Kombinerad analys, nulägesanalys, söder 1

File Information

Created By: Karlström, Hanna
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File Name: 31150WKSB.gsz
Directory: V:_UPPDRAG\224784\Teknik\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektion 25\V31_150B\

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

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Description: V31/150B kombinerad analys Uppsprucken torrskorpa, 50% vattenfyllda sprickor
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.: Nulägesanalys

Slip Surface
- Direction of movement: Right to Left
- Use Passive Mode: No
- Slip Surface Option: Entry and Exit
- Critical slip surfaces saved: 20
- 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

Friction

Model: Mohr-Coulomb
Unit Weight: 22 kN/m³
Unit Wt. Above Water Table: 20 kN/m³
Cohesion: 0 kPa
Phi: 38 °
Phi-B: 0 °

Crust co

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

Clay 1 co

Model: Combined, S=f(depth)
Unit Weight: 15.7 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 16 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1

Clay 2 co

Model: Combined, S=f(datum)
Unit Weight: 15.7 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m

Cu-Datum: 16 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0.1
Elevation: 12 m

Clay 3 co

Model: Combined, S=f(datum)
Unit Weight: 15.7 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 16 kPa
Cu-Rate of Change: 1.13 kPa/m
C/Cu Ratio: 0.1
Elevation: 7 m

