Odränerad analys, befintliga förhållanden

File Information

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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

Odränerad analys, befintliga förhållanden (2)

Description: V35900, odränerad 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

Crust ud

Model: S=f(depth)
Unit Weight: 18 kN/m³
C-Top of Layer: 30 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa

Clay 1 ud

Model: S=f(datum)
Unit Weight: 16.6 kN/m³
C-Datum: 17 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa
Elevation: 10 m

Clay 2 ud

Model: S=f(datum)
Unit Weight: 16.6 kN/m³
C-Datum: 20 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa
Elevation: 4 m

Clay 3 ud älv

Model: S=f(depth)
Unit Weight: 16.1 kN/m³
C-Top of Layer: 12 kPa
C-Rate of Change: 8 kPa/m
Limiting C: 20 kPa

Clay 4 ud älv

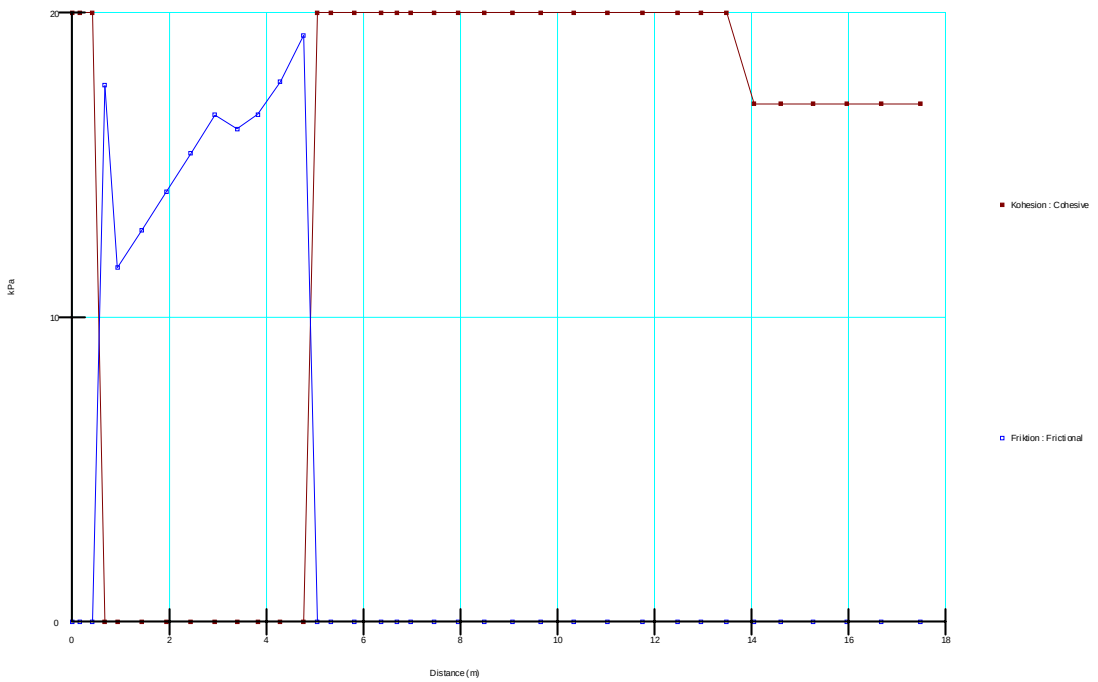
Model: S=f(datum)
Unit Weight: 16.1 kN/m³
C-Datum: 20 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa
Elevation: 0 m

Friction

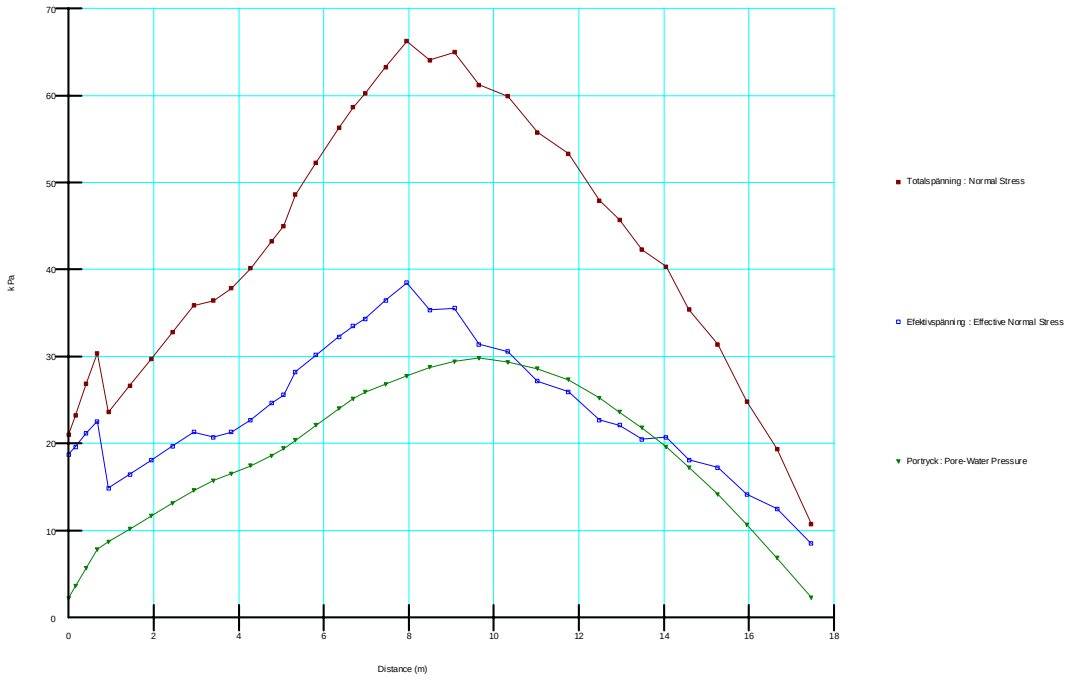
Model: Mohr-Coulomb
Unit Weight: 22 kN/m³
Cohesion: 0 kPa
Phi: 38 °
Phi-B: 0 °

