

Conductivity Plot:

The Electrical Conductivity (EC) of the soil is logged simultaneously with the HPT pressure and analytical detector data utilizing a dipole arrangement. The EC provides insight into stratigraphy and contaminant pathways when viewed in relation to detector responses. Typically, an increase in EC is indicative of finer grained, tighter soil types.

HPT Pressure Plot:

The HPT pressure gives insight into hydraulic properties of the soil as water is pumped into the formation at a constant rate. The pressure (unlike EC) is independent of certain factors such as pore water chemistry or mineralogy (contaminants, brines), and so further aids in defining soil/hydraulic properties. Potential contaminant migration pathways can be better understood when pressure data are viewed in relation to detector responses.

Estimated K Plot:

Estimated K is internally calculated with pressure and flow data in conjunction with dissipation tests performed at each location. Hydraulic conductivity data is useful for directing sampling, remediation and slug testing protocols.

PID Plot:

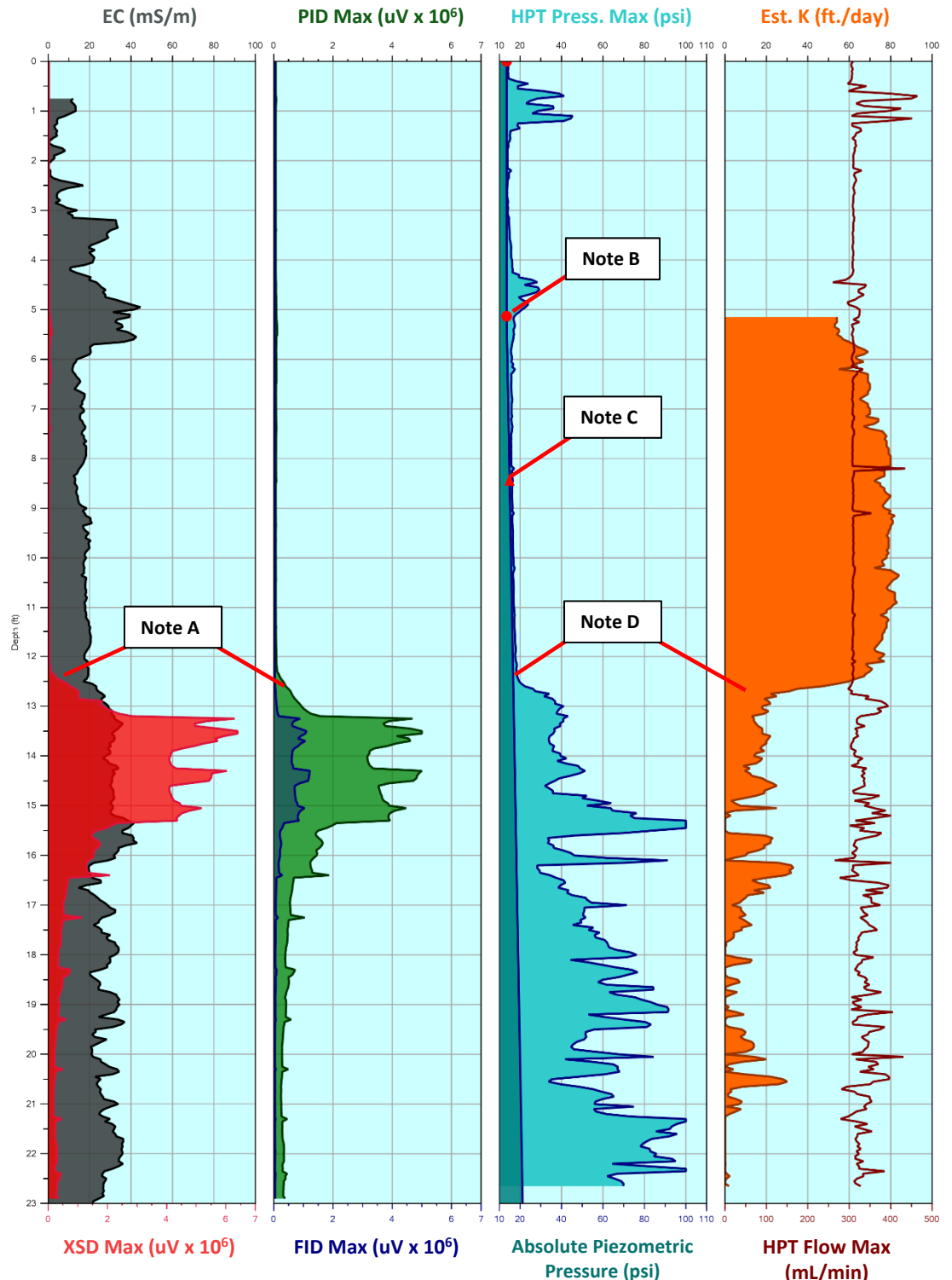
Detects unsaturated, multi-bond compounds (olefins) and aromatic (BTEX) hydrocarbons, as well as GRO to approx. 0.5-1 ppm detection limit in all types of soil.

FID Plot:

Detects all types of hydrocarbons (including methane and butane) to approximately 10 ppm detection limit. Generally, the FID response is an indication of total VOCs/CVOCs present.

XSD Plot:

Detects halogenated compounds (i.e. CVOCs such as TCE and PCE) to approximately 250 ppb detection limit.



Note A:

XSD (and PID/FID) responses starting at 12.5 feet are indicative of moderate level CVOCs.

Note B:

The hydrostatic water level is indicated with a round marker at 5.2 feet.

Note C:

The Absolute Piezometric pressure has been calculated and graphed with the dissipation test point indicated by a triangular marker at 8.4 feet. The pressure begins to increase relative to the head pressure as soon as the water table is encountered, producing the rising piezometric pressure baseline after 5.5 feet.

Note D:

Increasing pressure readings starting at 12.5 feet are indicative of a less permeable soil type (clay). Note that this pertinent data (related to contaminant flow pathway) is not dramatically discerned by the EC plot. Sinking, dense CVOCs are "trapped" in this less transmissive zone (see Est. K plot).