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Body 2 is the strongest conductor located so far on the prospect; it has a TEM decay constant of 0.6 msec (Figure 7).

EM INTERPRETATION – SHD20 – Body 3

The signature of Body 3 is best observed on the profiles for SHD20 Loop 14 (west loop) shown in Figure 8. The anomaly is broad, indicating a large conductor at the base of the hole, at a distance offhole of order 100 to 150 m, and it decays to background by Channel 12, indicating a weak conductor.

The decay of the anomaly at depth 790 m is shown in Figure 9. The time constant is very small (.046 msec), but the sign of the anomaly indicates that an inductive response is the correct interpretation (a current-channelling response would give a positive anomaly).

The anomaly profile is difficult to see on SHD20 with Loop 12 because it is masked by a larger background response. This background response is probably due to the fact that loop 12 was laid on more conductive sediment cover near the lake, whereas loop 14 was laid over hills west of the lake. When the data for the 2 loops are plotted on enlarged and similar scales (Figure 10) it is seen that the anomaly on Loop 12 is similar to, or possibly 30% larger in amplitude than that on Loop 14 (depending on where the background trend is drawn). Modelling to compare coupling between loops 12 and 14 for varying dips, indicates that the dip of Body 3 is in the range zero to 15 deg either direction (ie dipping shallowly north-west or south-east).

Figures 10a,10b show comparisons of field and model data for SHD20 Loop 14, and SHD20, Loop12. The modelled conductor is a 400x200m rectangular plate of 2.4S conductance, striking NE-SW, located east of and below hole SHD20 (see previous Section).

Loop 11 (east) also produces an anomaly indicating existence of a weakly conducting target off the end of the hole. Three-component data is available, but since the anomaly signature is both weak and extending beyond the end of the hole, it is not possible to deduce clear strike information. There is a suggestion in the V-component data that a NE-SW strike may be indicated, but a north-south strike direction is also possible within the ambiguities of the U-V component data at the low-signal levels which apply here.

The most important point about Body 3 is that it is a large flat-lying weak conductor, with sufficient area to allow inductive current circulation, as distinct from the linear pencil-like conductor described for Body 1.

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