

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Digby McLaren

INTERVIEWER: David Finch

DATE: October 2001

DF: Today is the 27th day of October and we are with Dr. D. J. McLaren, often called Digby McLaren.

DM: Not often, that is my name.

DF: That is your name, okay. At 607, 420 MacKay St. in Ottawa. My name is David Finch. What would you like to tell us today, perhaps would you like to start with some biographical information.

DM: About what, about the Society or about myself?

DF: About yourself.

DM: Well, I don't know how detailed you want. In terms of, I'm a geologist and I was sort of born and bred a geologist.

DF: Where were you born?

DM: In Northern Ireland, Kerrifogus???, in the country where the bigots live.

DF: And what year were you born?

DM: 1919.

DF: Now why do you say you were born into geology?

DM: Because my father was a geologist ??? from quite early, not exaggerating. I had a sort of interest in rocks and fossils and what was going on in life, you might say in general science from the very beginning. He brought me up that way. He was interested in everything. He was a marvellous man who suffered terribly with the Depression and so on and so on. Actually he had a great deal of influence in my life. He was a farmer and a successful one before the war and he was a horseman and a cattle man. The Royal Agricultural Show, in which animals of all kinds are given medals, he was a judge, a registered judge in the Royal Show of both cattle and horses. So when the war came he was in yeomanry, which is sort of the gentleman's cavalry. It's the same as the territorial army which is just for peace time soldiering and getting ready for war. So he was in the Army for most of the war. He was gassed and had all sorts of nasty things happening to him but he somehow survived. Then he came out of the army. He went to the university before that, Armstrong College which became the University of Durham and took geology and before his 3rd year was complete his father died, and his mother, who was a very, very unpleasant person, brought him back to run the farm so he never completed his degree. And this was a terrible thing because he was marvellous, I have his notebooks and he was with. . . all the geological people in England knew him and well and so on and so forth but he never completed his degree. Because when he got out of the Army at the end of the war he had married my mother and of course, it was a mixed marriage, he was Presbyterian, dour Scots people who everything was sinful, except not for him. And my

mother who was ascendancy Irish, that's to say, Cromwellian settlement in Ireland of the English, prosperous English and she was brought up in that very easy environment and had no hang ups at all. Nor did my father in fact. But the mother of course, was a Presbyterian, my father's mother, a strict Presbyterian and my mother was the Whore of Babylon because she said damn and backed on racehorses and smoked. Anyway he came out of the war, 1919 and began to get the farm back in shape when, it's happened now, foot and mouth disease and everything went broke. At that time the government only gave compensation if you got foot and mouth disease. He didn't get foot and mouth disease though he hoped he would. Then that went broke, the farm went broke and then he went into business being a sort of . . . quite bright at trying to do things, making straw ropes, he had a straw ropes machine, he had a company. Straw rope is coarse rope which the foundries used for packing fine material after . . . you know. . . different engineering things from the foundries and straw ropes were used for that everywhere. So he made a good living and then there was a thunder storm and fireball leisurely came across, went down the chimney of his work and blew up. . . and 2 or 3 people watched it. One of these very rare occurrences. Anyway so he went broke and he had no more money and his mother wouldn't give him any further support. She was a McNair you see and she's married beneath her, she married a McLaren. The McLaren's had to wait at the church at Belwidder??? in Scotland until the McNair's took their pews. Scottish history is exactly like the tribal histories of, you're reading about Afghanistan and all these countries you know, tribal countries. No different in Scotland, the history of Scotland is exactly the same.

#071 DF: So how did you come to get a geology degree?

DM: He showed me a lot. I walked all over the cliffs of Whitbury when I was brought up. But in those days a gentleman, in order to do anything, had to, I'm talking crudely because this is the way they looked on it. You had to have a good education which is not a bad idea but they had no money. My grandmother who was a very, very strong character, lived in Ireland, wonderful, wonderful woman, she also smoked and played bridge and went on cruises. And I remember her well, she was a lovely woman. She was spending out the end of a fortune, there was very little left but she still had enough to live on. And she supported me to go to school. So I went to a good school, it was a good school, tough. Just for your amusement, for a young, rather nervous child, going first to boarding school, learning that the motto was *Durra Verum Nutrix*, The Sternness of Men. And by god, it was. We used to run over the fells, you know, the hills of northern England, run over the fells in rainstorms and enjoy it.

DF: What school did you attend?