Strandskoning

Model: Mohr-Coulomb
Unit Weight: 21 kN/m³
Unit Wt. Above Water Table: 18 kN/m³
Cohesion: 0 kPa
Phi: 40 °
Phi-B: 0 °



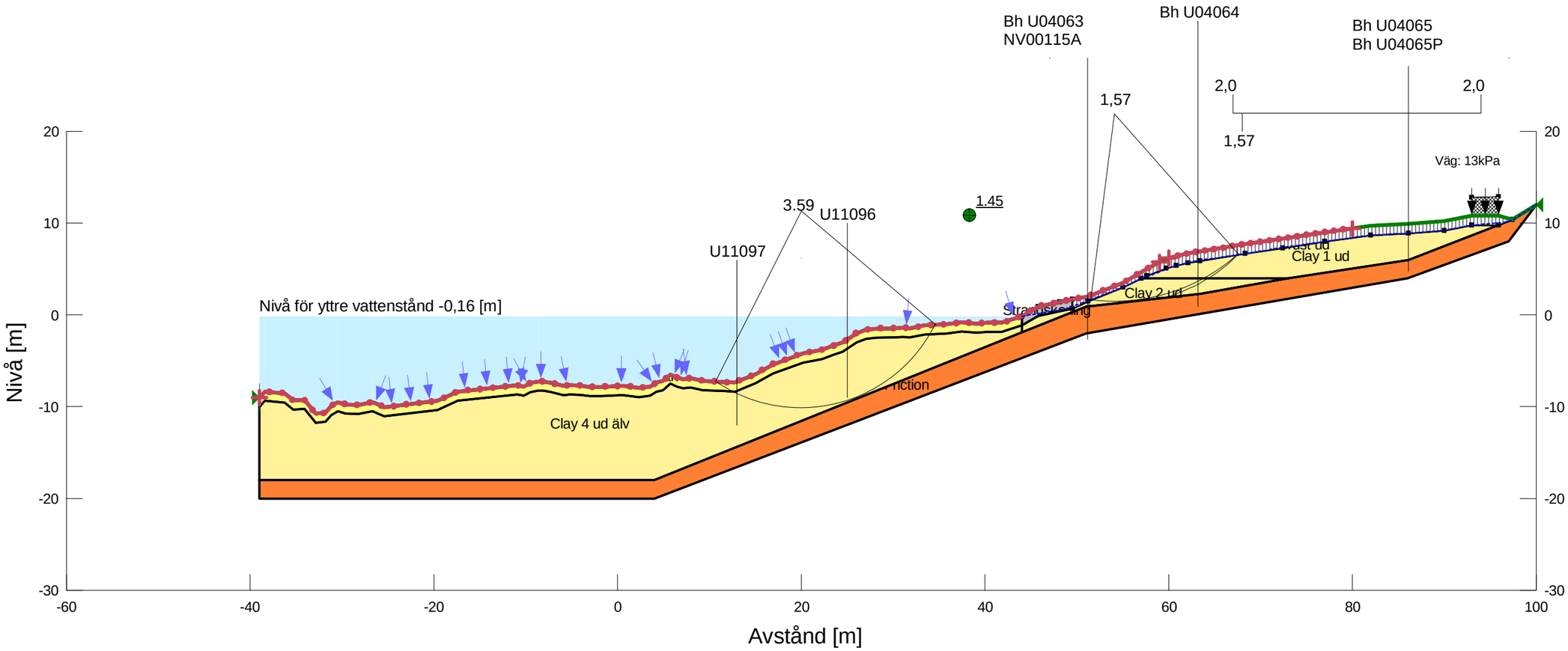
Figur 1. Kohesion och friction



Figur 2. Totalspänning, effektivspänning och portryck

Göta älv utredningen 2009-2012
SEKTION: V35900, odränerad analys
Uppsprucken torrskorpa, 50% vattenfyllda sprickor
Beräkningsmodell: Morgenstern-Price
Metod: Entry and Exit
Portrycksmodell: Pressure Head Spatial Function
Datum: 2010-12-13

Skala 1:500 (A3)
Leveransdatum: 2011-03-31



Beräkning utförd av: Petter Karlsson

Granskad av: Mats Ekenberg

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