



Who are you?

Stacey Emmerton

What do you do?

Production Seismologist (Geophysicist) working for Shell E&P UK

What does your job involve?

As a production seismologist, I look at seismic data and use 3D models to try and predict where hydrocarbons are in the subsurface. We use software such as Petrel as well as specialist in-house software and 3D visualisation centres. I work as part of a large integrated team whose ultimate goal is to get more barrels of oil/gas out of the ground. My job also involves working with the fields equity partners and the government to make sure we are all aligned. I have been the sole geophysicist on a number of Assets and responsible for delivery of technical work, partner management and drilling reports. Each day is different and includes a combination of technical work, decision making and business engagements. You also do a lot of training on the job going on courses and fieldwork around the world; Netherlands, Spain, Utah to name a few.

How did you get there?

I had a passion for physics at school and was fortunate to have a geology teacher who introduced me to geophysics, a great combination of real world physics applications and outdoor/fieldwork activities. I started a geophysics undergraduate at Imperial College London with a year abroad at the University of British Columbia. During my studies I really enjoyed learning more about how we explore for oil and gas, using just a few pieces of data and a lot of integrated thinking. This led me to study for a PhD looking at the relationship between magnetic & geochemical signatures in oil bearing rocks. Half way through my PhD, I sorted out a 4 month internship with Shell and halted my studies. It was an internship in which I completed a pseudo masters project which resulted in a report and an assessed interview. I was successful and given an open start date for 3 years to finish my PhD and join Shell. Since joining Shell, I have completed their in-house Graduate Program and am now part of an Advance Technical program which allows you to continually improve your skills by attending courses and on the job competency tasks.

How do you use your skills in geology and geophysics?

I use skills learnt in G&G everyday whether it's interpreting seismic data, looking at geological conceptual models or trying to identify new oil and gas fields. My PhD has really helped me with skills gained in presenting which is a big part of my job as well as report writing, time management and problem solving.

What do you love about geology/geophysics?

It's such a diverse field of work that I can be looking at anything from magnetic data, gravity data, 3D and 4D data to name a few. It feels like every day I am trying to solve a puzzle and no two days are the same.

Your best and worst moments?

In my second year of work, I had the amazing experience of going offshore and taking part in a 4D seismic acquisition in the Norwegian sector of the North Sea. I got to see the staggering size of the operation and have my first helicopter experience, it was incredible! My worst moment was the first week I started at Shell when I was told that I needed to complete a big piece of work for our partners yet I had never seen the field before or worked in seismic data for several years, it was very daunting and a massive learning curve. It can be a very fast paced industry!