

# Kombinerad analys, befintliga förhållanden, Nulägesanalys

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## File Information

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Last Solved Date: [2011-03-31](#)  
Last Solved Time: [18:52:20](#)

## 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/m<sup>3</sup>](#)  
View: [2D](#)

## Analysis Settings

### Kombinerad analys, befintliga förhållanden, Nulägesanalys

Description: [46900WS delomr 4, kombinerad analys Uppsprucken torrskorpa Hydrodynamiskt portryck](#)

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 maxvärde](#)

Slip Surface

Direction of movement: [Right to Left](#)

Use Passive Mode: [No](#)

Slip Surface Option: [Grid and Radius](#)

Critical slip surfaces saved: [20](#)

Optimize Critical Slip Surface Location: [Yes](#)

Tension Crack

Tension Crack Option: (none)

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 co

Model: Combined,  $S=f(\text{depth})$

Unit Weight: 18 kN/m<sup>3</sup>

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,  $S=f(\text{depth})$

Unit Weight: 16 kN/m<sup>3</sup>

Phi: 30 °

C-Top of Layer: 0 kPa

C-Rate of Change: 0 kPa/m

Cu-Top of Layer: 10 kPa

Cu-Rate of Change: 0 kPa/m

C/Cu Ratio: 0.1

### Clay 2 co

Model: Combined,  $S=f(\text{datum})$

Unit Weight: 15.6 kN/m<sup>3</sup>

Phi: 30 °

C-Datum: 0 kPa

C-Rate of Change: 0 kPa/m

Cu-Datum: 10 kPa

Cu-Rate of Change: 0.83 kPa/m

C/Cu Ratio: 0.1

Elevation: -3 m

### Clay 3 co

Model: Combined,  $S=f(\text{datum})$

Unit Weight: 16 kN/m<sup>3</sup>  
Phi: 30 °  
C-Datum: 0 kPa  
C-Rate of Change: 0 kPa/m  
Cu-Datum: 20 kPa  
Cu-Rate of Change: 1 kPa/m  
C/Cu Ratio: 0.1  
Elevation: -15 m

#### Clay 4 co

Model: Combined, S=f(depth)  
Unit Weight: 15.6 kN/m<sup>3</sup>  
Phi: 30 °  
C-Top of Layer: 0 kPa  
C-Rate of Change: 0 kPa/m  
Cu-Top of Layer: 3 kPa  
Cu-Rate of Change: 2.87 kPa/m  
C/Cu Ratio: 0.1

#### Clay 5 co

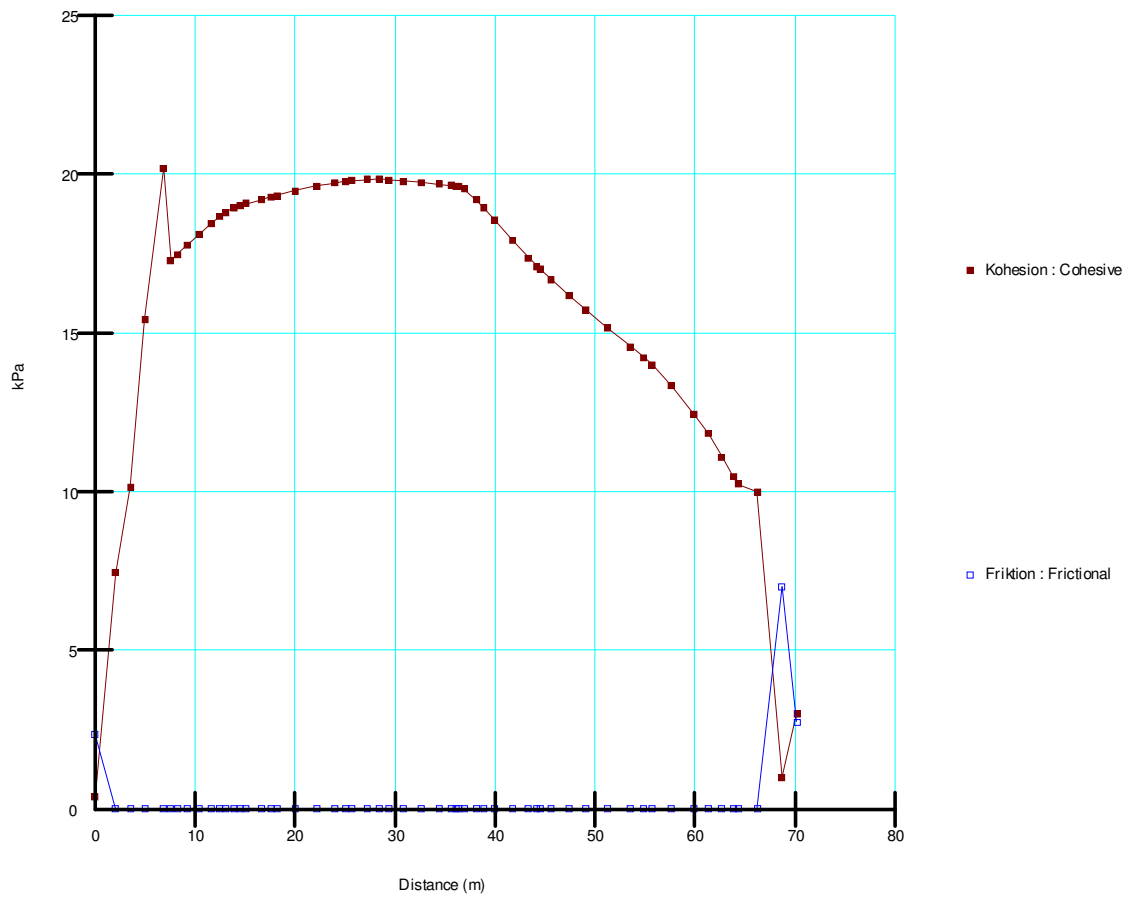
Model: Combined, S=f(depth)  
Unit Weight: 15.6 kN/m<sup>3</sup>  
Phi: 30 °  
C-Top of Layer: 0 kPa  
C-Rate of Change: 0 kPa/m  
Cu-Top of Layer: 3 kPa  
Cu-Rate of Change: 2.39 kPa/m  
C/Cu Ratio: 0.1

