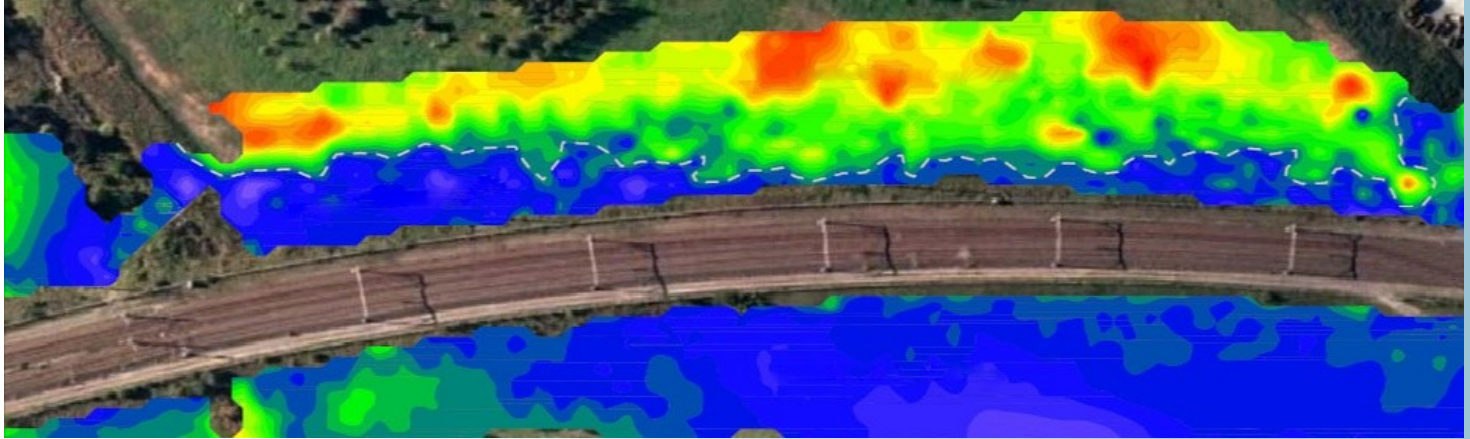


ENVIRONMENTAL INVESTIGATIONS USING ELECTROMAGNETICS

GBG Australia has vast experience using electromagnetic (EM) techniques for environmental applications. Performing surveys all over Australia for many different purposes, GBG staff are skilled in getting you the best data they can.

Applications for the use of EM methods include:

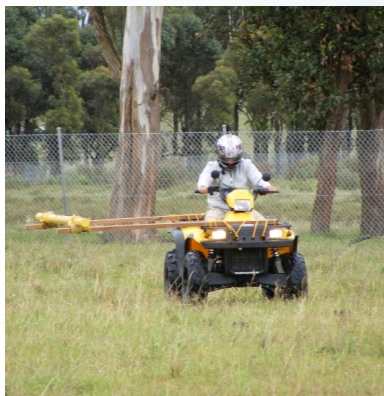
- **Landfill Delineation** • **Underground Storage Tank Location** • **Contamination Mapping** •
- **Salinity Mapping** • **Unexploded Ordnance Location** • **Archaeological Surveys** •



EM results showing extents of buried landfill material

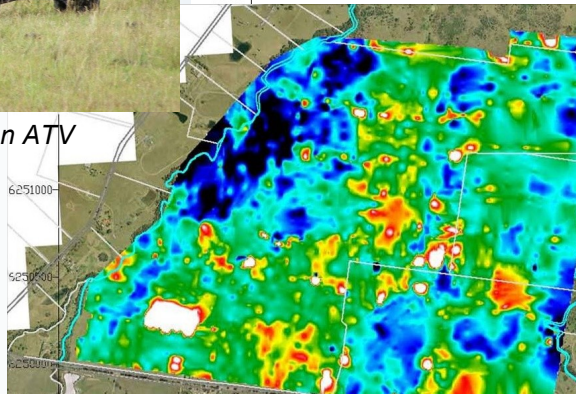
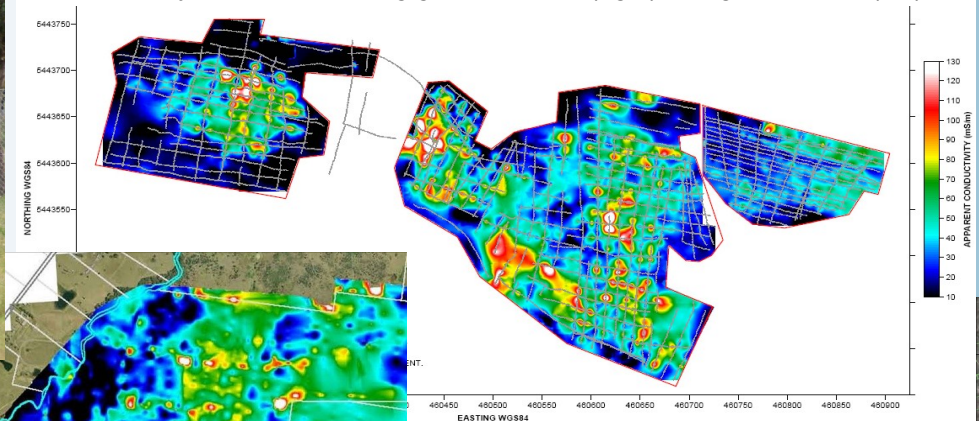


We have recently acquired the latest in EM data collection devices: The GSSI Profiler EMP 400. This frequency domain electromagnetic device has the ability to collect data with three different frequencies, corresponding to three depth ranges simultaneously. The Profiler only needs one coil spacing of 1.2 metres and weighs a total of 4.5 kg making it cheap and easy to transport. With a frequency range of 1-16 kHz the profiler is equipped to perform any job required. The Profiler also has little to no drift, making processing quick and easy. A standout feature of this new device is it's capability to link directly to a Differential GPS system to give sub-metre positional accuracy of results. The GPS location is automatically recorded with the EM data, removing the complicated time calibrations of other EM Units.

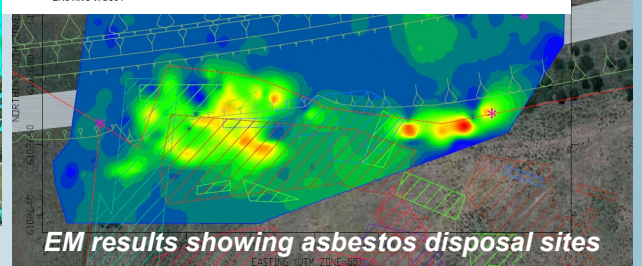


EM acquisition on ATV

EM survey of landfill showing general waste (right) and green waste (left)



Dryland salinity mapping



EM results showing asbestos disposal sites

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.