



interpretable. It is recommended that the anomaly be resurveyed using a tall sensor pole (of about three metres) to reduce the effects from near-surface magnetic material. (A similar survey is suggested for the postulated anomaly beneath the alteration zone: 2200N/1375E.)

A large deep seated source has been suggested for the Great Northern anomaly (see Figure A4), but more data, to the east, is needed for a confident interpretation.

VLF anomaly 'H' is coincident with a magnetic high between lines 1600N to 2000N. The magnetic is best developed on line 2000N (where the VLF is possibly 'false'): initial modelling of the response at 2000N/900E is shown in Figure A8. Although not an excellent fit, the interpretation indicates that the source is likely to be a thin, shallow body, dipping steeply to the east. As was the case for the good coincident VLF and magnetic anomalies on the Black Hill grid (at 1800W/1875S), there is no encouragement from the geochemistry profiles over this zone.

#### DISCUSSION

The geophysical/geochemical 'type' responses for a Renison-style deposit would be a large magnetic anomaly reflecting the replacement body, with shallower magnetic, VLF and geochemical anomalies indicating the 'feeder veins'. (Although at Renison itself, any ground magnetic response from the deeper mineralisation is invariably swamped by the very strong near-surface anomalies.)

No such combination of responses has been found on the Black Hill or Carbine Hill grids and exploration must concentrate on a buried 'sealed' body (sealed in the sense that there is little near-surface sulphides to produce VLF/magnetic responses).

There are two areas of interest for large, deep, replacement bodies: the Grand Prize -NW Extn and Great Northern aeromagnetic anomalies. The interest in these two zones lies partly in the fact that they are on the borders of the gridded area: ie, they have not been completely investigated.

There has been sufficient ground magnetic coverage of the Great Northern magnetic anomaly to show that its form is similar to the aeromagnetic response: ie, a large, deep body is the likely source (although a number of separate bodies could give a similar shaped anomaly). The VLF response over the magnetic anomaly is poor: there are geochemical responses, but no tin (suggesting a

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\*The Grand Prize area shows that extensive weathering of sulphides may occur, thus removing the source of the VLF and shallower magnetic anomalies (a weaker VLF response may be expected from the weathered fault zone). However such mineralised zones may be expected to show, as does Grand Prize, a strong geochemical response.