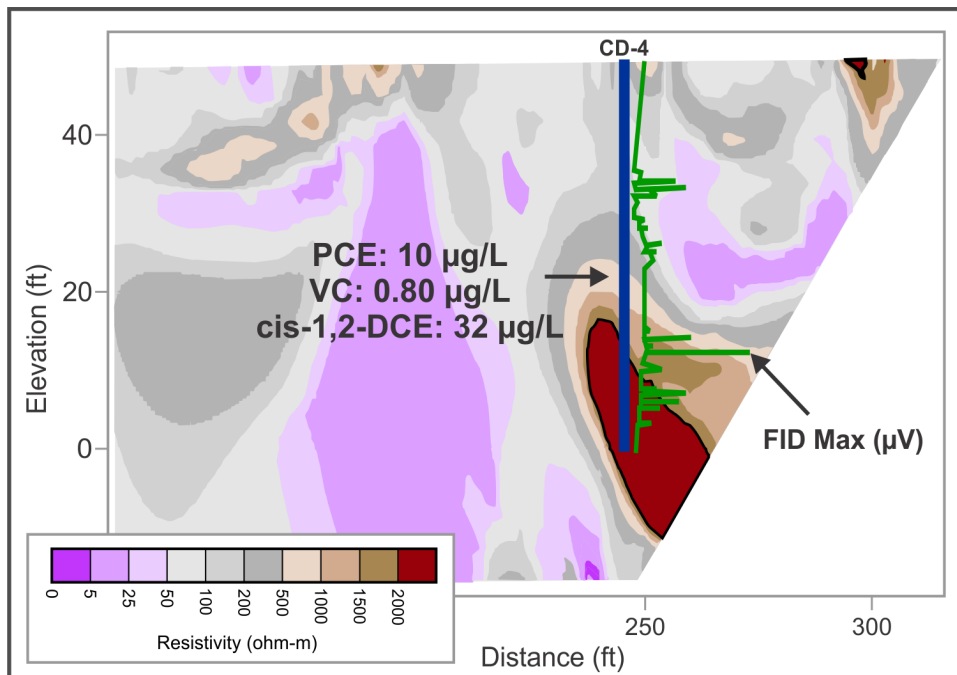


CASE STUDY

METHANE GAS POCKET AT NAPL SITE

Aestus GeoTrax Survey™ subsurface imaging was used to help characterize chlorinated solvent contaminant distribution and degree of biodegradation at a former dry cleaner site. A highly electrically resistive anomaly was targeted for confirmation drilling to assess levels of suspected DNAPL-related solvent impacts. Although solvents were detected above regulatory standards as expected, Aestus believed that another issue was contributing to the high resistivity levels.



Aestus' subsurface imagery allowed for targeted confirmation drilling (CD-4; see above graphic) and collection of groundwater chemistry data as well as flame-ionization detector (FID) data. Multiple supporting lines of evidence indicated the resistive anomaly was primarily caused by the presence of methane gas.

Evidence included:

- Anomalous highly resistive zone in GeoTrax Survey™ image
- Spike in FID data indicating likely presence of methane gas
- Elevated PCE daughter products supporting degradation as source of methane

RESULTS

Multiple lines of evidence confirm suspected methane gas pocket:

- ☑ GeoTrax Survey™ anomalously high electrical resistivity
- ☑ FID readings elevated
- ☑ Concentrations of biodegradation PCE daughter products present

MORE CERTAINTY & OPTIMAL OUTCOMES

Fiscally responsible and data driven water resource managers typically crave more certainty in their subsurface data. Integration of existing site data, Aestus' GeoTrax Survey™ electrical images, and targeted test well data resulted in a more complete understanding of the subsurface and allowed them to:

- ☑ Make better technical/business decisions
- ☑ Have clear road map for next steps
- ☑ Achieve project goals faster and cheaper

