Odränerad analys, befintliga förhållanden

File Information

Created By: Virginia Bengtsson
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Date: 2011-04-10
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File Name: 38850WUS.gsz
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Last Solved Date: 2011-04-10
Last Solved Time: 11:11:34

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

Odränerad analys, befintliga förhållanden

Description: 38/850 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
SlipSurface
    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: 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: 17 kN/m³
C-Top of Layer: 30 kPa
C-Rate of Increase: 0
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(depth)
Unit Weight: 15.6 kN/m³
C-Top of Layer: 8 kPa
C-Rate of Increase: 0
Limiting C: 0 kPa

Clay 3 ud älv
Model: S=f(depth)
Unit Weight: 15.6 kN/m³
C-Top of Layer: 17 kPa
C-Rate of Increase: 1.27
Limiting C: 0 kPa

Clay 3 ud
Model: S=f(depth)
Unit Weight: 15.6 kN/m³

C-Top of Layer: 14 kPa
C-Rate of Increase: 0
Limiting C: 0 kPa

Clay 4 ud

Model: S=f(datum)
Unit Weight: 15.6 kN/m³
C-Datum: 14 kPa
C-Rate of Increase: 0.69
Limiting C: 0 kPa
Elevation: 1 m

Clay 5 ud

Model: S=f(datum)
Unit Weight: 15.6 kN/m³
C-Datum: 14 kPa
C-Rate of Increase: 1.67
Limiting C: 0 kPa
Elevation: 1 m

Clay 2 ud älv

Model: S=f(depth)
Unit Weight: 15.6 kN/m³
C-Top of Layer: 8 kPa
C-Rate of Increase: 4.5
Limiting C: 0 kPa

Friction

Model: Mohr-Coulomb
Unit Weight: 22 kN/m³
Unit Wt. Above Water Table: 19 kN/m³
Cohesion: 0 kPa
Phi: 38 °
Phi-B: 0 °

Gravel

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

Bedrock

Model: Bedrock (Impenetrable)

Clay 6 ud

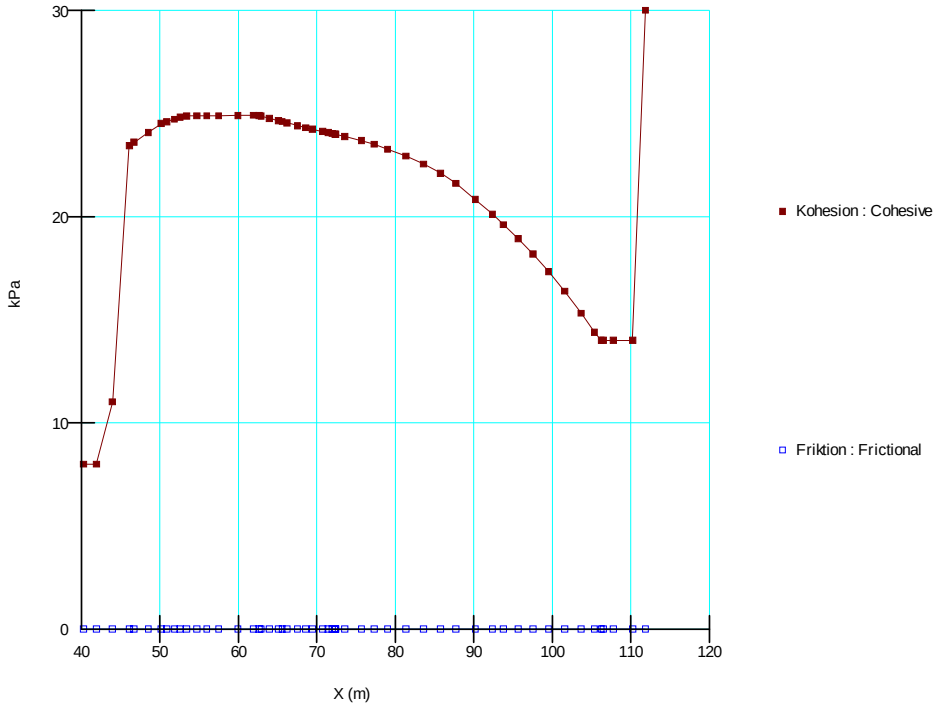
Model: S=f(depth)
Unit Weight: 16.2 kN/m³
C-Top of Layer: 14 kPa
C-Rate of Increase: 0
Limiting C: 0 kPa

