

Odränerad analys, befintliga förhållanden

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File Information

Created By: [Virginia Bengtsson](#)
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Last Edited By: [Bengtsson Virginia](#)
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File Name: [45550WUS.gsz](#)
Directory: [S:\Uppdrag\60_Externt\6020xx\602085_Stabilitetsutredning GÄ_Tyréns\GÄU DELOMRÅDE 4\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektion 2 45550\](#)
Last Solved Date: [2010-11-19](#)
Last Solved Time: [15:46:18](#)

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

Description: [45550 odränerad analys Uppsprucken torrskorpa, vattenfyllda sprickor \(50%\)](#)

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.: [Pressure Head Function](#)

Slip Surface

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

Use Passive Mode: [No](#)

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

Critical slip surfaces saved: [100](#)

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

Unit Weight: 18 kN/m³

C-Top of Layer: 30 kPa

C-Rate of Change: 0 kPa/m

Limiting C: 0 kPa

Fill

Model: Mohr-Coulomb

Unit Weight: 19 kN/m³

Cohesion: 0 kPa

Phi: 38 °

Phi-B: 0 °

Clay 1 ud älv

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

Unit Weight: 15.75 kN/m³

C-Datum: 3 kPa

C-Rate of Change: 0 kPa/m

Limiting C: 0 kPa

Elevation: 0 m

Clay 2 ud älv

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

Unit Weight: 15.75 kN/m³

C-Datum: 3 kPa

C-Rate of Change: 2.61 kPa/m

Limiting C: 0 kPa

Elevation: -9.3 m

Clay 3 ud

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

Unit Weight: 15.75 kN/m³
C-Datum: 4 kPa
C-Rate of Change: 1.14 kPa/m
Limiting C: 0 kPa
Elevation: 2 m

Clay 4 ud

Model: $S=f(\text{depth})$
Unit Weight: 16.25 kN/m³
C-Top of Layer: 18 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa

Clay 5 ud

Model: $S=f(\text{depth})$
Unit Weight: 16.25 kN/m³
C-Top of Layer: 20 kPa
C-Rate of Change: 1.67 kPa/m
Limiting C: 0 kPa

Clay 6 ud

Model: $S=f(\text{depth})$
Unit Weight: 16.25 kN/m³
C-Top of Layer: 27 kPa
C-Rate of Change: 1.67 kPa/m
Limiting C: 0 kPa

Clay 7 ud

Model: $S=f(\text{datum})$
Unit Weight: 15.75 kN/m³
C-Datum: 27.3 kPa
C-Rate of Change: 1 kPa/m
Limiting C: 0 kPa
Elevation: -18.6 m

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 °

Bedrock

Model: Bedrock (Impenetrable)

Sand

Model: Mohr-Coulomb
Unit Weight: 20 kN/m³
Unit Wt. Above Water Table: 18 kN/m³
Cohesion: 0 kPa
Phi: 33 °

