Kombinerad analys, befintliga förhållanden

File Information

Created By: Virginia Bengtsson
Revision Number: 249
Last Edited By: Bengtsson Virginia
Date: 2010-11-23
Time: 16:24:09
File Name: 42750WKS.gsz
Directory: K:\60_Externt\6020xx\602085_StabilitetsutredningGÄUTyrens\GÄU DELOMRÅDE 4\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektion 5 42750\
Last Solved Date: 2010-11-23
Last Solved Time: 16:26:25

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

Kombinerad analys, befintliga förhållanden

Description: 42/750 kombinerad 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: 50
    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 co
Model: Combined, S=f(depth)
Unit Weight: 18 kN/m³
Phi: 30 °
C-Top of Layer: 3 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

Fill
Model: Mohr-Coulomb
Unit Weight: 19 kN/m³
Cohesion: 0 kPa
Phi: 38 °
Phi-B: 0 °

Clay 1 co älv
Model: Combined, S=f(depth)
Unit Weight: 16.75 kN/m³
Phi: 30 °
C-Top of Layer: 0.3 kPa
C-Rate of Change: 0 kPa/m
Cu-Top of Layer: 3 kPa
Cu-Rate of Change: 0 kPa/m
C/Cu Ratio: 0

Clay 2 co älv
Model: Combined, S=f(depth)
Unit Weight: 16.75 kN/m³
Phi: 30 °
C-Top of Layer: 0.3 kPa

C-Rate of Change: 0.395 kPa/m
Cu-Top of Layer: 3 kPa
Cu-Rate of Change: 3.95 kPa/m
C/Cu Ratio: 0

Clay 3 co

Model: Combined, S=f(datum)
Unit Weight: 16.75 kN/m³
Phi: 30 °
C-Datum: 1.8 kPa
C-Rate of Change: 0.093 kPa/m
Cu-Datum: 18 kPa
Cu-Rate of Change: 0.93 kPa/m
C/Cu Ratio: 0
Elevation: 2 m

Clay 4 co

Model: Combined, S=f(datum)
Unit Weight: 16.75 kN/m³
Phi: 30 °
C-Datum: 1 kPa
C-Rate of Change: 0.111 kPa/m
Cu-Datum: 10 kPa
Cu-Rate of Change: 1.11 kPa/m
C/Cu Ratio: 0
Elevation: 2 m

Clay 5 co

Model: Combined, S=f(datum)
Unit Weight: 16.75 kN/m³
Phi: 30 °
C-Datum: 1.2 kPa
C-Rate of Change: 0.048 kPa/m
Cu-Datum: 12 kPa
Cu-Rate of Change: 0.48 kPa/m
C/Cu Ratio: 0
Elevation: 2 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

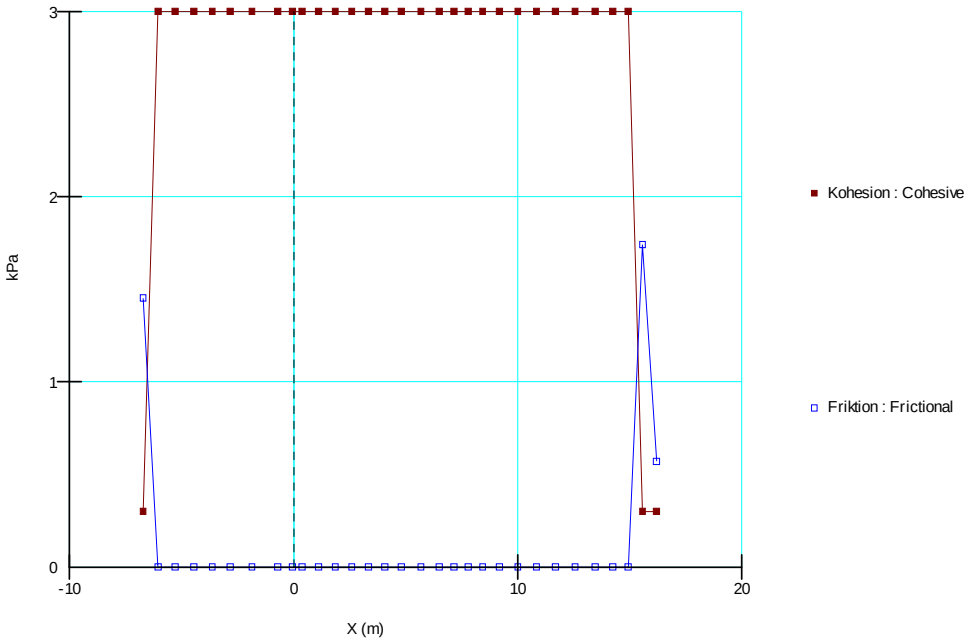
Model: Bedrock (Impenetrable)

