

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Don Stott

INTERVIEWER: David Finch

DATE: October 2001

DF: Today is the 22nd day of October and we are in Sidney at 2290 Amherst Ave. with Dr. Donald Stott. My name is David Finch. Could you start by telling us sir, where you were born?

DS: I was born in Reston, Manitoba.

DF: What year?

DS: 1928.

DF: What were your parents doing?

DS: My dad was a commercial traveller for J. H. Ashdown Hardware. It's a major hardware wholesale through western Canada, in fact, there used to be an Ashdown retail store in Calgary, on 8th Avenue.

DF: So he was a traveller?

DS: Yes. And Reston was sort of in the middle of the area that he travelled around, southwestern Manitoba, southeastern Saskatchewan, right on the edge of the dust bowl or in the dust bowl country for the Depression years.

DF: So what did he do in the 30's?

DS: Well, he sold hardware. Made some sort of a living at it. We were certainly reasonably, comfortably off. We weren't well to do or anything, grew all our own garden stuff, had a big garden. He had a salary, which a lot of people didn't in those years. So that made a big difference. And he said the 2 major items that sold in the Depression years were radios and copper boilers. People couldn't afford any entertainment so their only entertainment was radios and he won a trophy and some money for selling the most Stewart-Warner radios in western Canada back in the 30's. And the copper boilers of course, were used for brewing. Because people couldn't afford to buy. . well, it was basically Prohibition anyhow but they all brewed their own beer or distilled and so they all needed copper boilers.

DF: And your father's first name?

DS: Franklin.

DF: So tell us about your education.

DS: I received my Grade 12 at Reston, stayed there until I did that and then my parents had bought a hardware store at Wolseley in Saskatchewan. Dad was getting too close to retirement age and Ashdown's were tending to let their older employees go so they wouldn't have to pay pensions and he felt he should get out and get his own store so he could look after himself the rest of his life. So he bought a store in Wolseley, January 1946. I was still in Grade 12, I stayed in Reston to finish my schooling that year. The fellow that Dad bought the store from in Wolseley kept pestering him later on, to buy

back the store because Dad had increased the business so well, within 6 months. So Dad, in late August put a price on the store that was so high that he thought the fellow would back off. Instead of that he wrote a cheque out on the spot. And my dad didn't have a store, he didn't have an income. So he turned around and bought a store at Wapella in Saskatchewan. Even then the town was dying, it was not a good purchase. I had been at business school for 6 months because I was to become the bookkeeper in the store. And I went back to the store and stayed then, until fall of 1949. Being bookkeeper I could see that this business did not support 2 families. I was still young, I wasn't married but if I was thinking about getting married and having a family there was no way the business could support the two of us. So I decided to go back to university. That's when I headed off to Manitoba. So that's the early life.

#046 DF: So why did you decide to do what you did at university?

DS: I'd intended to go into science, I'd been good in science through high school. I'd intended really, to go into chemistry and then the first year I got into the very badly ventilated chemistry labs at the old Broadway buildings in Winnipeg and was dreadfully sick for 3 months. I'd be sick the 2 days that I was in the labs and most of the rest of the week and I'd recover on the weekends and go back into the labs and be sick again. So I thought, chemistry is out and I didn't like physics too well but I had taken geology and I was very much intrigued and I thought, this looks great so I decided to give it a try. And that's how I got into it. I'd never heard, really, of geology. Coming from a small country town, country school, you didn't get any geology in school in those years. And of course, I'd taken geology at university from Ed Leith, who probably gave the best geology course that I ever had throughout all my university years. He was remarkable. So when it came time then to make the choice for the honours degree, the extended geology course, I took geology. Finished at Manitoba and then I took a Masters degree there with Leith. At that time there had been considerable drilling through Manitoba, the time of the Virden discovery and so forth. There was quite a few wells around and I did a study of the Jurassic of Manitoba from the available information.

DF: Well logs?

DS: Yes, well logs and samples. A few cores, there wasn't much coring. So it was really one of the first basic studies of the Jurassic in Manitoba. I don't know that it's been much altered since although it should have been. But it was interesting. So then after that. . .

DF: So that was your Masters?

DS: That was the Masters. I had worked for Cal Standard for one summer in '53 and they wanted me to join them and I decided, no, I would go on and take my PhD. I was getting to be an age where if I didn't continue I probably wouldn't. So I didn't go into industry and I should have probably gone in for 2 or 3 years just to get the basic training, it would have been exceedingly helpful at the time. That was starting '53, '54. So I applied to 2 or 3 universities and was accepted at Princeton. I had known several people there, Princeton had provided a lot of geologists for the Survey, a lot of Survey geologists had been there. Princeton liked a field thesis, the Survey was in the position to allow people to do field studies and the whole thing meshed very nicely.

#081 DF: Wait a minute, were you working for the Survey by this point?

DS: Not permanently but for the summers. So then I went to Princeton, I was at Princeton from the fall of 1954 until the spring of 1957 and working summers for the Survey. I was studying the upper Cretaceous marine rocks of the foothills, the Alberta group. Then the Survey wanted to do a large mapping project in the Territories, Operation Mackenzie and this was basically a do or die effort because they had staged 2 or 3 helicopter operations previously which had not been particularly efficient or successful. They wanted to see whether this particular one would be any better. Well, as it turned out it was a huge success, mapped a huge amount of country at a pretty reasonable price and they were highly pleased and that's the reason the Survey continued with helicopters. If that had not succeeded, they'd have said no to helicopters and the Survey probably would have been years and years behind industry at that point.

