



Geo Jarf Azma Consulting Engineers

Established from 2011 with the mission to implement geophysical studies related to geotechnical engineering.

Today, the company's main activity targets specialized geophysical projects within geotechnical schemes and other relevant fields such as mine exploration and other subsurface detecting approaches by highly trained geophysicists and geological experts and technicians with Doctoral and Master Degrees in geophysics, mine engineering and other geological sub branches.

Ground Penetrating Radar Test (GPR)

Method and Application

Ground-penetrating radar (GPR) is a geophysical method that uses electromagnetic pulses to image and map the subsurface. GPR approach is an example of non-destructive test. GPR uses electromagnetic radiation in the microwave band of the radio spectrum and detects the reflected signals from subsurface structures. GPR can have applications in different media such as rock, soil, ice, fresh water, pavements and structures. In the right conditions, practitioners can use GPR to detect subsurface objects, changes in material properties, voids and cracks.



GPR Services

1. Locating and producing 3D images of underground infrastructure, such as gas, oil, water pipes and cables.
2. Determining concrete thickness, potential cracks and deformations, and the location of rebars within the concrete.
3. Determining the location of disposed wastes.
4. Examining sub-layer of roads.
5. Determining ground water level.
6. Determining geological properties and depth of bedrock.
7. Subsurface investigation in archeology and recognition of buried objects.
8. Application in environmental problems such as recognition of qantas and cavities (up to a depth of 15 meters).

Facilities and Appliances

1. 50 MH Antenna, GPR.
2. Borehole100- MHz Antenna, GPR.
3. 250 MH Antenna, GPR.
4. 500 MH Antenna, GPR .
5. 2.3 GH Antenna, GPR, Control units and other supporting equipment.