

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Mike Hriskevich

INTERVIEWER: David Finch

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DF: Today is April 19th, in the year 2001 and we are with Mr. Mike Hriskevich in the offices of the CSPG in downtown Calgary. His initials are M. E. Hriskevich. Could you start by telling us and we're hopping right over the biographical, educational and career questions because Mike has already been inflicted with an interview like this before and did such a very good job. We're going to go right through into the CSPG related questions, unless he has something else. So where would you like to start today?

MH: Well, I can just follow the outline that you've given to me. Let's see, how did I come to be associated with the CSPG. Well, I was very fortunate in working for an American multi-national company, Staniland Oil and Gas. They recognized that there was some potential in Canada so they opened up an office here in 1949 and of course, there weren't very many Canadian geologists around that had experience in the oil business so they sent up a cadre of people to start things off. These people were very well trained and we learned from them. Now, why did I get involved, what has this to do with CSPG. Well, the first thing they mentioned was do you belong to the Alberta Society, you should.

DF: What year was that?

DC: 1952. And do you belong to the American Association of Petroleum Geologists, well no, but you should. Why? Well, because you can learn from them, there's an exchange of ideas, excellent articles, their field trips, their conferences. You can further your career by doing so. So it was that kind of encouragement that I got from co-workers. And these people were very fine people, I learned an awful lot from them. You have to remember that I was a young PhD, coming to Calgary. Secretly I knew it all and here I am learning from guys who only had Bachelors degrees. And I quickly realized that degree doesn't mean a hell of a lot unless you can put it into practice. One of the fellows that worked for Staniland, he left just before I got there, he was a fellow by the name of Ray Stottler and he devised a classification of sediments, of carbonates. I had just finished digesting, in graduate school, Folks classification which was quite fancy, it had fancy names. Well Ray had already established the classification years before and used very good common names that didn't require a super brain. Like he would say, a fragmental limestone, a fossil, fragmental limestone instead of some fancy terms that academics sometimes use. So I had an opportunity to learn the very basics of the study of rocks and construction of maps, how to find a play, how to develop a play, how to determine if it was economic and so on. But the company was very serious, they supported very strongly any activity that had to do with the Alberta Society or the American Association of Petroleum Geologists.

#049 DF: So what were the ASPG activities like in those days?

MH: They had meetings, regular meetings, I'd say about once a month where someone would get up and talk on a current subject of interest. There would be field excursions that were organized to go out in the mountains and study the stratigraphy that was revealed. Those were the primary ones.

DF: So how did you come to be involved with the executive or in the activities?

MH: Well, over time I got involved in a couple of field trip committees. I attended meetings pretty regularly, voice my opinion from time to time and I guess somebody said, it's time to either put up or shut up, would you like to run for the executive. I thought about it and thought about it. Sure, it's my turn, I'll do it. I think we're all of us, obliged, if we belong to something to contribute something to it. And I enjoyed it. That was as much fun as I've ever had.

DF: Oh yes?

MH: Sure.

DF: Tell us some of the stories from your time on the executive?

MH: The first thing that happened was, I lost my Vice-President. He was transferred, Steve Antoniuk. And then Tony took his place, little Tony, his name will come to me in a minute, he took his place but it worked out very well. Everybody pulled their share of the load. I think as a committee, we were probably more conscious of the Society's finances than we were of our own. We would quibble quite long and hard about spending \$50 on something unless we could show that it was worth it. At times, I know blessed well I'd make a decision to spend \$50 that wasn't well thought out. So it was that kind of dedication to the Society that we found. And of course, what made it very nice was that any time you needed someone to help on a committee, you approached them and I'd say, I was turned down only once. Maybe I made 20-25 approaches and I was turned down just once.

#062 DF: What were some of the highlights of the year?