DM: Sedberg, northwest Yorkshire. Now it's in Cumberland or something that. That's where Sedgewick was, the great geologist. He was born in Dent. So the school was geological too. There was a science master there who was wonderful. And all the rocks and all the rivers and hills we ran around, on the edge of ??? district were geological and we knew what they were. And when I went home my father got various jobs in which to scrape a living and finally settled in Whitby on the northeast coast of Yorkshire. A beautiful place,

a fishing village. There he found at least, peace and my mother and my grandmother. But he went on showing me things. So it was my grandmother, there were relatives in Belfast of my grandmother who were prosperous lawyers and they came to my parents and offered to take me on as an article clerk in their company. My father brought this news to me at school where I was and doing quite well in science. He absolutely clearly and honestly told me what the thing was and I said, but I don't want to be a lawyer. He was so relieved. My grandmother didn't give a damn, she said, no, let the child do whatever he wants to do. So I got a sort of scholarship or some sort of similar thing at Cambridge and went there. Think of the horror from my parents, the absolute horror of this. My father was right through the war, he and my mother had watched this, I was born at the end of the war and they saw me grow up and prosper in health and 1939 the next war, you know. And they watched this. And of course, I was in the militia and I went out straight off and signed up. After one year at Cambridge with nothing you see. And the government wrote to me, to all the people who were first year university, all science students were told to go back and complete their degree in 2 years and then they went in the Army. Which was very sensible. So I went back in the first year of the war and this was very difficult, very difficult to work but nevertheless. And then in 1940 I went into the Army for 6 years. And didn't come out until 1946. In the meanwhile I had done an enormous amount of interesting things. The Army is boredom. When you're in action, I was in action for a year and a half in Italy, in action is boredom, sitting around with your finger up your ass punctuated by periods or episodes of extreme terror. Which, if you're an officer, you don't show.

#133 DF: What was your rank?

DM: Captain. I wasn't a brilliant soldier, never wanted to be. But the point about that thing, before I left England I got married, Phyllis, still here, still married. Best thing I ever did. She's a very tough woman too. And when I got into the Army we were able to live together for about 8 or 9 months in training areas. After Dunkirk and so on the Army was training hard but couldn't do anything until in December 1942. That's when I sailed away and said good bye to my wife for 3 1/2 years, didn't see her again. And I didn't know until I got to Durban and got the first mail on a series of troop ships, that she was pregnant. And my first son was born when I was in the Syrian dessert and I didn't see him for 3 years. Horrible. But I was all over the Middle East and I was conscious of geology. Before we sailed in the troop ship somebody had the rumour that we were probably going to the Middle East rather than to the Far East or other areas. I was heartily glad I didn't go to the Far East, that was rather unpleasant. But I was in 10 countries in the Middle East on and off and I was looking at them through the eyes of a partly trained geologist. It was interesting, I had a marvellous time. But of course, as I say, we were doing all sorts of strange things, firing guns all over the place and keeping order. Never mind, the Army is not worth talking about. But I survived somehow and came back to Cambridge and took another full degree and then came here. At that time I was reunited with my wife and son and then we had another baby. I'd passed all my exams well and it was a sellers market. With a good degree in geology I had jobs lined up everywhere in the world, absolutely,

you just had complete freedom of choice, it was amazing. We sat down, metaphorically, with an atlas and said, where shall we live. We settled on Canada. We didn't want to live in England. Apart from the fact that we thought we wanted to spread our wings wider and also thought that they didn't pay enough. So at that time somebody else had gone back from Cambridge. . . to England from Canada with the news that the Director of the Geological Survey, he'd met him, there was an International Congress which I didn't take part in of course, in '47 and this chap talked to the Director of the Survey and said, there are one or two people in Cambridge looking for jobs. And we were soft rock geologists, I was in geology and palaeontology and stratigraphy, not minerals in any way you see. And of course, the Director of the Survey, the Geological Survey was a very good one but it was heavily mineralized and most of the works and the mapping was looking for thingamajig. And then in 1947 Leduc came in and the Director of the Survey was looking hard for good soft rock geologists because they hadn't got enough. They had to map and describe all the foothills because the foothills go straight down in to the oil fields and so it was a piece of cake. Somebody wrote letters on our behalf, 2 or 3 of us and he employed up, almost sight unseen you know. It's true, I always say I arrived in Canada with a very good degree but nobody knows that, I was never asked. But it was the right choice and within a year I was doing what I wanted to do. I was in the Rockies with pack horses.

