SLOPE/W Analysis

File Information

Created By: Rebecca Bertilsson
Revision Number: 22
Last Edited By: Rebecca Bertilsson
Date: 2011-05-12
Time: 15:43:09
File Name: V16350_odränerad print.gsz
Directory: P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V16350\110830\
Last Solved Date: 2011-05-12
Last Solved Time: 15:43:34

Project Settings

Length(L) Units: meters
Time(t) Units: Seconds
Force(F) Units: kN
Pressure(p) Units: kPa
Strength Units: kPa
Unit Weight of Water: 9.807 kN/m³
View: 2D

Analysis Settings

SLOPE/W Analysis

Kind: SLOPE/W
Method: Morgenstern-Price
Settings
    Apply Phreatic Correction: No
    Side Function
        Interslice force function option: Half-Sine
    PWP Conditions Source: Piezometric Line
    Use Staged Rapid Drawdown: No
Slip Surface
    Direction of movement: Right to Left
    Use Passive Mode: No
    Slip Surface Option: Entry and Exit
    Critical slip surfaces saved: 5
    Optimize Critical Slip Surface Location: Yes
    Tension Crack

Tension Crack Option: Tension Crack Line
Percentage Wet: 0.5
Tension Crack Fluid Unit Weight: 9.807 kN/m³
FOS Distribution
FOS Calculation Option: Constant
Advanced
Number of Slices: 30
Optimization Tolerance: 0.01
Minimum Slip Surface Depth: 0.1 m
Optimization Maximum Iterations: 2000
Optimization Convergence Tolerance: 1e-007
Starting Optimization Points: 8
Ending Optimization Points: 16
Complete Passes per Insertion: 1
Driving Side Maximum Convex Angle: 5 °
Resisting Side Maximum Convex Angle: 1 °

Materials

Cl 1

Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa
Elevation: 0 m
Pore Water Pressure
Piezometric Line: 1

Crust

Model: Mohr-Coulomb
Unit Weight: 18 kN/m³
Cohesion: 30 kPa
Phi: 0 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Cl 2

Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 1.81 kPa/m
Limiting C: 0 kPa
Elevation: 15 m
Pore Water Pressure

Piezometric Line: 1

Cl 3

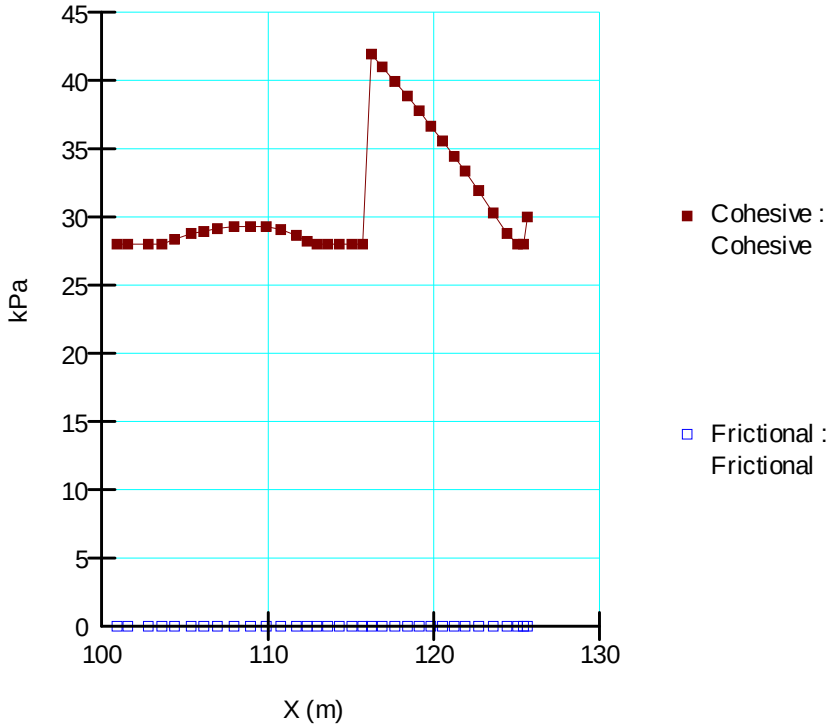
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 2.1 kPa/m
Limiting C: 0 kPa
Elevation: 5 m
Pore Water Pressure
Piezometric Line: 1

