Appendix 4. Inversion parameters used for inversion of direct-current resistivity data and forward-model scenarios.

FINITE ELEMENT METHOD
LOGARITHM OF APPARENT RESISTIVITY
Half-cell model refinement
Combined Marquardt and Occam inversion used
Gauss-Newton optimization method
Initial damping factor is 0.1600
Minimum damping factor is 0.0150
Increase of damping factor with depth by a factor of 1.05
Vertical to horizontal flatness filter ratio is 1.0000
Number of nodes between adjacent electrodes is 2
Flatness filter type, include smoothing of model resistivity
Topographic modeling used
Full Jacobian matrix calculation
Robust data constraint used
    Cutoff factor for data constraint is 0.0500
Robust model constraint used
    Cutoff factor for model constraint is 0.0050
Reduce effect of side blocks - yes
Thickness of first model layer is 0.6920
Factor to increase model layer thickness with depth is 1.1000
Root mean square error convergence limit is 1.000 percent between iterations
Minimum change in root mean square error is 0.400
Root mean square error convergence limit is 1.000 percent overall
Total number of iterations is 5