Odränerad analys, befintliga förhållanden

File Information

Created By: Lars Nilsson
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Last Solved Date: 2011-04-05
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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

Description: V33/600 odränerad analys Uppsprucken torrskorpa, vattenfyllda sprickor (50%)
Kind: SLOPE/W
Method: Morgenstern-Price
Settings
    Apply Phreatic Correction: No
    Side Function
        Interslice force function option: Half-Sine
    PWP Conditions Source: Piezometric Line
    Use Staged Rapid Drawdown: No
Slip Surface
    Direction of movement: Right to Left
    Use Passive Mode: No
    Slip Surface Option: Grid and Radius
    Critical slip surfaces saved: 1
    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

Gravel

Model: Mohr-Coulomb
Unit Weight: 18 kN/m³
Cohesion: 0 kPa
Phi: 40 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Clay 1 ud

Model: Undrained (Phi=0)
Unit Weight: 16.5 kN/m³
Cohesion: 16 kPa
Pore Water Pressure
Piezometric Line: 1

Clay 2 ud

Model: Undrained (Phi=0)
Unit Weight: 15.5 kN/m³
Cohesion: 16 kPa
Pore Water Pressure
Piezometric Line: 1

Clay 3 ud älv

Model: Undrained (Phi=0)
Unit Weight: 17 kN/m³
Cohesion: 12 kPa
Pore Water Pressure
Piezometric Line: 1

Clay 4 ud älv

Model: Undrained (Phi=0)
Unit Weight: 16 kN/m³
Cohesion: 12 kPa
Pore Water Pressure
Piezometric Line: 1

Friction

Model: Mohr-Coulomb
Unit Weight: 19 kN/m³
Cohesion: 0 kPa
Phi: 34 °
Phi-B: 0 °
Pore Water Pressure
Piezometric Line: 1

Bedrock

Model: Bedrock (Impenetrable)
Pore Water Pressure
Piezometric Line: 1

Clay 5 ud

Model: S=f(depth)
Unit Weight: 15.5 kN/m³
C-Top of Layer: 16 kPa
C-Rate of Change: 0.6 kPa/m
Limiting C: 0 kPa
Pore Water Pressure
Piezometric Line: 1

Clay 6 ud älv

Model: S=f(datum)
Unit Weight: 16 kN/m³
C-Datum: 12 kPa
C-Rate of Change: 1.5 kPa/m
Limiting C: 0 kPa
Elevation: -7.5 m
Pore Water Pressure
Piezometric Line: 1

Clay 7 ud älv

Model: S=f(datum)
Unit Weight: 16 kN/m³
C-Datum: 22 kPa
C-Rate of Change: 1.5 kPa/m
Limiting C: 0 kPa
Elevation: -9.5 m
Pore Water Pressure
Piezometric Line: 1

Clay 8 ud älv

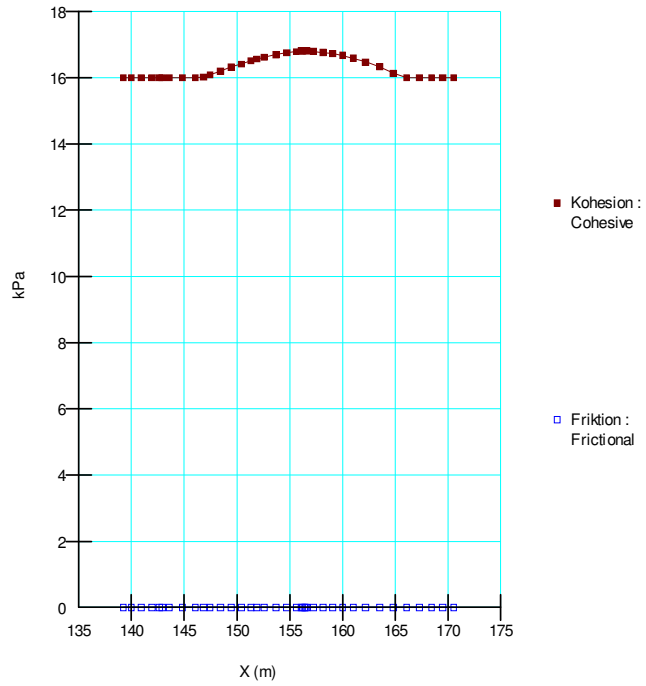
Model: S=f(datum)
Unit Weight: 16.5 kN/m³
C-Datum: 22 kPa
C-Rate of Change: 1.5 kPa/m
Limiting C: 0 kPa
Elevation: -9.5 m
Pore Water Pressure
Piezometric Line: 1