Cl 4

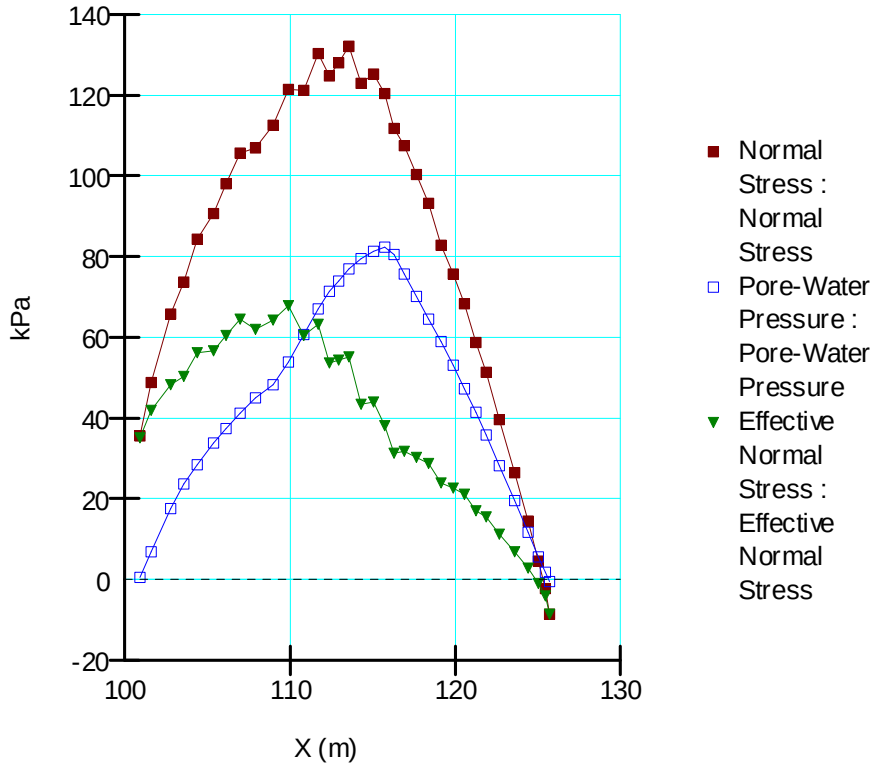
Model: S=f(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 0 kPa
C-Rate of Change: 25 kPa/m
Limiting C: 0 kPa
Pore Water Pressure
Piezometric Line: 1

Cl 5

Model: S=f(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 25 kPa
C-Rate of Change: 2.37 kPa/m
Limiting C: 0 kPa
Pore Water Pressure
Piezometric Line: 1



Figur 1 Kohesion och friction.



Figur 2 Totalspänning, effektivspänning och portryck.

KLIMATANPASSNING SKREDFÖRUTSÄTTNINGAR I GÖTA ÄLVDALEN

Sektion: V16350
Delområde: Intagan Ström
Analysmetod: Odränerad analys

Slip Surface Option: Entry and Exit
Method: Morgenstern-Price
PWP Conditions Source: Piezometric Line
Date: 2011-05-12
Created By: Rebecca Bertilsson
Last Edited By: Rebecca Bertilsson

Skala 1:1000 (A3)