MH: Some of the highlights. What came out of our year was the Face of Time, we published that. It's I think, a very fine publication, made in Alberta, about Alberta. And it contains a reference to evolution, one reference to evolution. Some group found this out, creationists and they just jumped in with both feet and it was never going to be allowed into the school system and Tony Mason and I had to . . . well, we were involved in some radio interviews and interviews with the press to point out that this was a good piece of stuff, that the kids should have this to learn. About that time I met a fellow with whom I'd worked at Fina and I didn't know that he was a creationist. He stopped me on the street one day and we chatted and he said, Mike you really don't believe that this slimy thing crawled out of the water, rubbed against a stone and an eye was formed. I said, good god, where did you hear that. He said, well, that's what I've been told you evolutionists believe. I said, God wouldn't let me believe that kind of stuff. He was rather surprised you know, here a guy with a PhD who says he believes in God. I told him that there was absolutely nothing incompatible with my believe in God and in the bible, with what The Face of Time was produced for. Well, he went away shaking his head because he was all set for me to get some scientific reasons at him and to snowball him and with God's help,

I think I made him stop and think a little. That was an interesting time. Because it is a good teaching tool and I think eventually it did work its way into the system. There have been some recent articles published, if you're interested in that subject at all, Geo-Times has an issue devoted to that. And there's a very fine explanation. One could take Genesis and say God did this on the first day, that on the second day, the third, and if that isn't the story of evolution, I don't know what is. The only problem that people have is they say, you know, he did this in 8 days or 6 days and the 7th day he rested. But the original documents, the original Genesis story, it's not really a day, it's sort of a period of time. So there's nothing wrong with reconciling some of these things. To me there's absolutely no controversy there at all. That was interesting for me personally, I think for the Society, because we worked hard to get that out. It was expensive. And then to be kind of run into this opposition that wasn't based on anything logical, either religious logic or scientific logic, which I think are one and the same.

#102 DF: What other publications came out that year?

MH: There were several of them here, I'm just looking at my report for the year because you know, you're asking me to remember something that went on roughly 32 years ago. Gas Fields of Alberta came out at the time, Developing Sedimentary Basins in Western and Arctic Canada by Peter Ziegler. You know, we inherited some things that came to fruition and we started a few. This has been the kind of pattern that the ASPG and now CSPG has worked out over the years.

DF: You've mentioned the ASPG several times, at that point did it feel like the Society was primarily a Calgary based society.

MH: It was something like what happened with the American Association of Petroleum Geologists. A bunch of geologists got together somewhere, I think it was in Tulsa, Oklahoma and decided that they should form an association. Well, it would have been presumptive for 25 or 30 geologists to say that we're the American Association of Petroleum Geologists, like it was for the Alberta Society. And so finally, as the Alberta Society grew and extended its influence to other parts of Canada and into the academic areas, I think it was Ted Best that said, it's time we became a Canadian Society. And that thought was nurtured and came to fruition a year or two after my term in office. I was kind of sad to see Alberta go but. . . Something that you're used to.

DF: Any other notes there?

MH: I've mentioned that we got training in house with Staniland and with other companies, they provided a venue where a person could be trained for the job. Well, the Society's role in the beginning was to have meetings and promote good fellowship, field excursions, technical books, and then gradually, slowly but surely, the evolution to putting on courses came along. So the Society does sponsor, in various ways, putting on of courses that are specifically designed to help young geologists, all geologists that need additional training in certain areas. So that I think is quite a change. The big change that I see though, is this big office that they have here. We had one sort of part time employee at the time, now it's an institution. And I think it's needed but that's a big change too.

#137 DF: Any contentious issues the year you were President?

MH: No. I don't think there were too many. The only contentious one was, as I mentioned before, The Face of Time. That was kind of a difficult thing for us to understand. Sometimes, they say you shouldn't get involved in discussing religion or politics and this is both you see. So it was kind of a, not difficult time but an interesting time. It was frustrating for us to see the basis on which our work was being. . there were aspersions cast.

DF: Questions, yes. But in a way, it's always been thus with the oil industry hasn't it?

MH: Yes. And I think, once thing I did notice, when I worked for Staniland and this I think was probably the root of a lot of the problems that the oil industry has had, had then and has now. Something happened in which the company was involved in something which was fairly important and I innocently said to my boss, shouldn't we let the press know about this. It's none of their business. And I could see no harm coming from this and yet it was none of their business. The less they know about what we're doing the better we like it. Now that attitude of course, changed over time but that was I found, kind of strange. It was rather secretive in many respects. People were keeping their ideas, their plays, to themselves. It's still done this way but the oil industry has recognized that it owes explanations to the public. I'll be the first to admit that there were some things done that were not very nice by the industry at the time.

