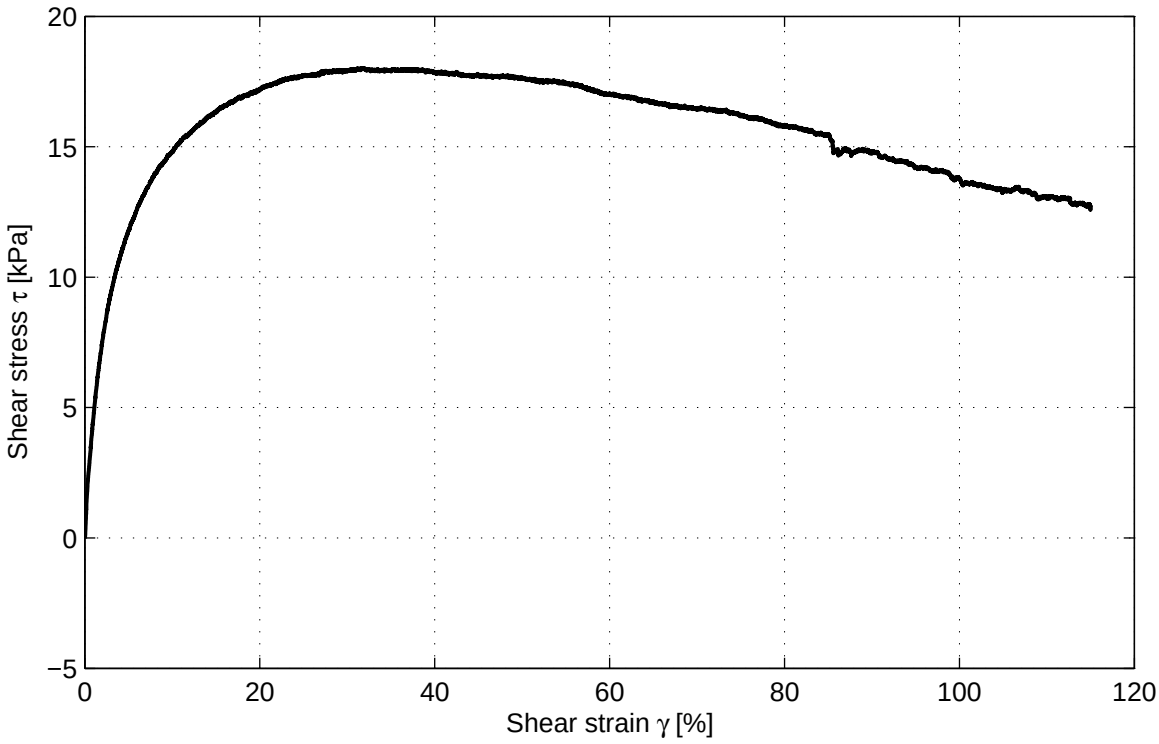
appendix	page
DSS62	4

Direct Simple Shear Test

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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]	21.7
Test type	Constant height
Apparatus code	DSS−D
Sample name	64
Bore code	MB−04
Depth top [m]	−3.84
Depth bottom [m]	−3.89
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	1.00
w_0 [%]	410.7
w_{final} [%]	322.8
Consolidation stress [kPa]	40.0
Consolidation strain [%]	28.59
Strain rate [%/h]	8.0
Max shear stress [kPa]	18.0
Vert. stress at max shear stress [kPa]	27.0
Shear strain at max shear stress [kPa]	31.9
σ_v at γ = 40% [kPa]	25.3
τ at γ = 40% [kPa]	17.9
Sample Disturbance Index [%]	–
SDI qualification	–