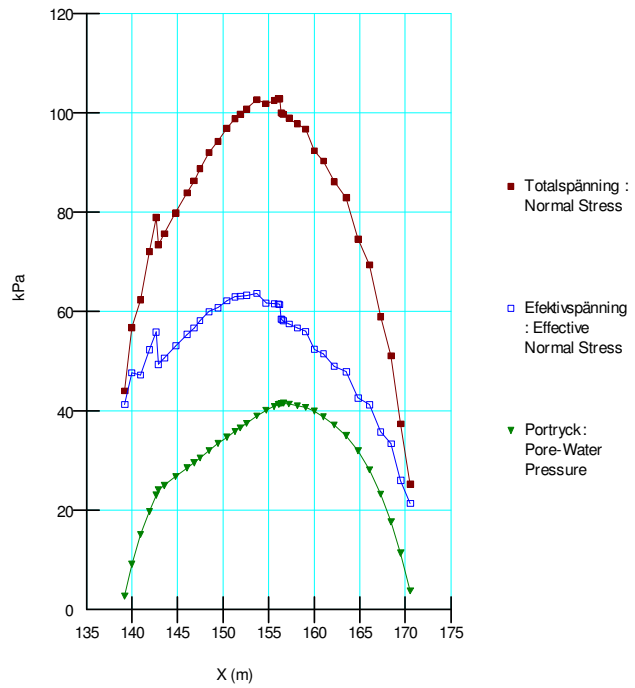
Surcharge Loads

Surcharge Load 1

Surcharge (Unit Weight): 10 kN/m³
Direction: Vertical

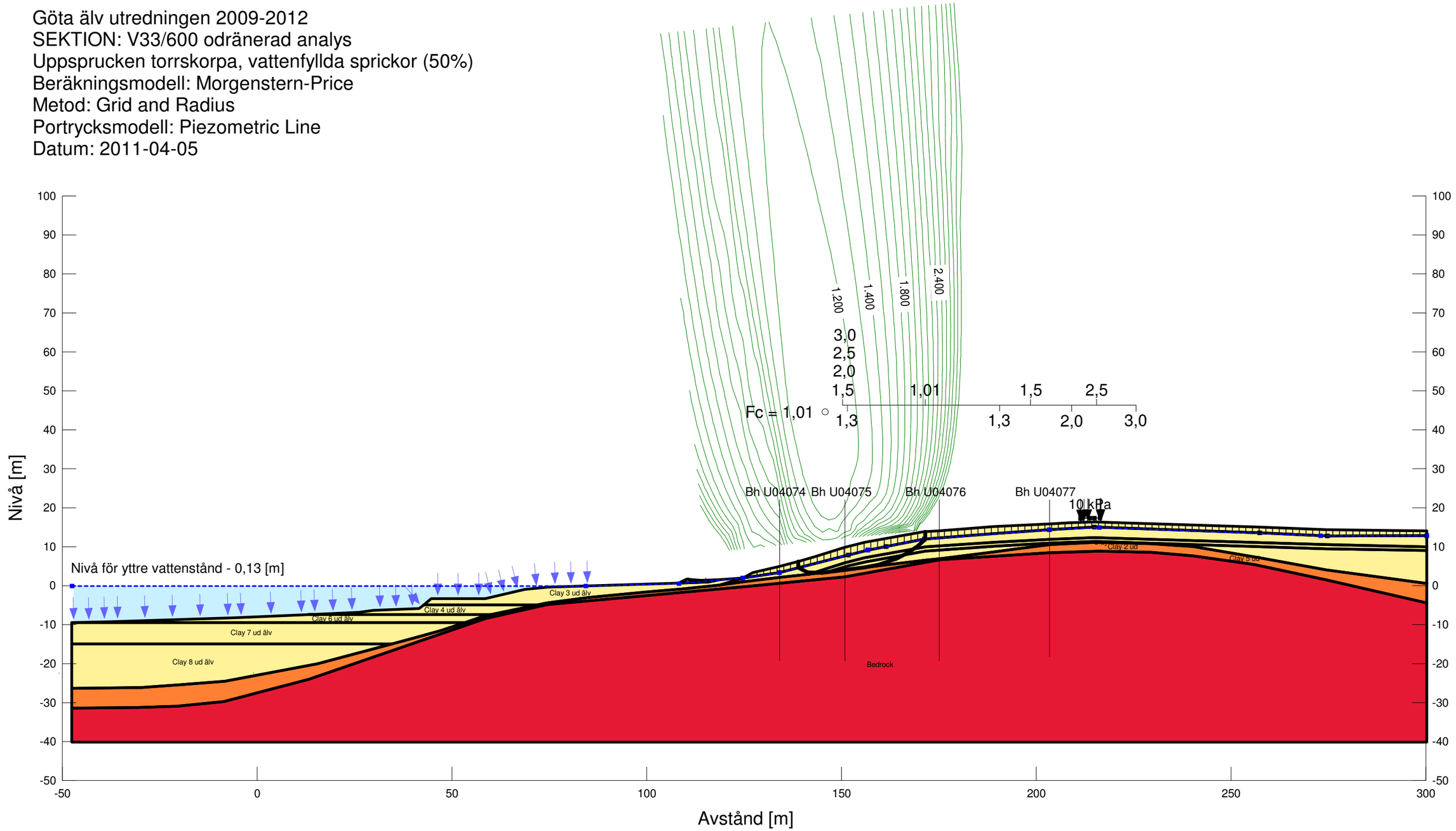
Diagram för glidyta i älvkant (Fc = 1,01)





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

Göta älv utredningen 2009-2012
SEKTION: V33/600 odränerad analys
Uppsprucken torrskorpa, vattenfyllda sprickor (50%)
Beräkningsmodell: Morgenstern-Price
Metod: Grid and Radius
Portrycksmodell: Piezometric Line
Datum: 2011-04-05



Beräkning utförd av:
Lars Nilsson

Granskad av:
Mats Ekenberg

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