DF: Such as?

MH: A little bit of oil spill here and there, covered up and move on, nobody says anything. But of course you know, at the time that the Rainbow area was being developed, we had a small diesel plant there because we were using an awful lot of fuel and because it's remote it's very expensive to haul it in. So we built this pilot plant and it supplied the diesel needs. Well, what ended up was we had some of this tarry residue that was left over. Now what are we going to do with it. Well, we covered the roads with it. That was standard practice in those days, you oiled the roads. Hell, nowadays that's pollution, some of those roads should be scraped off and all this stuff should be burned off somewhere and get rid of it you see. So things like that, our ideas about what was pollution evolved, have changed the way things are done.

#177 DF: What were some of the hot areas of exploration in the late 60's?

MH: Well, the Rainbow area was the area that I was involved in. That was an exciting time because it was a small company, Banff Oil, supported by foreign capital, Aquitaine, that decided that they were going to look for something bigger than was found around the edges of known production. Aquitaine were also experts in sulphur gas treatment, extraction of sulphur and the marketing of sulphur. So they were actually looking for sulphur bearing gas and there was a report put out by Imperial, published by Imperial, saying that their studies indicated that the area was gas prone and would be sulphur bearing gas. Well, this was okay with Aquitaine so we drilled the well. There was always a nagging thought that there might be some oil there because, in the Long Lake Well, located not very far from our discovery, there was some condensate recovered in a drill stem test, gas and condensate. Well, later on people went in and found that this was

actually a thin oil lick. So oil was possible. But when the well was drilled then there was 400 odd feet of oil pay and another 100', more than 100' of gas pay, it was really something quite interesting. I don't know whether I mentioned this in my previous interview or not, but what happened then was this small company who had developed a seismic technique that worked very well and we were ahead of everybody.

DF: And what was the seismic technique?

MH: It was common depth point and applying it specifically to the geology and the techniques used in processing this data with computers. We had our own processing department, little Banff Oil.

DF: Who developed the CDP?

MH: I don't really know, it was kind of an evolutionary thing. I think it was in its infancy then but if you took the method and just applied it helter-skelter to an area you probably wouldn't get much. But if you fine tuned it to acquiring the data that you expected to get from the depth that you expected it at, then you could get some very useful data. And in the Rainbow area multiples were a real problem, you couldn't see anything because of the multiples. And this stripped away the multiples and the pictures were just clear. What was exciting was we took this technique that we used for 6,000' of depth and we applied it in the Strachan-Ricinus area. We applied it to looking for reefs again, this time of upper Devonian age, at a depth of around 13-14 thousand feet and what was exciting was, we shot a line across a well that had been drilled by Gulf in 1953.

DF: What year did you do your work?

MH: 1967. And the well tested the reef and got quite a good blow of gas, followed by salt water. So of course, it wasn't economic, it was abandoned. But what was interesting was that well was drilled on the Flanka??? reef and somewhere, if you put a little needle in with a picture of a reef and spun it around, somewhere there was a full reef around there. So we took this seismic technique and shot the line and we processed it and re-processed it and all of a sudden you could see the reef. And when we drilled the well we got 530' of gas pay. Then we moved from there to Ricinus and discovered another gas field.

#236 DF: So why were you looking in that area?

MH: Because Aquitaine was interested in sulphur. They were looking for sulphur bearing gas. They were I think, the world leaders at the time for extracting sulphur from natural gas which had hydrogen sulphide in it.

DF: What was the market for the sulphur?

MH: For fertilizer. And they had discovered a huge gas field in southern France. So they brought their knowledge and techniques and all this good information to Canada at no cost.

DF: I need to make an editorial comment here, before we went on tape I was giving Mike the gears about foreign control of the Canadian oil industry, so that's why this theme keeps popping up and I appreciate that he's being so generous with his comments but. . no, go ahead.