DF: So what was the technology they were using, you say helicopters but. . .?

DS: We were just using helicopters as transportation and then making field observations on the ground.

DF: So nothing aerial, you weren't working from aerial photographs in conjunction with that?

DS: Yes, we had aerial photographs. The country had been photographed. We had fairly decent photos as I remember. Bob Douglas, who was the Party Chief and Don Norris who was sort of second in command, were doing most of the structural mapping and the rest of us were doing stratigraphy, sedimentology, palaeontology. They needed somebody on the Cretaceous and so I had been encouraged to come and also to take more or less permanent employ with the Survey. I had almost finished my thesis, I hadn't quite. I thought, well I'm not going to go back to Princeton for a full winter because I don't need to. So I went on the Operation Mackenzie and then went back to Ottawa, finished my thesis on my own time before Christmas and then continued onwards with the Survey permanently then from there.

DF: So you worked for the Survey in Ottawa?

DS: Yes. I joined the Survey in 1957 and stayed in Ottawa until 1961. The Survey had opened a Calgary office in 1950, planned on actually building a new building. Didn't get around to it of course, for quite some time, but they expanded the staff and were encouraging people to move out. I thought, I was married at that time, if I wanted a house I was going to buy a house in Calgary not Ottawa. So I might as well move then and so I moved in '61 and of course, we didn't get a new building then until the Institute of Sedimentary and Petroleum Geology was built in 1967. Then I stayed with the Survey until I retired in 1989.

#119 DF: So what did you do with the Survey in Calgary?

DS: I continued my Cretaceous studies then. I had finished the study of the Alberta group from Grande Cache south to the Montana border and thought I would continue northward. But it was obvious that that wasn't a full time project so I started to pick up the lower Cretaceous from Grande Cache. And I started on the Fort St. John group, the lower Cretaceous marine succession. Because much of the area hadn't been mapped or not mapped in much detail, started in sort of a second priority to carry a rough base map

with me, geological map, as I went. So I mapped all the country that I was going through. Not in a lot of detail and at times, not too accurately, but it got mapped. And there was nothing else available.

DF: So what were you using to map it?

DS: I was using some photographs and they weren't great at that point. Some of the base maps, topo maps, were 8 mile maps which are horrible. I think it was the B.C. government had started to produce some detailed maps but hadn't got them published. And they were producing maps, I think, 1:10,000. But they were immense sheets, far too detailed for what I could use them. And at times we got lost because we didn't have proper base maps, but not for long, a couple of days at a time. The whole pack string.

DF: So this was all horse back?

DS: Yes. I used horses from 1958 through to 1962, I think was the last year I used horses. Had some use of helicopter in the early 60's, '60, '61 I had a couple of week or so with helicopters.

DF: Can you go into some detail as to, were you the Party Chief on these?

DS: Yes. I was all by myself.

DF: Yes. Can you tell us the details. Like, it's a lot of work getting around in the bush, even more so it you've got all these horses and everything.

DS: Well, we usually had a reasonably small party. In the early years, when I was doing my PhD thesis, it was small, I just had myself and a student assistant and a cook and a packer. I suppose we had maybe, 15 horses. The first year we travelled from Hinton, on the Jasper highway, up to Grande Cache and then back down, all through the western side of the foothills, down to south of Nordegg, Clearwater. And the next year, I didn't use horses, I used a truck basically, and just had a student and a cook. I needed a cook for security in camp because we were along the forestry road. So I had an 18 year old. He wasn't the greatest of cooks but he and the student got along fine so it was fine, a good arrangement. Then in the north, where we were travelling larger distances and away from supplies much longer, I usually had 2 packers and a cook and a senior assistant and 2 juniors. The first summer I think I was not back into town for over 3 months, about 3-3 1/2 months that we didn't go back into town. We were just out so far and there were no real roads and it just was not practical, so you'd just send the packers off to get supplies. Then in later years, we were working in areas where roads provided better access and we weren't too far away most of the time.

#170 DF: Sounds like a lot of pack horses, did you have a lot of gear with you?

DS: You had to carry enough food for probably a month at a time, you had tents, had a camp stove, you had all the people's gear, their sleeping bags and clothes. You'd probably pack 10-15 horses sometimes. And then you'd travel 4 or 5 hours at the most was a real good day to pack. If you went longer than that the horses played out and you played out and it just wasn't . . . And it took you so long to pack in the morning and then move and then set up camp you had . . .

DF: You were moving every day?

DS: No. Quite often you'd camp in the same place for 4 or 5 days, sometimes longer. No, you

tried no to move too often because you wasted too much time. But it was sort of a relaxed way of doing things. You weren't too pushed and moved at a slow pace so you could look around and enjoy the scenery.

DF: Now these packers that you hired, did they know the territory?

DS: Yes.

DF: Because it's an awfully big territory.

