

EARTH SCIENCE & ENGINEERING

Who are you?

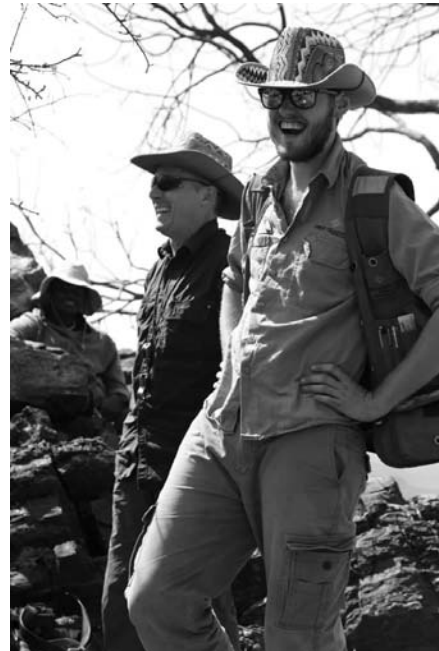
Tom F. Wesby

What do you do?

Global Exploration Geoscientist

What does your job involve?

I work for a mid-tier mining company within a committed geoscience department focused on global exploration. I spend most of my time looking for new deposits, and improving the performance of our mines. It basically involves thinking hard about what we know and what we need to find out in geoscience. That ultimately leads my colleagues and I into the field, into labs, into pits, and down into the Earth for answers.



My job means I'm responsible for identifying new exploration opportunities, putting forward new ideas and methods to my team and presenting my own analyses on the market trends to help steer our strategy. In doing that, my team and I need to be familiar with a wide spectrum of software that can quickly analyse big geochemistry datasets, put together maps of satellite images over terrain and geophysics, and give us 3D geological models. Other than that my most valuable tools are a rock hammer, hand-lens, and microscope (just like they were at Imperial). Do I travel for my job? Definitely, 15 different countries in the 4 years I've worked so far! But I love travelling and have been lucky in finding a job and a flexible team that encourage a good attitude towards other cultures and towards finding the right work-life balance.

How did you get there?

Sometime in year 3 I decided I needed to get some dirty, hands-on experience, preferably with some big industrial flavour so that I could carry that on my CV and into some decent options for different engineering careers in the future. I had a little experience with geochemical research groups beforehand but basically applied to every exploration or mining company out there using only projected grades from an MSci. After a year I had 3 offers, which each demanded on-site technical interviews. I chose a company based upon the personalities of my 'soon to be' colleagues and haven't regretted it for a second - I've been in that same company ever since!

How do you use your skills in geology and geophysics?

I use both the theoretical knowledge and practical geoscience skills I learned at the RSM to do my job. This gets applied to everything; from geochronological dating, to mapping rocks on continental scales, clearing tracks for drill rigs, and running geophysical lines over mountains. The most important transferrable skill I gained during my time at Imperial is the ability to learn quickly and keep an open mind.

What do you love about geology/geophysics?

I love that the geosciences are relatively young in terms of how far they have developed philosophically compared to the other sciences, this gives me the feeling that we can still make great strides in advancing as a community, and making interesting discoveries without needing to become a specialist. This is also a very

small professional community, and you can meet a considerable fraction of the interesting players quite easily. How many other sciences can make those claims!

Your best and worst moments?

A few years ago I was with a helicopter campaign in the Territorial Rockies- my first. We were roaming over the range to collect a bunch of geochemical datasets but had to carry bear kits and had a bunch of training for dealing with grizzlies. One lunchtime we roamed into this little enclave in the side of a mountain surrounded by dark trees, which really gave us the shivers. Eventually we started to hear, or imagine, a crunch crunch crunch on the loose rocks somewhere around the crags. Me and my partner were out of signal range and just sat there with our kits aimed out at the edge in total silence for what seemed like an hour. We didn't hear any more noises but did see a little squirrel go by and couldn't stop laughing.

Actually we told that story on another helicopter trip with a big chopper. One of the passengers laughed so hard he accidentally opened the rear door at 10,000 feet! After freaking out for a while and realising we couldn't get it closed, the pilot told us over the headsets that the downdraft would stop anyone falling out- then we really let loose with all our hilarious field tales! That was one of many very fun trips I've been on, with every day full of laughter. Worst moments?!