#203 DF: What year was that?

DM: We immigrated in '48 and then in '50 was my first field season.

DF: Where were you in the Rockies?

DM: Banff to Jasper. Sampling, looking, just trying to find out what goes on. They were scarcely mapped you see. But I discovered in the Survey that you had to have a PhD to get top grade. Well, I had two children by then and the third one on the way I think, no, no, two children. And I wanted to get more money because we could scarcely live on what I was getting. I was a scientific officer but not a full thingamajig in the way the Survey was constituted. So I had to find some way to get a PhD. All the universities I tried in Canada said, we'd be delighted to have you, marvellous, very good, but you would have 2 years residence. I said, but look, I've spent 6 bloody years in the Army and I'm over educated anyway. In terms of all the exams I've passed because it was before and after the war and I want to get on with my life. I don't want to do 2 years. So they said, we can't, the rules don't apply. So a chap we knew slightly at Michigan University said, write to Ken Landis at Michigan. Landis was a very distinguished petroleum geologist who had covered himself in glory and then taken up teaching and he was a revered professor. So I wrote to Landis and said, I want to come and get a PhD in one year. He wrote back and he said, I have looked through every document I could find in this university to see if you could come, take a degree, in one year and he said, I can find no reason why you shouldn't. The fact that nobody's ever tried, he said, is neither here nor there but I'm willing to take you on if you are. That's a true story. So I went to Michigan, had a marvellous time. I'd spent the war fighting Germans and of course, in the middle of the German belt in Ann Arbor, there in Michigan, all my professors were Strum, Ehler, Kesling, Killam, all Germans, every one of them and they were the nicest

people I've ever met in my life and they became firm friends all our lives. It was so amusing. And Phyllis came of course and we had another baby and ups and downs with her health and things, it wasn't easy but we had a winter at Michigan. And it was jolly good, it was very good, I learned a lot. So there we were and after that I was paid more. And I set out my field program for the first few years I was with the Survey was Rockies.

DF: What did you do your PhD on?

DM: Well that's the point. The first year at the Survey I went into the field and collected a lot of information. There was Dutch geologist who was very good and still a friend, Rein de Wit.

#257 DF: Oh, he sends his greetings, I saw him on Monday.

DM: Oh really. Oh, he's a marvellous man, good. Well, he had a field party the year before that and they said, look, you better go with de Wit to learn the ropes and so on and so forth, which was wonderful and it was marvellous and we had a lovely season. He showed me, not only the. . . but the procedures you know. I had no problems with horses because I was a horseman and I love them. So I had the qualifications straight off you see, to do field work. And after that I worked with the pack horses slowly northwards, doing. . . I wasn't mapping, I was doing stratigraphy, describing the stratigraphy, trying to interpret the things I would see. And it was fascinating and wonderful. And of course, as soon as I started this work I got involved with petroleum geology because it was petroleum geology though I wasn't looking for petroleum. I was looking at the rocks because they were exactly the rocks of Leduc you see, at the surface. That gave me just what I wanted because I liked mountains, always had, it was really, really interesting. And of course, became a regular visitor to Calgary and I used to get my field trips. . . I started my field work from Calgary you see, left the truck here and went on.

DF: So how did that research help your PhD?

DM: Oh the PhD, was that first year, I had ample data after one year in the Rockies. I collected all the fossils I could and I zoned some of the rocks that I collected from and came up with a zonation on *rinkcanilia* ??? brachiopods and made that into a PhD. It's a shellfish but not a mollusk, it's another kind of shellfish. I published a paper on that but Michigan took my PhD thesis, just hook, line a sinker, they said, this is perfect. So I just wrote a report for the Survey and said what I'd done and put it in as a PhD thesis. I got my PhD in 2 years.

#307 DF: So what did you do then?

