Key Victoria
Malongo
7 May 1982

Dear Mr. Fawcitt,

Thank you for your letter, which was held over for me while I was on vacation. I hope these pages prove helpful to anyone interested in working for Schlumberger.

I was recruited in April 1980 while in my third year of Engineering (papers in Control, Mechanics of Solids, Materials and Economics). In September I started at the Africa Training Centre in Pau, France. New recruits are assigned to one of five Units - Africa, Middle East, Far East, South America and Europe, and generally remain there for the first five years. Training centres are normally based in the Unit - but ATC was moved from Luanda after independence. Anyway ten days later I found myself in Warri, Nigeria on a three-week familiarisation trip. Nigeria is not a very pleasant location - there being constant water and electricity shortages, and very little in the way of leisure facilities. However for a new boy it was not bad, and some engineers who have lived there a year so tell me it grows on you. During this time I saw my first oil rig and my first logging job - which is the engineers' raison d'etre. We left the base at 10pm, arrived at midnight, slept for two hours, then spent 48 hours logging. At the end engineer, trainee, rig geologist and local helper were all dropping off, but we finished and even found oil.

Then it was back to Pau for ten weeks intensive training. At "school" trainees learn the theory behind the various measurements we make, and practice handling the equipment. There is a lot of detail to be learned, much of the theory being simple (the difficult parts are glossed over), and plenty of

trainees is now about $2400 per month, and only increases by $260 on promotion. On top of the base salary is a ~~geop~~ geographical coefficient which in Congo adds 60% to the base salary.

After being promoted I was given two weeks leave - fare paid to London. Each location has a schedule for days off. In Congo it was 16 weeks work and two weeks off. In desert locations it is 5 on 2 off and salary is higher.

On my return I was assigned to an offshore rig. My responsibilities were to run every Schlumberger job on the rig to maintain the logging unit (cab, motor, winch, generator) to look after one complete set of logging tools and surface equipment and to co liaise directly with the client. In other words I was very much on my own, using the base for supplies and back-up. Consequently I could organise my rig set-up as I wished, with no interference and job satisfaction was much higher - between 1 and 2.

In the next few months I got to know the client, was able to sell more services, found out a lot more about drilling, geology and of course gained much experience of running jobs. The rig was on a development platform - a field had been found and its limits fairly well defined. Now a platform is permanently placed from which a dozen wells were drilled - deviated in different directions to produce the oil. The programme for each well involved drilling to the expected depth of the reservoir, making two or three logs to discover precisely the depth of the oil zones, putting in steel casing and tubing to reinforce the ~~co~~ borehole and then perforating the casing to start the oil flowing. Every time a well was drilled Schlumberger would be required ~~for~~ on three occasions - twice to log and once to perforate. On average the cost to the customer of these services came to $100,000 a well and they would complete a well in three weeks.

working with your hands. Tests are given once a week on the material covered in the previous week - a couple of hours the night before memorising block diagrams and a few key facts sees most people through. At the weekend each trainee has a go at running one of the 7 or 8 services we learn at school; and the logs are marked. Test, logs, and practical ability go to make the tutors' appraisal of the trainees' performance. If one of these is obviously weak the trainee comes in for a bit of stick. If he doesn't improve, he is normally encouraged to resign. In my school 7 out of an original 21 did not finish. This created a very difficult atmosphere for a wee few weeks as the whole process was kept rather secret, which made everyone a little nervous. However, those who were determined to get through did - if only because tutors like to see someone who works hard.

We finished just before Christmas and had six days off before leaving for the field. I was assigned to Congo as I could not get a visa for Nigeria (the same will apply for all Cambridge graduates - Nigeria does not accept that BA's can be engineers). Pointe Noire, the town from which oil operations are based is a very pleasant place, with excellent restaurants, clubs, cinema, a beach and European women. Once in the field a lot of the pressure of training school disappeared - one still worked hard, but in a more tolerant and friendly atmosphere. Within three months I had enough experience to become a fully operational engineer and was duly promoted.

Trainees generally have the roughest time, and for this reason I would put job satisfaction pretty low - 3 during school, improving slightly in the field. Earnings are high, especially considering the company is getting little useful work from a trainee for his first four months or so. The base salary for

During this time I would spent between two and three weeks a month offshore, most of it in preparing for the jobs, some standing-by because of delays. The jobs were short, averaging 8hours each, though occasionally I had to work 24 - 36 hours preparing and running a job.