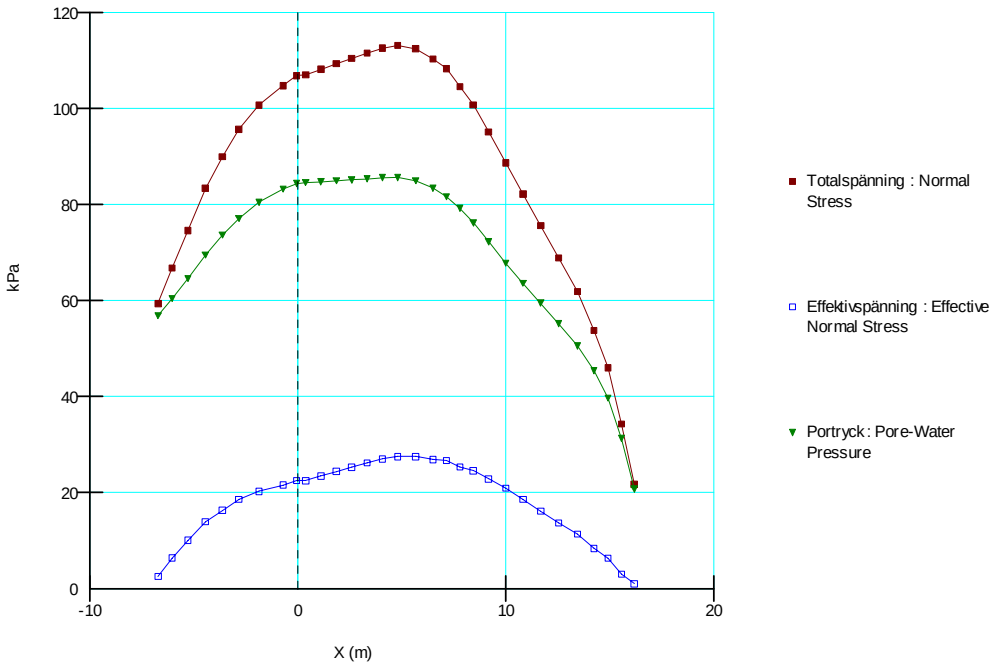
Surcharge Loads

Surcharge Load 1

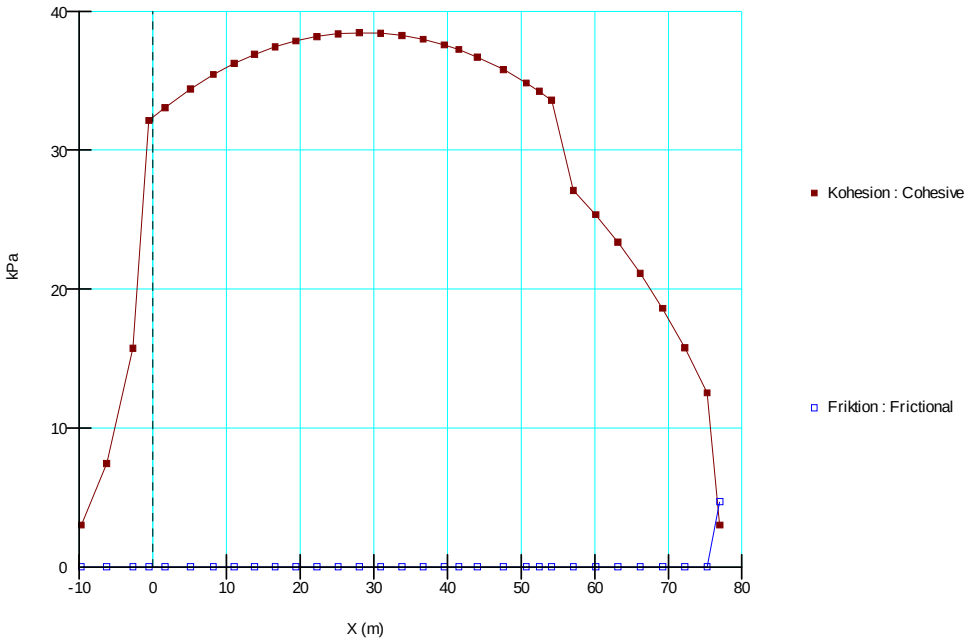
Surcharge (Unit Weight): 20 kN/m³
Direction: Vertical