DM: That's what I did. I had several field seasons doing geology and writing reports on the rocks and my bibliography. But of course, I was, you might say, an all rough journeyman stratigrapher. I tackled all sorts of things. The most exciting thing I ever did was in 1955. Fortier and some people like Solant you know, said that Canada should be doing more in the Arctic to establish sovereignty and things like that. So they arranged a giant operation called Franklin to map the Arctic Islands, the northern Arctic Islands, from Bathurst up to Ellesmere. That was 30 geologists, 10 full degreeed, 10 or 15 and a lot of senior students and also camp workers, radio operators, everything. This was primitive times, 1955. To

spend the summer, it was 4 1/2 months. Three of us planned where we would make sort of our tents, have our camps later in the summer. In the spring, that's the end of April, early May, we occupied the. . . I flew in a ski wheel Dakota, DC-3 to southern Ellesmere Island to find a landing place, with an Eskimo and a dog team and an assistant. We flew up there and went round the coast line and round the coast line, round and round, various areas until we found, the pilot thought that the ice looked good enough, not too rough, good enough in one small bay, to land. So we landed. We unloaded a lot of supplies and my dog team and Eskimo and my assistant, who was a son of the milkman actually, in Ottawa, a marvellous chap. And there we were and they flew away, we were there for a month. We then hitched up our things and reconnoitred the coast line where we were with dogs and the Eskimo. It was just wonderful. And every week the DC-3 would land and deliver more stores. They were doing that in 2 other places as well, 2 other geologists at work. One of them out at ??? and one further west. These were going to be the sites of the base camps for operations later, when we used S-55 helicopters to put out field parties in the summer. But this month we had, we were put there essentially, to enable all the supplies to be delivered on to the sea ice. And once a week we would have to return to our base and the base tent. Most of the time we were out fly camping on the coastline on ??? trips and once a week. . . And we had one day with a sledge to help us and we would unload all the gas cans and all the food and all the tents and things for 30 man occupation. But we did a great deal of geology in between, it was marvellous. So then back to Resolute and the S-55's arrived. They were very early use of helicopters. The S-55's were great big brutes, looked large, and they were completely gutless. They could hardly carry. . . they could only just take a field camp. You and your assistant, your tent and supplies for a week or two, that's all they could do. But it didn't matter, they put out field camps you see, from the central base, where there was cook and radio operators. So they had 3 bases during the season, 1, 2, 3. We were all put out at various places and walked. It was walking, walking, walking, I never walked so far in my life. This was a wonderful operation, Operation Franklin. As a matter of fact Sorry, I haven't got the text there.

#413 DF: So what is it you have here?

DM: This is the report that we published, after this. . . it was called Operation Franklin, 1955. It was a tremendous report and of course, it started a boom in research for petroleum in the Arctic. One of two people made themselves millionaires by trading in, you know, buying and selling for rights. But of course, they haven't found a great deal. They've found some on Bathurst Island, in the high Arctic. There's oil there but they've never gone after it because it didn't look as though it was big enough to justify the immense cost of exploiting it.

DF: And bringing it south, yes. Can you tell us about your career in the 1960's. We need to get to 1971 eventually, when you were President of the CSPG?

DM: I was a journeyman geologist in Ottawa and I was head of the palaeontology section after a few years. And of course, I took up my own scientific interests which were broader than just western Canada. I was pursuing problems over the top and visited Russia in the early 60's to discuss geology with them. I've got a bibliography of what I published and it was a

very large number of maps. Or I had a part in a lot of maps. There was another big operation 2 or 3 years after the Franklin, was Mackenzie, we were mapping on the Mackenzie, which I took part in. Other than just my own every day work. And at the same time I was getting on with describing some of my fossils, which were used for correlation.

DF: How did you come to be associated with the ASPG?

DM: As soon as I started working in the Rockies and coming to Calgary, the Geological Survey had a small office, Wickenden was in charge of it, I've forgotten his first name, nice chap. And there was Helen Belyea there and this was the Survey's office doing useful subsurface studies of the oil potential rocks. I was studying the same rocks. What I was doing was studying, and there were other people too of course, and the companies were doing the same, I used to have a lot of friends, Gerry Henderson and people like that, run into them in the Rockies, looking at the rocks and describing them. Because they also occurred under the plains, similar. So very soon after I started I was immediately told about the ASPG and I joined it, I can't tell you the date but it must be the early 50's. And pretty soon I began to publish notes and papers in it and give talks. I found 1 or 2 things this morning, like this, this is the sort of thing. That's the sort of publicity I got, Canadian Rocky Mountains, Development of Devonian. What's the date of this. It's probably been eaten away.

#508 DF: It's in Oil in Canada, the technical. . .

DM: It's Oil in Canada, that's ???

DF: Yes, and would you like to read the title of the article?