Name: Cl 1
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 0 kPa/m

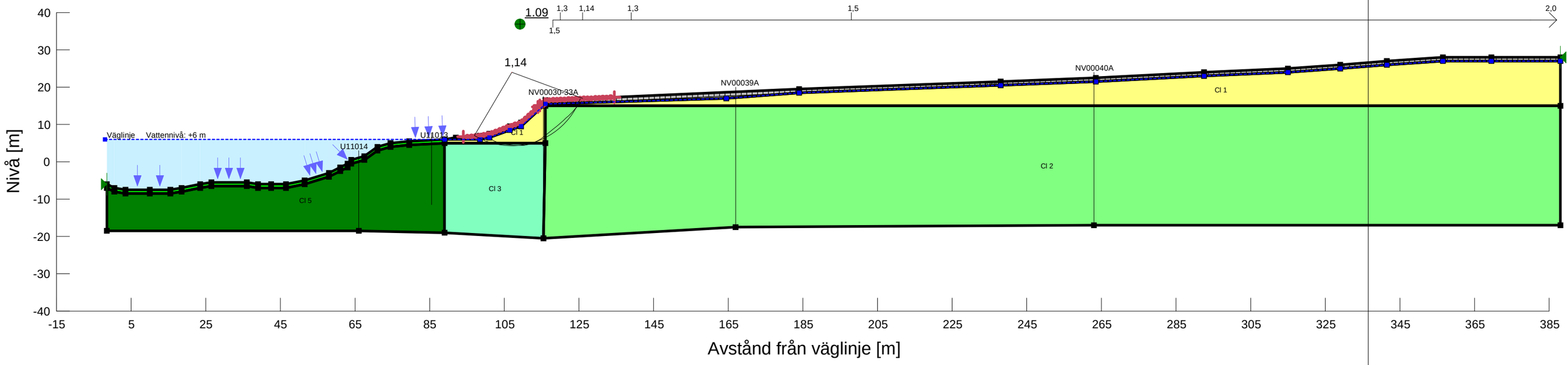
Name: Crust
Model: Mohr-Coulomb
Unit Weight: 18 kN/m³
Cohesion: 30 kPa
Phi: 0 °

Name: Cl 2
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 1.81 kPa/m

Name: Cl 3
Model: S=f(datum)
Unit Weight: 17 kN/m³
C-Datum: 28 kPa
C-Rate of Change: 2.1 kPa/m

Name: Cl 4
Model: S=f(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 0 kPa
C-Rate of Change: 25 kPa/m

Name: Cl 5
Model: S=f(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 25 kPa
C-Rate of Change: 2.37 kPa/m



Directory: P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V16350\110830\
File Name: V16350_odränerad print.gsz

SLOPE/W Analysis

File Information

Created By: Rebecca Bertilsson
Revision Number: 67
Last Edited By: Kine Meijer
Date: 2011-08-31
Time: 08:08:31
File Name: V16350_kombinerad print.gsz
Directory: P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V16350\110830\
Last Solved Date: 2011-08-31
Last Solved Time: 08:09:06

Project Settings

Length(L) Units: meters
Time(t) Units: Seconds
Force(F) Units: kN
Pressure(p) Units: kPa
Strength Units: kPa
Unit Weight of Water: 9.807 kN/m³
View: 2D

Analysis Settings

SLOPE/W Analysis

Kind: SLOPE/W
Method: Morgenstern-Price
Settings
- Side Function
  - Interslice force function option: Half-Sine
- PWP Conditions Source: Pressure Head Spatial Function
- Pressure Head Spatial Fn.: Uppmätta värden

Slip Surface
- Direction of movement: Right to Left
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 5
- Optimize Critical Slip Surface Location: Yes
- Tension Crack
  - Tension Crack Option: Tension Crack Line

Percentage Wet: 0.5
Tension Crack Fluid Unit Weight: 9.807 kN/m³

FOS Distribution
FOS Calculation Option: Constant

Advanced
Number of Slices: 30
Optimization Tolerance: 0.01
Minimum Slip Surface Depth: 3 m
Optimization Maximum Iterations: 2000
Optimization Convergence Tolerance: 1e-007
Starting Optimization Points: 8
Ending Optimization Points: 16
Complete Passes per Insertion: 1
Driving Side Maximum Convex Angle: 5 °
Resisting Side Maximum Convex Angle: 1 °

