What can the HydraSleeve sample for?

HydraSleeves are passive samplers that grab and seal a core of water (and everything in it) from a specific interval of the water column in your well screen ("saturated screen") or borehole. Therefore, any chemical, solid, and physical parameter that is present in the saturated screen at the interval where you collect the sample will be represented in your sample.

HydraSleeves are successfully used for organics (VOCs and SVOCs), metals, ions, inorganics, pesticides, 1,4-Dioxane, PFAS, physical parameters, and more. For some of these constituents of concern (CoCs), we have data available on our website (click "Data" link at bottom of page) from bench tests and third-party field studies that have been published or shared with us. However, HydraSleeves are also used for many other CoCs on projects where results are not available to the public.

What else do I need to consider when evaluating HydraSleeves for my project(s)?

Please review the SOP linked below for complete information, and/or send EON your well data for assistance with planning and troubleshooting according to best practice.

Well Diameters & Depths: For wells and boreholes with 2" and larger diameters, we have options for all CoCs. For 1" wells with Sch 40 casing, we have an option for non-PFAS CoCs. There is no known maximum sample depth, and HydraSleeves have been used in wells over 1500ft deep.

HydraSleeve Placement: All passive groundwater samples represent a specific interval of the saturated screen. In some cases, HydraSleeves may need to be compressed with a top weight to sample the correct interval. Ask EON for guidance based on the details below, including a diagram showing HydraSleeve Sample intervals.

- The HydraSleeve is placed *beneath* the interval where it will collect the sample, rather than within the sample interval.
- Factors such as saturated screen length, the presence of formation stratification or bedrock fractures, and the density of your CoCs relative to water (i.e., "floaters" or "sinkers") may also affect where samplers should be placed to target your CoCs.

Sample Volume: There are HydraSleeves available for a wide range of sample volumes, depending on the dimensions of your saturated screen. In a 2" well, each 5ft of saturated screen can yield just over 1L of volume for any passive sampling method. Wider diameters or longer saturated screens can yield larger volumes when larger or multiple sleeves are used.

Solids & Turbidity: HydraSleeve samples include any solids (dissolved or suspended) present in the sample interval, without contributing any additional, method-induced turbidity. Sample can be field- or lab-filtered after retrieval if needed.

Suspension Tethers: HydraSleeves are deployed on a suspension tether with a bottom weight. Depending on the type of sleeve you use, other reusable or well-dedicated accessories may also be required on your tether. Ask EON about our recommendations for weight and accessories, and about our convenient and affordable service for your well-dedicated, custom tethers.

Side-by-side Studies/Field Comparisons: Please let EON know if you are planning to conduct a comparison with another sampling method or historical data! We have guidance and recommendations (based on USGS and ITRC publications) for planning and evaluating your comparison.