

## Van Walt Guidelines for sampling for PFAS in Groundwater

Validity November 2024

- Revision 5.0 – 13<sup>th</sup> November 2024

We need to make clear, that at the time of writing, there are no ISO or EN standards which deal with the sampling of groundwater for PFAS.

There is a vast library of scientific papers which describe the challenges and methodologies related to this subject and whereas we are certainly not in a position to debunk or even query these writings, we do need to point out that there is a diversity of opinions which are often confusing and sometimes contradictory. Frequently, we detect an unjustifiable emphasis on minutiae, drilling down on potential pathways for contamination which some papers are, off and on, forcefully querying.

There also seems to be a divergence between European and American pragmatism. The latter concentrate on pathways of contamination from the field technician and materials used which could lead to an over-estimation of PFAS; the Europeans tag on to that the possible under-statement due to PFAS sorbing into the sampling materials. It is not for us to comment on the validity of either approach.

**Our suggestions and comments, which could change without notice as we progress with this subject, are as follows:**

1. All efforts are made to ensure that sampling materials from Van Walt and its supplier partners are PFAS free **at the point of manufacture**. This includes the following sampling hardware:
  - a. Bladder Pumps from QED and Geotech Environmental
  - b. Geosub impeller type pump from Geotech
  - c. Dip meters and oil interface meters from Hydrotechnik, QED/Heron, Geotech
  - d. Van Walt HexPump peristaltic pump
  - e. HDPE Bailers from Geotech
2. Please be aware that whereas some materials are tested at the initial production run stage for a limited number of PFAS compounds they are unlikely to be routinely tested after that unless there is a change of materials.
3. Although not routinely tested, LDPE, HDPE and silicone tubing do not compositionally contain PFAS substances but no manufacturer can absolutely guarantee that traces of these substances are not unintentionally present.
4. Be mindful of cleanliness of the materials and the operators while on site.
5. We are unfamiliar with all decontamination chemicals. We use and recommend Deconex which is declared PFAS free at the point of manufacture.
6. There are many PFAS compounds. It is prudent to decide, in advance of the sampling and specifically for the project, which of these compound(s) are of interest.
7. Make sure that the analytical methodology used by your laboratory is compliant with current regulations concerning PFAS. (e.g. <https://www.eraqc.com/environmental-industry/pfas>)
8. Because there are several pathways to contamination post manufacture, including contamination by insufficiently trained personnel, **it is essential that field blanks are**

**taken.** It is probably not necessary to do this at every sampling point but certainly twice a day: One at the first location and one at the end of the daily sampling round.

- a. Blanks are standard practice in the USA and some European and other countries.
  - b. Should you want more information on how to take field blanks then please contact us.
9. As soon as an EN or ISO standard become available you should follow the terms and this document will automatically expire.

Vincent van Walt

13<sup>th</sup> November 2024