Phi-B: 0 °

Gyttja

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

Unit Weight: 14 kN/m³

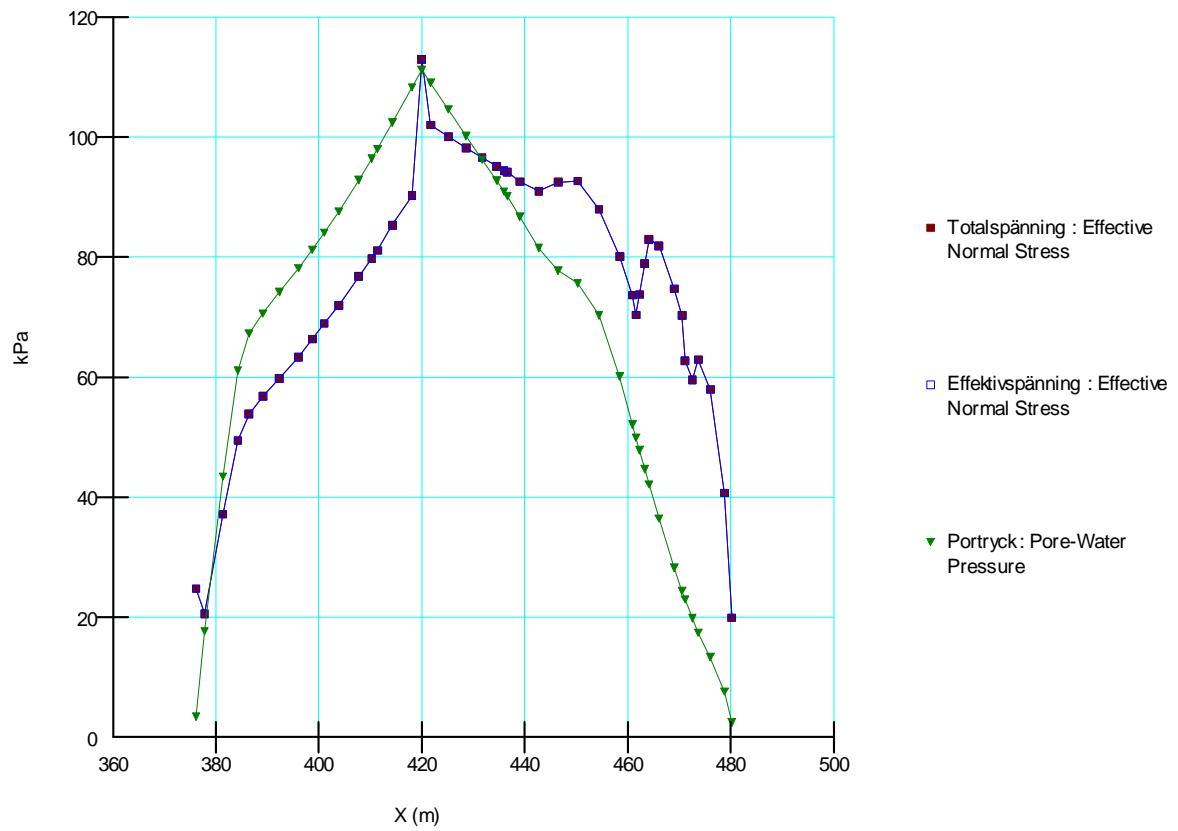
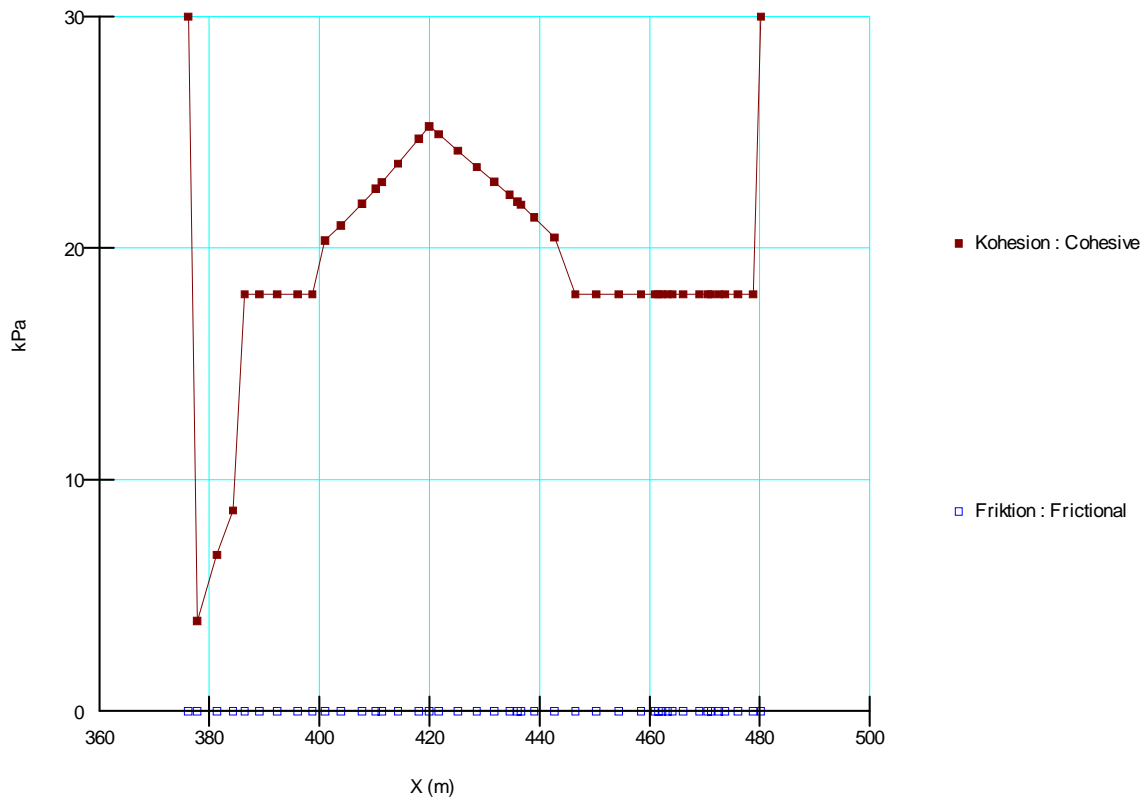
C-Datum: 7 kPa