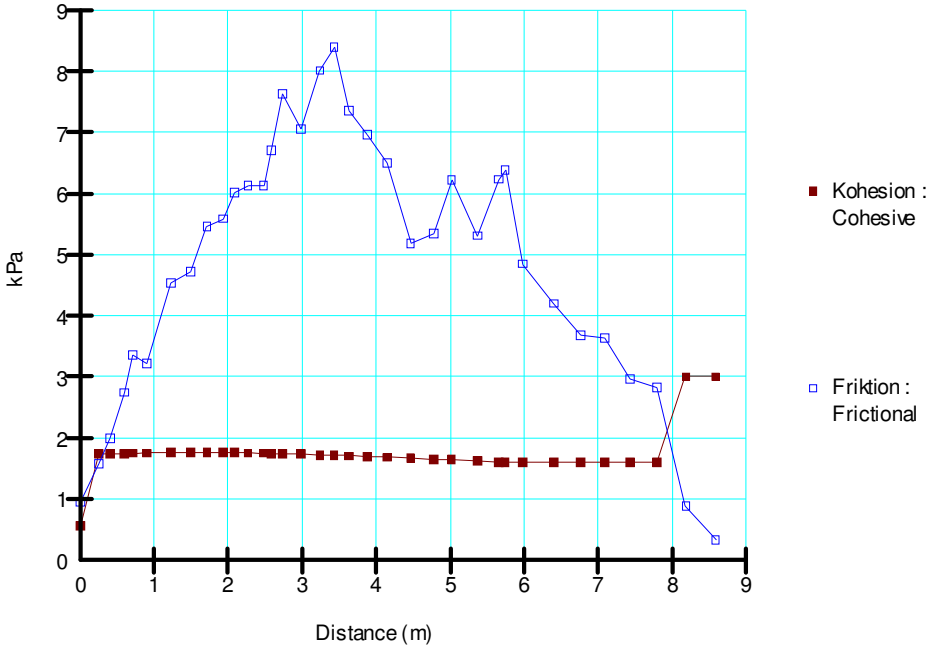
Clay 4 co

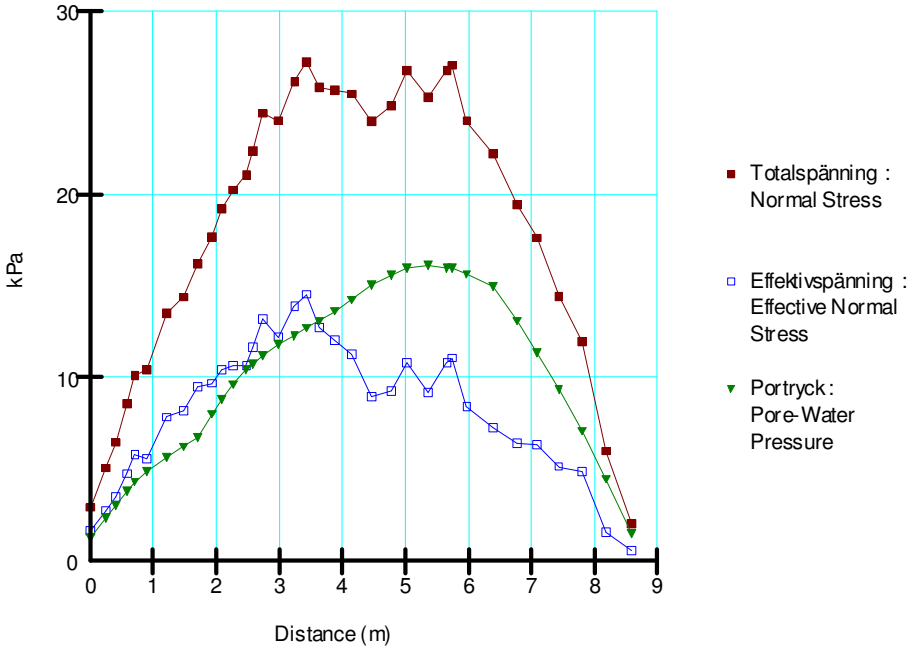
Model: Combined, S=f(datum)
Unit Weight: 16 kN/m³
Phi: 30 °
C-Datum: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Datum: 25 kPa
Cu-Rate of Change: 0.56 kPa/m
C/Cu Ratio: 0.1
Elevation: -1 m

Clay 5 co älv

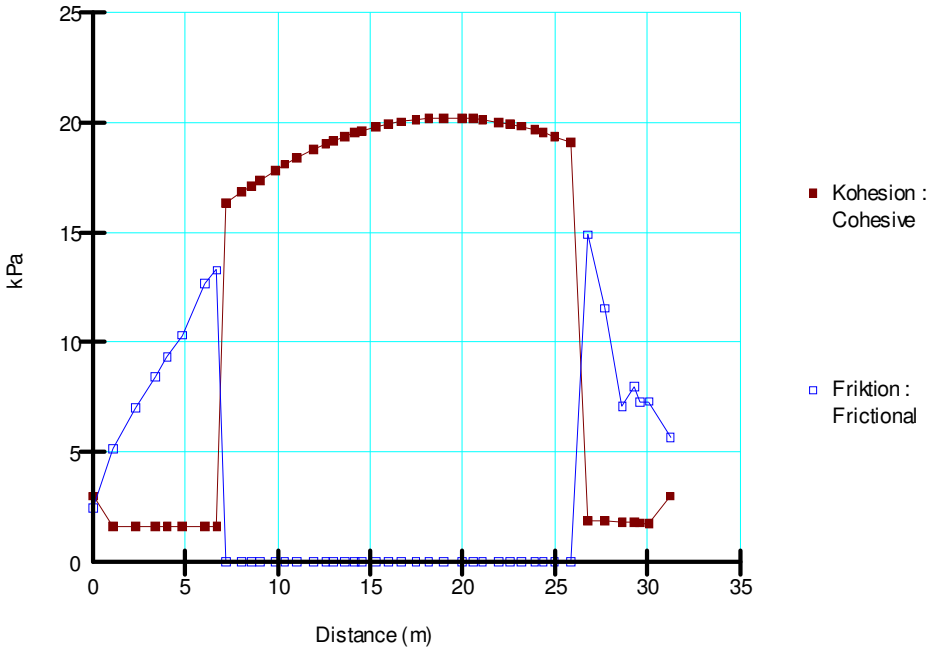
Model: Combined, S=f(depth)
Unit Weight: 15.7 kN/m³
Phi: 30 °
C-Top of Layer: 0 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 5 kPa
Cu-Rate of Change: 6.72 kPa/m
C/Cu Ratio: 0.1

