

Field Report 2

DUE: Thursday, October 22nd

Email me a PDF of your completed work as before.

This field report assessment is a little different – think of it as a *component* you can use in a future/traditional field report. Here is the rationale:

In the previous field report many of you wrote a section where the field surveys **collected** (the VES, the 2D ERT profiles) were described. However, at the same time, an attempt to describe **how the electrical resistivity method works** was frequently given. Even if both components were written well, this is confusing to any reader because it (1) combines two distinct things, and (2) breaks up your narrative. In addition, too little attention/space is then paid to each of these components.

I agree that it is a good idea to describe how the method works for your audience. So what is the solution?

Solution 1: Make *how the electrical resistivity method works* its own section.

This would at least make the narrative of your text/report more clear. However, a problem remains: most audiences do not want to read what is necessarily a somewhat long and technical explanation in the main part of the report where they are trying to get to your *geologic conclusions*.

So while they will be happy to know you have the technical expertise to do what you were hired to do, it's not likely they will be happy reading about it in the middle of your main report text.

Solution 2: Put the description of *how the electrical resistivity method works* in an Appendix.

This has the advantage of being like a very long footnote: the flow and understanding of your main text is not dependent on reading the appendix at any given moment, but it is there if desired.

In your main text when describing what electrical surveys you did, you can say "... see Appendix 1 for details on the electrical resistivity method ..." (or however you wish to say it).

An additional advantage is that there will then be many reports in which you can essentially just "plug in" this section with little to no modification.

The “Field Report” Assignment is then ...

... to create an Appendix in which, with your own understanding, you describe how the electrical resistivity method physically works: what is the physical basis of the method, what is a measurement, field procedures, array types (advantages, disadvantages), VES vs. 2D ERT, vs. 3D ERT, and whatever else I forgot to mention.

Resources: On the [Textbook Readings webpage](#) you have links for CH 6 from LITE (which we’ve used), but also reading material from CH 5 of I2AG (a more verbose chapter on electrical resistivity from a different book). What is advantageous about the I2AG book is that the webpage also has a link to the figures from that chapter as a big ZIP file of JPG images and as slides. These might be useful in your work. Of course, you can seek out other resources – but always give proper attribution. Therefore you will need to *develop a proper bibliography file for all your references you can use in Overleaf*.

Last remarks: It will be tempting to think you can put this off and do it quickly just before it is due, since it has a “summary” aspect to it rather than analysis of original data. **This is false.** But wait! I can use an AI to make it ... well, this is not allowed in our course because we are in the *learning and building judgment* stage of your education and not because I am against AI. It will almost certainly show if you use an AI, although perhaps you can trick me. If so, congratulations.