DS: Yes. They were usually hunters who lived in the area, they knew all the trails. In general, and sometimes they didn't. Sometimes you would hire them locally and then move out of the area that they were familiar with and occasionally it would cause a bit of trouble but in most cases they would go ahead and scout out the routes that they were going. So not too much trouble.

DF: Any incidents along the way?

DS: Oh lots.

DF: Such as.

DS: Always bear incidents. However.

DF: Tell me some bear stories.

DS: Some shouldn't be told. Probably the worst one was up on the Liard River. This was with helicopters and we'd come out at Muncho Lake and they dropped me on a small creek. Then they went back and because we were going to be out for a long while they had to bring in a second load of supplies, they could only bring the student and myself and some supplies the first trip and then they had to bring more the second trip. So while they had gone back to Muncho Lake I guess it was, we started to set up tent and I suddenly heard this crashing through the bush. I assumed it was a moose coming down the creek and instead, when I looked up, there's this fair size grizzly bear. [phone rang]

#204 DF: Okay, so you were talking about setting up a tent and you looked and. . .

DS: Oh yes. I thought that probably a moose would come charging down the creek and then I looked up and instead it was a fair size grizzly bear. He finally stopped less that 15' from me and I had an ax because I had been driving tent pegs, so I just swung the ax around my head and looked large and made a lot of noise and the bear went off, back up the creek. So I said to the student, we'll get the rifle, we had. . I don't know what we had but anyhow, we got a rifle in the pack that had been left and when I went to find shells there was no box of shells. Fortunately there were 4 shells that were in the rifle that should not have been in the rifle, it shouldn't have been loaded when we had it on the helicopter but it was and fortunately they were there. And about 20 minutes later there was a noise across this little creek and along came a moose followed by a calf and at an equal distance behind was the grizzly bear. He had been tracking the moose and of course, when he charge us, he had thought we were the moose that he was chasing. He'd gone back up and found them and chased them down the creek. So then he stopped and looked at us and I said, he's not going to take us, I'm going to take him. So I fired one shot and missed and he came towards us and I hit him with the second shot, missed with the third shot and hit him with the 4th and he collapsed into the middle of the creek but he wasn't dead and we had no more shells. I said, the chopper is going to be back in a couple of

hours, we'll just sit here, I'm not going to move because I don't know how mobile this bear is. If we have to I can take the ax and go and break his neck but I don't want to go near him if I don't have to. So we sat and watched the bear and he was still alive. So the chopper came back and circled and I pointed and they saw the bear in the creek and they landed and as soon as the pilot got the chopper stopped and he was carrying a revolver at the time, they were allowed to and killed the bear. They had brought in the extra box of shells because they had found that. I guess we had left the shells with the rest of the pack. So that was all right. In the meantime the moose and calf had swum the Liard and gone over to a little island on the east side. I think it was that night, there was a tremendous commotion off on the island and we watched with binoculars and another grizzly bear was on the island. I guess he'd killed the calf in the meantime, we hadn't seen that but the moose went out into the river, the bear chased him, killed the moose in the river and dragged him back up onto the island and sat and gorged on the bear for several days.

#244 DF: On the moose.

DS: On the moose. So I said to the pilots when they came in about 5 days later, there's another bear on that island, if he goes off the island the current's so swift that he'll float down the river and the most logical place for him to come out is on the little delta where we're going to camp, on our next move. Legal or not you better go over and kill that bear because we're just going to have trouble with him. Oh great, they had my permission to kill the bear. So over they go and while they're flying around I see one bear go off into the river so I knew there was a wet bear around. And then there's a bunch of firing and they come back and I said, did you kill the bear, oh yes, they'd killed a bear. Was it a wet bear or a dry bear, it was a dry bear. Now whether there was two bear on the island, I don't know. So we moved down onto the little delta, I get up the next morning and go out to start making breakfast and I get the strangest feeling that somebody's watching me. I turn around and there's a grizzly bear standing right beside the tent. I shouted to the assistant, give me the gun. So he comes charging out of the tent and the bear went up a shale bank right above us, it was quite steep and he just went up above us, he was looking down on us. So I said to the assistant, you can try this one, you can use the rifle and I'll cover you with the revolver, I had a revolver in the second load. I said, I'll cover you with the revolver and we're likely all right. So he tried and he missed so then I used the revolver and I killed the bear. He come rolling down the shale and landed right beside the tent. Well, what do you do with a bear when you're stuck there for 5 or 6 days in hot summer weather. Not only that but you're attracting other bears. So we spent all day floating this damn bear down the creek. It was a very tiny little creek, hardly enough water to move it but with enough flotation and us pulling we got the bear about a mile down the creek. That night a huge big, black bear came in to feed on the grizzly bear. So we quite deliberately made sure we missed the black bear but we fired a few shots to scare him off. And he did go off and that was the end of the bear story but we had lots of bear incidents, all kinds of bear incidents.

DF: What did you do to protect your food?

DS: Usually just left it in an aluminum box, that's all you could do. We never really lost any,

at least I didn't. I don't think any of the people in the camps really got into a major, major bad situation because of bears but they were all like this, a bear would come up and you would scare him off or you would kill him, one or the other. You hate to do it but it's me or them. You don't really choose to do you.

#285 DF: Did any of them seem like predatory bears, they were out to get you or they were just after your food?

