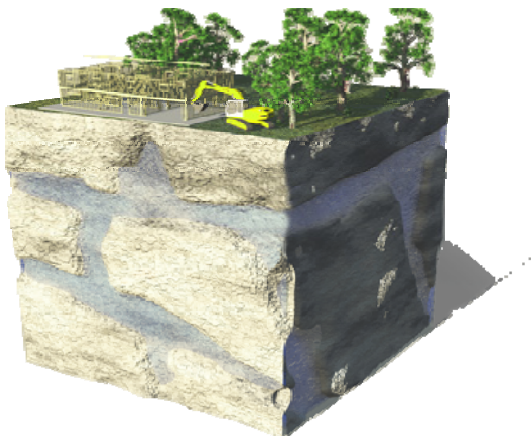




groundradar

# voids and tunnels

Reduce risk using long-range ground penetrating radar



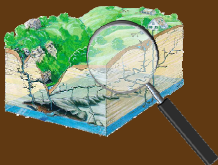
## THE DEEPEST-PENETRATING GPR TECHNOLOGY

UltraGPR uses high-powered transmitters and real-time sampling receivers to capture the deepest images possible of the subsurface. Although not every geotechnical site is ideal for GPR imaging, where radar is suitable, UltraGPR offers penetration to over 60 m.



## THE HIGHEST RESOLUTION GEOPHYSICAL METHOD

Compared to other void and tunnel detection methods (microgravity and ERT), UltraGPR offers unparalleled resolution and survey speed. However, radar is only suitable in specific environments whereas other methods can be applied more broadly.



## THE MOST EXPERIENCE IN DEEP VOID DETECTION

Groundradar conducts void detection surveys on all six continents annually. On-going contracts with the world's largest petroleum, engineering and mining companies ensure that void detection accounts for a large portion of UltraGPR projects



## THE LOWEST COST IMAGING TOOL

At a fraction of the cost of other geophysical methods, UltraGPR offers rapid spatial coverage to ensure target detection in full 3D.





Replace risk with knowledge

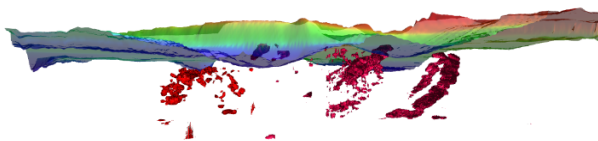
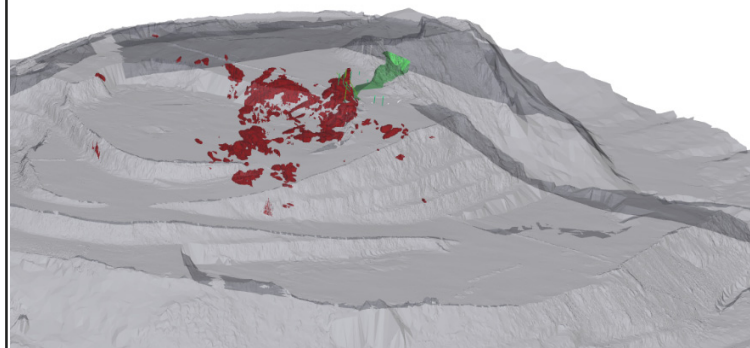


» *Rapid scanning of large areas for voids*

» DEEPEST AND LOWEST COST SCANNING ULTRAGPR CAN SCAN 1 HA IN 2 HOURS, PRODUCING THE HIGHEST RESOLUTION 3D MODELS OF HIDDEN TUNNELS AND VOIDS POSSIBLE WITH REMOTE SENSING.

» SUITABLE ONLY IN SPECIFIC ENVIRONMENTS ANY RADAR TECHNOLOGY IS LIMITED TO RESISTIVE ROCKS, SUCH AS LIMESTONE. FINE-GRAINED SEDIMENTARY ROCKS SUCH AS SHALE AND SILTSTONE ARE NOT SUITABLE.

» MINEVUE FOR UNDERGROUND SURVEYING MINEVUE IS THE WORLD'S ONLY ATEX-APPROVED GPR SYSTEM DESIGNED FOR USE IN UNDERGROUND COAL MINES. OPERATING AT 40 MHZ, IT IS DESIGNED TO PENETRATE DOZENS OF METRES INTO COAL SEAMS.



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