MH: I didn't mean to dig too hard.

DF: No, that's fine.

MH: So they knew what to do. They had already developed the methodology for this extraction.

DF: But why in the Rainbow area, that's quite a ways out of the known area?

MH: Sometimes you take what pay is available and in the Rainbow area, Imperial had that land to begin with. They dropped it except one section that happened to be upon the discovery well. So they knew something was there but they drilled a few other larger anomalies and then moved away. Then they finally dropped that one lease and then Mobil came in and paid 3 or 40 or 40 cents an acre for two big reservations. Mobil looked at it, did some seismic, had a problem with the multiples, they had a whole list of prospects, their cut off was here, the Rainbow area was below their cut off. So they decided to farm it out. Banff was looking for something that might be useful for Aquitaine's purposes and by golly we decided to take that farm out. That was the way the thing happened.

DF: You were the geologist on that?

MH: Yes.

DF: So the seismic really helped you on that one?

MH: Oh yes, absolutely. It was kind of interesting because we were trying to decide on the location of the first commitment well and we had this one seismic line, an old line from Imperial, which didn't have as many multiples in it. So we said, let's drill on this anomaly because it's the best anomaly and I said, fine, some LSD was picked and I said, no, we've got to go out there and find the shot point tags, I want it drilled on exactly this shot point. Because if we'd been half a mile off we would have been off the reef. And of course, I think, I've got to take credit for this, I insisted that it was going to be called Rainbow.

DF: Why?

MH: The pot of oil at the end of the rainbow.

#282 DF: Okay. Good for you. I always wonder where these names come from. Where did Banff come from?

MH: Rainbow actually, there's a Rainbow Lake close by and the well was. . so the name Rainbow was okayed by the Conservation Board. Banff was a small company that had been formed during a game of golf at Banff Golf Course. That's my understanding of it. And it was a small company, well run, found some production around the edges, around Bells Hill Lake and the French were looking for an entry into Canada at the time and they were smart enough to realize that the company should be run by local people instead of bringing in geologists with different ideas, world wide ideas because Canada was kind of particular. Stratigraphic traps were the thing that were important here. So they just gave Banff the go ahead to look for plays, get involved and so on.

DF: How many geologists were with Banff at this time?

MH: At this time I think there were, because it was at about this time, in December of 1963, a deal was made between Aquitaine and Banff, then they began to recruit some staff and I was taken on as Chief Geologist in April. By that time I think there were four other geologists there.

DF: Do you remember what people were being paid at that time?

MH: A geologist with a fair amount of experience would be getting paid say, \$800 a month, \$7 or 8 hundred a month. Chief Geologists made about \$800 or \$900. A far cry from the highs that existed a few years ago, I don't know what they are now.

DF: So Rainbow helped open up that part of Alberta for exploration.

MH: Oh yes. The exploration not only took place in the immediate area of Rainbow but it moved up towards Zama and up north that way. And you know, the fellow that really put the idea down on paper was a fellow, Jim Law, he worked for Chevron. In 1953 I was working for Staniland Oil and Gas and my job was to look at all of the well information north of the Peace River Arch, to look especially at the Devonian section to see if there were any plays there. That's where I first came across the middle Devonian reef and then, lo and behold. Just about the time I'm finishing my studies, Jim publishes this article that's in the AAPG and he describes the area around Zama and one of his statements is that one of these days somebody will find oil or gas, in biohermal reefs of middle Devonian age. And I liked his article because I had done this work independently and geez, we didn't differ one iota. So that was kind of . . . and I think he's the fellow that really. . . Chevron drilled some wells up there but they missed. So Jim's the fellow that. . . now, he died a few years ago but he was the fellow that put it on paper the first. . . And of course, I'm sure a bunch of people in other companies had the same idea. As someone said, sometimes you have to be in the right place at the right time to get your ideas into reality. And I was lucky to have that.

End of tape.

