

# You don't know what you don't know

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## ABSTRACT

As a consultant in the mining industry, we have the opportunity to visit interesting deposits all over the world. Every deposit we have visited is different and each deposit has its own set of challenges to face when it comes to defining and understanding the deposit geology and the economics to make the deposit viable for extraction. Some of these challenges include data capture, appropriate sampling techniques, structural characteristics, geochemistry, geophysics, lithologies, and defined economic boundaries. It is important that as geologists we substantiate that the practices used at each deposit (e.g. drilling, sampling, geological modelling, resource estimation, etc.) are appropriate and the results obtained are robust and defensible.

Whilst their intentions are always good, the Competent Person is often not aware of issues where their geological practices have not been substantiated. "You don't know what you don't know" is a phrase frequently stated during a Mineral Resource audit. Further investigation at our client sites on why geologists have not completed the relevant technical work to substantiate that the drilling, sampling, density, assaying, geological modelling and estimation processes are appropriate has identified a few common responses:

- "I was unaware that this was required".
- "I have not had training in this area and do not know how to complete the checks required".
- "This is how we've always done it".

This paper provides real examples of audit findings where geological practices were not substantiated simply because the Competent Persons were not aware of such requirements. It explains why substantiating the practices are important and provides an insight into how they can be avoided.