DM: Reef Development in the Devonian of the Canadian Rocky Mountains. I gave this talk in April of 1953 to . . . paper at the annual general meeting of the Canadian Institute of Mining and Metallurgy I gave this talk. And I gave it to the ASPG luncheon meetings and things, that kind of talk. As soon as I had anything interesting I would try and transmit it. This is an example of that. Yes, I'll show you this, I'll show you some of the others too.

End of tape.

Side 2

DF: The article that Digby just mentioned was printed in Oil in Canada, December 21, 1953. So that's the reference there. Tell that story again.

DM: Well, I used to take packers out with my. . . you know, I would hire pack strings. Anything up from 20-30 horses. On one occasion, Tom McCready who is one of the marvellous type chaps, champion skier and also a great guy. He was my packer one year and there was one place near what is called the Ancient Wall, it's a geographical feature which I wanted to see, I wanted to get to the other side of. I asked him, McCready to take a small. . . just take 2 or 3 horses and we could go up there for a day or two because I could collect all I needed. So he said, it's a hell of a climb for the horses and so on. So he said, yes, we'll try and so we went off and it was a hell of a climb and we got up by and got in it. Then of course, I collected a lot of stuff, samples and we came back down again and then I learned in Jasper that they called it McLaren's Diggings. It was always just

McLaren's Diggings and then I discovered in a geographical magazine that McLaren's Diggings is now McLaren's Pass. I've been promoted.

DF: And that's in the current edition of Canadian Geographic.

DM: Yes.

DF: Yes, that's the one on the newsstands right now, that's great.

DM: The map that goes just northwest of Jasper. They were great guys of course, the packers.

DF: So tell me how you came to be President of the ASPG, as it was called.

DM: I don't know. I haven't really thought about that. I mean, I was very active in it because I was doing things all the time. And I used to go to the meetings and take part in the debates and arguments and rows.

DF: Were you living in Calgary at this time?

DM: Yes. I went to Calgary in '67 and came back here in '73. When I got to Calgary I became the Director of the new organization for the Geological Survey called the Institute of Sedimentary and Petroleum Geology, ISPG, which was very exciting. Because we had a free hand. We'd got a good Minister and Deputy Minister and a good Director and we good funding. So I went out there and we built up this team, which was a real team with a tremendous esprit d' corps. You couldn't imagine. We were all arrogant bastards really, we were so proud of ourselves. We really were very proud of ourselves because we got everything going. We actually were allowed to purchase the equipment they wanted for analysis, for all the different analytical techniques I wanted to use. And I had a wonderful staff. So I was already quite well known by people and I made it my business to be. One of the purposes of the ISPG would be to service the oil industry. We would identify their fossils, we would discuss their rocks with them, we would meet them in the field. They used to pay some of our field expenses, the companies, it was a very good, very tight relationship with the companies. And this worked very well for a number of years. And of course, as I say, the members, the scientists in this organization considered themselves an elite, which is grand when you've got a good esprit d' corps. Because they were very good. I dearly loved them. So I suppose it was reasonable that I should come there, in that. Incidentally one of the interesting things in the thing you sent me is the discussion which was in my Presidential description. The fact that I believed that they should stop, or else I say that, it has now been agreed that we should stop holding elections for officers with 2 or more people because it's ridiculous and wasteful. Because you choose the best men you can find and if two of them thingamajig and he doesn't get in, he's pissed off and he won't stand again for awhile. Of course, this was in the air anyway, it was coming, both in the AAPG and I think the GSA and everything else. You don't have an election with more than one likely candidate because it wastes people. That was one of the things that I was very strongly in favour of was giving up this. . . we used to have to find 2 people to run for President you see which won't do. But that's all in there. So I didn't win an election but somebody appointed me and I enjoyed it, it was very interesting. I also liked the people I was taking part with. . . mostly, mostly. It was a natural really, to have this new institute coming up and serving the industry and also encouraging them in their ways of. . . For instance the Society ran this Devonian symposium. I was, at that time, an authority on the Devonian. I'd worked all my life in Devonian rocks and was doing it