Materials

Cl 1

Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 28 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1
Elevation: 0 m

Crust

Model: Combined, S=f(datum)
Unit Weight: 18 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 30 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1
Elevation: 0 m

Cl 2

Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m

Cu-Datum: 28 kPa
Cu-Rate of Change: 1.81 kPa/m
C/Cu Ratio: 0.1
Elevation: 15 m

Cl 3

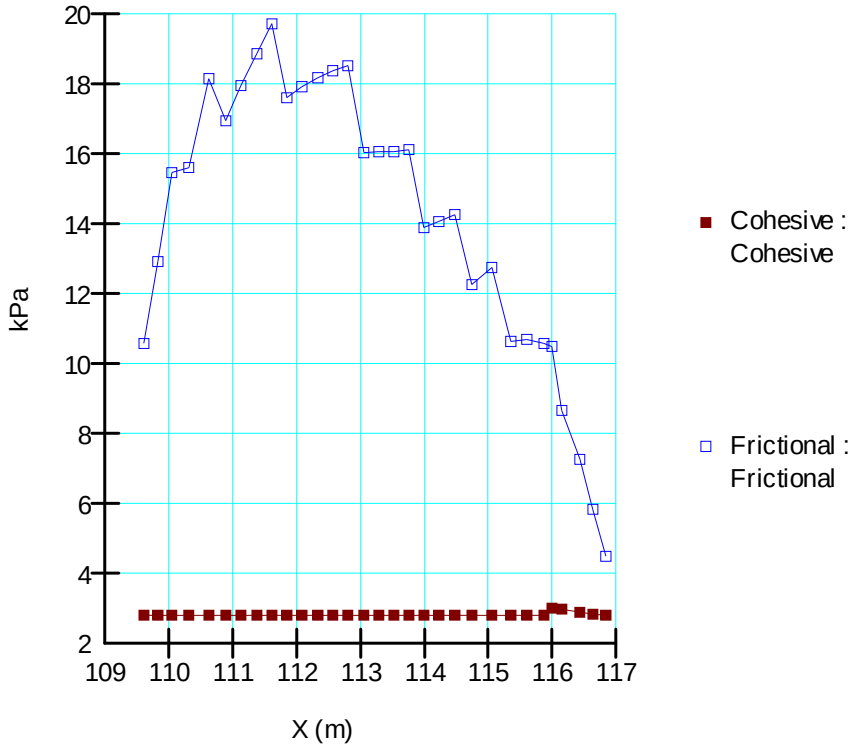
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 2.1 kPa/m
C/Cu Ratio: 0.1
Elevation: 5 m

Cl 4

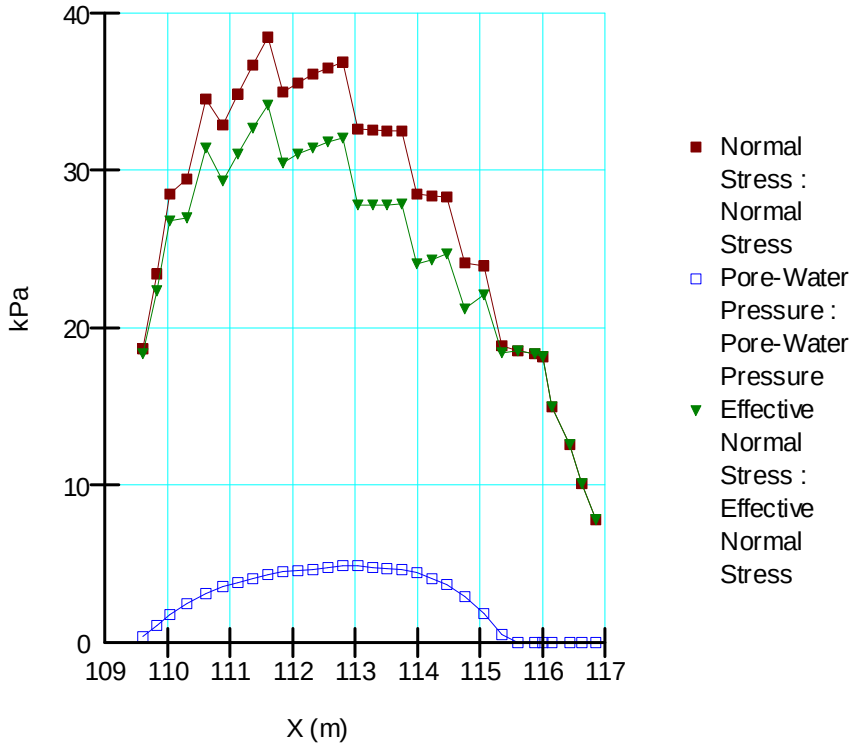
Model: Combined, S=f(depth)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 0 kPa
Cu-Rate of Change: 25 kPa/m
C/Cu Ratio: 0.1