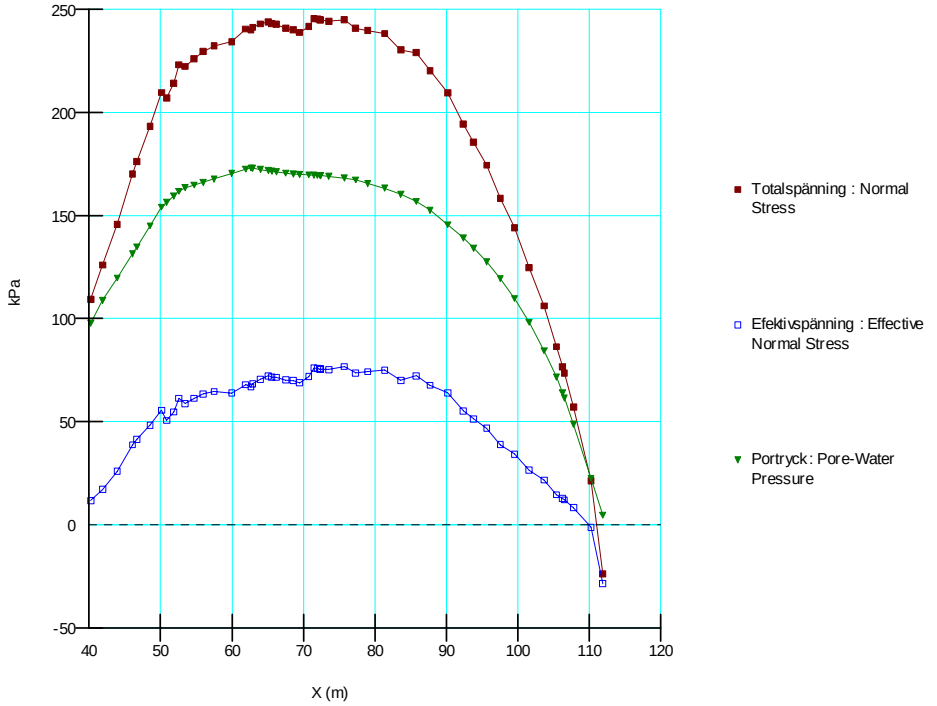
Surcharge Loads

Surcharge Load 1

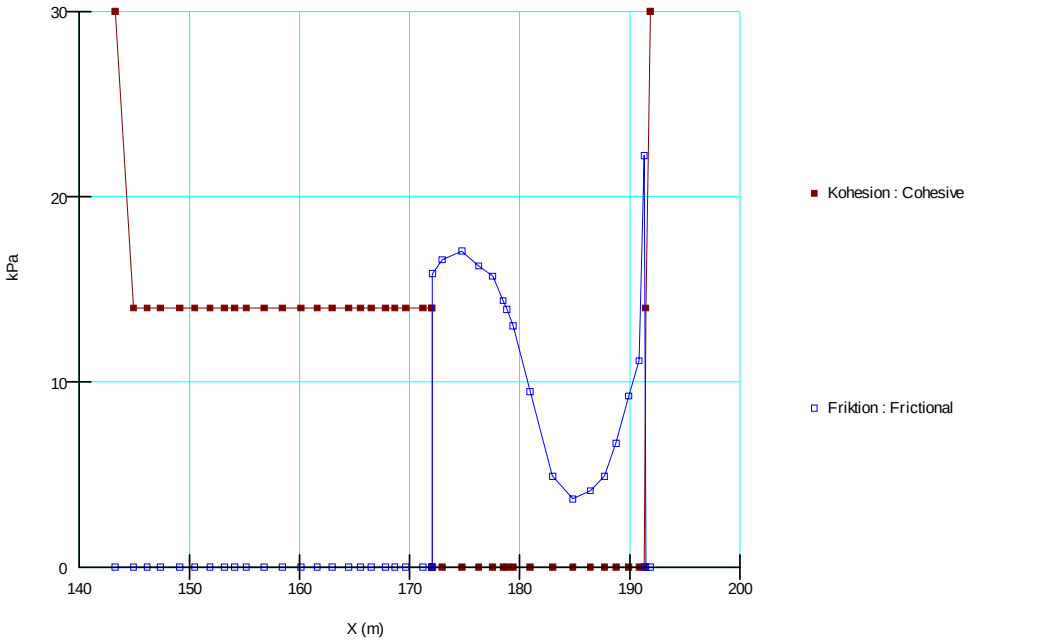
Surcharge (Unit Weight): 20 kN/m³
Direction: Vertical

