

Monitoring Wells and Return Monitoring Visits

For some projects it may be necessary to install Monitoring Wells in some, or all, of the excavated borehole positions. These wells are unobtrusive, entirely underground, and covered with a metal cover that is flush with the ground surface. When in position, these wells allow ground gas and groundwater to be monitored. This is particularly important for sites where a basement is to be constructed, remediation works, or brownfield site redevelopments.

The wells themselves consist of a series of connected 1m long plastic pipe pieces, some of these are perforated while others are plain. A portion of a borehole will be selected for screening and will accordingly have the perforated section of the pipework placed alongside it. For example, if in a 5m deep borehole the strata from 2mbgl to 4mbgl needed to be screened the pipe would have the following top to bottom configuration: 2m of plain pipe, then 2m of perforated pipe, then 1m of plain pipe sealed with a plastic cap at the end.

If a Monitoring Well has been installed, then a series of return monitoring visits will also have been arranged. These visits involve an individual engineer attending site and calling at each of the Monitoring Wells. There, they will proceed to use hand equipment to take readings of the data that is required – which will be either groundwater or ground gases, or both.

Once the monitoring regime for a particular site has been completed, the wells are decommissioned either by ourselves or those who take over from us on site. Any pipework is pulled from the ground and the position backfilled using a non-contaminating grout. The location is reinstated in a like for like fashion with the original or desired setting.



Figure 1: Monitoring Well cover being concreted into position in a car park



Figure 2: Some of our monitoring equipment. A PhroCheck Tiger LT (left) and GFM435 (right)