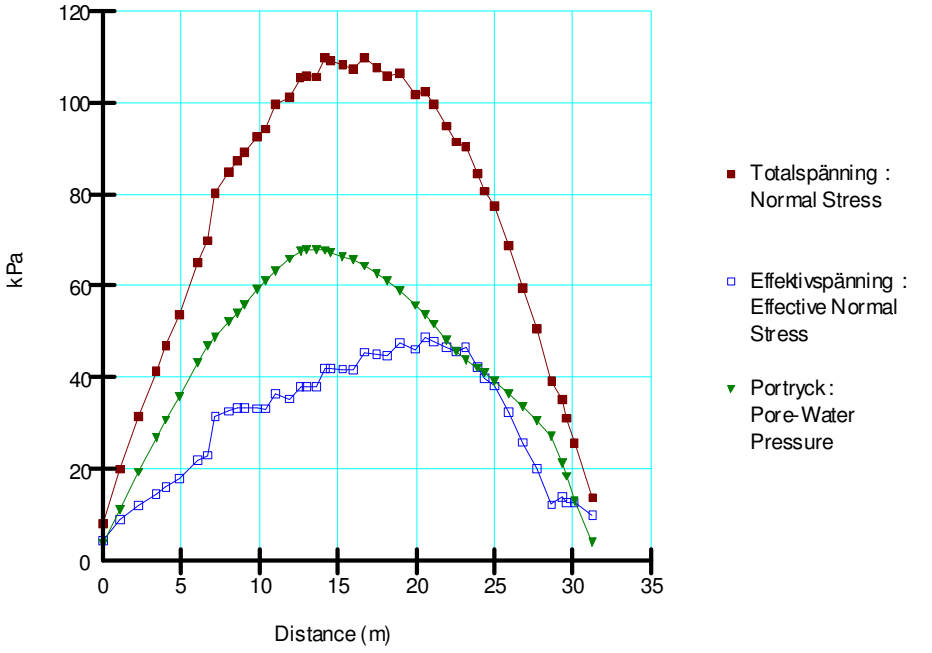
Södra slänten





Norra slänten





Skala 1:800 (A3)
Leveransdatum 2011-03-31

Göta älv utredningen 2009-2012
SEKTION: V31/150B kombinerad analys
Uppsprucken torrskorpa, 50% vattenfyllda sprickor
Beräkningsmodell: Morgenstern-Price
Metod: Entry and Exit
Portrycksmodell: Pressure Head Spatial Function
Datum: 2011-04-04

