

This month we get to know Mike Hatch.

1. For how long have you been a geophysicist?

I did my first geophysical job for Zonge Engineering as a fieldie in August 1987. By the way, my pay was USD \$2.95 per hour.

2. What do you like most about being a geophysicist?

The variety of work experiences. As a field geophysicist (my favourite aspect of geophysics) I loved the physical work, the challenges of the weather, keeping the data collecting going through whatever the conditions. Running pretty sophisticated laboratory quality equipment and a really bad lab is how I kind of look at it.

3. What made you decide to be a geophysicist?

I was an economics major at university in the USA (a bit lost in it though, no great love for economics) and walked through the geology department with a friend and saw an ad for a mud logger, base salary \$16k plus bonus (this was 1983), on call all the time, working anywhere in the world. The next semester I took my first geology course. Of course I graduated into a major industry low point - both in mining and petroleum industries that I didn't get a job for two years (see pay rate above).

4. What's one thing you wish someone had told you when you were at university?

Don't worry about your grades too much. There were courses that I would have / should have taken that would have been very interesting. For some reason I thought my grades mattered so I took other things. And they were never that great anyway. Hmmm.

5. Your most respected geophysicist?

Ken Zonge was a huge mentor for me throughout my career. There were times when I was in the field and would call the office at 9:00 pm and he would be the one in the office who gave me the answers. He and I talked a lot over the years.

6. When you are asked "What's a geophysicist??" or "What does a geophysicist do?" what is your stock answer?

I say: You've probably heard of the old surveys where crews would set up explosions, and have instruments that measure where the sound waves from the explosions go and are figure out what's down there. Well I do the same thing, but set up equipment to put electricity in the ground and then I see what gets lit up with the power. From various properties of the electricity we can pretty well get an idea of what's been lit up and about how deep it is. Most look at me with some bewilderment (undoubtedly thinking "that's a job?") and some seem to get the idea of what I'm saying. Overall, normal people never really quite get it.

7. Do you think AI will take over your job or will the human element remain vital to exploration successes?

I have worked with company geophysicists for whom the data quantity/load is so big that they are only able to have a quick look at the data - they often do not get the chance to dig into it the way it needs to be dug into. I am quite sure that AI will be a huge help in that process; nevertheless my feeling is that a team of human geophysicists (with good geology skills) working with a team of geologists (with good geophysical skills) will make the big decisions. More data will be collected from the air, as technology improves so there will gradually be less call for ground people. Watch the drone space for big advances that will change everything.

