WAGON PASS

AUSTRALIA

Geophysics on a Challenging Deposit

The Wagon Pass Pb-Zn Mississippi valley type (MVT) deposit, located in Western Australia, is characterized by lenses of reticulate fracture filings stratabound within dolomites. The deposit has a strike length of 300m, a width of 30m to 80m and a thickness of up to 36m. The mineralization consists of galena, sphalerite with subordinate iron and copper sulphides.

Regional Gravity and Magnetic surveys show the Wagon Pass deposit as both a magnetic and gravity high.

These highs are likely associated with basement highs as with many MVT deposits.

The gravity and magnetic data were used to define prospective areas which were then grid drilled.

Hole NRD-23, the discovery hole intersected the Wagon Pass deposit.



Down-hole logs were recorded in the discovery hole to characterize the mineralization and to assist in stratigraphic correlation.

Chargeability and Resistivity logs were recorded using a pole-dipole array and electrode spacings of 2m, 8m and 16m.



Results in the Discovery hole show elevated chargeability and reduced resistivity in the mineralized zone.

Additional geophysics, including Gravity, **IP**, **TDEM** and Misé-a-al-masse were conducted on the deposit with limited success. Responses were considered to be related to local facies changes rather than the mineralization.