In September I was moved to a new platform, on which we had installed a computerised surface unit, which was very interesting and made my job a lot easier. The jobs were still the same, but from my promotion until I left in February I moved from knowing how to run a job to knowing how to fix tools and troubleshoot any problem.

From February ~~is~~ until April I was on vacation. Vacation is counted at the rate of 4days per month and I was due 70 days, having overstayed in Congo.

Now I am in Cabinda, which is just south of Congo. There is nothing here except the Gulf camp and four offshore rigs. For this reason the coefficient is slightly higher and days off are more frequent. In the next few months I should be promoted to Senior Field Engineer, having learned more services and picked up some geological interpretation. The base here is smaller than Pointe Noire and lacks some equipment, so the job is a little harder. Certainly the life is harder to support, there being nowhere to go in the evenings. Still I have two week off in a month . . .

In writing at length about my work in Schlumberger, I have tried give some idea of the sort of things we do. Now I will try to answer some of the specific points you mention in your letter.

2. Certainly you are both mentally and physically stretched in this job. Mentally normally when trying to solve a problem which has occurred during or just before a job. Part of the stress is pressure to find a solution quickly, as time lost during a job is expensive, annoys the client and the base manager, and does not look good for the engineer. The other part is thinking up a solution to a problem you have never seen before - or even before that finding where in the line of surface equipment to downhole equipment the problem lies. Physically of course you are stretched during long jobs, which often involve carrying heavy equipment and climbing a lot of stairs!

As far as electronics knowledge is concerned, you can even get by on A level physics! There is none of circuit analysis, calculating outputs and values of various components which forms a lot of first and second year electricity courses. It is sometimes useful to know what a flip-flop is or what a microprocessor can do, like to understand how a tool or a piece of surface equipment works. This becomes important when trying to repair something - which is often done by a technician anyway.

3) Living out of a suitcase usually applies to days off. Life in bases like Congo is no different to from the point of view of accomodation, to life in Britain. Bachelors share a house and normally have their own, permanent room. Time spent offshore of course is different, as is living in an oil company camp. One thing is for sure - engineers in that sort of situation don't have much of a social life.

Marriage again depends on the location. Many locations are in towns, and often there are other oil company families to provide a community of sorts. In oil company camps however it's men only, so you see your wife only on days off. This is harder for Schlumberger personnel than others as most other companies have a 4 weeks on 4 weeks off schedule in such locations. After a few years in the company, marital status is taken into account when moves are planned. Personally I would not marry until after I cease to be an operating engineer and move into management or sales, where the schedule is more regular, and the chances of being in a remote location lower.

4) Qualities needed by a field engineer are, as the company literature says, aggressiveness (towards the job, not people!) an ability to work alone - even a preference, hard-working, adaptable, practical, and a logical, quick mind. Perhaps I should explain one or two of these. You are mostly on your own as an engineer. No one will tell you what you should be doing; so it up to the engineer to decide if he needs to check his tools again, or go to sleep. Also if there is a problem, the engineer is expected to diagnose and repair if he can. It does not look good if you bring a tool back to town with a simple fault. This is where aggressiveness and working alone come in. A large part of the job is troubleshooting. Most of the equipment, though technically fairly complex, can be broken down into identifiable blocks. It takes a logical mind to search for the fault - eliminating each piece from suspicion until the problem is located. Often the technically excellent people look for the ~~difficult~~ solu complicated solution, when most faults are simple, easy to find and fix.

5) I, like most other engineers, joined the company without knowing quite what to expect. Certainly I have enjoyed it more than I imagined, and this may change my plans from being rather ~~short term~~ to for a short

stay in the company to a longer one. At the moment I enjoy being an operating engineer, but quite like the idea of running a base - which is 3 or four or so years in the future. On the other hand, I am not at all convinced that my future lies in Schlumberger, or even in the oil industry - at some stage I will probably want to settle in Britain or some other Western country and take up a less demanding (and less lucrative) job. It is interesting to note that many engineers stay for around three years, then leave either for jobs in the oil industry, which is where most go, or back to their own countries.

Finally, a word about recruiting. What the company is looking for in a Cambridge graduate is not technical ability - 3 that much is taken for granted - but an attitude of confidence, willingness to work and get on, and reliability. Show the interviewer that you're not scared, but realise the job is hard, and that you want to do it, and you're in!

Best of luck.

R. on Mabel