Odränerad analys, befintliga förhållanden

File Information

Created By: Saad Jamil
Revision Number: 265
Last Edited By: Jamil, Saad
Date: 2011-01-11
Time: 16:35:34
File Name: 34050WUS.gsz
Directory: V:_UPPDRAG\224784\Teknik\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektion 19\
Last Solved Date: 2011-01-11
Last Solved Time: 16:35:54

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: V34/050 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: 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: 0.5 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(depth)
Unit Weight: 17 kN/m³
C-Top of Layer: 18 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa

Clay 2 ud

Model: S=f(datum)
Unit Weight: 16 kN/m³
C-Datum: 18 kPa
C-Rate of Change: 1.17 kPa/m
Limiting C: 0 kPa
Elevation: 7 m

Clay 3 ud

Model: S=f(depth)
Unit Weight: 16 kN/m³
C-Top of Layer: 18 kPa
C-Rate of Change: 0 kPa/m
Limiting C: 0 kPa

Clay 4 ud

Model: S=f(datum)
Unit Weight: 16 kN/m³

C-Datum: 18 kPa
C-Rate of Change: 1.16 kPa/m
Limiting C: 0 kPa
Elevation: -4 m

Clay 5 ud älv

Model: S=f(depth)
Unit Weight: 16 kN/m³
C-Top of Layer: 12 kPa
C-Rate of Change: 10 kPa/m
Limiting C: 0 kPa

Friction

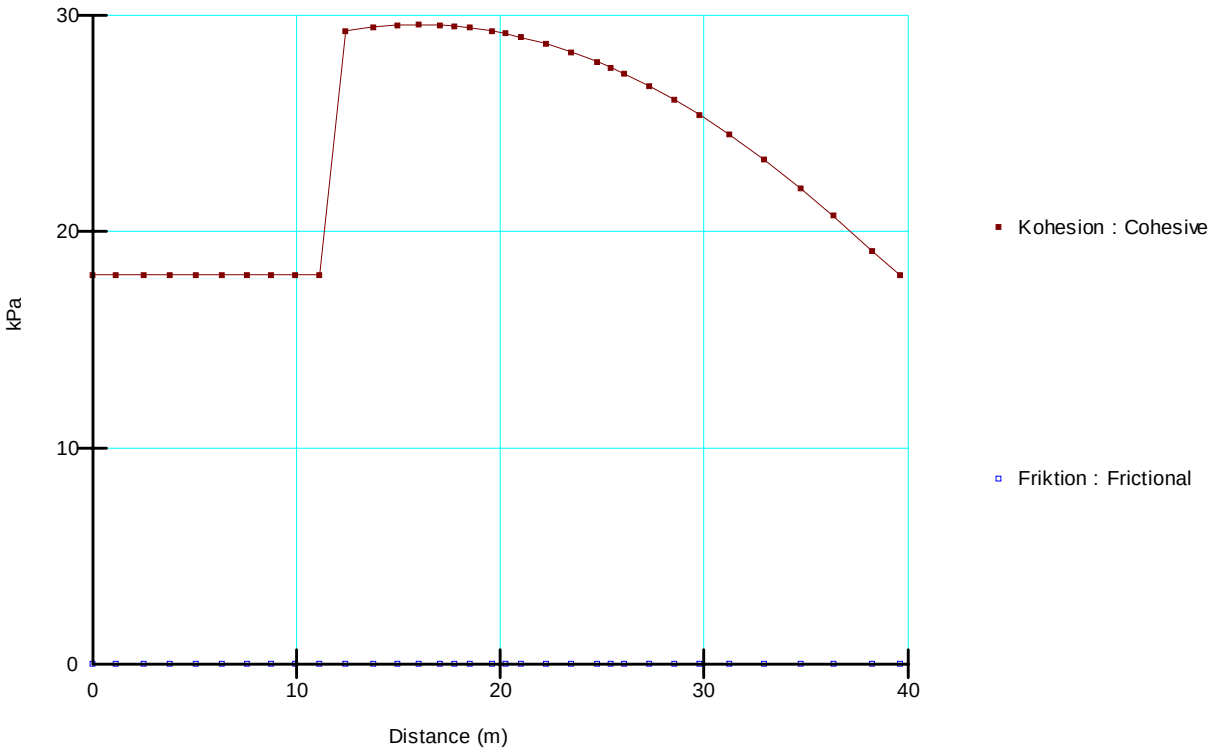
Model: Mohr-Coulomb
Unit Weight: 22 kN/m³
Unit Wt. Above Water Table: 20 kN/m³
Cohesion: 0 kPa
Phi: 38 °
Phi-B: 0 °

