

Drilling Services

Site Investigation of a former landfill, Borough Green



Ecologia was tasked to install groundwater monitoring wells beneath an abandoned sandpit that had subsequently been used for landfill. This was a geologically complex site, overlying the boundary between the lower greensand and upper greensand & Gault clay that run below the area of Kent where the site is situated.

The objectives of the SI were as follows:

- Determine the depth of aquifer and true groundwater gradient
- Assess the extent of soil contamination at discrete depths.
- Identifying any differences in the local strata across the site.
- Determine of the depth of groundwater contamination via multilevel sampling within the aquifer.
- Determine site specific hydrogeological parameters by performing an aquifer test.
- Revise the hydrogeological conceptual model in the light of the new findings and perform a groundwater DQRA.
- Providing preliminary input parameters for designing a suitable remediation strategy.

Despite difficult drilling conditions, including a wire fence turning up 6m below the surface, and some substantial logistical challenges, all of these goals were achieved, allowing improved modelling of the groundwater below the site.

Drilling techniques used for this site included Wireline Hollow Stem Augering and Sonic drilling, as well as conventional rotary methods.