C-Rate of Change: 1 kPa/m

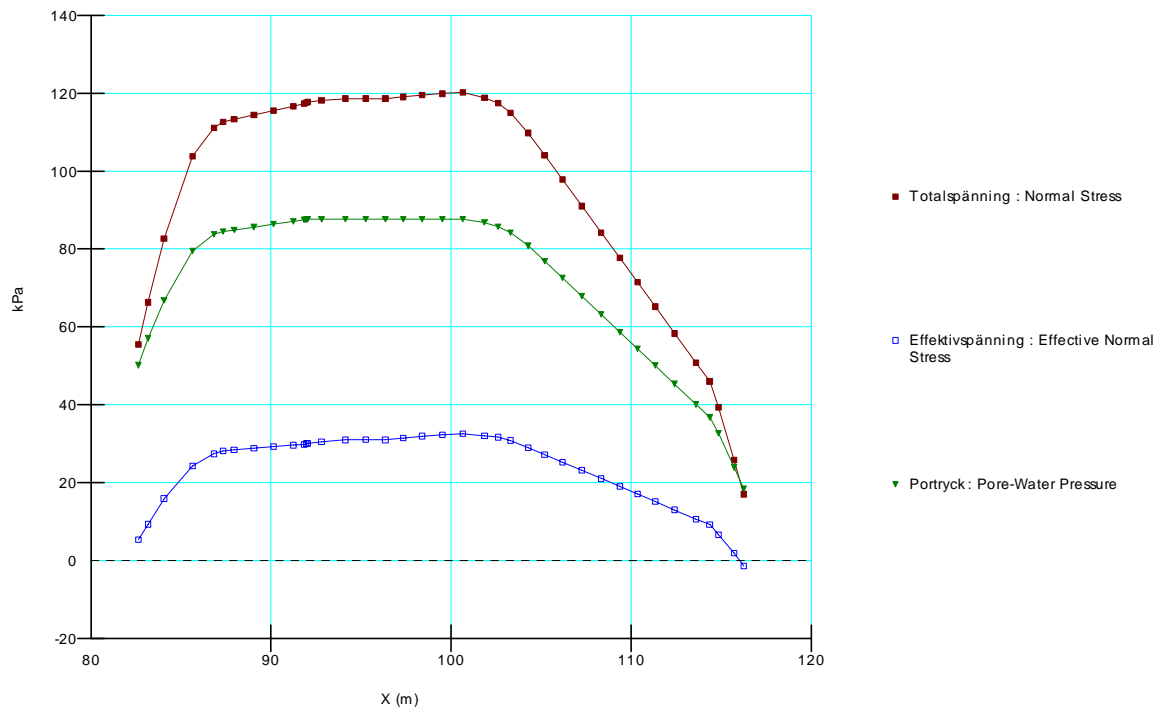
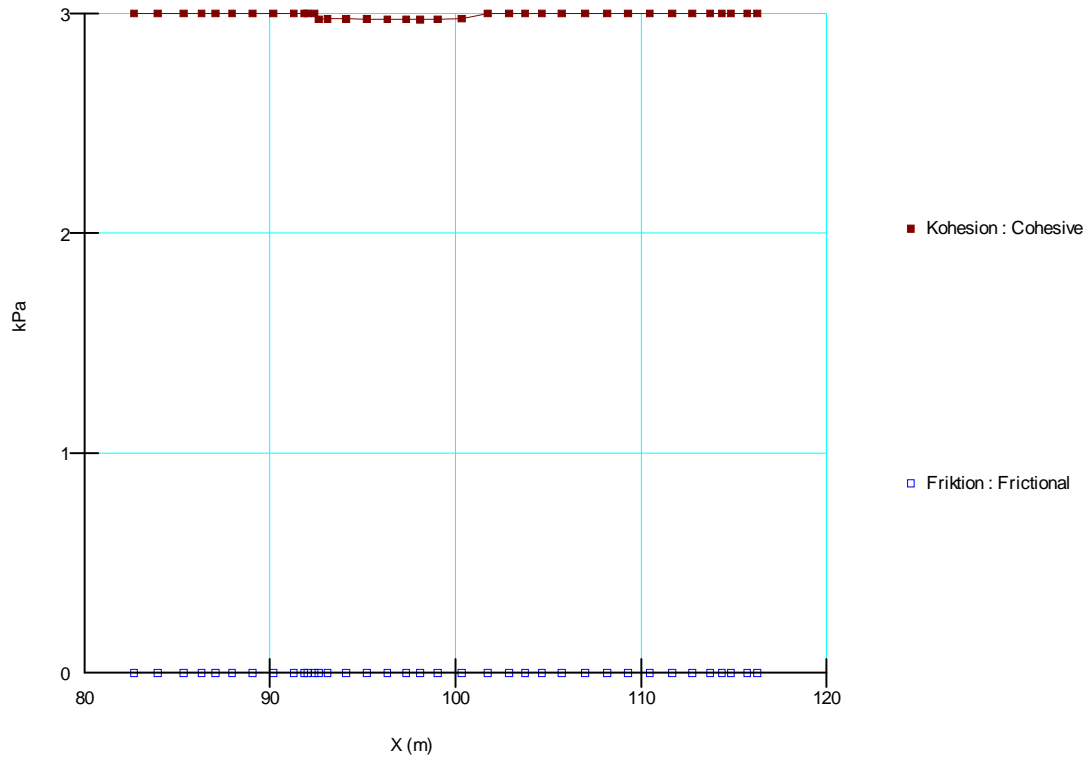
Limiting C: 0 kPa