Bedrock

Model: Bedrock (Impenetrable)

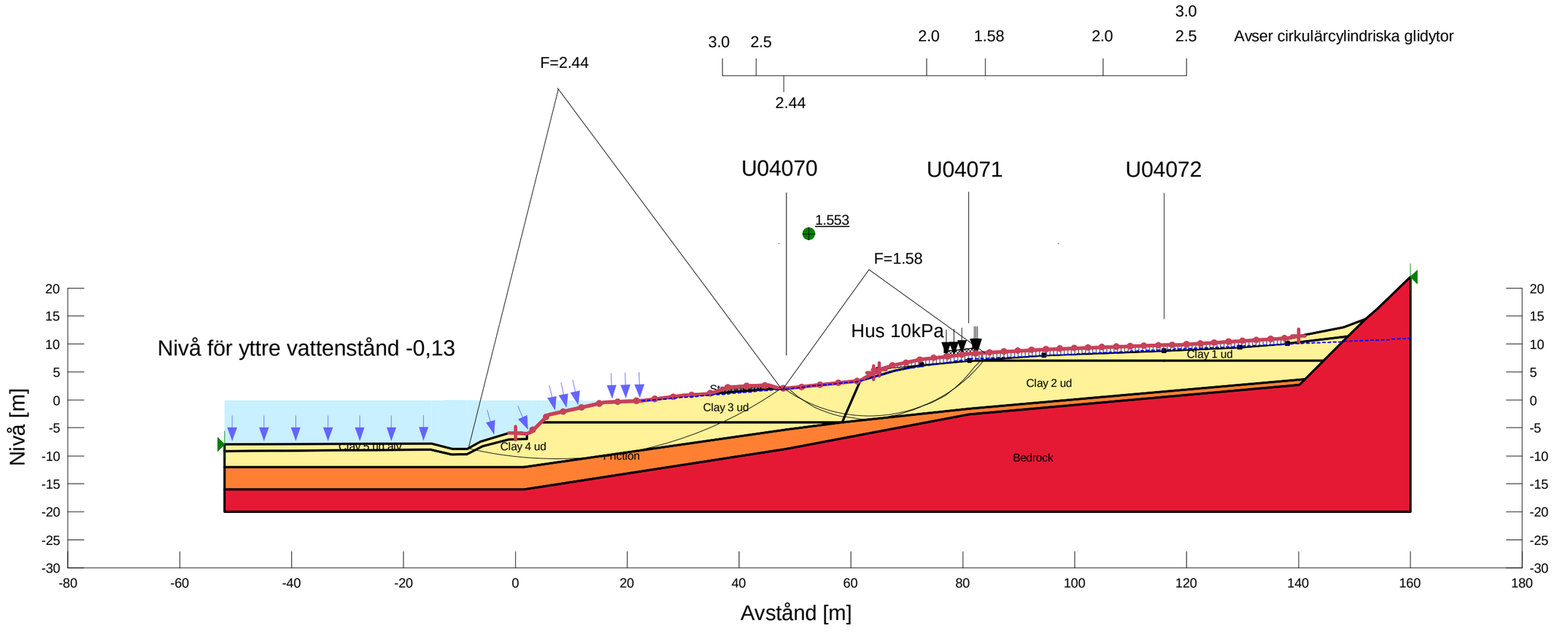
Strandskoning

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


30
20
10
0
kPa
0
10
20
30
40
Distance (m)
Kohesion : Cohesive
Friktion : Frictional

Skala 1:800 (A3)
Leveransdatum 2011-03-31

Göta älv utredningen 2009-2012
SEKTION: V34/050 odränerad analys
Uppsprucken torrskorpa, 50% vattenfyllda sprickor
Beräkningsmodell: Morgenstern-Price
Metod: Entry and Exit
Portrycksmodell: Pressure Head Spatial Function
Datum: 2011-04-06



Directory: V:_UPPDRAG\224784\Teknik\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektion 19\34050WUS.gsz

Beräkning utförd av:
Saad Jamil

Granskad av:
Mats Ekenberg