with Devonian fossils all the way around the world. So the ASPG had plans which I was very pleased about, of holding a symposium on the Devonian, a global symposium on the Devonian. This coincided exactly with the time I moved from Ottawa to Calgary to take over the ISPG. It was a perfect collaboration and logical. And this Devonian symposium was a crashing success. I mean, they got everybody, the Russians, everybody from Timbuktu, everywhere where there were Devonian rocks. They all came and it made for good friendships as well, lots of people got to know each other. Before that I'd been working in Russia quite often and going on subjects which interested me and because of my position in the Geological Survey I was able to pursue. So that it was useful to them that I could help and the organization could help the CSPG. And also we, that is to say, the government geologists, could use the CSPG in their work. It was all one group, it really was. And there was no rivalries, there were independent. . . I mean, marvellous anecdotes I could give you. Peter Moore, he's a marvellous man, very amusing chap and then there was Colin Crickmay who used to come to meetings and give little asides, ??? , quite amusing you see. And Peter Moore would take him on and we would have marvellous debates. Some of them got quite savage. But it was a very interesting experience, these early years, the early years of what we're talking about, how successful it was. I mean, we had several of our geologists went off into the field using the helicopters that were company's and using the company camp. Nobody thought anything of it. Providing the G-men, the government men were free to publish anything they wanted, and they did. Which of course, advanced the science enormously. So the CSPG played a very important role in the development of the petroleum industry in Canada. There's no question of it and the government played a role in their support. And the industry played a role in their support of government, a big role.

- #128 DF: Reading through your minutes from the year you were President were there any other highlights, any other things you'd like to talk about the year you were President?
- DM: There was that and the other one was the name change. We didn't achieve, in fact we didn't really try because it had to come in progression but we opened the door in our year to considering being the Canadian Society. And the next executive went forward with it, I was the last President of the ASPG. And happily you know. And also we changed the rules then, of not having to vote for 2 candidates in elections, that was changed too. They were both recommended in my report. Not that I did this but it was the time that it should be done and was being done.
- DF: What else do you have to say about the ASPG, the CSPG? What do you think of its role in the geological community in Canada?
- DM: It was the best club in Canada.
- DF: It's turning 75 years old, what would you have to this 75 year old youngster?
- DM: What do you mean?
- DF: To the Society?
- DM: To the Society?
- DF: Yes, it's turning 75 next year, we're celebrating that. What would you say to it on its 75th

Anniversary?

DM: It's self congratulation because we all believed in it or owned it you know. It really did. The geologists were very open about that. I don't know what you'd say. This is gimmickry.

DF: Well, do you wish it another 75 years?

DM: Yes. And I hope I'm invited to the next one. I don't think I'm exaggerating this. I'm not am I, you must know enough of that, that it really is. . . There were and again, in this report, there are all sorts of differing systems were taking part. You give quite a good account of this. It was all this business of . . . oh yes, the legality of geology and the engineers and all that sort of thing. Well, I haven't anything to say about that. It has to be done and it is useful. I know it's useful to have the engineering. . .they are recognized or geologists recognized. It's something I could let other people do because all these . . . frankly, all the niceties of how to approach and how to do things, bore me. If something's good and should be done it usually will be. But you do have to have . . . I was always a very difficult person to administer. I find administration boring, although necessary but I'd rather somebody else did it.

#186 DF: Can you tell us some stories from Operation Franklin? What were some of the things that you got into, up there on the Arctic Islands?

DM: Oh, it was huge. I mean, the experience was huge you know. To go on to Ellesmere Island. I spent a month or two in Goose Fjord on Ellesmere Island, which flows south into whatever, ???, doesn't it. This was where the Fram wintered 2 years. I think it was '88 and '89 I think it was. This was the Norwegian explorer, anyway the Fram is well known. The Fram wintered two winters before 1900, it was 1898 or '99 or something like that. Dates may be wrong. And it was interesting and I'm sure this hadn't been visited very many times after that, although it had been visited of course. But we found, on the beach, timbers, squared boards and things which had been left by the Fram. I think the built houses and something, Fram over wintered two winters. And we also found collecting bottles, 1 or 2 collecting bottles for somebody for insects. These had been lying there ever since they were dropped and had survived and they were mauve, purple. This effect of sunshine and apparently it takes a very long time to do that. So that was rather interesting.

DF: What colour had they been to start with?

DM: Oh white. White glass.

DF: Oh and they'd turned colour because of the sun?

DM: Yes. It takes a very slow process but it does, it does colour. My mind is very, very difficult, I get a flicker of something and then I lose it, it's very unpleasant.

DF: I was asking about adventures on Operation Franklin.

