

Ground Gravity Survey

Non-ground disturbing technique

The gravity method is a non-ground disturbing technique that monitors natural variations in the Earth's gravity field at different locations.

These gravity variations represent changes in the density of rocks below the surface.

Ground gravity surveys can be carried out on foot (Figure 1) or using a 4WD vehicle (Figure 2) or utility task vehicle (UTV) to transport the operator and equipment between the observation sites.

Gravity survey equipment typically consists of a gravity meter, a Global Positioning System (GPS) base station and roving GPS unit.

At each observation site, the gravity meter is lifted out of its box or cradle, placed on the ground or a baseplate, and the meter is levelled and read (optically or digitally). The entire process takes between 5-10 minutes.

The process of collecting gravity data has little to no impact on the surrounding environment or land use.



Figure 1: Example of ground gravity survey carried out on foot



Figure 2: Roadside ground gravity survey carried out with light vehicle