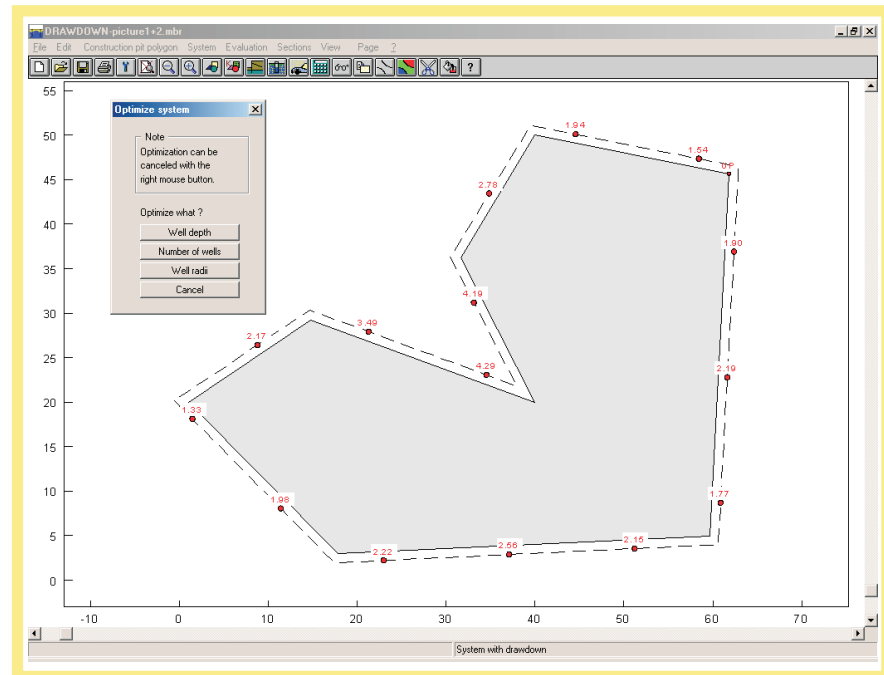
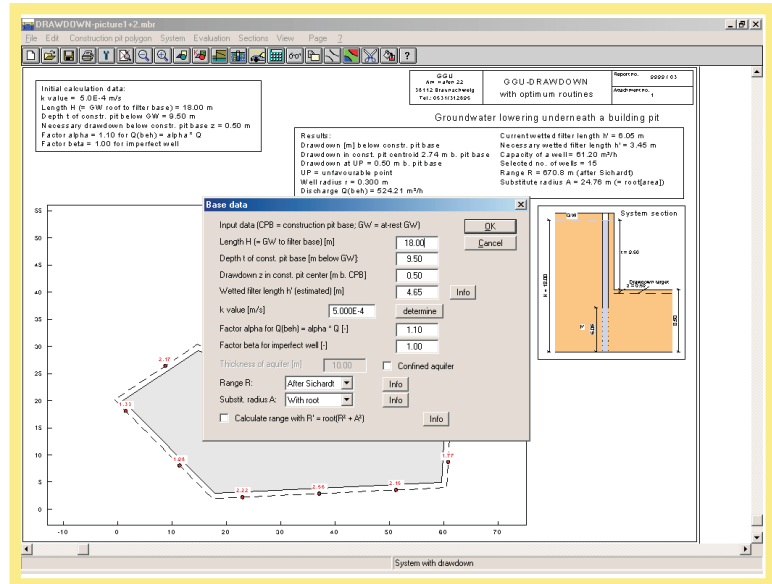


Description

GGU-DRAWDOWN - Optimisation of multiple well installations

The GGU-DRAWDOWN program allows the calculation of multiple well installations. Building pits with rectangular and any other outline shape can be calculated. The influence of open water and sheeting walls can be taken into consideration. The program has optimisation routines for well number, well radius and well depth. After input of the building pit dimensions you can change to the optimisation routines to get, in seconds, an optimally configured ground water management. Graphic analysis (draw down sections, system sections, isographs in colour and "normal", as well as several legends) allows you to present all calculation results as a data protocol on the screen.



GGU Am Haten 22 38112 Braunschweig Tel.: 0531/312895	GGU-DRAWDOWN with optimum routines	Report no. 9999 / 03 Attachment no. 1
---	---------------------------------------	--

Groundwater lowering underneath a building pit

Initial calculation data:
 k value = 5.0E-4 m/s
 Length H (= GW roof to filter base) = 18.00 m
 Depth t of constr. pit below GW = 9.50 m
 Necessary drawdown below constr. pit base z = 0.50 m
 Factor alpha = 1.10 for Q(beh) = alpha * Q
 Factor beta = 1.00 for imperfect well

Results:
 Drawdown in const. pit centroid 2.74 m b. pit base
 Drawdown at UP = 0.50 m b. pit base
 Well radius r = 0.300 m
 Discharge Q(beh) = 524.21 m³/h
 Current wetted filter length h' = 6.05 m

Necessary wetted filter length h' = 3.45 m
 Capacity of a well = 61.20 m³/h
 Selected no. of wells = 15
 Range R = 670.8 m (after Sichert)
 Substitute radius A = 24.76 m (= root[area])