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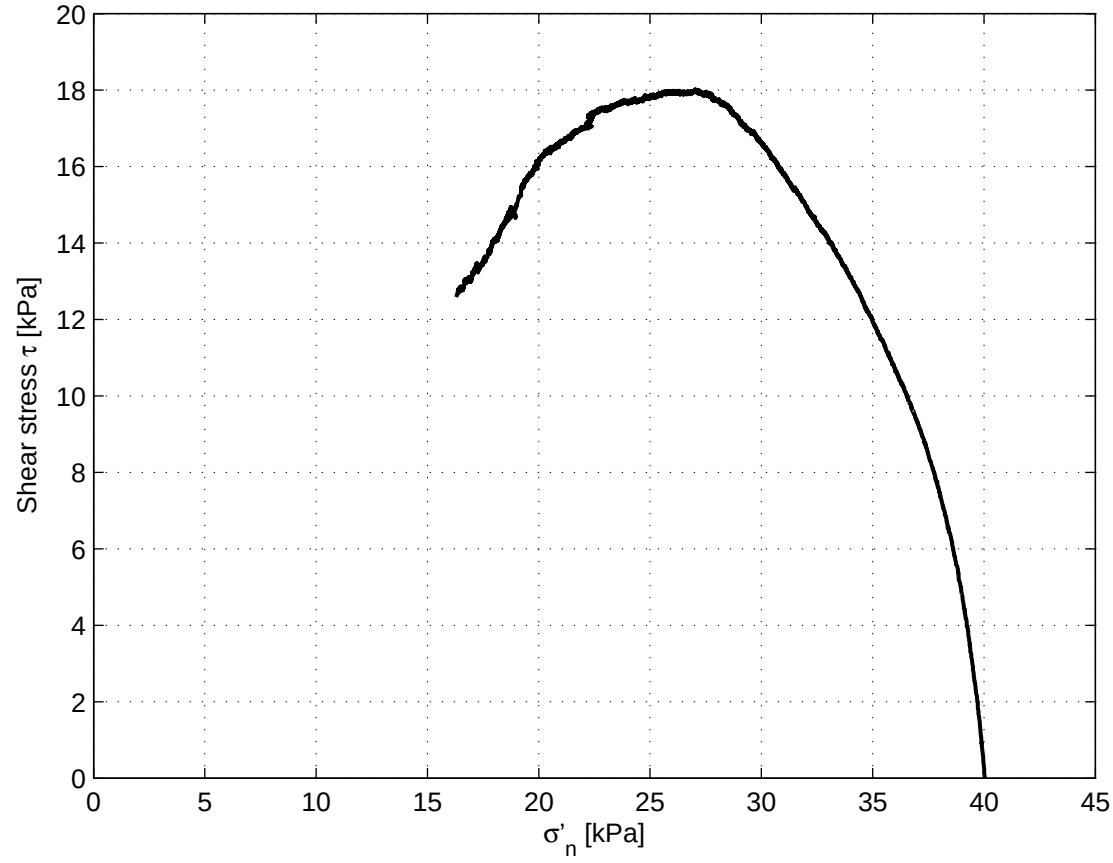
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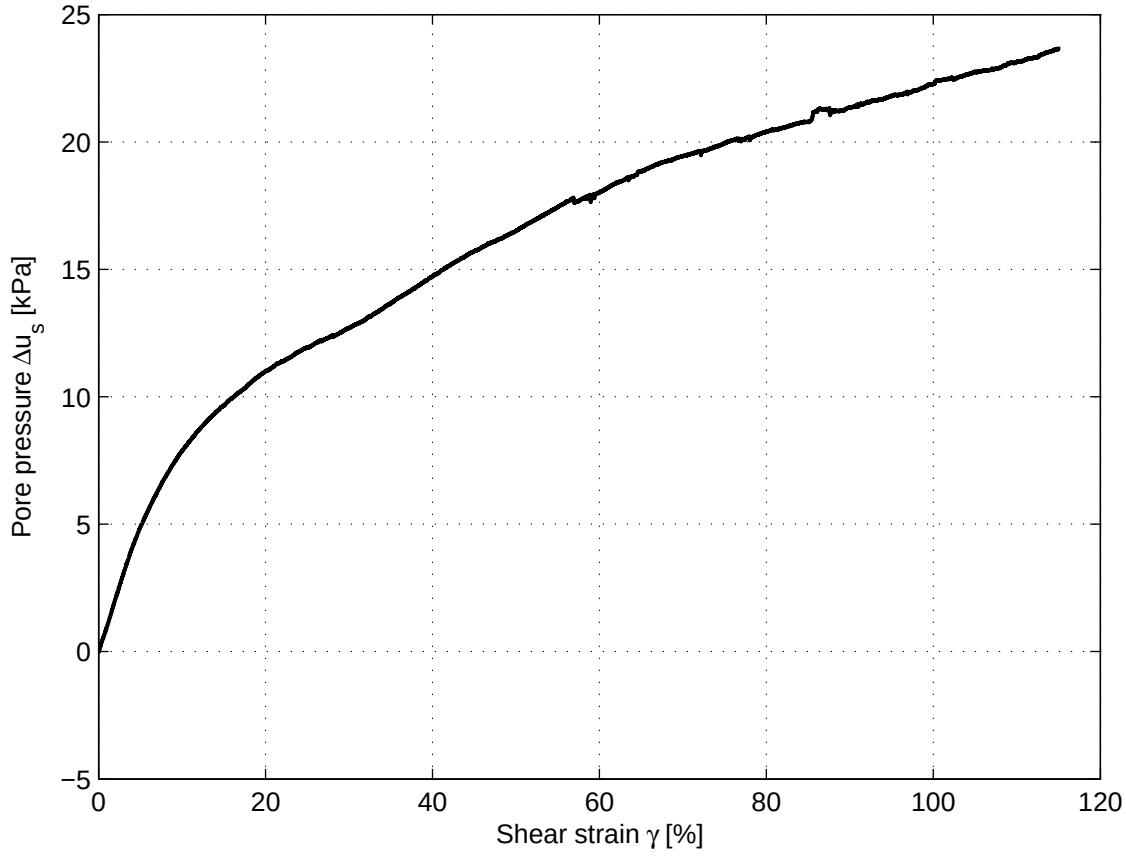
Direct Simple Shear test on sample 64