Side 2

MH: I mentioned the right time and the right place. During the time that I was looking at the samples of the wells around the Peace River and north, I looked at one and here, in the Slave Point formation that at that time, was not known to be productive, didn't I find some reef. I was really excited and went roaring into my boss's office and I said, Bruce, I found some, there's some reef in this well, it's in the Slave Point, I think it's got some oil stain in it, there's some little fluorescence in it. He said, how thick is it, I said, it's about 20-25 feet thick, he said, come back when you find 100'. Well, you couldn't make money on 25' of pay in those days, it had to be more. I should have kept track of that but I never did anything with that particular bit of knowledge. But it taught me a little bit about economics.

DF: Have you been to some of these past President's dinners?

MH: Yes. I've missed the last few because for some reason, Mary and I have taken the month of October off and gone to eastern Canada to visit with family and friends, so I've missed a few of them but I used to attend them fairly regularly.

DF: What kind of stories come up at those meetings?

MH: Well, it's always good to get together. I don't think there's too much reminiscing goes on. I think what happens is that the executive, at least the meetings I attended, the executive give the past Presidents a kind of run down as to what's been happening and where the

Society's going and what they see as maybe new directions. And they look to the advice from past Presidents as to, is this a good idea or its not. Sometimes I suppose they listen, sometimes they go on. But there's that kind of interaction. It's nice to be at those meetings, to be with old comrades.

DF: Any stories come up.

MH: The odd story. I can't remember any. . .well, of course, there's what's his name, Bill Gallup who was close to the indigenous people here and who knew the various dances and any time we made a field trip down to the Crowsnest that was part of the routine was that the Indians would come along and us guys would join in, in the dances.

DF: You worked with Bill.

MH: No, I didn't work with Bill but I knew him. I don't think to say we were friends but we were good acquaintances and we'd always stop and say hello to each other on the street and swap lies. He was a good guy.

#030 DF: Any other stories that come up at those meetings?

MH: Gosh you know I can't really. . . from time to time some past event would be relived. Ted Link was always a topic of conversation because he was not only a very good geologist but he was kind of a bit of a flamboyant character so there are quite a few Ted Link stories around as well.

DF: Can you tell me some?

MH: I can't, my memory isn't that good.

DF: How about some stories on yourself?

MH: Well, I have to be careful with that one.

DF: What were some of the more unusual things that happened to you, in the field or in your career?

MH: One of the things that gave me a lot of pleasure was, about the same time as I was President, 1969, I got a telephone call from an acquaintance of mine, who turned out later to be a friend, Yves Fortier, who was the Director of the Geological Survey of Canada, and he asked me if I would like to be Chairman of the Field Excursion Committee for the International Geological Congress, which was going to be held in Canada in 1972. I tried to walk away from it but he was pretty persistent so finally I went to my boss and he said, sure, if you can handle your own work, you can handle this. I said, well, I've got a good secretary and boy, was she ever good, so I took that on. Now, field trips across Canada for the International Geological Congress, we had 72 separate field trips going. That meant that there had to be guides on these trips from industry, from academia, from government. And getting them to all work together. I certainly didn't do this all myself, but I visited every one of these field parties, wherever they were headquartered and went over the trip with them and so on. One of the real joys was that that budget at that time was about \$1 million, just about \$1 million even and we came within \$3,000 of realizing the budget. I think we made a \$3,000 profit, which is phenomenal when you consider how independent some of these geologists are. Budget, who's going to worry about a budget. There's one fellow that budgeted for double occupancy for rooms and decided at the last minute each guy deserved his own room and came in about \$3-4 thousand over budget. Well, hell. So

you have independent guys like that, that sometimes created a little bit of a problem. But it was a unique opportunity to see another side of geology's life in Canada, just to get involved with the academic people.

DF: So how far afield were these trips?

MH: Well, they extended all the way across Canada, from Newfoundland into British Columbia and we had a number of them that went into the Northwest Territories. One in particular that was a flying trip over the Arctic Islands and they buzzed a polar bear. I know that that's not very nice but these fellows who had never seen polar activity and to see a bear on a floe of ice and see him jump in the water to get away from this noise, was quite something.

#071 DF: Where were the trips in Newfoundland?

