

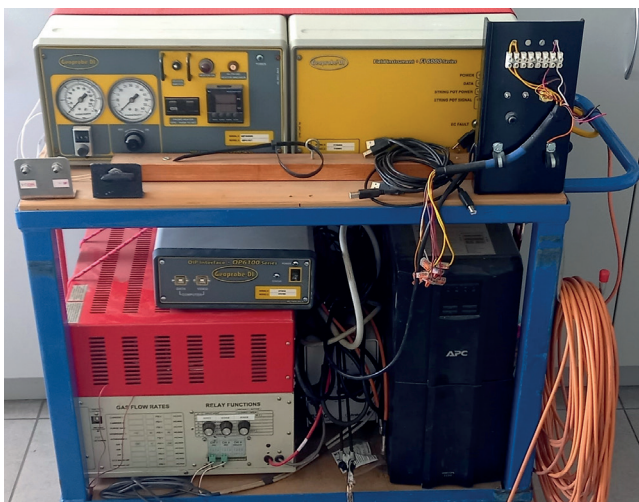
DIRECT PUSH SERVICES PROVIDED BY DEKONTA

DEKONTA owns two 7822DT rigs (Geoprobe, USA) which are compact, versatile and powerful enough even for complicated geologic conditions in Central Europe. Using these 2 drilling rigs DEKONTA is capable of providing a variety of field works from site surveys and monitoring wells installation to direct push injections.

DT22 Soil Sampling System and Groundwater and Soil Air Collection

Direct push methods (DP) are frequently utilized for collecting soil samples, and DEKONTA utilizes the DT22 Soil Sampling System for this purpose. This system is designed to gather continuous core samples of unconsolidated materials, retrieving a 1.25-inch core within a soil sample tube. Beyond soil sampling, DP methods also facilitate the collection of groundwater or soil air from specific depth intervals. This adaptability enables the flexible combination of groundwater, air, and soil sampling, thereby providing comprehensive insights into subsurface conditions.

MIP and OIP logging system



MIHPT logging using Geoprobe 7822DT

Monitoring and Injection Wells/Probes Installation

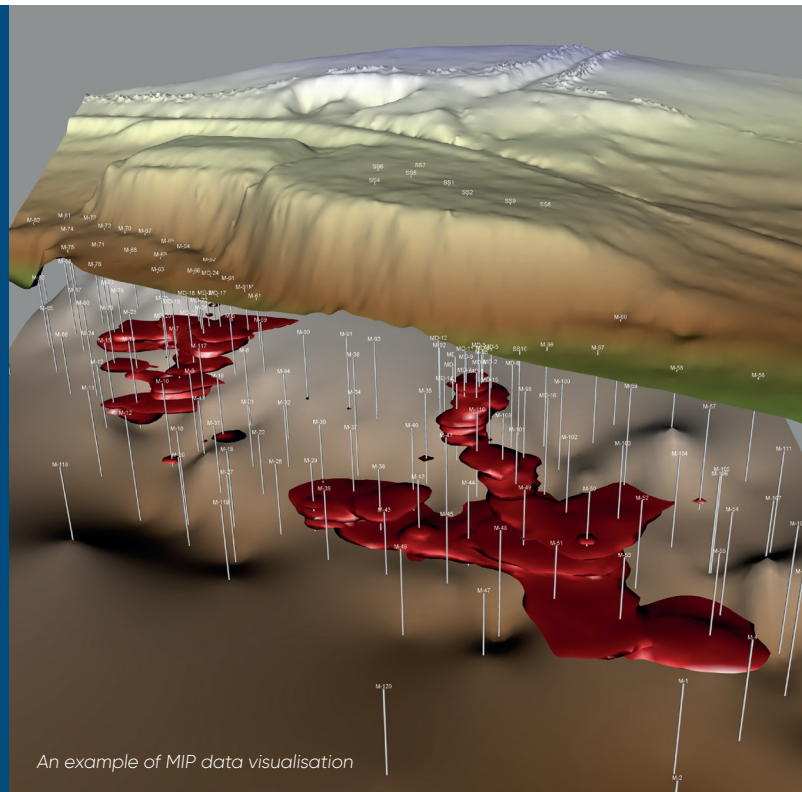
DEKONTA possesses the capability to install both monitoring and injection wells or probes, with an inner diameter of up to 51 mm. The installation of these wells or probes using DP typically offers a more cost-effective solution compared to traditional drilling methods.

Injection of Remedial Agents

DP injection offers a valuable approach for application of remedial agents into the subsurface without the requirement for permanent wells. This technique facilitates distribution of the injected agents, particularly in challenging environments such as poorly permeable sediments. Through DP, diverse remedial agents, including oxidants, reducing agents, and carbon sources/nutrients, can be introduced into the subsurface in either liquid or solid forms.

Direct Image® tools in DEKONTA:

Direct Image® tools (Geoprobe, USA) vertically log in-situ soil characteristics such as lithology, electrical conductivity, and permeability and can calculate static water level and estimate hydraulic conductivity. Specialized soil probes can accurately delineate zones containing diverse volatile and gaseous organic compounds (e.g. chlorinated solvents), materials exhibiting fluorescence (e.g. petroleum free phase), and also measure a range of other soil properties.



An example of MIP data visualisation



OIHPT logging in the industrial park

DEKONTA possess these tools:

- ✓ **Membrane Interface Probe (MIP)** – measure volatile and gaseous organic compounds, which are drained from the soil through a semipermeable membrane and transported into the aboveground installed specific detectors (FID, PID, XSD)
- ✓ **Optical Image Profiler (OIP)** – emits UV light in to the soil surrounding the probe and captures the fluorescence emitted by the present ultra-violet fluorescent materials, these can be free phase liquids as well as diverse tracers etc. It can also be used to capture visible images of the soil at different depths
- ✓ **Hydraulic Profiling Tool (HPT)** – measures the pressure required to inject a set flow of water into the soil to assess the formation permeability
- ✓ **MIHPT and OIHPT probes** – combines features of the MIP/OIP with the HPT

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