Direct Simple Shear Test

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2016−08−23	venema

POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

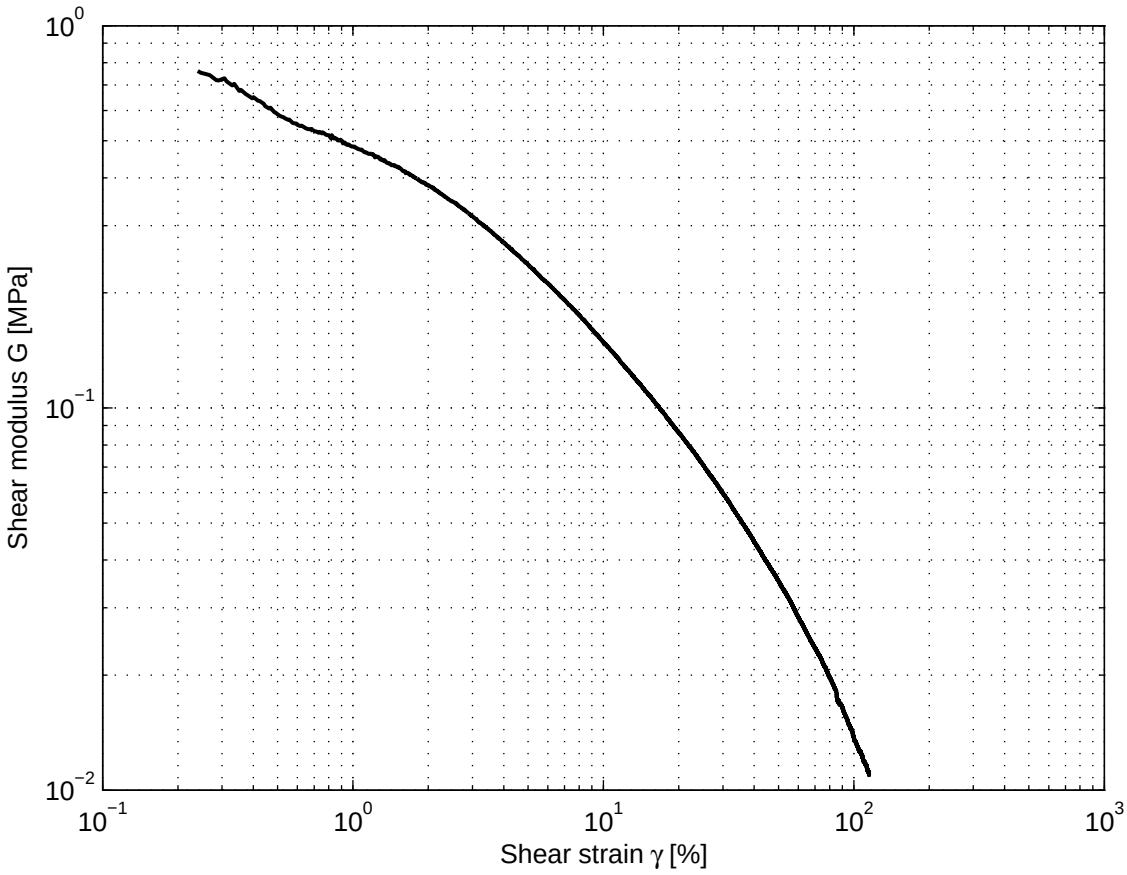
Direct Simple Shear test on sample 64

project	version
1220719.3	1.3

Direct Simple Shear Test

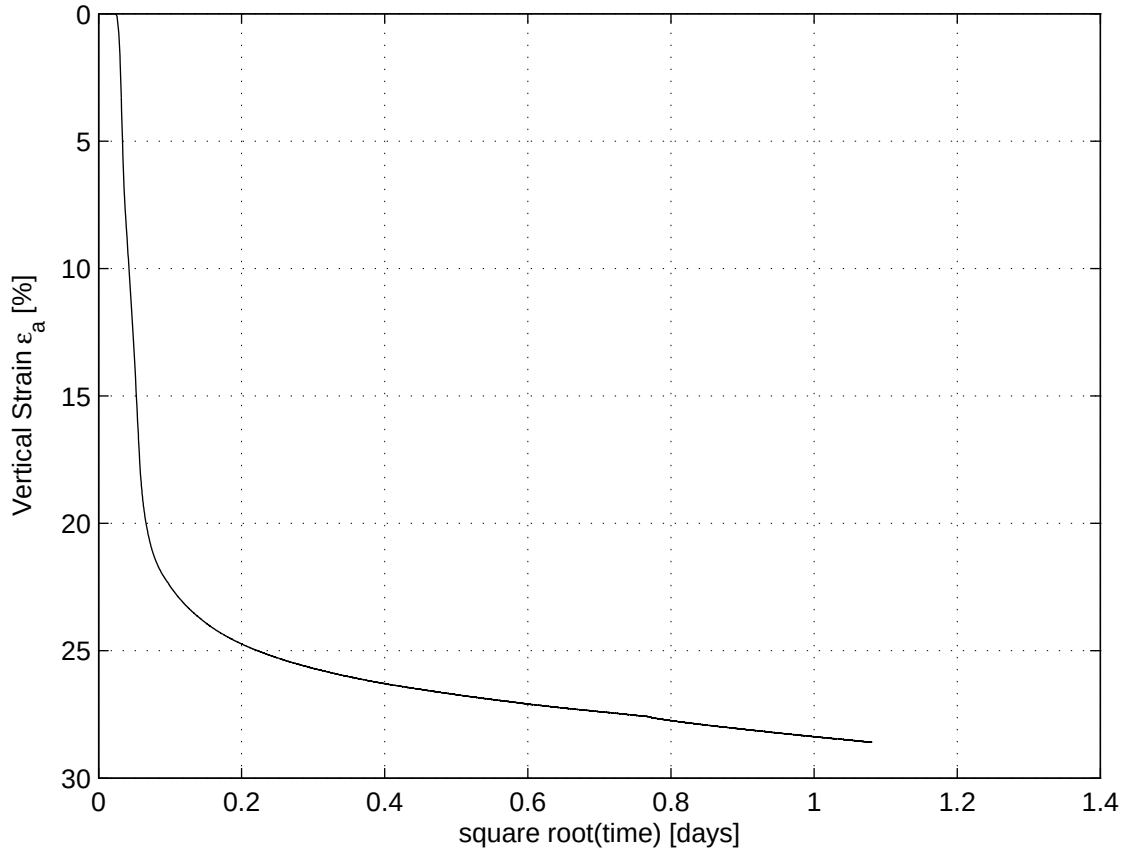
appendix	page
DSS64	2

*) Gecontroleerd en vrijgegeven door ess op 2016-08-24



γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	11.8	N.A	35.1	4.9	0.2
15% deformation	16.3	N.A	30.4	9.7	0.1
30% deformation	17.9	N.A	27.3	12.7	0.1
Maximum strain	12.7	N.A	16.4	23.6	0.0
Maximum τ	18.0	0.00	27.0	13.0	0.1

*) Gecontroleerd en vrijgegeven door ess op 2016-08-24



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date	signed
2016−08−23	venema

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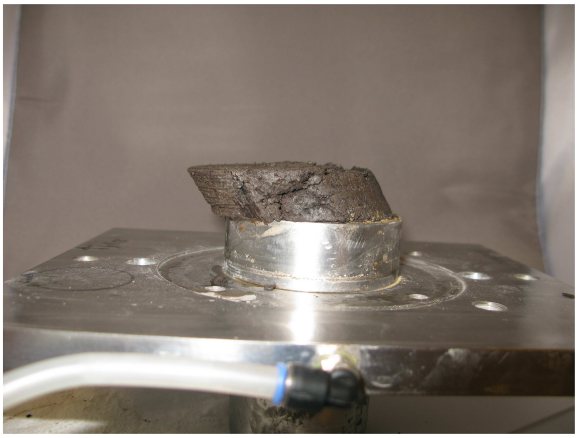
Direct Simple Shear test on sample 64

