

ADVANCED GEOPHYSICAL CLASSIFICATION IN A PRODUCTION ENVIRONMENT: A CASE STUDY FROM THE WHISKEY FLAT REMEDIAL ACTION HAWTHORNE ARMY DEPOT, NEVADA

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This poster/presentation will provide an in-progress update of the USACE Remedial Action (RA) at Whiskey Flat Munitions Response Site being performed by Engineering/Remediation Resources Group and its geophysical subcontractors, CH2M Hill and Black Tusk Geophysics.

The Whiskey Flat RA project design team (PDT) is applying cued advanced geophysical classification (AGC) upon digital geophysical mapping (DGM) detection survey datasets to optimize the removal phase across the 1,000-ac MRS.

The PDT and its approach employ multiple subcontractors and multiple platforms to meet the varying terrain, anomaly density, and other challenges in the production environment and demands of the RA schedule. Adaptations include the use of multiple towed arrays and person-portable DGM teams for the detection survey, and the use of both government furnished equipment (i.e., Naval Research Lab's TEMTADS 2x2), and the commercially-offered equipment (i.e., Geometrics Metal Mapper 2x2).

In addition to differing AGC equipment, these sensors are being used in different platforms, with the TEMTADS being used in person-portable and the Metal Mapper being used on a telehandler.

Furthermore, the different AGC sensors require unique data management and processing methods to arrive at the intended result of a verified and validated dataset capable of supporting AGC decisions.

This case study will present: the goals of the project; lessons learned in meeting these goals; plenty of photos; narrative from the last twelve months of field work; and the PDT's perspective on executing AGC at a large RA.