

# GEOLOGIST

**Name:** Karina Tyne  
**Employer:** Cameco Corporation  
**Education:** BSc. Geology



**DETAILS OF THE JOB:** There is a wide variety of responsibilities for a geologist at a uranium mine site. In Karina's case, it involves estimating the grade and tonnes of ore coming to the surface. Using 3D modelling, she incorporates all geological data that is collected through underground mapping and diamond drilling to calculate the estimate. This helps the company determine the planned grade and tonnage of the remaining reserves and resources, which enables engineers to determine how and when to safely mine the ore.

"Geology is unique because it is a combination of all of the sciences: chemistry, physics, geometry and even biology," says Karina. "And although science is at the core of geology, creativity is also very important in any geological interpretation," says Karina.

**A TYPICAL DAY:** Karina's work is primarily above-ground and computer-based, using programs such as Leapfrog and Vulcan for modelling and estimation, and AcQuire for data collection and management. She occasionally joins a ground control engineer underground to ensure active stopes are breaking according to design, "and that we aren't leaving any ore behind," she says.

### SKILLS NEEDED:

- Critical thinking and problem solving
- Ability to embrace change
- Ability to honour scientific principles while being creative

**COMMENT:** "Geology is dynamic, theories are constantly being proven and disproven – and this is what makes it exciting," she says.

The potential to travel is part of the appeal as well. Although she currently works in northern Saskatchewan, her career has given her opportunities to visit interesting places around the globe.

**WHERE CAN I GO TO GET AN EDUCATION?** U. of Regina, U. of Saskatchewan.

**HELPFUL HIGH SCHOOL COURSES:** Physical Science 20, Environmental Science 20, Earth Science 30, Biology 30, Chemistry 30, Mathematics 30, Calculus 30, Physics 30.

**NOC:** 2113