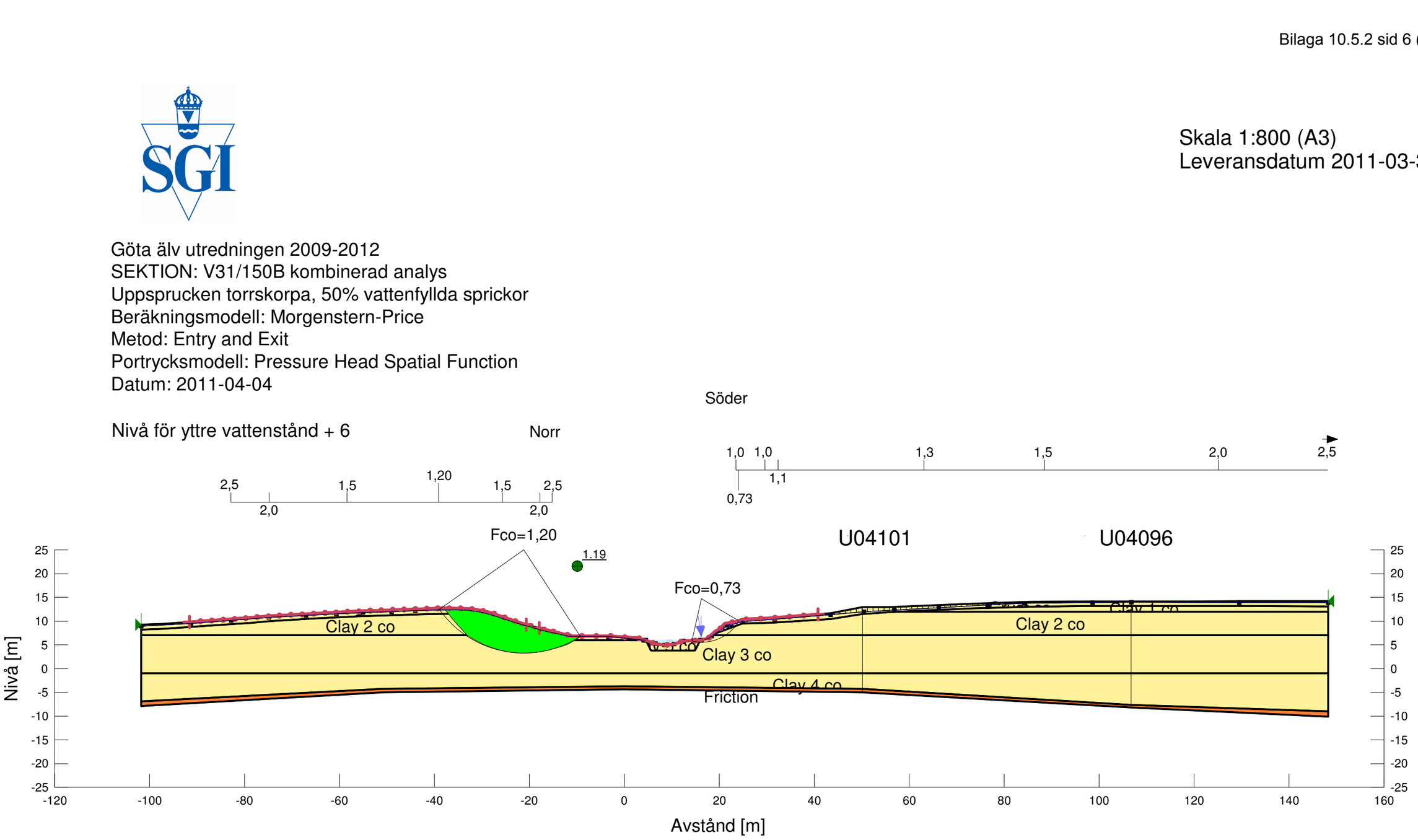
Nivå för yttre vattenstånd + 6

Norr

2,5 2,0 1,5 1,20 1,5 2,5 2,0

Söder

1,0 1,0 1,1 0,73 1,3 1,5 2,0 2,5



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Beräkning utförd av: Hanna Karlström

Granskad av: Mats Ekenberg

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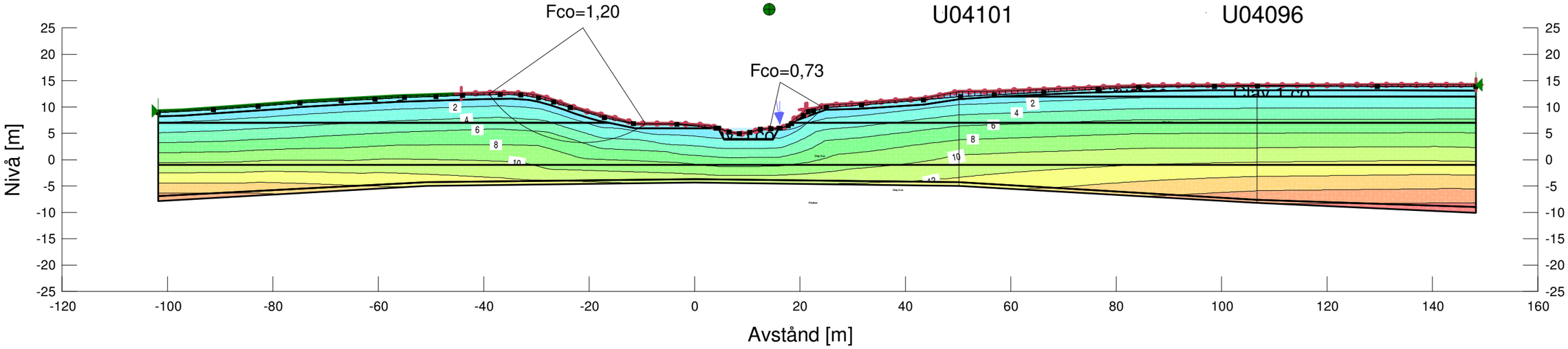
Nivå för yttre vattenstånd + 6

Norr

2,5 2,0 1,5 1,20 1,5 2,5 2,0

Söder

1,0 1,0 1,1 0,73 1,3 1,5 2,0 2,5



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