DS: They were probably after the food. It's like the one chasing the moose, he didn't mind taking a full grown moose, he wouldn't have minded taking a human being. But they were just after food and probably had never seen a human being before. Anyhow, bears, you get used to them. Black bears you just shrug your shoulders at, they'll take off. Grizzly bears are not nearly as frightened, they're big enough and tough enough they don't need to be frightened. And always a few helicopter scares too. I was the search master usually. I ended up being in camp whenever a chopper went missing. That happened 2 or 3 times. Fortunately we never had any injuries, we never killed anybody, the Survey was very fortunate. But we were careful, we tried to be especially careful. One of the hunts actually, out of Fort Nelson, it was the last day we were there, I went down to Fort Nelson to pack up the gear so we could truck it out or ship it out and Gordon Taylor and the pilot continued to do some mapping and the engine quit. They made a forced landing and their signal was picked up, reported in and I think it was the next day, I think they were out overnight. But anyhow, when we started the search late in the day, Dick Turner happened to be there and Dick went out with his own private plane and did quite a lot of searching. And he paid for all that gas himself and never got any reimbursement for it. But people are lost, that's what you do if you've got a plane. You might have to have the same thing done for you some time. And he must have spent a lot of money that day. Anyhow we knew approximately where they were and we went in the next day with a chopper that went in and we spotted them and picked them up and brought them out.

DF: What was your strategy for searches? Did you each day know more or less where everybody was going?

DS: Yes. Before you left camp you left an indication on a big map board where you were going, the traverse you'd be making on the section that you were measuring, so that there was a pretty good idea where everybody was. We knew basically where people were so if we had to search we could do it within a limited area. As I say, we never had any major incidents as far as injuries, and we certainly didn't kill anybody. We were luckier than some. So then, as I was doing the lower Cretaceous study, particularly started working back south again, I started to pick up the Jurassic and the lowermost Cretaceous rocks. Partly just to fill in a blank that we had in our stratigraphy and mapping. And that eventually became a very major project for myself. I had done a lot of that before I was named Director and I was named Director in 1973 of the Institute. I had finished the Fort St. John, basically the lower marine Cretaceous study before I was named Director but I didn't have it written up. And while I was Director I managed to write that bulletin up, which was a fair achievement because there was a lot of things going on. I was busy as Director, got involved with the CSPG at that time. But I did manage to get a publication

done too.

#345 DF: So that's a lot of years of research to go into that.

DS: Yes. There was a lot that went into that, that was a fairly significant contribution there. Then in 1980, I decided that I'd done enough administration. I wanted to finish off the Jurassic, lowermost Cretaceous study which I'd done most of the field work. It wasn't totally complete. And then look at other things, I'd had enough of administration. So I stepped down. I had been President of the CSPG of course, during that time. I'd barely got rid of the Directorship when I got dumped with 2 other projects. One of them was the Mesozoic conference with the CSPG and the other was the volume for the Decade of North American Geology, the volume on the western Canada sedimentary basin. These were 2 huge projects really, and of course, the Mesozoic conference, later involved producing another volume for the CSPG, another bulletin that, memoir. And it was decided that I was the most logical choice to be the editor and hence everybody for manuscripts.

DF: Okay now, you've got to unpack that statement for me because what you've said there is very complicated. There's a lot of work in putting one of those together, tell me that process.

DS: First of all, you have all the speakers at the conference and most of those will contribute to the memoir. But you have to approach them and make sure that they will. In general, I found most people quite willing to do it and most were fairly prompt in getting a manuscript done. But on the Mesozoic there were two major papers that caused considerable problems. One was one we really needed but the author is noted for procrastination and I don't think we ever did get it, even though we delayed and delayed and delayed the volume because of it. Everything else was finished and we were still waiting for it. And the second one turned into quite a political mess because a group of researchers in the States decided to go sideways and try and publish in Canada, material that had been refused in the States because it was not good science. Fortunately I wasn't too dumb and I had sent it out to be critically read and got the comment back that it wasn't worth publishing. This caused quite a lot of chaos because how do you refuse papers from people that are supposedly good. So it was a bit of fancy footwork but finally I just put my back up and said, no. Critical readers have said no, I don't know the geology, I'm not going to accept it, you can try publishing it elsewhere and left it at that. But it caused some ill feeling of course. But then you have to send each manuscript to at least 2 critical readers to make sure that the science is all right and that in general, it makes good sense. Then it has to be technically read for all the grammar etc. Well, I got Don Glass involved and Don has done many memoirs for the CSPG. And Don was a tower of strength, so between the two of us then, we got the volume together. We did it in fairly good time, I think if I remember rightly, we did it within a year, which is a pretty good record for a CSPG memoir. It might have taken us 2 but I think it was 1. And it's got to be timely so you can't afford to delay. Now with the Decade of North America, this was sponsored by the Survey and in general they wanted to have people from the industry and academia involved. And we tried that, we did to some degree, not as much