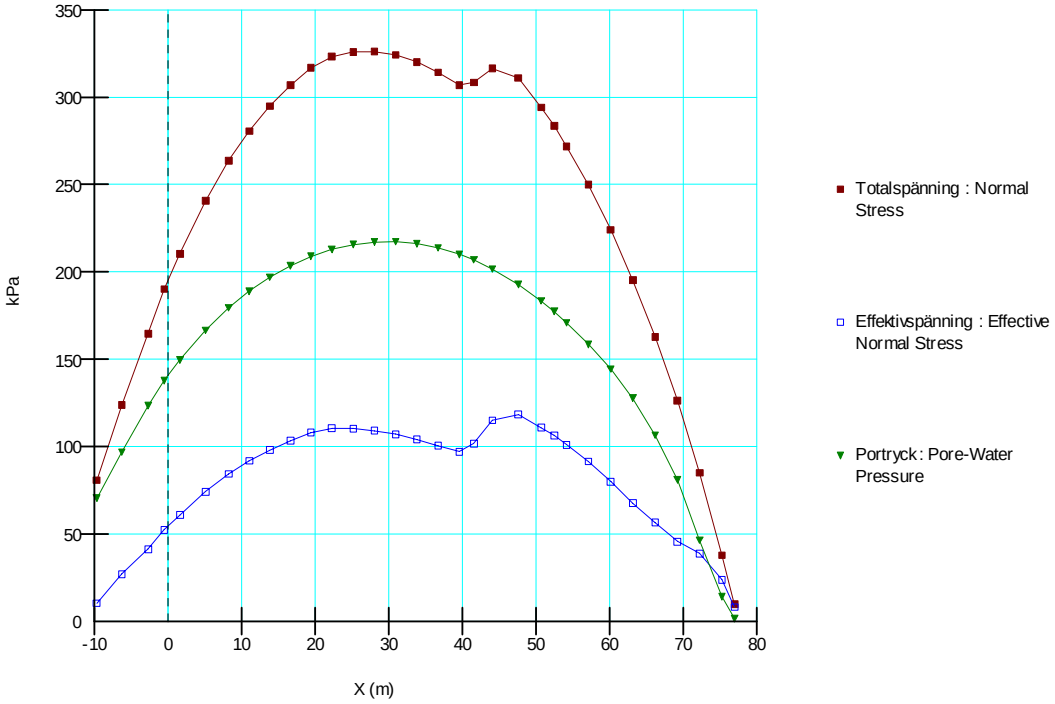
Glidyta (Fk = 1,05)





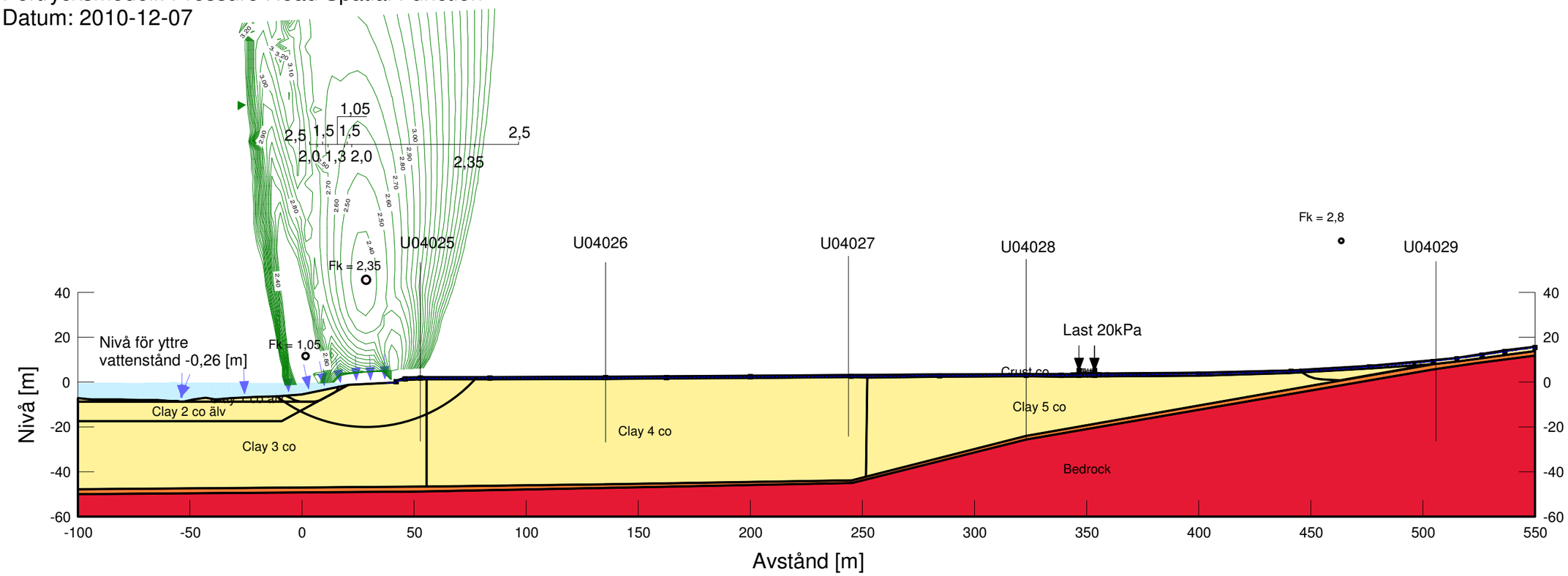
Glidyta (Fk = 2,35)