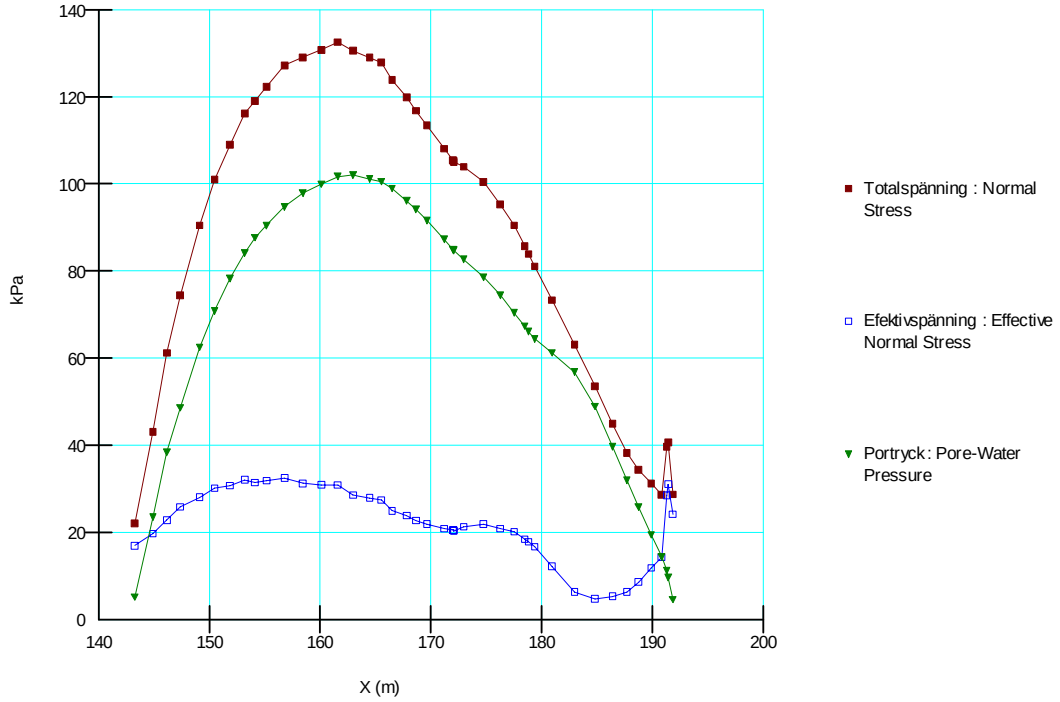
Glidyta älvsläntt (Fc = 0,86)