Cl 5

Model: Combined, S=f(depth)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 25 kPa
Cu-Rate of Change: 2.37 kPa/m
C/Cu Ratio: 0.1



Figur 1 Kohesion och friction.



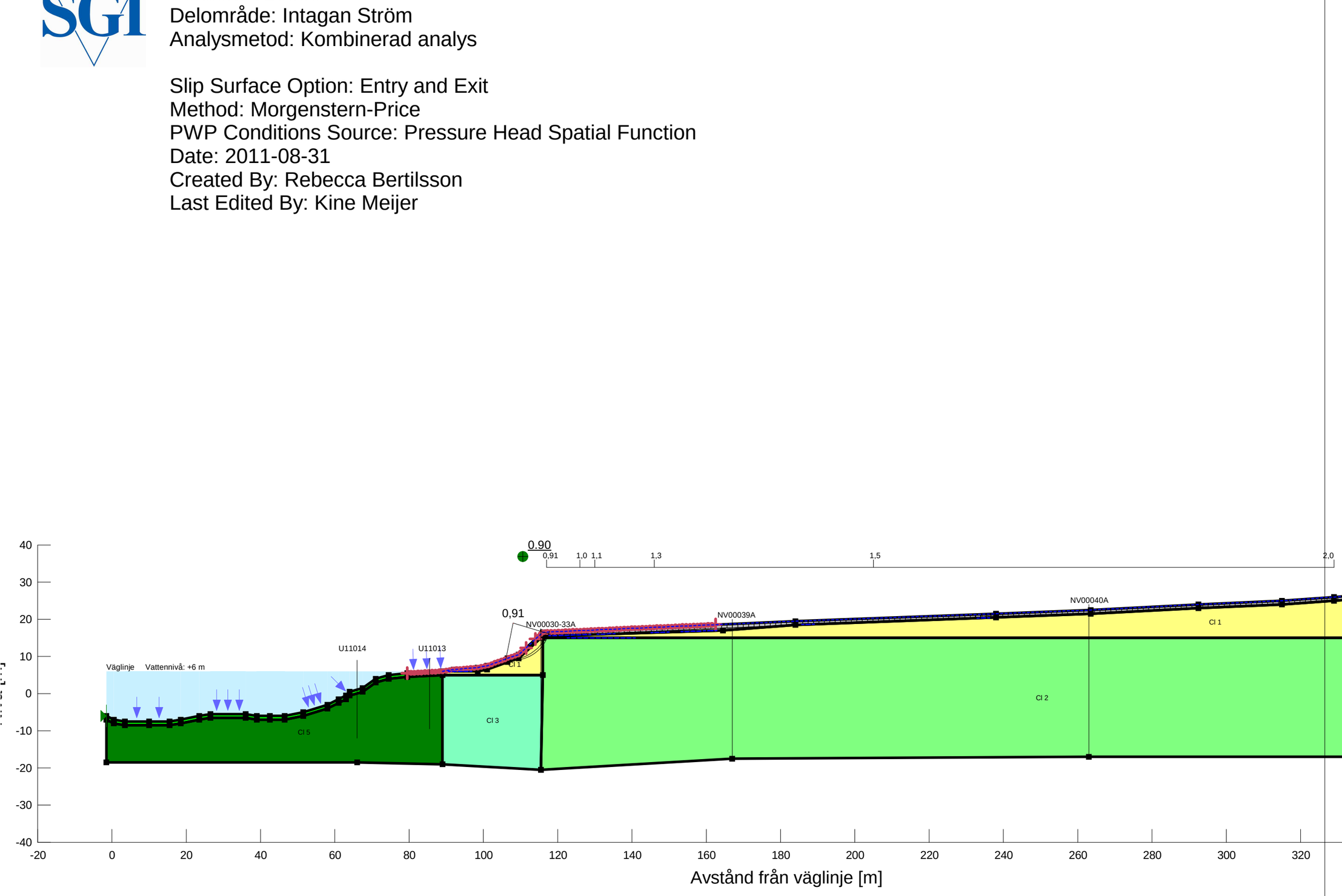
Figur 2 Totalspänning, effektivspänning och portryck.