DM: Yes. The one thing about field work in this Geological Survey I learned very early on, is no heroics. You don't take risks, you never, never misjudge the possibilities. And that runs through and there are 1 or 2 people, I won't name them but one man I know who was responsible for the death of a pilot. Because he pushed him, you know. We learned, if the pilot didn't want to go, don't overrule him. And of course, most pilots won't be overruled. But it was some guys who ??? possibilities you know, really influencing

people. So in principle, no heroics in these things. That doesn't mean to say the work isn't hard and long but you don't take any chances if you can avoid it. I can't really . . . coming back to these S-55's which were awful, awful planes. You could have had a dinner party in the cabin but they'd have had to be midgets. It was a terrible machine and it had gear noises. I'm deaf now and after a flight, my camp was moved say, from one to another, my ears would ring for 2 or 3 days afterward. It just lacerated your ears. Down at the bottom, this awful, awful gear whine. Nobody in those days told you, we should have been issued with ear muffs, good ones too. Same with eyes. I had cataracts because I worked in the high mountains for years without dark glasses. Nobody tells you this but they do now. And I'm quite deaf. I was in the artillery during the war and . . .

#261 DF: That didn't help either.

DM: Well, it wasn't half as bad as they S-55's. A few good round bangs and the guns. . .if you're on the right end of a gun, that is, you're shooting at somebody else it doesn't make all that much of a noise. When you're being shot at, that's another thing. ??? shoots, which the Germans like, that's when I say abject terror, waking up in the morning in a slit trench with a bloody great shell bursting above your head. That's terrifying. And you know there's a whole lot more coming. They tell you, this is noise trauma.

DF: When you were working on Operation Mackenzie, did you do any work with canoes?

DM: Oh yes, all the time. I came down Trout River, from the lake, back to the Mackenzie by canoe.

DF: What kind of canoe?

DM: I don't know what kind it was now. Just ordinary with outboard motor and not too big because we, at the long portage, over the falls, they sent the helicopter for us and took the canoe over the portage for us. Otherwise we did it all.

DF: Where did you learn to canoe?

DM: That's a good question, actually. You learn because the Geological Survey always takes students out and students graduate upwards and the best ones are chosen if they want to have the job. I didn't graduate through that thing but I had Rein de Wit to assist me early in how to behave in the field and I've got a good deal of common sense and I was brought up on boats just as I was brought up on horses. So no problem there. So what canoeing with an outboard motor, you make sure you load it right and don't go out if there's a storm. Lakes are dangerous with canoes, rivers aren't. The drownings, we've had 1 or 2 drownings in the Survey but they were lake storms. And they can get up very quickly. But river work, that's different.

DF: Anything else you'd like to tell us about your career? Any regrets, any things you wish you could have done?

DM: This is terrible you know. When I'm now telling people, one descends to cliché, you can't help it but that I have had a life in which I did exactly what I wanted all the time. And that, when I came here in 1948 I found that the Geological Survey was willing to pay me to do exactly what I wanted. And it's true, it's true. The only time I was doing things I didn't want to do was in the Army. I'll tell you a story about that but you mustn't. . . well, you'll see why. I'm an easygoing guy and I have few enemies I think. But I've only had

