





## BETWEEN ARD A HARD PLACE

A degree in geoscience used to be a ticket to a job.

Why that's no longer the case, and what today's graduates can do about it

By Rose Ugoalah

RIGHT NOW, hundreds of newly minted geologists are preparing to don caps and gowns and collect their diplomas on university campuses across the country. But when they do, they will be crossing the stage into a future that's very different from the one they'd expected. When they started their degrees, they probably imagined that they would gain entry to the workforce the way most of their peers and predecessors had: with ease. They'd get summer jobs, co-ops, and internships

and eventually find permanent and well-paid positions. But this year's crop will have to contend with more than just pre-interview jitters or the challenge of deciding which job offer to take. Low oil prices mean that many oil and gas exploration companies are cutting back on projects or canceling them outright, and while that's bad news for job security all around, it's particularly problematic for petroleum geoscientists. After all, they tend to be the first to go – with the newest among them going earliest of all.

Dennis Labrecque, a 40-year veteran of the petroleum geoscience industry and the president of Wellsite Geologists, knows all about the pressures on today's graduates. For financial reasons, Labrecque recently moved out of his downtown Calgary office and began working from home. His agency, which has operated for more than 25 years, employs geologists in oilfield consulting work. Wellsite's clients have included Husky, ConocoPhillips Canada and Encana, but he says low commodity prices have brought the demand for geologists to a screeching halt. As a result, he's had to make cuts of his own. Last year Labrecque had eight geologists working for him, each earning between \$75,000 and \$175,000. This year, that number has fallen to zero, with no plans to increase it any time soon. "I am not hiring," he says.

Many exploration companies were reluctant to speak with *Alberta Oil* about the dismal future facing recently graduated geoscientists. Cenovus, however, said it will not hire any full-time employees this year, including geologists. John Hogg, the president of the American Association of Petroleum Geologists (AAPG), says that because new well drilling has dropped off and because geologists are on the front end of all wells drilled, their work has all but dried up. If conditions persist – and most believe that they will, at least in the near term – there will be substantial layoffs, he says.

The damage isn't permanent, mind you. Robert Kavcic, a Toronto-based economist with BMO Capital Markets, says that although oil prices are hitting lows similar to the global recession of 2008, the current situation isn't necessarily as dire as it was then. During the so-called Great Recession, many businesses in the energy sector couldn't get the credit they needed to run their businesses due to the instability and unpredictability of the capital markets. Today, he says, this

is not the case. That's in part because of an emerging consensus (one that Kavcic echoes) that crude prices will recover gradually to around \$75 per barrel within six to 12 months.

But until this occurs, oil rigs across North America continue to be taken offline, and Hogg says this freeze in operations will chiefly affect the new geoscientists hoping to enter the industry. "There will be a year or two where very few of them will be hired," he says. "And they may actually leave the industry before they get started." Hogg says that if commodity prices stay low for more than three years, a lot of young professionals will find other careers and may not return to the petroleum industry when the markets regain their footing. His advice to new undergrads? Getting a master's degree or a doctorate might be a good investment. "To come out [of school] when there are no jobs is the worst thing for them."

## "THEY MAY HAVE TO FIND A JOB, INSTEAD OF THE JOB" – LAURENCE LINES

The sudden instability in the job market for geoscientists doesn't just affect today's graduates. It's also on the mind of tomorrow's graduates, people like Grant Salo who have to figure out how they're going to prepare for a job market that may not be ready to receive them. He's in his second year of undergrad in Brock University's earth sciences program in St. Catharines, Ontario, and while he initially wanted a career as an exploratory geologist doing fieldwork in the oil and gas industry, the recent turmoil has him reconsidering his next move. The decline in oil prices is a hot topic of discussion for Salo and his peers, who have decided to look outside of petroleum geoscience for

their co-op placements. Environmental geology, mineral exploration and mining, particularly in the gold industry, are becoming attractive options.

Their strategy is one that University of Calgary geoscience professor Laurence Lines says current graduates should be trying as well. He says that, due to similarities in the imaging tools and techniques used, the medical field has attracted geophysics grads in the past. And while some of his recent graduate students have found work related to geoscience, many are still searching. "They may have to find a job instead of the job," he says. And for geoscience technologists, entry-level jobs are still scarce. SAIT's geoscience program is specifically geared at hydrocarbon exploration. Instructor John Fernando says that many companies are no longer offering summer job opportunities, and of those that are, few are extending them into full-time job offers.

Fernando's students are understandably worried, but he remains optimistic that the market will eventually turn around. Lines is also confident the markets will rebound, and that the job market will as well. But until then, he says that diversification and flexibility are key. He also says that an upside to the low oil price environment may be the broadening of the skill sets of geoscience graduates into other areas. Students like geophysics undergrad Ryan Borman might not have a choice, either. Last summer he completed micro-seismic and acquisition work with a company that specializes in vertical seismic profiles, and while the opportunity helped him make industry contacts, he hasn't secured any employment promises after graduation this spring. He's now considering returning to a job operating heavy equipment in a coal mine. In fact, he says, no one in his class has landed a full-time job yet. "It's not looking so good right now." •