

# Odränerad analys

Report generated using GeoStudio 2007, version 7.16. Copyright © 1991-2010 GEO-SLOPE International Ltd.

## File Information

Created By: [Saad Jamil](#)  
Revision Number: [397](#)  
Last Edited By: [Jamil, Saad](#)  
Date: [2010-12-14](#)  
Time: [12:48:31](#)  
File Name: [43850WUS.gsz](#)  
Directory: [V:\\\_UPPDRAG\224784\Teknik\Delområde 1-10\Delområde 4-14084\Geoteknik\Beräkningar\Sektion 4\](#)  
Last Solved Date: [2010-12-14](#)  
Last Solved Time: [12:49:19](#)

## 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/m<sup>3</sup>](#)  
View: [2D](#)

## Analysis Settings

### Odränerad analys, befintliga förhållanden, nulägesanalys

Description: [V43/850 odränerad analys](#)  
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: [\(none\)](#)  
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:  $S=f(\text{depth})$   
 Unit Weight: 18 kN/m<sup>3</sup>  
 C-Top of Layer: 30 kPa  
 C-Rate of Change: 0 kPa/m  
 Limiting C: 0 kPa

### Filling

Model: Mohr-Coulomb  
 Unit Weight: 20 kN/m<sup>3</sup>  
 Unit Wt. Above Water Table: 18 kN/m<sup>3</sup>  
 Cohesion: 0 kPa  
 Phi: 35 °  
 Phi-B: 0 °

### Clay 1 ud

Model:  $S=f(\text{datum})$   
 Unit Weight: 18 kN/m<sup>3</sup>  
 C-Datum: 14 kPa  
 C-Rate of Change: 0 kPa/m  
 Limiting C: 0 kPa  
 Elevation: 2 m

### Clay 2 ud

Model:  $S=f(\text{datum})$   
 Unit Weight: 16.6 kN/m<sup>3</sup>  
 C-Datum: 14 kPa  
 C-Rate of Change: 1.4 kPa/m  
 Limiting C: 0 kPa  
 Elevation: -3.5 m

### Clay 3 ud

Model:  $S=f(\text{datum})$   
 Unit Weight: 16.6 kN/m<sup>3</sup>  
 C-Datum: 30 kPa  
 C-Rate of Change: 0.52 kPa/m  
 Limiting C: 0 kPa

Elevation: -15 m

#### Clay 4 ud

Model:  $S=f(\text{depth})$   
 Unit Weight: 16.3 kN/m<sup>3</sup>  
 C-Top of Layer: 15 kPa  
 C-Rate of Change: 0 kPa/m  
 Limiting C: 0 kPa

#### Clay 5 ud

Model:  $S=f(\text{depth})$   
 Unit Weight: 15.8 kN/m<sup>3</sup>  
 C-Top of Layer: 15 kPa  
 C-Rate of Change: 0 kPa/m  
 Limiting C: 0 kPa

#### Clay 6 ud

Model:  $S=f(\text{depth})$   
 Unit Weight: 17 kN/m<sup>3</sup>  
 C-Top of Layer: 15 kPa  
 C-Rate of Change: 1.5 kPa/m  
 Limiting C: 0 kPa

#### Clay 7 ud älv

Model:  $S=f(\text{datum})$   
 Unit Weight: 15 kN/m<sup>3</sup>  
 C-Datum: 3 kPa  
 C-Rate of Change: 0 kPa/m  
 Limiting C: 0 kPa  
 Elevation: 0 m

#### Clay 8 ud älv

Model:  $S=f(\text{datum})$   
 Unit Weight: 16 kN/m<sup>3</sup>  
 C-Datum: 3 kPa  
 C-Rate of Change: 3.6 kPa/m  
 Limiting C: 0 kPa  
 Elevation: -7.3 m

#### Friction

Model: Mohr-Coulomb  
 Unit Weight: 22 kN/m<sup>3</sup>  
 Unit Wt. Above Water Table: 20 kN/m<sup>3</sup>  
 Cohesion: 0 kPa  
 Phi: 38 °  
 Phi-B: 0 °

#### Bedrock

Model: Bedrock (Impenetrable)

#### Clay 9 ud strand

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

Unit Weight: 18 kN/m<sup>3</sup>  
C-Datum: 18 kPa  
C-Rate of Change: 0 kPa/m  
Limiting C: 0 kPa  
Elevation: 2 m

#### Clay 10 ud strand

Model:  $S=f(\text{datum})$   
Unit Weight: 16.6 kN/m<sup>3</sup>  
C-Datum: 18 kPa  
C-Rate of Change: 1.04 kPa/m  
Limiting C: 0 kPa  
Elevation: -3.5 m



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

Göta älv utredningen 2009-2012  
SEKTION: 43/850W odränerad analys, nulägesanalys  
Beräkningsmodell: Morgenstern-Price  
Metod: Entry and Exit  
Portrycksmodell: Pressure Head Spatial Function  
Datum: 2011-04-05

