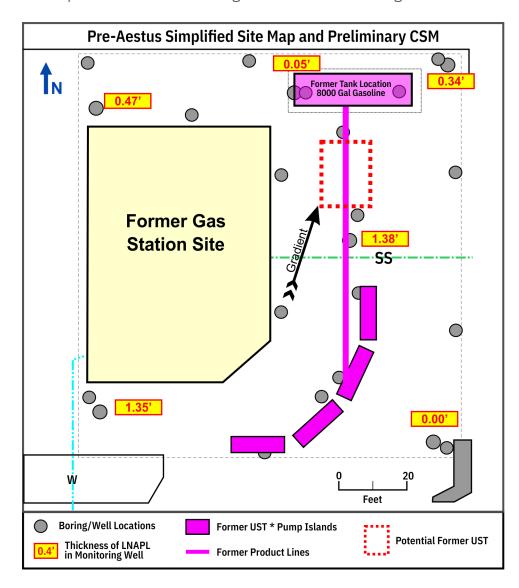
CASE STUDY

DETECTING MULTIPLE LNAPL Sources

A former gas station had varying free product (LNAPL) thickness detected in monitoring wells across the site complicated by fluctuating groundwater levels. Former UST and pump islands were suspected sources but no consistent contaminant migration pattern obvious from well data only.

Aestus' consulting firm client, funding entity, and the regulatory agency desired focused drilling targets for more expensive drilling methodologies as well as zones for targeting remediation. GeoTrax Survey™ ultra-HRSC scanning data achieved these goals.



RESULTS

- Identified unknown ust
- Explained distribution of varying Inapl thicknesses
- Identified zones of potential bioactivity/ degradation
- Obtained hrsc data despite direct push rig refusal
- Ultra-hrsc csm provides road map for remediation

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



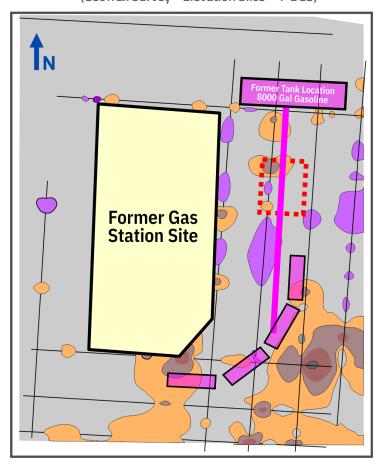
CASE STUDY

DETECTING MULTIPLE LNAPL SOURCES

Aestus' integrated subsurface imagery and historical drilling into its 3D visualization software as part of our GeoTrax CSM+™ conceptual site model (CSM) update process. Confirmation drilling was performed to confirm electrical anomaly composition at targeted locations. These data were integrated and the resulting updated CSM is shown below in the context of two different GeoTrax Survey™ data elevation slices:

Shallow Pump Island Related Impacts

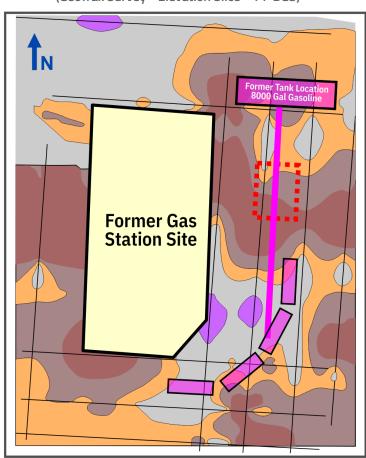
(GeoTrax Survey™ Elevation Slice - 4' BGS)



The graphic above shows LNAPL related impacts (orange and maroon zones) and potential bioactivity (purple zones) at 4 feet BGS and predominately near the former pump islands

Deeper Leaking UST Related Impacts

(GeoTrax Survey™ Elevation Slice - 14' BGS)



The graphic above shows LNAPL related impacts (orange and maroon zones) and potential bioactivity (purple zones) at 14 feet BGS (near water table elevation) and predominately near the known UST location as well as the suspected UST location (red dashed square)



YOU DESERVE MORE CERTAINTY IN YOUR SUBSURFACE DATA







