World Leaders in Ground Geophysics
Since 1986
Committed to Safety

Safety

- HSE management system
- Full-time HSE specialist
- Member of ISNetworld & GGSSA
- Insured with Chartis
- Pre-field risk assessment
- Training (First Aid, WHMIS, TDG, driving, ATV, chainsaw, etc.)

Experience

Our safe operations keep our most demanding clients happy. We operate safely for Junior Explorers and are approved operators for Major Mining companies like RTZ, BHP and AREVA.
Quantec technology

- 2D Distributed Array DCIP & MT
- Full 3D Data Acquisition of DCIP & MT
- High Resolution MT
- Design, acquisition, QA/QC, interpretation, integration and consulting
- Deep high resolution imaging
- Complex deep surface to depth environments
- Deep resistivity surveys
- Gravity, mag, rad, IP, TEM, BHEM, CSAMT and VLF
ORION 3D surveys

- Accurate imaging for complex environments
  - Depth of investigation to 1,500 m for Resistivity, 750m for IP
  - Confidence in interpretation

- True 3D acquisition
  - Omni-directional super-sampling

- Multi-parameter
  - DC Resistivity, IP, MT
**Distributed multi-parameter data acquisition**

- Penetrates deeper than conventional geophysics
- DC Resistivity, IP, MT
- Depth of investigation to 700 - 1,500 m
- Well-established in the industry
  - 15 Years
  - Over 500 surveys
- Effective for exploration in mine site environments
  - 250 surveys
Some of our Orion 3D clients...

- Barrick / Kinross
- Nevada Sunrise
- Blackthorn
- Landore
- Cerro Grande
- Vale
- ENSA
- Denison
- Armour Energy
- Grupo Mexico / Minera Mexico
- Peel
- KGL
- Areva
- BHP
- Round Mountain
- Golden Arrow
- Kitumba
- Junior Lake
- Santa Cecelia
- Nemesis
- Cascabel
- Phoenix
- Glyde
- Charcas
- Mallee Bull
- Bellbird
- Cigar Lake
- Old Dominion

- First True 3D Survey 2007
- Regular production since 2011
- Over 20 survey patches completed
The ORION 3D process

- **Survey flexibility**
  - Distributed acquisition allows for customization of the survey layout

- **3D geometry**
  - The survey samples local geology from all directions simultaneously

- **High signal-to-noise ratio**
  - Low-noise electronics ensure high quality data

- **Depth penetration**
  - Large-offset data acquisition ensures maximum depth penetration

- **High resolution**
  - High data volume boosts the resolution of the survey and supports confident and accurate interpretations

*Yields best representation of the subsurface for drill planning*
Built on the strengths of:
- TITAN Processing
- SPARTAN Flexibility

- Up to 300 receiver channels for every transmit
- 2 x 2 km
- Unprecedented: equal number of orthogonal dipoles
ORION 3D layout

- True 3D DCIP measurement
- Simultaneous receiver sampling
- Omnidirectional data free from receiver geometry bias

- Receiver dipole
- Data recorder
- Current injection
- “Conceptual” current path
Survey set-up & footprint
Sampling everything  (from all directions)

2D Lines

Omni-directional sampling for unparalleled definition

more than 140,000 samples
Nevada – showing the high resolution

280,000 data points

Hidden Hill

~ 200 m

Drill Holes and Mineralization
Zambia – showing mineral correlation

Mineralization inside geophysical target

Historic drillhole - no mineralization

160,000 data points

4 km

2 km
Santa Cecilia - introduction

- Location, High Western Cordillera, Maricunga Belt.
- Intensive Hydrothermal alteration
- Magnetic, CSAMT and ORION 3D DCIP/MT
DC Resistivity Inversion

DC Res Horizontal Slice
(3775m ASL) ≈ 700m depth
3D MT Model

DC Resistivity

Deep-seated Conductor

1 km
Accurate delineation of the entire alteration system. High and low levels.

Stockwork defined with the ORION 3D DC and IP

A significant conductive zone, defines the size and depth extension of the hypogene and related mineralization

ORION 3D MT images the porphyry itself and zonation
Thank you

www.quantecgeoscience.com