MH: There was one right across Newfoundland, to give a picture of the total structural geology, there was another one on the stratigraphy of Newfoundland that just dealt with what kind of rocks were present here and there. That was a pattern all the way across. They tried to weave in as much as they could on economic geology, what mineral deposits were present, what prospects were present, whether there were any industrial minerals that could be developed. Of course, in the oil industry there were a number of trips that were fostered or led by people in the oil and gas business that would take groups of people into the mountains to see the rocks exposed there that are underground and are producing oil and gas.

DF: Newfoundland's pretty unusual geologically isn't it?

MH: It is.

DF: Can you tell us something about that?

MH: One of my professors at Princeton, Dr. Howell, cut his eye teeth on the Cambrian stratigraphy of Newfoundland. It's well endowed with fossils, so I used to hear from him about that. I spent a summer in Newfoundland. It's a harsh place to live but the people are so kind and thoughtful. They were unsophisticated. I'll tell you a little story about a fellow that I met in a lumber camp. We were staying a few nights at this lumber camp while we were doing geological work in the area and the cook made a cauldron, it was 2 or 3 feet across and maybe about a foot and a half, 2's high of beans and they were the best beans I've ever had. Well, the first night before we turned in we'd sit and have a cup of tea and the guys that were cutting the bulk wood were a bit shy, it was hard to start a conversation with them. By the second and third night they were getting to be a little bit more open. It was that time that Confederation was being talked about. This one fellow, he said, I'll not be marking my X for Confederation. So I said, why my son, because I was beginning to talk like a Newfoundlander now and he said, they're going to tax me punt. I said, who told you that, a fellow I knows real well, told me they were going to tax me punt. Well, I said, whereabouts are you from, oh he said, from this little outport. I said, you know, all the ins and outs of the bays, he said yes, I said, you could hide your punt couldn't you. Yes. Do you think it would pay them to look for your punt, they're going to charge you a \$4 fine, well, maybe not, maybe not. But that same guy was kind and thoughtful, he'd give you the shirt off his back if you needed it. So he was naive about

certain things, he believe certain people implicitly but he was kind and thoughtful, very nice people, very nice people.

#107 DF: So the IGC was here in '72 you say?

MH: It was in Montreal, held in Montreal in 1972.

DF: Right. And the field trips were just a part of what. . .

MH: They were a big part of the trip. I can't recall the number of people that were on the trips but it was a substantial number, 2 or 3 thousand people. Because we had field trips before and after the Congress.

DF: And the purpose was just cost recovery right?

MH: Just cost recovery.

DF: So that's why you say your million dollar budget, coming in close was exactly what you wanted?

MH: On some of the field excursions we made a little bit of money. We knew we were going to lose some on others because we had to subsidize them and so it worked out good, ended up with a profit of \$3,000.

DF: On a million dollars, that's a very small percentage.

MH: I must say that I was relieved that we came in, in line. There was another thing that I was involved in too. Again, I wasn't first choice on it but I was called one day and asked if I would be the Manager of the Second International Devonian Symposium that was held here, was it 1980 something or other. I don't remember the date on it. Digby McLaren was the Chairman but the work all was done in Calgary. Digby would visit us once in a while just to see how things were going and there again, thanks to Hugh McIlreath who organized the thing I had a bunch of volunteers who were absolutely superb. That was fun, it was fun to get it done. And fun to see how many people from all over the world came to Canada. Because the first one was held 25 years before and Digby had organized that one you see. So there was a continuity to it. In particular there was some Devonian fossils from shales that were very intricate and they used an X-ray method of taking a look at them. And my gosh, that was fascinating. We had people from all over the world sharing their experiences. That was fun.

#133 DF: How do you explain this spirit of volunteerism in what is really, quite a competitive industry?

MH: It's competitive sure, but the area of competition is over here. When you're down to prospects and so on, you're very highly competitive there, but when you want to discuss ideas that may generate these prospects, people are a little bit more open about discussing them. They're a little bit reticent if there's any direct line you see. We didn't advertise the method we had for seismic in the Rainbow area and then later at Strachan-Ricinus. We didn't advertise that but there came a time when the industry was getting to be fairly well aware, that's when we published. So I think that's the best way I know of explaining why there's, in such a competitive area, there's a feeling of comradeship. And of course, going out to study rocks in the field, I suppose you could do that in secret too but it's always nice to have someone else's opinion and as long as someone says, hey come on out here, I

want to show you an outcrop, I can't quite make sense of it but let's take a look at it, see if we can figure it out.