project	version
1220719.3	1.3

Direct Simple Shear Test

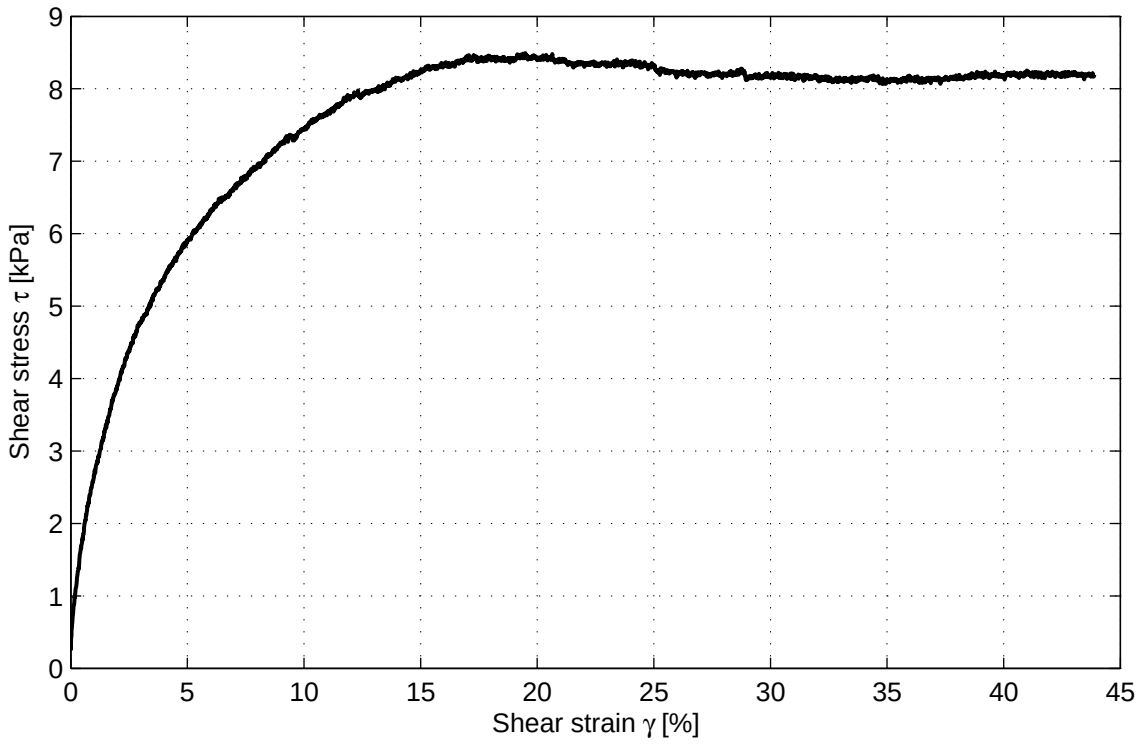
appendix	page
DSS64	4

*) Gecontroleerd en vrijgegeven door ess op 2016-08-24





*) Gecontroleerd en vrijgegeven door ess op 2016-08-24



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	8
Bore code	MB−01
Depth top [m]	−3.66
Depth bottom [m]	−3.71
Specimen condition	Intact
Trimming procedure	With cutting ring
ρ_i [g/cm^3]	1.0
S_0 [%]	–
Void ratio start shear [−]	1.01
w_0 [%]	438.3
w_{final} [%]	396.1
Consolidation stress [kPa]	9.6
Consolidation strain [%]	11.14
Strain rate [%/h]	8.0
Max shear stress [kPa]	8.5
Vert. stress at max shear stress [kPa]	8.8
Shear strain at max shear stress [kPa]	19.5
σ_v at γ = 40% [kPa]	8.5
τ at γ = 40% [kPa]	8.2
Sample Disturbance Index [%]	–
SDI qualification	–

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POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

