METALMAPPER 2X2 – TESTING AND EFFECTIVENESS ON A MUNITIONS RESPONSE SITE

Kelly Enriquez, USA Engineering & Support Center Huntsville; Brian Junck, Arcadis; Stephen Stacy, Arcadis

The Geometrics MetalMapper 2x2 started shipping in the summer of 2016; however, it wasn't previously demonstrated for use in performing Advanced Geophysical Classification (AGC) at either ESTCP live site demonstrations or at other munitions response sites (MRSs). Arcadis performed multiple tests at Blossom Point from September 2016 through July 2017 and started using the system to collect cued data in August 2017 on the Remedial Investigation/Feasibility Study (RI/FS) at the Former Fort Pierce United States Naval Amphibious Training Base (USNATB), which was one of the first projects contracted through USACE that used the MetalMapper 2x2. This presentation will provide an update on the MetalMapper 2x2 system functionality since Arcadis presented the initial results at the 2017 SAGEEP conference, but will focus on the use of the MetalMapper 2x2 in the field, the preliminary AGC results, and lessons learned from the Fort Pierce RI/FS. On the Fort Pierce USNATB RI/FS, Arcadis used a combination of EM61-MK2 digital geophysical mapping (DGM) surveys and cued MetalMapper 2x2 surveys to characterize the nature and extent of munitions and explosives of concern (MEC) at two former World War II training areas. The presentation will discuss the MetalMapper 2x2's effectiveness and field worthiness, challenges found in using the system in the field, key differences with the TEMTADS 2x2 upon which it was based, lessons learned from both the USACE and contractor perspectives, and the preliminary AGC results.