DF: So it's the scientific inquiry end of it too.

MH: That's it.

DF: So it's the academic and. . . Yes, because most of you are trained at least to a Masters level.

MH: I think most of the people were Bachelors, there were some Masters and a few PhD types.

DF: Anything else you'd like to say about the CSPG? What do you think of its future, where do you think it should go?

MH: I think its future is in good hands. These young whipper snappers that are running it now, they're good guys. And I think they've got probably more of a business sense than some of us old timers did that ran by our boot straps. I think its in good hands and I don't see how, with its present organization, it can get seriously derailed. Because they've built up a good solid financial base. I don't think anybody can destroy that base. There's a history there of the way the society has developed and has worked that it would be hard to cause it damage. So I'm quite confident that it's well run and it will continue to be well run. There's maybe be the odd little dip here and there, where somebody decides to publish an esoteric publication and it costs too much money and doesn't sell well and will be a drag on them financially, that's always a possibility. But when that happens people are doubly careful next time round.

#171 DF: What do you think have been the greatest accomplishments of the CSPG in these first 75 years?

MH: I think they've established themselves as a society that can be trusted. Sure they have their roots in the industry mostly, and in academia and in government, but I think when they speak as a scientific society, they speak freely. They speak for the members, they don't speak for industry, they don't speak for academia. That's what I see as being awfully important.

DF: How about when the CSPG tries to - well, the booms and busts are very cyclical in this industry, every 10-12-15 years. Is there anyway that the Society can give direction of the training of new geologists? Obviously when there's a demand for them, by the time you get them trained then there's no demand anymore, what can be done?

MH: Let me just give you a little bit of an experience that I had. After I took early retirement I had an arrangement with the University of Western Ontario, where I would go down for a week and one lecture a day on generating and developing prospects, just something about the oil and gas business. It started off in boom times, when there weren't enough geologists and in two years it was just zero. This student that came to listen to one of my talks, and he said, what are the chances of getting a job in the oil industry and I felt bad, but I looked him in the eye and I said, there isn't a snowballs chance in hell that you can get a job. Well, thanks for being honest. And that's the way it turned out. You know, it's not the oil industry itself that causes these sort of things, they may have contributed a bit. But it's the world wide view of petroleum and natural gas as a fuel. And when you get politics in North America mixing with politics in the far East and the politics of the Near

East, it becomes an uncontrollable sort of a thing. I don't know how. . my daughter graduated just in time for that debacle. You see, so I know personally what it's done. There have just been no jobs. I can remember that Dome had an offer out to quite a few young geologists and before the accepted, Dome got the letter out pulling back their offer. It was a horrible experience for these people to think they had a job, somewhere to go to, somewhere to start and all of a sudden, hey, you don't have a floor, you're dropping.

DF: What did your daughter do?

MH: She got a job at the Institute of Sedimentary Petroleum Geology in the Micro-Palaeontology Lab and she now runs the lab. So she's done okay. Married and got a marvellous grandson.

#218 DF: Well, that's good for you. What do you consider to be the most significant achievements of your career now that you've had a few more years to think about it, since the last interview? What did you enjoy the most?

MH: You know, there are people, once in awhile I get asked, would you have changed anything in your life and I think back and there are about a half dozen things that I have done that make me cringe at the thought of them, I think, what possessed me to do something like that. They weren't . . I didn't steal, I didn't . . .

DF: They weren't criminal.

MH: No, they weren't criminal things but they were dumb things.

DF: Such as?

MH: Well, oh no.

DF: Oh come on, tell us one anyhow.

MH: I'm going to skip around, I'm going to dance around that. But then I think of all the wonderful things that have happened to me and there isn't a damn thing that I would change. So I've really enjoyed what I've done. I had the opportunity to be President of a Society, to be Secretary of the AAPG for a couple of years, to do something like field trips for the International Congress. I had friends all over Europe, geologists that I could correspond to all over Europe. Working with a French company, having the opportunity to visit France, to see their research facilities, to which we, as a Canadian subsidiary, had all the access at relatively little cost. Got you again hey. So that's what's made my life really pleasant. I have no regrets.