Elevation: 2 m

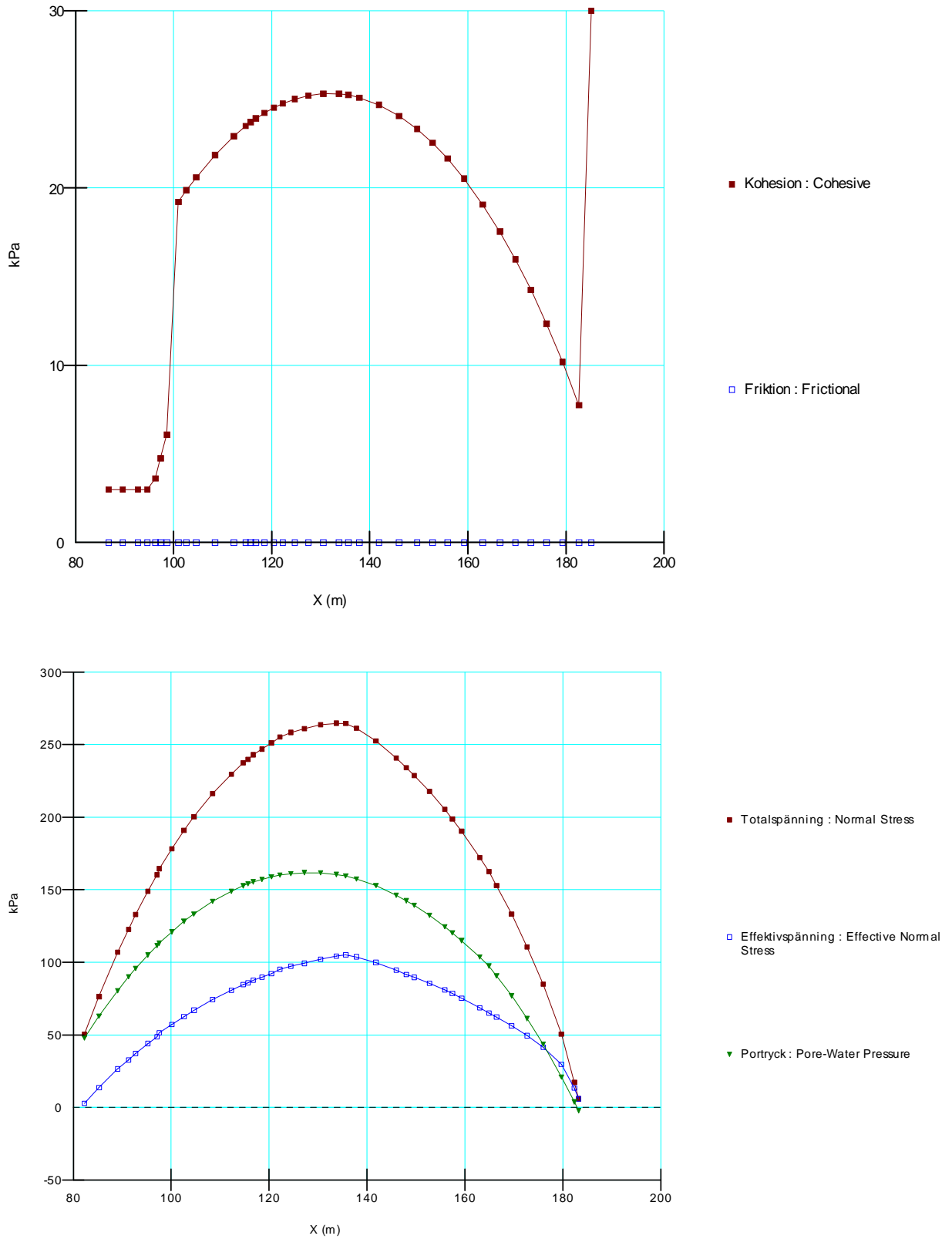
Optimerad glidyta slänt vid fastmark ($F_c=1,65$)