two people I really hate, and I mean hate. I would still now, and they're dead now, happily watch them bleed to death, that kind of hatred. One of them was my battery commander when I was in Iraq, we had a summer in Iraq, in tents, in the summer. That's terrible. We had deaths from heat stroke, we had all sorts of things. And it was ghastly. I was in charge of the regimental survey troop. Gunners have to be well surveyed in so the guns can all hit the same target. And you can talk the language, you can also give other guns, you can call for the corps artillery if you like and the heavies can come in with your observations. So you take this very carefully. So training for gunners is just playing with theodolites, or levels you call them, ??? levels. And every time you move the guns you've got to put them all on the same grid. ??? never knew that, they couldn't fire barrages you see. We could fire barrages and be very effective. But you have these ways of doing them and you train and you train and you train and you train all the time. My troop was called specialists, they were all people that were mathematicians and they were all ??? types because they were well educated and quite amusing guys you know and really people who know what's what. We paraded at 5:00 always and we trained and did something or other till 8 or 9 and then we just went back to the tents and lay sweating, double walled tent but still, terrible heat. Then you'd get up again at 5 and do a few other things and go to bed. When we trained with the specialists we'd go out, it was pretty flat but we were on the very edges of the foothills of the Persian mountains. The foothills are still in Iraq. And we would go up into the hills and shoot angles, calculate gun positions, put a stake in and do it. And they all had to that and do these things and do the arithmetic correctly and use 7 figure foot logs, we didn't have computers then. So this was all grand. And we discovered, in this appalling heat, there was a dry river valley coming down, just a little waddie and we discovered there was a lake. There was a natural dam there and here was a beautiful pool about 30' long, of beautiful water. Because the drainage was underground and the way the ground was shaped, it had formed here. So of course, we would do our training and then we'd drive quickly to this lake because nobody else knew about it, anyway they were doing other things, and tear all our clothes off and leap in and it was wonderful, just absolutely wonderful. Then we'd get dressed wet and go in. After a day or two my battery commander had me into his tent, he was a pompous little ass and he said, McLaren, I understand that you've been bathing with the men. He said, that is not behaviour becoming of an officer. So I waited for him to finish and I said, I suppose you don't want them to know that officers have balls. And he put me under house arrest in a tent. So I went back to my tent, there are Army regulations to define house arrest and what was to be done, I wasn't to be flogged though. So I went in and a friend came in and asked me what I was doing and I told him my story. And of course, the tents all hear each other, that story went right round the regiment and I knew he was powerless to do anything about it and furthermore he couldn't go to the CO who was a regular and had a very good sense of humour. If the CO had known he probably would have been sick with laughter.

#420 DF: Any other Army stories?

DM: Oh plenty. But that's my favourite because it gave me more satisfaction than I've ever

had.

DF: So did you get all the adventure out of your Army days that you thought you would?

DM: No. But I got a lot of very interesting travel and history. I mean, this is all in Herodotus, it's all in the Bible you see. And before I came out from England I was telling you that somebody had a rumour that we were going to the Middle East and I chose my books. You weren't allowed to have very much for weight but I chose an Every Man's Classical Atlas and the Bible and the translation of Herodotus and Alexander Kinglake's letters on the Middle East and I think that's about it, and it was exactly right. It was just beautiful. The Classical Atlas was very good, because it showed the route that Darius took down the Vitak ???Pass. We came down there you know. And we went up to the Visitun??? Heights above Karmenshaw??? which is the Rosetta Stone of Asia carved on the heights. We camped there. You could look at it through binoculars. You couldn't climb it, normally they would have scaffolding for people to look at it. But that was wonderful. And I was in Palestine for nearly a year with the Palestine police, with the Arabs and the British soldiers. Glub Pasha founded the Palestine police and it was a wonderful, wonderful set of men, both religions, both races. And they got on extremely well and their officers were Christian and . . . none of us I'm sure would ever have dreamed that the ??? . . they were all good friends. And of course, the other thing about the Army is, I mean, you get ??? and it's nasty, I saw a few of the German atrocities or I was nearby when I was told about them. The priest burned in his church and quite a lot of very nasty killings in trenches. But other than that, the Army is sort of ludicrous really. Because you all live like little boys playing with pop guns but they aren't pop guns. But other than that I enjoyed myself. Because I'd only got into the Army one year after the war started, because of having to go back and finish a degree I had to stay in until early '46. And that was all right, I mean, it was a prolonged thing, bloody awful. And I published my first paper in geology in Italian.

DF: Oh really.

DM: Yes, I didn't speak Italian but I knew it fairly well. But the secretary in somebody's office translated it fairly well. Just for fun, on the Perugian Hills, Perugia is central Italy, do you know Italy?

DF: No.

DM: Perugia is probably one of the most beautiful places in the world. The view of the Tiber valley below you, Assezia on one side and Lake ???, it's quite beautiful and I enjoyed that, I enjoyed it hugely and had a lot of friends.

DF: Well, that's wonderful. I'm sorry to have to interrupt you but we're running out of tape here.

DM: No, that's all right, I've waffled too much really.

DF: No, not at all. So on behalf of the CSPG . . .

DM: Yes, but I hope this won't go into the CSPG will it? I'll tell you what, the only thing you can publish is the story of me and my battery commander and the troops swimming.

DF: That's the only part I can't publish.

DM: You can.

DF: Can publish, oh okay. The rest of it I can't. No, well, on behalf of the CSPG and the

Petroleum Industry Oral History Project I'd like to thank you so very much for sharing some time with us this afternoon and we'll end the formal part of the interview at this time, thank you very much.

DM: All right.