

## The Driller's Daily Report

The primary objective of ground investigation drilling is not only sampling and testing; it is also to generate information for use in geotechnical design and to assess land potentially affected by contamination. Reporting is required for each borehole undertaken and it should take the form of a Driller's Daily Report, colloquially known as the Driller's Log. This report must record accurately and completely everything relevant to the borehole.

Historically, these have been handwritten on paper sheets. However, there is an increasing shift towards electronic systems, often utilizing tablet computers. These systems offer multiple advantages over paper-based reporting. BS 8574:2014, the code of practice for managing geotechnical data in ground engineering projects, promotes their adoption by stating:

*"Data should be collected at the source, entered once, and retained electronically, e.g., in a computer system." The document further states that "if electronic data logging at the source of collection is not feasible, the data should be manually recorded on paper only once, and subsequently entered into a computer system."*

The BDA (British Drilling Association) supports and recommends the use of electronic data capture at the source, i.e., by the Lead Driller, due to the many benefits it offers, including improved efficiency and a reduction in errors or missing information.

Whether electronic or paper-based reporting is employed, BS 5930 and the UK Specification for GI provides information regarding the data that should be included in the Driller's Report. As a minimum the report must include:

1. Project Name and Project Number
2. Crew Names
3. Borehole Number
4. Day/Date
5. Machine details
6. Equipment details (SPT hammer, etc)
7. Borehole depths and diameters
8. Casing depths and diameters
9. Water added (depth and quantity)
10. Strata depths and descriptions
11. Samples (type, depth and recovery, blows, casing, water level, where applicable)
12. In situ tests (depths and details and casing, water level, where applicable)
13. Depths and times of encountering hard strata/chiselling.
14. Groundwater levels (all strikes with time intervals, depth sealed, start shift, end shift)
15. Installation details
16. Backfilling and reinstatement
17. Standing/Dayworks (details, start time, and duration)
18. Aquifer protection seals, depths, and diameter
19. Ability to add extra remarks (borehole termination reason, SPT rod straightness, etc)

***The BDA audit will check that all the relevant information above is recorded by the drilling team or is able to be recorded where applicable. If any one or more pieces of information are missing, incorrect or there is no provision to be recorded, this will be noted as a single minor non-conformance for audit purposes. As such, the BDA recommended that all companies looking to undertake a BDA audit review their Daily Report templates to ensure that all above relevant data is able to be captured, where applicable.***