Optimerad glidyta undervattenslänt (Fc=2,22)



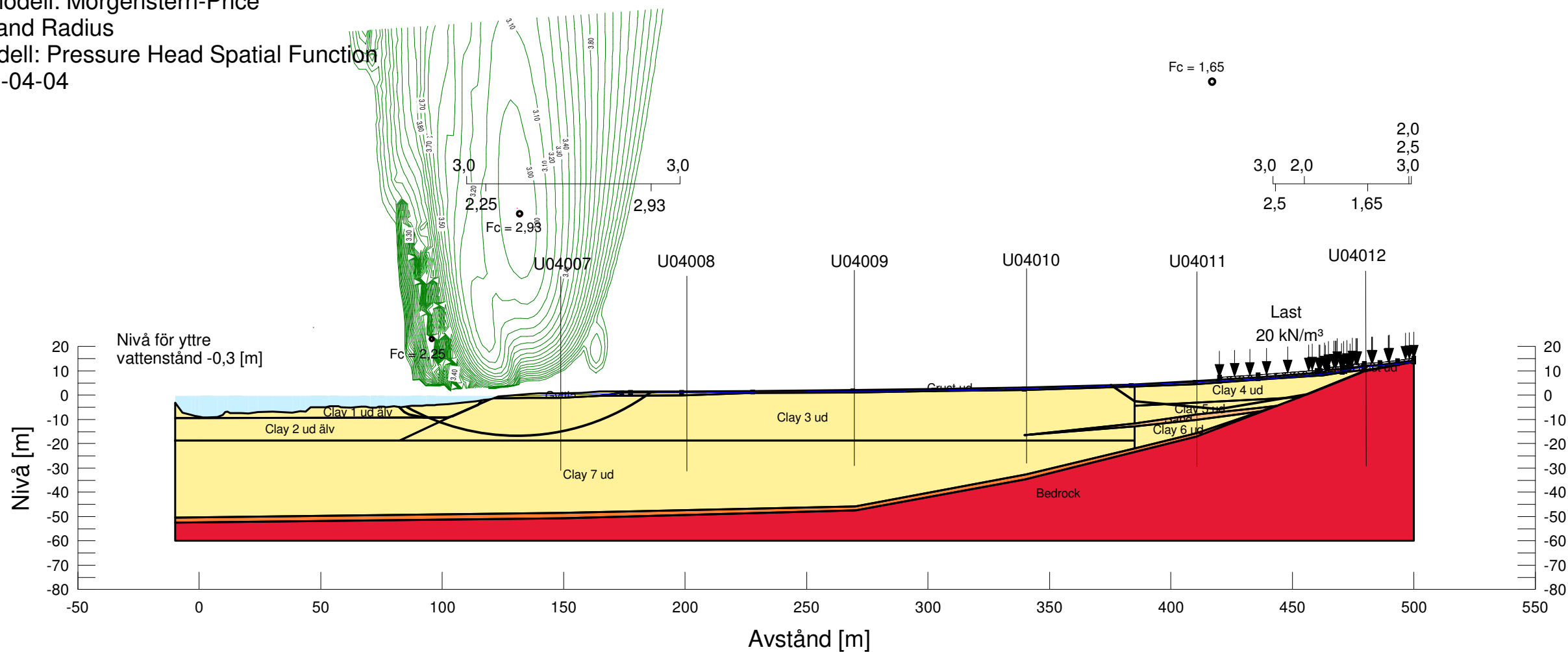
Cirkulärcylindrisk glidyta älvslänt ($F_c=2,93$)





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

Göta älv utredningen 2009-2012
SEKTION: 45550 odränerad analys
Uppsprucken torrskorpa, vattenfyllda sprickor (50%)
Beräkningsmodell: Morgenstern-Price
Metod: Grid and Radius
Portrycksmodell: Pressure Head Spatial Function
Datum: 2011-04-04



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