as we would have liked. But again, there's the time factor. With that one, unfortunately the Survey management did not see it in the same light as I did and they wouldn't give it any priority. So any Survey people that were involved had, basically, to carry on their normal duties and do this as a sort of a side issue. I felt that the Survey had taken the project on as a priority and should have said it has priority, finish off that manuscript and then go back to your normal duties. As a result we started the project, I think in 1981, it was almost complete when I retired the end of 1989. And it had been done with Jim Aiken, both of us were at retirement age, we both retired within a year of each other. I think eventually, that volume was published in 1998, which was unacceptable as far as I was concerned, just unacceptable. But you were involved all the time, there was always something coming up. So you couldn't really plan too far ahead because you knew you were going to have to give another block of time to trying to push this somewhere along the way. On top of that then of course, I finished off the Survey Bulletin on the Jurassic Fernie and the Minis group of northeastern B.C. It was finished before I left Calgary in 1990 or basically, all written but it took a couple of years to really get everything sorted out and edited and it took quite a while for that to be published too. And that's basically my Survey career.

#451 DF: What in this whole process was it that excited you about geology?

DS: As far as my own career of course, I was very much involved with the Jurassic, Cretaceous. And you had a chance, I had a chance to put together a story for a large part of the Jurassic, Cretaceous history of western Canada. I did it at a time when there wasn't an awful lot known, you were sort of operating without a lot of background information. There had been other people and certainly some of them had provided some very basic and useful information, which could be incorporated and was. But you still had some freedom without having to battle against a whole lot of other biased ideas that you might not agree with. So there was a lot of challenge and a lot of interest there. And just being able to put together the story and do some of the mapping. Some of the country I went through hadn't been mapped at all. So you were contributing new information and that was great. As far as my job as Director, it was a time when petroleum exploration and the coal exploration were really at a fairly major peak throughout western Canada. It was just tremendously interesting to see what was going on and trying to keep up with the current trends and everything. There had been the push, both in industry and within the Survey, to get the petroleum assessment going. You'll hear a lot more about that from Bob McCrossna when you talk to Bob. That was done after Bob joined the Survey in 1971, so a lot of it was done when I was Director. Then there was a major initiative to get into coal exploration, more coal assessment but at the time we had to get into exploration and we did a lot of drilling, which the Survey normally wouldn't do but nobody else was going to do it. We had a fairly major drilling program for coal in southwestern Alberta and southeastern B.C. We built up a major coal program at the time. Since then of course, it's just cratered again. Although I understand now there's a lot of interest in methane production so again, they'll be going back to the coal bearing rocks. So there were the 2 major programs that were involved there. A lot of mapping was going on, we had major, major parties in the

Arctic and had a lot of activity in the foothills and mountains. And the Survey had a lot of money and a lot of people and a lot of very good people. So we really were doing some very fine things I think, certainly in the Calgary office, through those years.

End of tape.

Side 2

DF: So you were never directly involved in working for the industry but. . .

DS: No. Very close to the industry.

DF: Yes, tell me about that relationship.

DS: It probably wasn't nearly as good as it should have been. There was always some hesitation to get too close to industry and we had to be very careful, or thought we had to be very careful, that we didn't favour one company over another. In other words you couldn't give one company information without ensuring that it was given to all. At times that wasn't easy. So you tended not to give any information. On the other had, if anybody ever came to the Survey wanting information, I think every geologists attitude was, fine, they can have anything I've got and if anybody else comes they can have anything I've got. So on an individual basis I think people were very open but on an official basis I think we tended to be somewhat more restricted. And had to be because if we gave any company sort of a complete report without making it public then the other companies would say, we've paid our taxes for this, why can't we have it. So you had to be very careful and you had to make sure that it was in a format that everybody could use. And sometimes it wasn't easy to do that and do it quickly. And again, at times there were industry committees, I was never much involved with that and I look back now and say, yes, I probably should have been, it would have helped a lot. But there were committees advising senior management in the Survey. Certainly the petroleum group was very much involved with going to industry and getting information, sharing information. The coal people were in constant contact with the coal companies. So there was a lot of give and take going on. This was something else I was going to mention, Dave, as far as my own work was concerned. While I had done the mapping in northeastern B.C. sort of as an aid to myself, to keep track of where I was and what was going on, it was just before the major coal exploration in northeastern B.C. And when the companies went in there the only maps that were really available were mine. So a lot of the very old original exploration, the first exploration for coal in the 70's, people used my maps and then went in and refined them of course, they needed refinement, no question. But at least they had a much, much better idea where to go and where to look. So while some of what I did was sort of isoteric perhaps, it did have a major benefit as far as the original coal exploration. Tumbler Ridge, Bull Moose Mountain, all of that country down through there. The first people that came in with those companies would normally come to me and say, what have you got, what can we use. And I would say, there's a map, it's not the greatest but it's there. Even at that time, I visited companies afterward and they would show me around and I'd show them around and we'd share a lot of information. So I think, on an individual basis through the Survey, there was good rapport with the companies. And

certainly in later years, I know the companies were sharing seismic information which I never had. It would have been helpful but I never had it.

#037 DF: No. Because that came after you were in there.

DS: It came basically, after my time, in a way. Although there was a lot of seismic work being done but even then, the companies themselves were being highly, highly secretive about what they had got and they weren't sharing it with anybody. But later on it was a different matter because they knew the other companies had it and no sense of hiding it too much.

DF: You expressed earlier in the interview, a regret that you didn't work for industry for a few years.