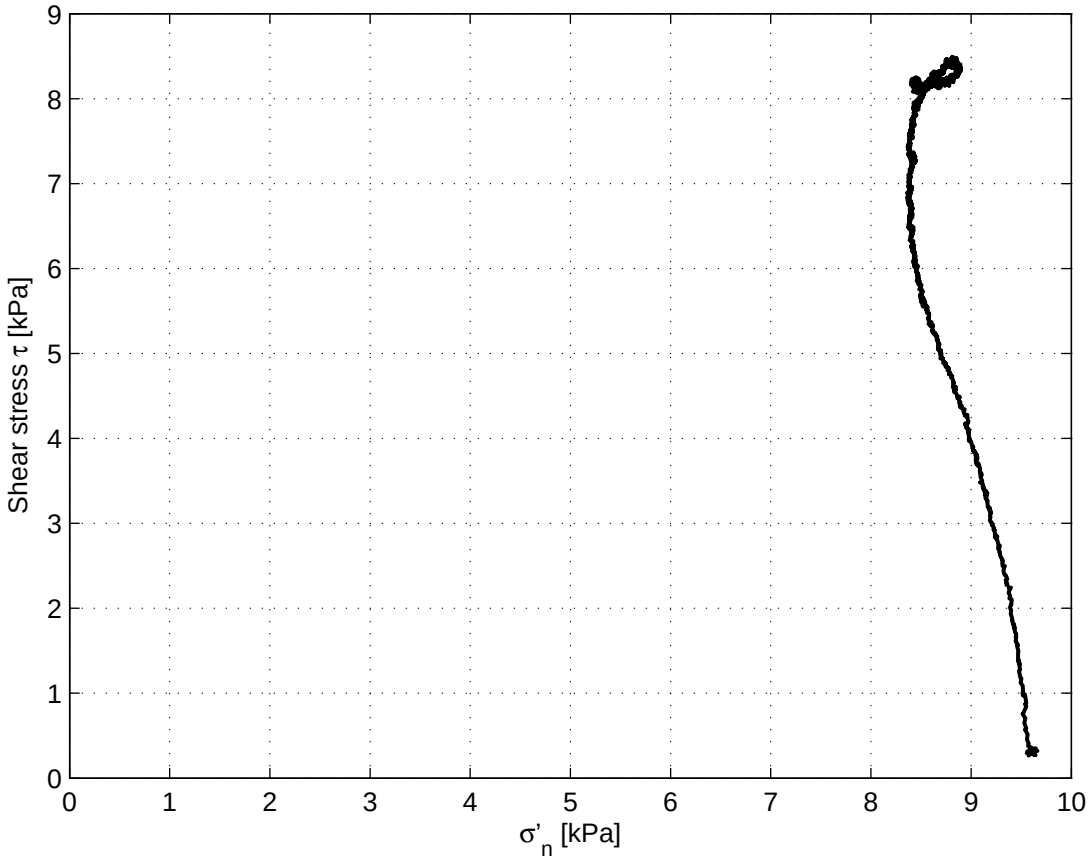
Direct Simple Shear test on sample 8

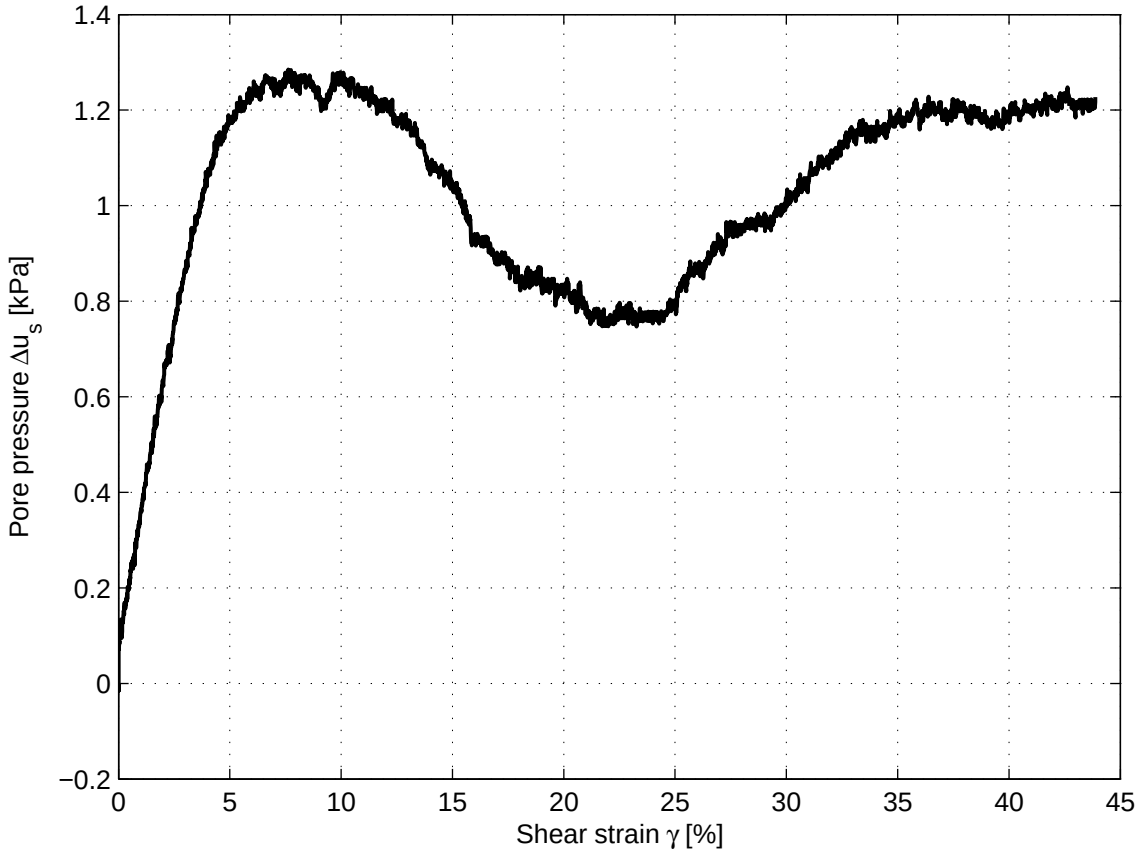
project	version
1220719.3	1.3

Direct Simple Shear Test

appendix	page
8	1

