

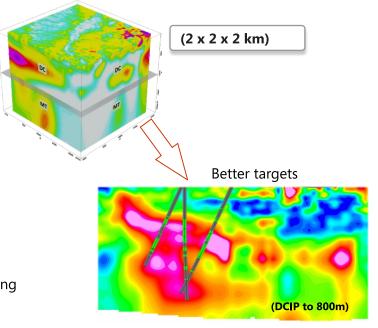
# 3D Distributed Multi-Parameter Imaging

### **Technology for Discovery**

ORION 3D provides the most sophisticated and accurate electrical imaging of the subsurface available.

Full 3D data acquisition of DCIP & MT for True 3D results in complex geological environments.

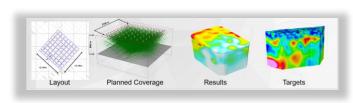
- Highlighted cross structures
- Detailed structural imaging
- Accurate target delineation
- From surface to depths of 2000+ metres (DCIP to 750m, MT to 2000m)
- Property and deposit scale imaging prior to drill programs for improved planning and enhanced targeting



#### **Overview**

ORION 3D is a multi-parameter geophysical technology providing DC resistivity, IP chargeability and deep MT resistivity, designed to provide detailed information in complex geological environments.

**ORION3D** is based on proven methods of DC Resistivity, IP Chargeability and MT Magnetotellurics and is an extension of the technology behind the successful **TITAN 2D** system. **ORION 3D** is designed to collect data in true 3D. By measuring in an omni-directional fashion all the nuances of the subsurface are captured. This yields the best possible images of the subsurface.



From design to targeting

# 1 km

#### **High Signal to Noise**

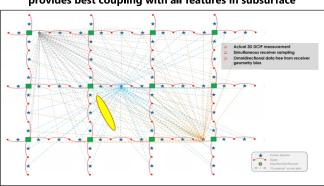
- The high data volume and accurate measurements contribute to the overall resolution of the survey through better inversions and enhanced understanding of the subsurface.
- A typical setup can use up to 294 receiver dipoles coupled with 450 current transmits. This generates over 130,000 unique data measurements. This is a 100 fold increase over conventional approaches to DCIP surveys.
- In addition, an array of **MT stations** is recorded over the duration of the survey within the ORION3D grid to increase the depth of investigation of the survey.



## ORION 3D survey - Multi-parameter DCIP & MT



#### **OMNI-DIRECTIONAL CURRENT PATH** provides best coupling with all features in subsurface



Example: feature energized from only 1 injection site

#### Simultaneous measurements at distributed receivers for every current injection

(\* Coverage from as small as 1 x 1 km)

- Flexible dipole lengths from 300m to 10m
- Current injections throughout the grid
- Flexible survey designs can be set up around surface obstacles
- Orthogonal receiver dipoles deployed across the entire survey area
- Survey plan includes estimate of 3D coverage

#### **IMAGING BEFORE** DRILLING **SAVES MONEY** Mineralization inside geophysical target

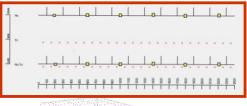
#### **Highest Resolution**

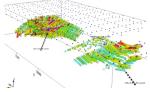
#### **ORION SWATH**

Technology configured on a 2D grid but providing 2.5 D results. Utilizes cross line dipoles for better 3D coupling.

#### **ORION PLUS**

Utilise existing boreholes to energize the sub surface from below. Adding subsurface energy improves inversion results at depth.







Global Office Locations

#### **HEAD OFFICE**

TORONTO, CANADA: +1 416 306 1941

USA: +1 403 919 6644

ARGENTINA: +54 261 496 1414

CHILE: +56 2 2368 4564 PERU: +51 54 288 686

BRAZIL: +55 61 981 230 671 AUSTRALIA: +04 10 529 992

#### **Exploration Enquiries**

info@quantecgeoscience.com