DS: I think anyone who worked for industry got a much, much better background in subsurface techniques, how you studied rock samples, particularly using geophysical records from the wells. And got a much better training in that. And you got a much different outlook on the petroleum side of things. I really never had that and it would have been very beneficial in my own work because eventually, at one stage, I started to join the outcrop studies with the subsurface. And I had to go into subsurface and I always felt that my background really wasn't any more than adequate, at times it wasn't adequate.

DF: You're being pretty modest here. Which of these accomplishments do you think was most important, your greatest contribution?

DS: I suppose the report that I look back on as being the most reliable, perhaps the most useful was the lower Cretaceous, Fort St. John group. My thesis study was a good study. Other people have gone in and done a tremendous lot more work and changed ideas and everything else and of course, that's only natural. The Jurassic-Fernie Minis succession, the report on it was almost a reconnaissance study, such a huge amount of rock over such a large area that it needed and still needs a lot more study. But no one will ever do it now, they won't ever do a regional study again, they'll go in and do small areas but they'll never do the regional study. But there are still questions that I can't answer, and nobody else can either at the moment. So there were the three major Cretaceous studies that I did and am reasonably satisfied with them.

DF: So how did you get dragged into management?

DS: Well, I had a young family and thought it would be nice to spend more time at home. I had been given some junior positions, nothing very serious, in the Survey before that, in the Institute and applied for the job and got it. For the first few years I was quite pleased with it, it was an interesting job, there was not too much hassle. But towards the end, we began having problems with salaries and while we would manage to hire some extremely good people, highly competent people but we'd no sooner hire them, we'd bring them on staff, move them to Calgary and the companies would snatch them up and pay them a better salary. And the Survey just would not increase their salary levels and we just could not retain them because of the poor salaries. The problem was that our salaries were based on sort of a Canada wide basis. There were geologists all across Canada and if you looked at that, they were paid not too badly but we were working in Calgary where the industry and the university were paying top salary and there was no way you could retain people. So it was very difficult to retain very good people. And we lost some excellent people and

the Survey suffered for it and is still suffering for it. But that's life, that's company politics and just industry in general, so that's the way it goes.

#083 DF: So in addition to all these other things you were doing, you also became President of the CSPG. Tell me how you first came to be associated with, it would have been the ASPG to begin with?

DS: The first association goes back to the 1953 field trip, which is the field trip of all field trips in the CSPG history. If you've never heard about it, and you must have heard about it, this was the field trip that went down through Turner Valley to the Crowsnest Pass. They didn't hire buses, it was a convoy of 90 cars. It was escorted by police, I don't know how many, probably a couple. But of course, the roads were basically trails and gravel. And 90 cars on dusty roads, it was awful. Anyhow, we get down to the Crowsnest Pass and they have a conference and visited different places. We visited different stops along the way but you can imagine trying to get people in and out of 90 cars, up to an outcrop and get them back, it was a very slow process. I was just a student, I'd gone down with Gerry Henderson, it was the year I worked for Cal Standard. Then they had this big evening party at Crowsnest. They stayed in some motel, people were scattered all over, I think there were people in tents, there were people in the motel, I think there were people on the ground in bedrolls. It was quite a party as I remember, near the Frank slide. I can remember one occasion somebody asked where a certain distinguished geologist was, the remark was, oh, he's up walking the ridge of the motel, which he was. And they had an Indian dance that night, Bill Gallup had organized part of the entertainment and he'd brought in some of the local natives and they put on quite an Indian dance. Then the natives got the geologists all involved in this pow wow really. So it was quite an evening. I remember that quite well. Then the next day we went back . . .

DF: So the geologists were dancing. . . ?

DS: Oh, with the Indians, yes, oh yes. It was just a good party. Then the next day we went back up the forestry road and back in, I guess, at the Highwood River. But dreadfully dusty, oh awful. Everybody that realized what was going on had tried to get as much beer into their car as they possibly could because they knew how much dust there would be. It was awful. But it stands out in your memory because it was such an awful thing. So that was my first introduction to the CSPG and then, somewhere along the way. . .

DF: What kind of a guy was Bill Gallup?

DS: I didn't know Bill very well.

DF: Not beyond that?

DS: Not much beyond that. I knew him by reputation but there's other people around knew Bill. A very fine person, a good geologist. I guess he had married, either married a native wife or she was half native, I've forgotten. But this was his association. No, he was extremely well liked. Other than that I don't really remember too much. Later on I gave a talk at the ASPG, I guess I joined that time and then I retained my membership. I wasn't really very much involved that I remember, I doubt if I was, up until the time I was asked to run for Vice-President of the Society. And of course, then and I guess, even now, it's hard to get people to run so a lot of the times they come to the Survey where it's sort of

half encouraged and supported. So I was put in as Vice-President and then you carry on and end up as President. That was of course, quite a year because it was the 50th Anniversary. There's some conflict here between the 50th and the 75th, there's one year difference somewhere. But I think we had the same discussion when I was President or before I was President. But the previous executive or probably the past two had organized most of the activities. So I wasn't really directly involved in getting the activities going, they were already in motion when I became President. What we did was make sure that they went ahead without any hitches and then did the planning for the following years.

