

# **STUFF THEY DON'T TEACH YOU IN TEXTBOOKS ABOUT COLLECTING GEOPHYSICAL DATA**

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Learning how to run a geophysical survey from a textbook is one thing, being out in the field physically collecting the data is another thing entirely. Textbooks are an important resource when learning the basics of a method. A textbook, or professor, will teach valuable mathematical and theoretical information, and can, of course, explain the general steps involved in the data collection process. Looking through a textbook will present examples of data collected in the best-case field conditions; some geophysics students may even have the opportunity to collect data during field camp. While all of this is a solid starting point for the making of a good field geophysicist, the textbook may lead the reader to believe all field sites will have ideal soil and rock conditions or even perfect weather. However, it should not be surprising that this is not the case, and in fact, most field sites could be categorized as “non-ideal”.

Therefore, the focus of this presentation is to pass along tips and tricks for collecting field data in these non-ideal conditions. These are the tricks not found in textbooks or lecture notes but passed along from one geophysicist to the next while battling the elements. These are the things learned through first-hand experiences, during “necessity is the mother of invention” moments. What troubleshooting can be done when the geode and laptop aren't talking to each other? How can contact resistance be improved during an electrical resistivity survey when adding salt water isn't enough? How can a seismic trigger be built when the hammer trigger is broken, or wasn't packed in the box to begin with? These are just a few examples of questions that have been asked, textbooks failed to answer, and will be discussed here.