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

Göta älv utredningen 2009-2012
SEKTION: V42/750 kombinerad analys
Uppsprucken torrskorpa, vattenfyllda sprickor (50%)
Beräkningsmodell: Morgenstern-Price
Metod: Grid and Radius
Portrycksmodell: Pressure Head Spatial Function
Datum: 2010-12-07



Beräkning utförd av:
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Granskad av:
Mats Ekenberg

Directory: S:\Uppdrag\60_Externt\6020xx\602085_Stabilitetsutredning GÄ_Tyréns\GÄU DELOMRÅDE 4\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektioner from 110408\Sektion 5 42750\42750WKS.gsz

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SEKTION: V42/750 kombinerad analys
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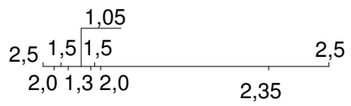
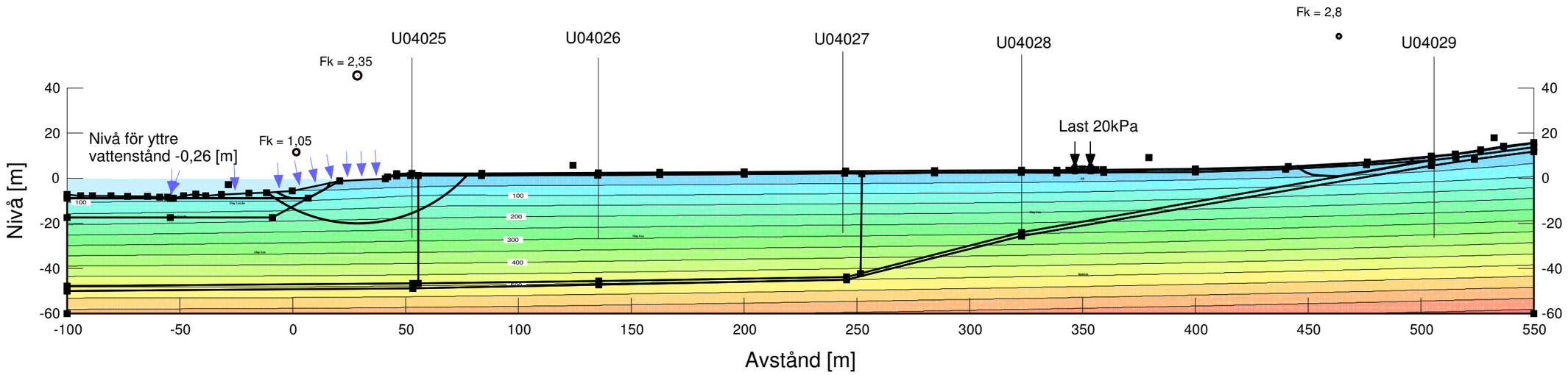
Metod: Grid and Radius
Portrycksmodell: Pressure Head Spatial Function
Datum: 2011-04-04





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