*) Gecontroleerd en vrijgegeven door ess op 2016-07-04





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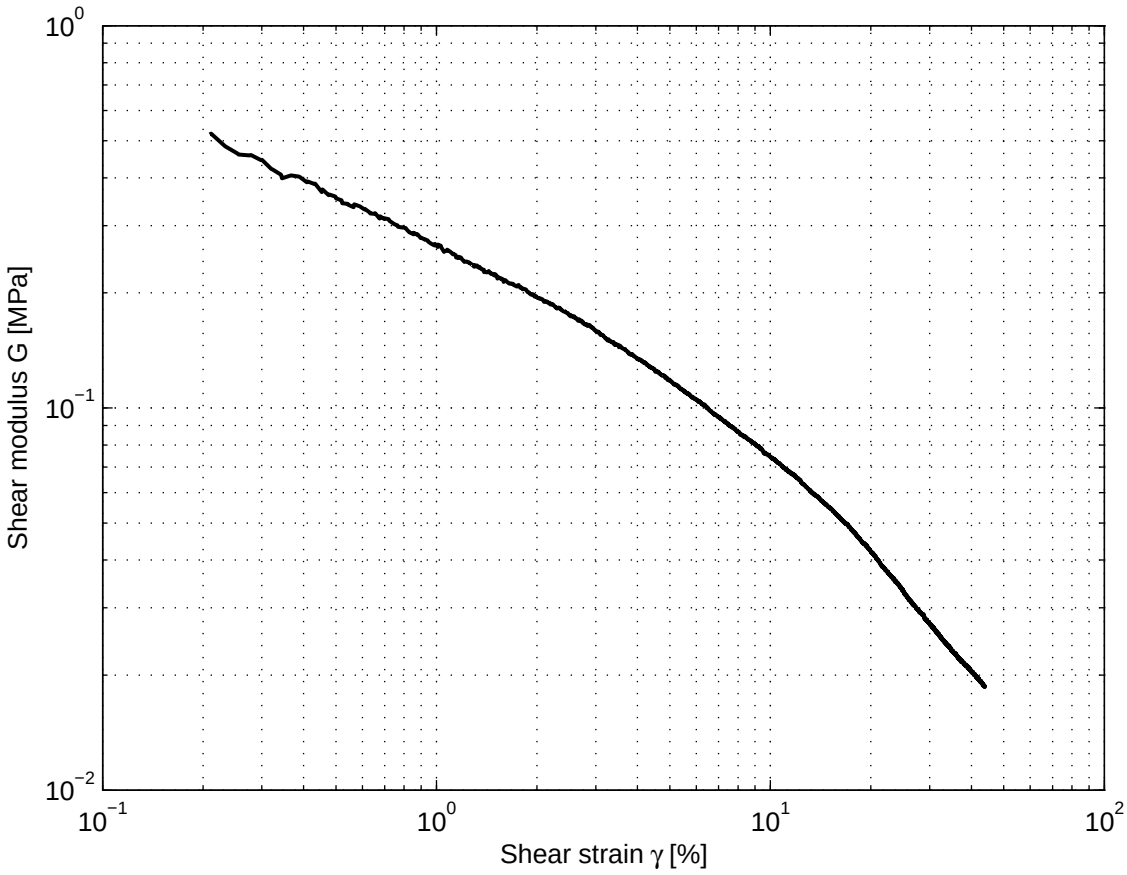
POV−M Vacuümconsolidatie: BLKGR − laboratoriumtesten

