

## ENVIRONMENTAL INVESTIGATIONS USING GEOPHYSICS

GBG Australia has vast experience in the environmental geophysics field. We have applied a multitude of different techniques to suit a range of situations and targets. Many of these applications allow large amounts of data to be acquired in profiles which can range from tens of meters to kilometres long - all in a shorter time frame than standard testing and safer to both the operators and the environment. Typical investigations comprise:

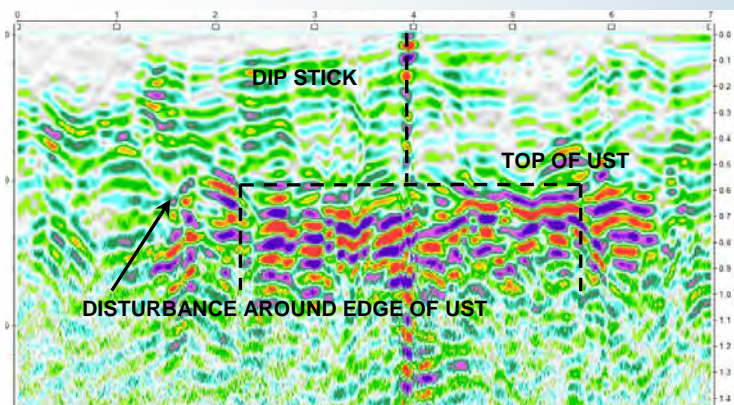
- ◇ **Landfill delineation**
- ◇ **Underground storage tank location**
- ◇ **Contamination mapping**
- ◇ **Unexploded ordnance location**

With the constant advances in geophysical technology and with the advent of greater computing power, the use of geophysics in environmental investigations has never been faster, safer and more cost effective.

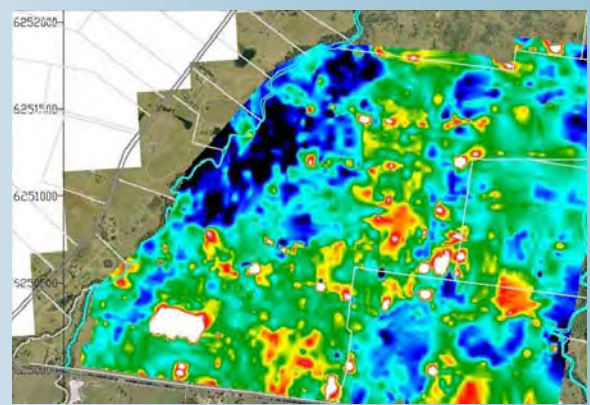


Techniques we specialise in include:

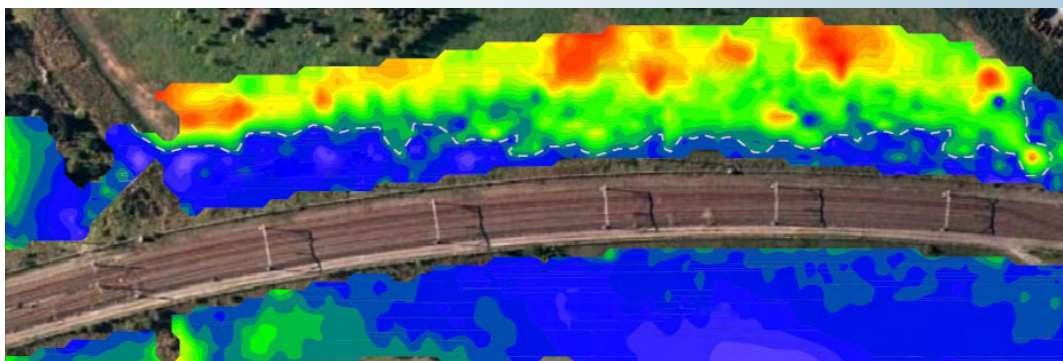
- |                                       |                                      |   |
|---------------------------------------|--------------------------------------|---|
| <b>Ground Penetrating Radar (GPR)</b> | <b>Magnetics and metal detection</b> | <b>Resistivity profiling</b>                          |
| <b>Electromagnetics (EM)</b>          | <b>Land and marine seismics</b>      | <b>Multi-channel analysis of surface waves (MASW)</b> |



**Underground Storage Tank in GPR data**



**Dryland salinity mapping**



**EM results showing extents of buried landfill material**



**EM acquisition on ATV**

Geophysical techniques are non-destructive and allow for targeted excavations, testing and remediation planning. Data acquisition is generally quick and preliminary results can often be available with just a few hours of processing. Investigations can be tailored to suit site and budget requirements and results can be presented in a variety of ways such as in CAD or GIS format.