#### Friction

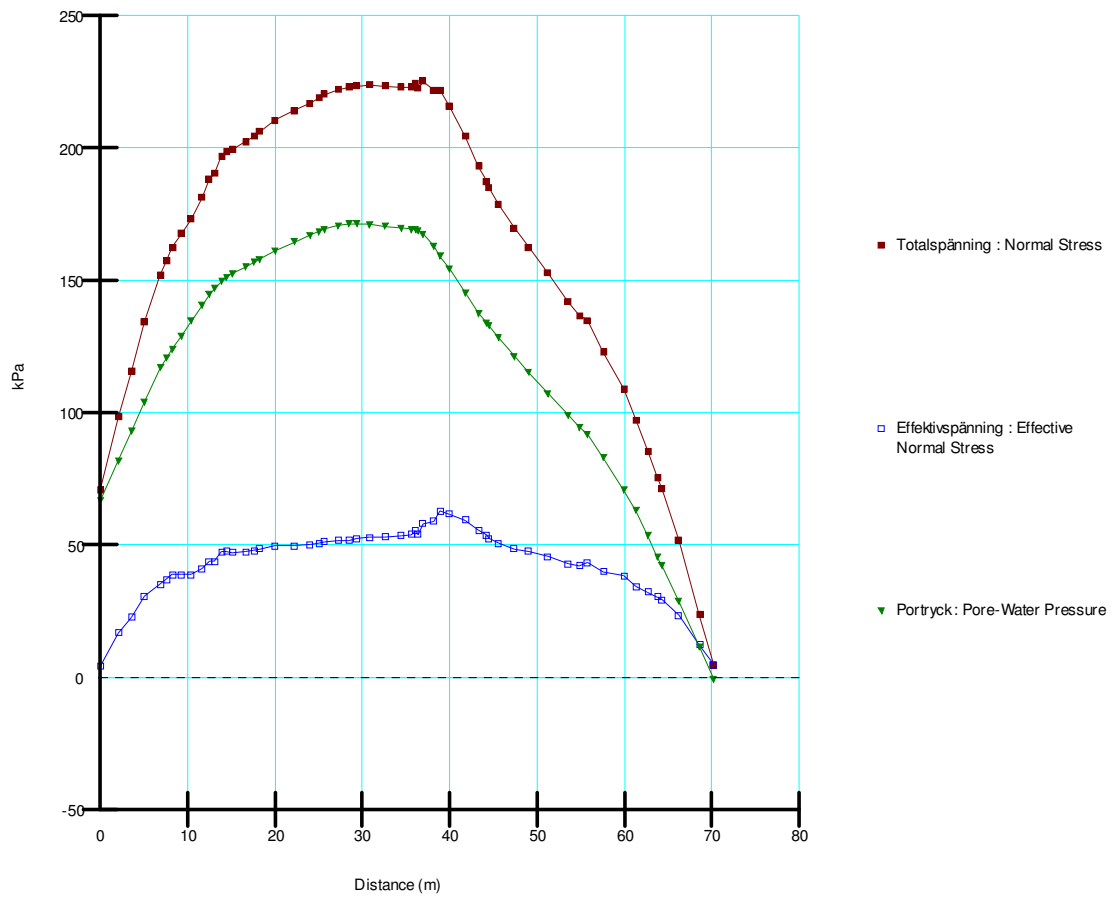
Model: Mohr-Coulomb  
Unit Weight: 22 kN/m<sup>3</sup>  
Unit Wt. Above Water Table: 20 kN/m<sup>3</sup>  
Cohesion: 0 kPa  
Phi: 40 °  
Phi-B: 0 °