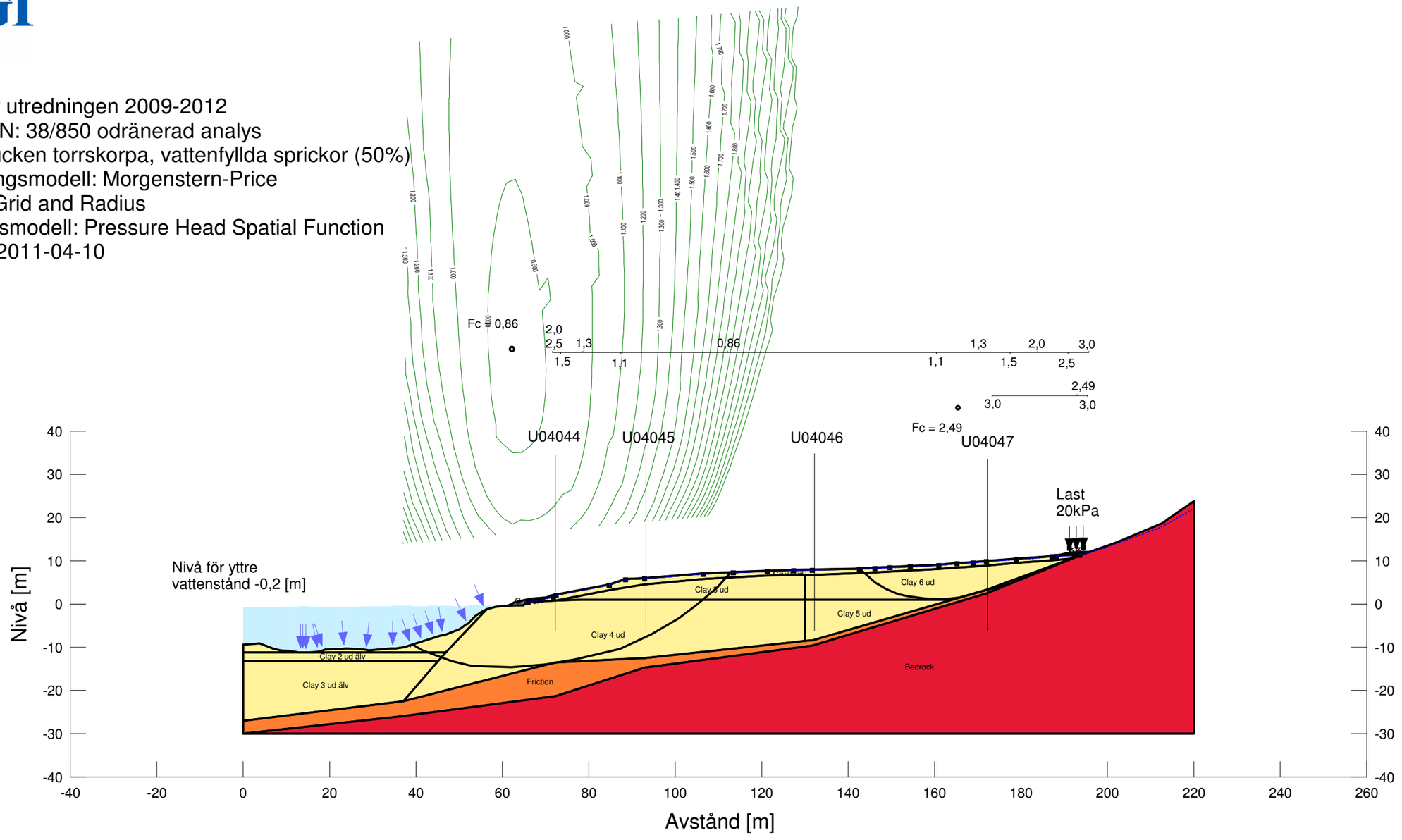
Glidyta fastmarksslänt (Fc = 2,49)





Skala 1:1000 (A3)
Leveransdatum 2011-03-31

Göta älv utredningen 2009-2012
SEKTION: 38/850 odränerad analys
Uppsprucken torrskorpa, vattenfyllda sprickor (50%)
Beräkningsmodell: Morgenstern-Price
Metod: Grid and Radius
Portrycksmodell: Pressure Head Spatial Function
Datum: 2011-04-10



Beräkning utförd av:
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Granskad av:
Mats Ekenberg

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