M ZONE

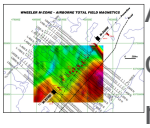
CANADA

Can Geophysics Work under High Voltage Power Lines?

The M zone is a uranium occurrence on the Wheeler River Project in the Athabasca Basin of Northwestern Saskatchewan.

The deposit is an Athabasca-type uranium deposit that lies at an unconformity, beneath 400 meter of Athabasca sandstone.

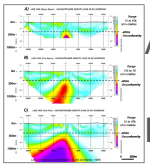
The M-Zone deposit is thought to have formed as a result of oxidizing basin fluids meeting reducing fluids from a graphitic fault in the basement rock.



Although the deposit is below 400 metres of sediment, it is associated with a conductive graphite fault zone, and should be a good geophysical target. However; a nearby 3-phase power line limits conventional ground EM.

The DC resistivity technique has been favoured due to its ability to map structurally controlled alteration that accompanies unconformity uranium targets.

Surveys were conducted using 3 arrays:



A, Dipole-dipole

B, Pole-dipole

C, Pole-pole

2d inversions show that each array successfully detected the conductive graphitic fault zone.