#138 DF: Any memorable events in that 50th year?

DS: When I looked through the report there's things there that I have vague memories on. I suppose the one thing that I took a great deal of delight in, a great deal of pleasure was, I signed the trust deed for the educational fund, the Student Industry Field Trip fund. That I guess, had been being organized before I took over but I ended up being the President that signed it and I think that's probably one of the best things the Society has done.

DF: What's a trust deed?

DS: It was establishing the foundation or the trust where all the money goes so that it can only be used for the Student Industry Field Trip. I think they've modified it now, it's used for other educational things which is fine. But at that time I think the objective was maybe \$50,000, now they're trying for something like \$3 million. So times change but it's still there and it's still being used to real good advantage. Thinking over some of the highlights, one of the things that did really hit me and you might not think of it but this was 1978 and we had Sheik Yamani there. The Sheik was under extreme security at the time and I think, if I remember rightly, there had been some sort of a death threat which tightened up security a whole lot more. Very few people were aware of it. Anyhow, he had armed guards and there was a lot of controversy about these guards being armed in Canada but they were carrying guns. So I'm not sure whether the guards were still allowed to have guns or whether the RCMP took over. But when the Sheik started into the conference centre to give his talk I was directly behind him. He had 2 body guards on each side and just as we started off some idiot dashed from the side right in front of the Sheik. The guards immediately drew their guns. I just about hit the floor, I would have if it had gone any further. This guy was fortunate that he didn't get shot. Then we went in and they said at the time there were spotters up in the balconies around and they all had guns. So it was a very twitchy affair at the talk. I wasn't too pleased about it. And there were very few people knew about it. I don't think the people behind me realized that these guards had drawn their guns, I think it was just the 2 of us right behind the Sheik that saw what was going on. It was scary. But there were problems back then, like we've still got problems. That was quite an affair. Certainly the conference was basically the highlight of that year, there were some other interesting things went on. Then Jack McMillan blindsided us, and me particularly, at the end of that year. Our very last meeting we were talking about things and I think one of the last motions Jack decided that we had to have the Mesozoic Conference. I knew as soon as he said, Mesozoic, oh, I'm fingered. I'm working in Mesozoic and there was nobody else around. I really didn't

want the job and I thought, I can't speak against it, I'm President but personally, yes, I don't want it. Anyhow, the executive decided yes, they'd have a Mesozoic Conference in 1983 and we had a Mesozoic Conference and I got that and I got the volume. So I had another 3 or 4 years work out of that. So that's the way it goes.

#186 DF: Is it true or does it just appear as though you had a hard time turning down these projects?

DS: I really didn't want the Mesozoic one very bad but it was Cretaceous basically, there was some Triassic, there was some Jurassic. But there really wasn't anybody else around within the CSPG that would likely take charge. And I enjoyed it once I got into it. I was fortunate, I kept asking questions as to who we should have on the organizing committee. Most of the people I didn't know but I would ask and somebody would say, oh yes, so and so is great, just try them. And I would phone and in most of the cases people, oh yes, we'd be glad to and they turned out just . . . I just made sure things were going and they did all the work. And it was great. I really enjoyed that and I got to know a lot of people too of course, and that was fine.

DF: And the GSC supported you in this?

DS: Oh yes. And this was the nice part too, particularly when I was President. Digby McLaren had been President before and of course, Digby was my Director in Ottawa, he was still my boss in Ottawa and he was very supportive of the CSPG. And the GSC had allowed both Digby and myself an entertainment budget. While I was President and I did to a certain extent again when I was Chairman for the Mesozoic Conference, I tried to see every committee head through the year. Now to do this in the CSPG is a real chore because there's about 80 committees. But I would take a group of 4 or 5 people with sort of common interests, committees doing similar things, and have lunch. At first people thought I was wanting to interfere. I didn't want to interfere, what I wanted to do was find out what they were doing and if they needed additional support. Once they realized that and that I was interested in what they were doing personally, it was great. And I made a lot of friends. And so we made a lot of contacts which were great for future years. I did sort of the same in the Mesozoic Conference, although there we had fairly regular meetings of all the committee head. So that everybody knew what everybody else was doing and if somebody saw a glitch they could point it out or try and mesh efforts, this type of thing. And it went very well. And at that time we probably made as much or more money than had ever been made before. People were very, very surprised because they had assumed at the beginning that we were going to have a deficit, instead we had a huge surplus. So it was great. It was a good conference and we made a lot of money. And of course, that showed them that they could make money from these conferences, this is what they've been attempting to do every since and this is what the Society has been living off year by year is the surpluses from their conferences. And they're trying to budget so that they do have a surplus now and they have to in order to survive.

#225 DF: No, in the 75 years most of the Presidents of the CSPG have been from industry.

DS: Yes.