#### Vägbank

Model: Mohr-Coulomb  
Unit Weight: 21 kN/m<sup>3</sup>  
Unit Wt. Above Water Table: 18 kN/m<sup>3</sup>  
Cohesion: 0 kPa  
Phi: 40 °  
Phi-B: 0 °



Figur 1. Kohesion och Friktion

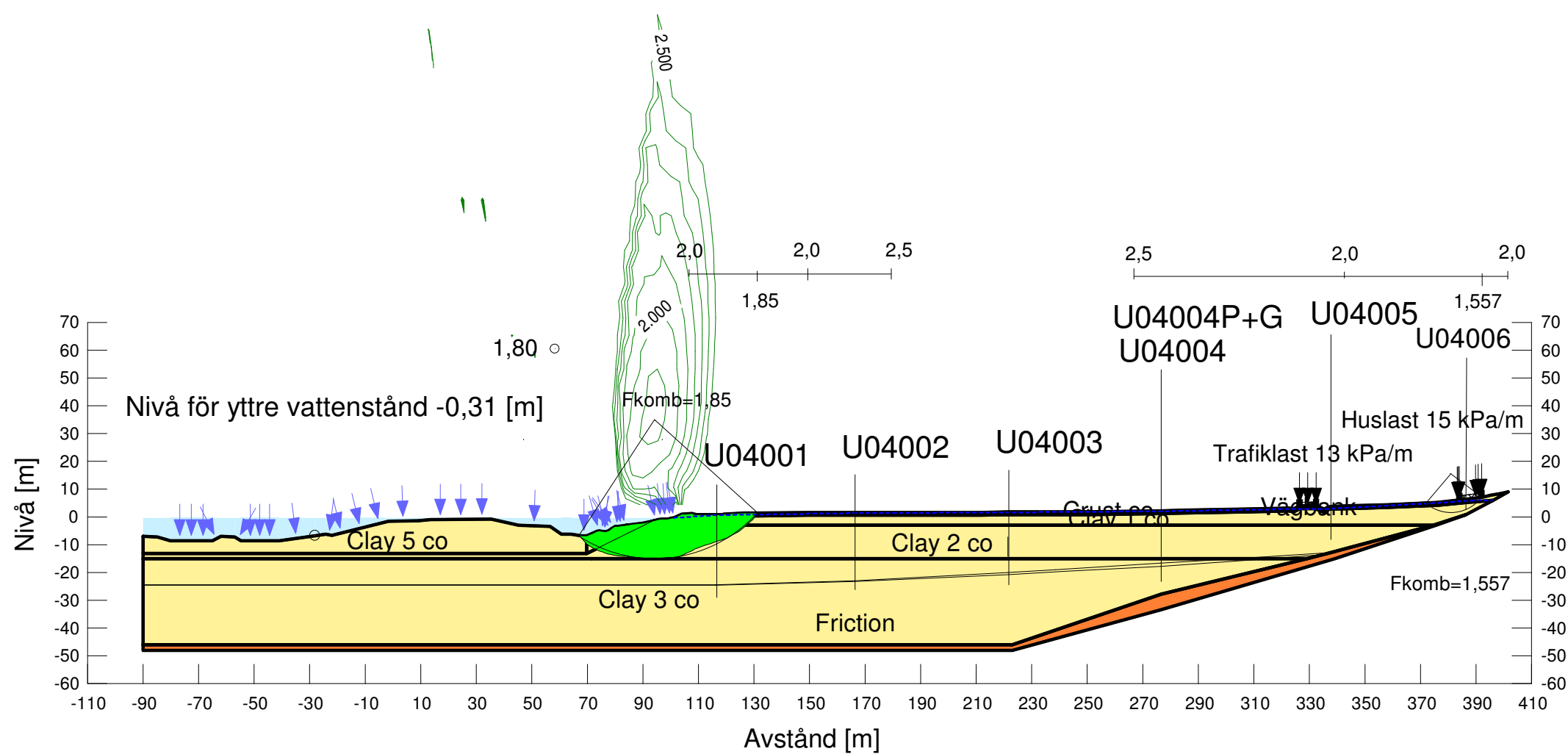


Figur 2. Totalspänning, Effektivspänning och Portryck



Skala 1:2000 (A3)  
Leveransdatum 2011-03-31

Göta älv utredningen 2009-2012  
SEKTION: V46/900 delomr 4, kombinerad analys  
Uppsprucken torrskorpa  
Artesiskt portryck  
Beräkningsmodell: Morgenstern-Price  
Metod: Grid and Radius  
Portrycksmodell: Pressure Head Spatial Function  
Datum: 2011-04-01





Göta älv utredningen 2009-2012  
 SEKTION: V46/900 delomr 4, kombinerad analys  
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 Beräkningsmodell: Morgenstern-Price  
 Metod: Grid and Radius  
 Portrycksmodell: Pressure Head Spatial Function  
 Datum: 2011-04-01

Skala 1:2000 (A3)

Leveransdatum 2011-03-31

