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Att. H. Gibson

Memo re: Borehole Survey Mt. Sicker, Hole # MTS5

Standard procedure for running a multiple loop, TEM survey is to set the primary field positive when the collar of the hole is inside the transmit loop and negative when the collar is outside of the loop. The polarity is set at surface with the probe held vertical to remove any ambiguities that might arise from topography or the angle at which the hole is drilled. In the case of the Mt. Sicker survey, it appears the operator set the primary field positive at the collar, both inside and outside of the transmit loop. In some logs (MTS1 & 2) the sign is definitely reversed, in others it is not as clear (ie angle of hole & the topography make it difficult to evaluate). It is probably safe to assume he followed the same procedure throughout the survey and therefore the signs should be reversed in any log with the collar outside of a transmit loop.

The erratic changes in the primary field strength measurement (see hole MTS5, loop 2) appear abnormal. This measurement is usually disregarded in an angled hole because of the coupling problem between the primary field and the receiver probe. Regardless, changes in the field should be fairly uniform unless the hole is in the immediate vicinity of a conductor.

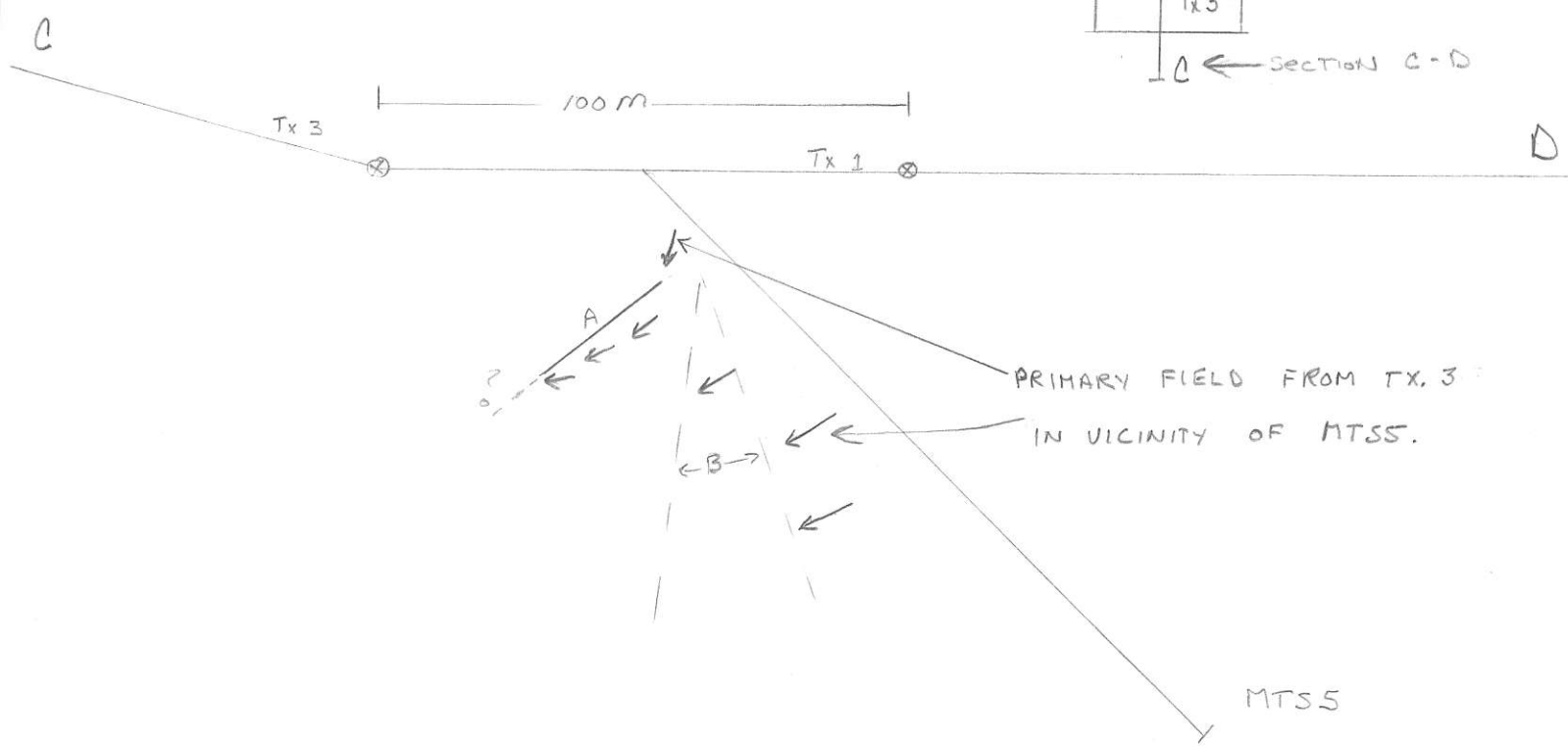
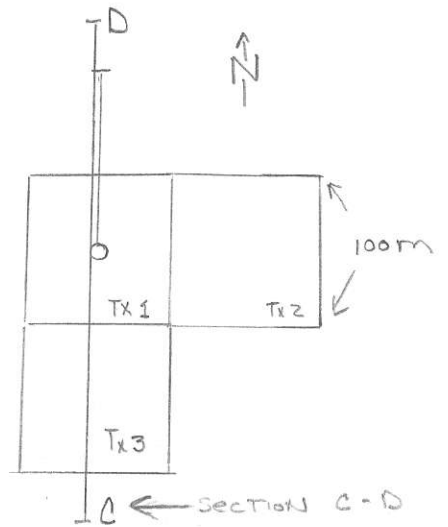
The only significant anomaly in MTS5 is detected from transmit loop 1. The anomaly spans the full length of the hole with the strongest response at the collar of the hole. It can be interpreted as a cross-over response (conductor below & parallel to the hole, dipping at 70-90 degrees north) or as an off hole anomaly with the conductor near surface (within 20 meters) and dipping south (see attached figure). If the conductor was parallel or subparallel to the hole a response should have been detected from loop 3. If it was near surface and dipping south it should also have been detected from loop 3 unless it has a limited down dip extent (10-15m) and is paper thin. A positive to negative cross-over was detected when the hole was surveyed from Tx 2. This is likely related to the polarity problems discussed above and not an off hole conductor.

In conclusion, the data is at best suspect. Therefore prior to drill testing the "anomaly" detected in MTSS repeat the survey of the hole. If the collar loop data is verified, survey all other loops (N,S,E,W) to assist in the interpretation of the conductor location.

D.C. Anderson, Geophysicist

A handwritten signature in cursive script, appearing to read "D. Anderson". The signature is written in dark ink and is positioned below the typed name.

PLAN VIEW



SECTION C-D "QUESTIONABLE" CONDUCTOR LOCATION

- A - SMALL CONDUCTOR DIPPING SOUTH COULD BE NULL COUPLED TO PRIMARY FIELD FROM TX. 3. CONDUCTOR WOULD HAVE TO BE THIN.
- B - CONDUCTOR SUB-PARALLELING MTSS DIPPING @ 70-90° N. CONDUCTOR SHOULD HAVE BEEN MAXIMUM COUPLED TO PRIMARY FIELD FROM TX 3!