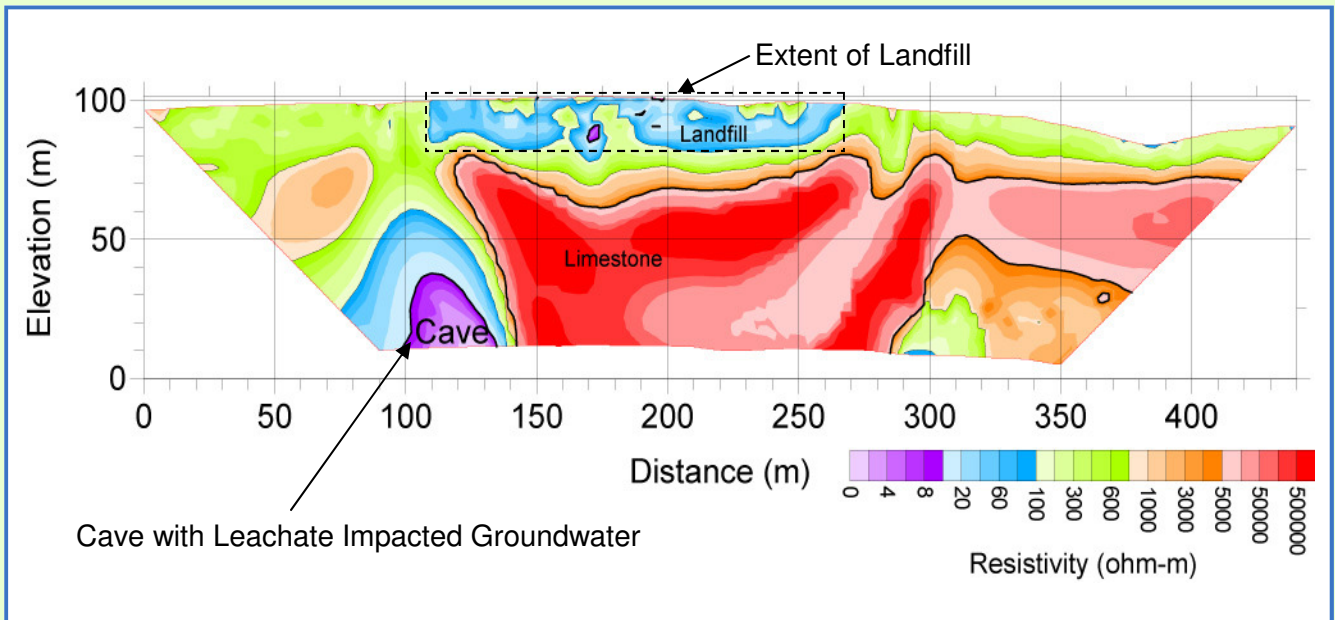


Locating Extent of Landfill and Leachate

GeoTrax Survey™ Case Study



Located Extent of Pre Subtitle-D Landfill And Cave Filled with Leachate Impacted Groundwater

- This pre Subtitle-D landfill was a trench fill operation that had a history of operational problems including seeps, leachate, and contamination of groundwater. Since the closure of this landfill is 1996, there have been problems maintaining the cap and cover
- Landfill is located in the Boone Formation which consists of fossiliferous limestone and is known to have many dissolution features such as fissures, sinkholes, and caves.
- Surface seeps near the landfill have a definite oily sheen which are attributed to contamination of the groundwater by the landfill.
- A nearby property owner adjacent to the landfill sued the landfill owner, stating that the landfill had contaminated the spring on his property.
- Aestus' GeoTrax Survey™ was used to image this site in an attempt to delineate the landfill boundaries as well as the geologic conditions beneath the landfill to a depth of about 300 ft (100 m).
- The landfill can be seen clearly in the upper central portion of the image and generally has a low resistivity. The very resistive red portion of the image appears to be relatively competent limestone of the Boone Formation.
- Due to the geometry and the low resistivity (i.e. high conductivity) of the anomaly in the lower left of the image, it appears to Aestus that there is a cave present which is filled with a conductive material; most likely leachate impacted groundwater.