

SCINTREX

right angles to the line, and thus the equipotentials will be parallel to the reading dipole. Therefore readings in the "zone of distortion" should be regarded with caution.

Note particularly that the *source volume* is *normal to local slope* and not vertically beneath the potential dipoles.

Note also that the volume of material *closest* to the potential electrodes will influence the data most. It is difficult to easily quantify the complex relationship between the volume of material sampled and its distance from the potential dipole.

Figure 3 displays the secondary current pattern generated from the decay of induced polarization effect *within* a chargeable sulphide source, together with the equipotential field generated by that decay. Note that due to the necessarily curved nature of the current flow outside the body, the on-surface manifestation is *wider than* the *source width*. Note also that the volume sampled in the primary potential field (apparent resistivity ρ_a) is not necessarily the same volume as is the secondary potential field (apparent chargeability M_a). This is of course true for *any* array.

From the *form* of the profile over any resistive or chargeable unit, a maximum depth to source estimate can be made. The depth can, however, be less than the maximum depth estimated, as this calculation assumes a 'narrow' source. Also, the depth to source cannot be estimated better than the potential dipole employed (20 metres)