Direct Simple Shear test on sample 8

Direct Simple Shear Test

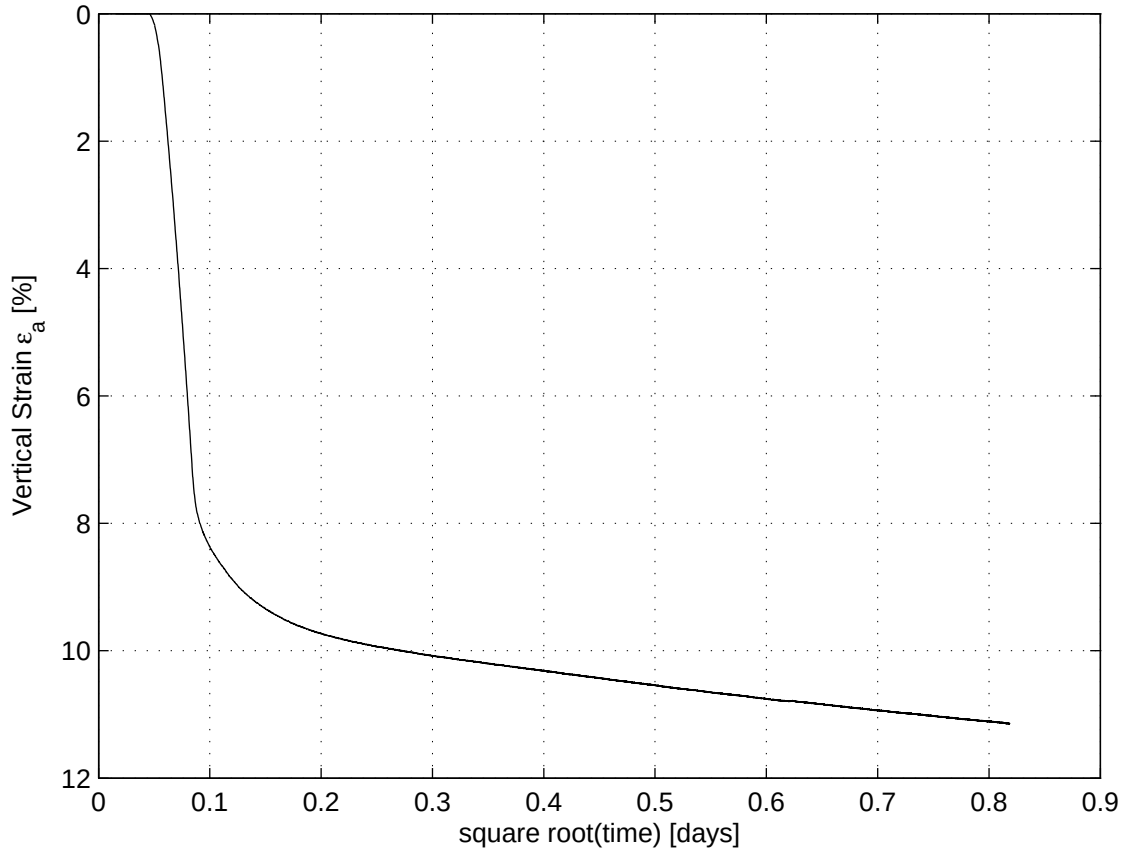
project	version
1220719.3	1.3
appendix	page
8	2

*) Gecontroleerd en vrijgegeven door ess op 2016-07-04



γ [%]	τ [kPa]	ε_a [%]	σ'_n [kPa]	Δu_s [kPa]	G [MPa]
5% deformation	5.9	N.A	8.5	1.2	0.1
15% deformation	8.3	N.A	8.6	1.0	0.1
30% deformation	8.2	N.A	8.6	1.0	0.0
Maximum strain	8.2	N.A	8.4	1.2	0.0
Maximum τ	8.5	−0.00	8.8	0.8	0.0

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Direct Simple Shear test on sample 8

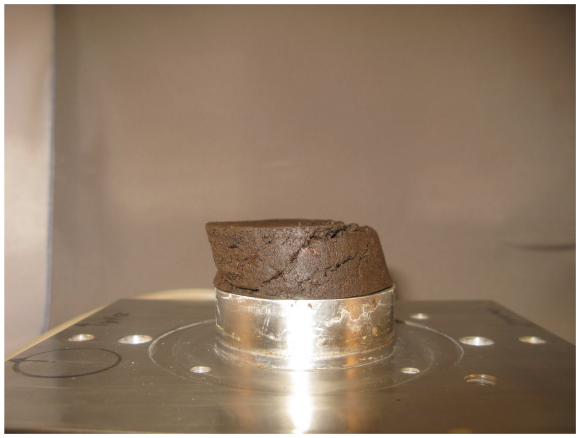
project	version
1220719.3	1.3

Direct Simple Shear Test

appendix	page
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