Skala 1:1000 (A3)

KLIMATANPASSNING SKREDFÖRUTSÄTTNINGAR I GÖTA ÄLVDALEN

Sektion: V16350
Delområde: Intagan Ström
Analysmetod: Kombinerad analys

Slip Surface Option: Entry and Exit
Method: Morgenstern-Price
PWP Conditions Source: Pressure Head Spatial Function
Date: 2011-08-31
Created By: Rebecca Bertilsson
Last Edited By: Kine Meijer



Directory: P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V16350\110830\
File Name: V16350_kombinerad print.gsz

Name: Cl 1
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 28 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1

Name: Crust
Model: Combined, S=f(datum)
Unit Weight: 18 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 30 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1

Name: Cl 2
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 1.81 kPa/m
C/Cu Ratio: 0.1

Name: Cl 3
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 2.1 kPa/m
C/Cu Ratio: 0.1

Name: Cl 4
Model: Combined, S=f(depth)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 0 kPa
Cu-Rate of Change: 25 kPa/m
C/Cu Ratio: 0.1

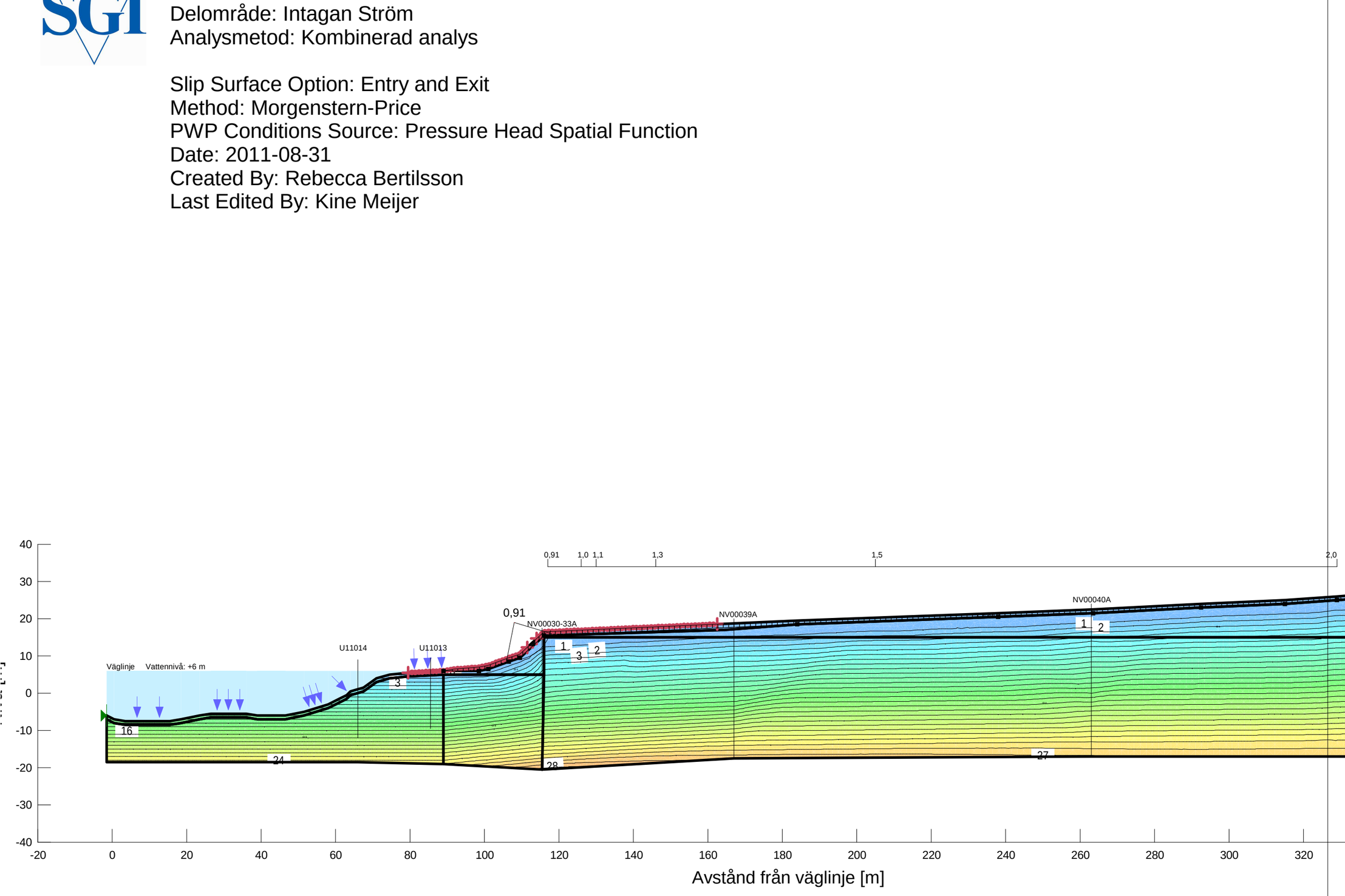
Name: Cl 5
Model: Combined, S=f(depth)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 25 kPa
Cu-Rate of Change: 2.37 kPa/m
C/Cu Ratio: 0.1

Skala 1:1000 (A3)

