**A.1** Calculate cumulative thickness for each of the lithologic classes for multiple depth intervals (5, 10, 20 and 50 m).

**A.2** Calculate the depth of the top of the first sand layer ('top sand').

**A.3** Calculate the percentage of each lithologic class above the 'top sand'.

**A.4** Anthropogenic deposits > 2 m

- Yes → No Class
- No

**A.5** Top bedrock < 2 m (Houthem, Maastricht and Gulpen formations).

- Yes → Class I
- No

**A.6** Top bedrock < 100 m (Rijnland and Chalk groups).

- Yes → Class V
- No

**A.7** 'Top sand' < 2 m (minimum thickness resonance layers)

- Yes → Class II
- No

**A.8** 'Top sand' 2-3 m

- Yes → mainly sand (>60%) → Class II
- No

**A.9** 'Top sand' > 3 m

- Yes → mainly clayish sand → Class III
- No

- No → clay, peat, minor clayish sand → Class IV