- DF: There's only just a handful of you that were in the GSC. So it seems like quite a significant contribution.
- DS: Part of it of course was that the Survey was not represented in western Canada, did not have an office in western Canada of any size until the Institute opened in 1967. So in the first 40 years of the Society's history there really weren't that many GSC people available, nor did they have the resources. And most of them were sort of junior staff at that time. Up till the time I came out in 1960 I think there was less than 10 in the office. So you didn't have much to draw from. There were a few people there that could have done it, yes. And some were deeply involved, Helen Belyea was veyr much involved and there were others around. But then Digby of course, came along. Digby was an obvious choice and was highly supportive. I was the next Director, I put in my 3 years, everybody puts in 3 years, Vice-President, President and past President. Don Cook, Mike Cecile, I may have missed somebody there, I think that's most of them.
- DF: Now given that you were willing to do all this for the CSPG, what was your motivation, I mean, you're not a member of industry?
- DS: No, but you're a member of the geological community and you're intreested in everything that's going on. Whatever the industry publishes is pertinent to what you do and everything we do is basically, pointed towards the industry. Our whole justification is what can the rest of the country use. Well, it's the petroleum industry and the coal industry for the GSC in Calgary and so, it's those people in the Society that you're looking at all the time. I was getting as much back as I was giving probably, making contacts, this type of thing. It was a give and take situation, no question.
- DF: Can you try to assess the value of the CSPG for us over the 75 years of its history?
- DS: I'm sure there are others that could state it better than I can but I think the Society has provided a tremendous service in the way of their publications, their continuing education programs, certainly with their noon hour luncheons, those have been highly successful for what, the last 50 years I suppose, I don't know when they started. They're highly attended. Of course, the companies support it, people don't mind a lunch but they're very informative and it's a good way of educating everybody. I think that it's just stimulated the industry and it has, to I guess, a fair degree, helped communications between the different companies. People are not nearly as secretive now as they used to be. I think the Society really has done a very good job for its members.
- #274 DF: Given that you were President for the celbration of the 50th Anniversary, what would you say should be done in the 75th, what worked for you, what worked well in the 50th?
- DS: It was all planned ahead of time, I can't take any credit for it really.
- DF: You can't take credit for it but what worked, what particularly seemed like it. . . the people liked?
- DS: They had planned some fairly significant events. There was the coal assessment which was basically brand new as far as the local coal industry was concerned. There was the major conference with Sheik Yamani and of course, anything that is current is always of interest to everybody else. Then of course, they've always run some very good field trips.

That year they cratered because of weather and it's not very many years I guess, they've had bad weather. It was just a good year. I don't think, other than the fact that they brought in Sheik Yamani that it was that much different from sort of the normal year. They do much the same type of thing, sometimes they're a little more ambitious than others.

DF: What happened to the weather that year? You mentioned it in your report but you don't say what the weather was.

DS: I think it turned extremely cold and wet if it didn't even snow, that we couldn't get into these sections in the foothills. There was just no way. I've forgotten now, they may have been using helicopters and the choppers couldn't fly, I can't remember. I know they're remote. I would have thought they probably would have had to use choppers, I think you'd even have to use choppers today, there's no roads into them. But that's long gone, I don't remember.

DF: Tell me any other impressions you have of the CSPG, just its importance and significance. You've touched on many of the things, like the Student Industry Field Trips and so on.

DS: I'm sure some of the industry people would have a lot more to say than I do. It's hard in a way, to judge just how useful the Society has been to the industry when you're not working in the industry. I think for the people on the Survey, perhaps as much as anything, it's been the outside contacts. Certainly there's some excellent people in industry who've done some tremendous work and of course, we will use anything that anybody has published to the utmost if we possibly can. Why reinvent the wheel as it were. Some of us have had some excellent relationships with people in industry and they've worked hand in glove, there's been a lot of joint publications, this type of thing. So it's been useful from both sides. I think probably the publications and . . . well, the Student Industry Field Trip of course, is just a tremendous contribution. And it's a way of recruiting people too, getting people to come into the industry. It encouraged a lot of students I think, kids who would never have seen much of the industry without having been on that field trip. And then they go back and they tell their friends and it all helps.

#326 DF: Just before we end, I'd like to just throw the discussion open to a really general question. What have you enjoyed most about your career?

DS: Probably the field work. It's been a lot of fun at times, a lot of hard work. But seeing new country, seeing new geology, putting together some of the geology that really has not been studied in any great detail. Just had a tremendous advantage and a lot of the country that I went into, particularly in the early years it was still pristine, it had hardly been touched. The first few years there were very few seismic roads through any of the foothills and it was just absolutely untouched wilderness, gorgeous country.

DF: How do you feel about that now?

DS: Well, I guess if you're going to have development some of the environment is going to suffer. I don't think it needed to have suffered as much as what it did and I'm sure they don't do things the way they did earlier on. But for awhile there things were pretty bad.

DF: Well, they do hand cut lines now, and so on.

DS: Yes, this is it. And they barely even show. Then of course, you don't have good trails for pack horses either. But you don't need them.

DF: So any regrets, any things you wish you could have done?

DS: You always have regrets. I was never in the petroleum industry is one. Always other types of projects that you might have liked to have done but you just don't get involved with. I'm satisfied with what I've done, quite happy with what I've managed to do. I might have done things differently if I knew 40 years ago what I know now, or 50 years ago. However that's the way it goes.

DF: Well, good for you. On behalf of the Petroleum Industry Oral History Project and the Canadian Society of Petroleum Geologists, I'd like to thank you so much for allowing me to come and visit you today and share with me and with us some of your recollections. Thank you very much.

DS: Well, thank for coming Dave.