KLIMATANPASSNING SKREDFÖRUTSÄTTNINGAR I GÖTA ÄLVDALEN

Sektion: V16350
Delområde: Intagan Ström
Analysmetod: Kombinerad analys

Slip Surface Option: Entry and Exit
Method: Morgenstern-Price
PWP Conditions Source: Pressure Head Spatial Function
Date: 2011-08-31
Created By: Rebecca Bertilsson
Last Edited By: Kine Meijer



Directory: P:\!Göta älv utredningen 2009-2012\Delområde 1-10\Delområde 5-14085\Geoteknik\Text\Interngranskning\V16350\110830\
File Name: V16350_kombinerad print.gsz

Name: Cl 1
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 28 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1

Name: Crust
Model: Combined, S=f(datum)
Unit Weight: 18 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 30 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1

Name: Cl 2
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 1.81 kPa/m
C/Cu Ratio: 0.1

Name: Cl 3
Model: Combined, S=f(datum)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 28 kPa
Cu-Rate of Change: 2.1 kPa/m
C/Cu Ratio: 0.1

Name: Cl 4
Model: Combined, S=f(depth)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 0 kPa
Cu-Rate of Change: 25 kPa/m
C/Cu Ratio: 0.1

Name: Cl 5
Model: Combined, S=f(depth)
Unit Weight: 17 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 25 kPa
Cu-Rate of Change: 2.37 kPa/m
C/Cu Ratio: 0.1