DF: No regrets. However you've got to tell us at least one of these stories.

MH: Well, one of them. Before I was married, before I was serious about thinking of getting married, I took a young lady out, she was a ministers daughter, a very nice lady. And we're dancing you see, and I meet a friend and my mind goes blank and I say, Ted, this is uh, uh, uh. She says, Marion, I say, this is Marion, uh, uh, uh. Marion Gilbert, she say, don't you remember, she says to me. I said oh my god, how. . .you know. The others were maybe a little more serious than that but these are things that still bother me when I think about them.

DF: How about any in your career, any faux pas, geological?

MH: Well, you know, people will judge the same person in a very different. At one time, much to my surprise and chagrin, I was judged unworthy so I was moved aside. Of course, this

hurt my ego pretty badly and it took me a little while to get over it. But then somebody else took over and I was promoted. So sometimes and probably there was good reason for both these actions, but sometimes things happen to you that are kind of hard to take, hard to swallow but I think make for a better person finally. It chops the ego down a bit.

#272 DF: And maybe just hard to understand too, you don't know all the circumstances or whatever.

MH: There was a fellow that we had on our staff at Aquitaine of Canada who was not really producing and it was a time of shortage of geologists. And this guy was lured away from my company and I thought well, we're sorry to see him go but he hasn't really been working to his potential. I meet the fellow who has hired him about a month later, and he's really apprehensive, he says, gosh, I hope you're not mad at me for hiring this fellow. I said, well, I'm mad but I'll get over it and he says, boy he's a real cracker jack, he's just turning out stuff like you wouldn't believe. Is this the same guy so sometimes this may be the environment too. One man's meat is another man's poison.

DF: Now you worked for big companies and small over the years, any comparison between them?

MH: I learned from each company. I started off with Staniland and I found that their method of attacking exploration problems was ahead of its time. They had geologists and geophysicists working together, really working together. It's easy to say but most other companies didn't at the time. Then I worked for what later became BP Canada and they were interested in foothills, they were interested in structures. Then I worked with Petrofina. It was interesting there because I had a chance to do a lot of geology because they didn't have any money for drilling. There again, the separation between geology and geophysics was a brick wall. Then I spent a couple of years with Atlantic and that was an American company. You see, each one of these operated in a different way and gave me an insight into, there's no one way to do things. It's just a variety of approaches, for the same end. Then I worked for Banff and Aquitaine for 19 years, almost 20 years and that was really an experience because we were very successful with Banff and Aquitaine and they gave us all kinds of autonomy. Once the budget was established and there were some basic rules about how much budget you could do, depending on the income that you had. We didn't pay any dividends or anything like that. And so we could change our focus from place to place, all we'd do is inform them. Do you know that in all this time I think there was only one time that the liaison guy came and said, Mike, we'd like to make a suggestion about that project that you have up in the Yukon. I said, Jack, I think we're going to try and get a partner. Oh good, they were thinking that it was just too rich for our blood alone so we'd get a partner. And we worked very, very well with them, very well with them. They had research facilities that were second to none. Part of my job was to go over there and spend a week vetting their research projects. That was fun.

#328 DF: When you were President of the CSPG, what was the relationship of the President to say, the provincial politicians or the civil servants in the energy departments and so on?

MH: Almost none. Maybe that's where we kind of you might say, were lax or maybe not as active as we should have been. But there's a problem with that. If you're going to start to lobby is it going to be the Canadian Society of Petroleum Geologists or are you going to lobby for Alberta. The American Association of Petroleum Geologists has I think, about 25, maybe a little more, 30% foreign members now, non-U.S. types. I was Secretary of the. . .one of my jobs was to make sure that the representation was equal for no-U.S. as well as U.S. types. And every now and then and they still do that, because the last issue of their new magazine, the Explorer, has reference to a lobby that the American Association of Petroleum Geologists is participating in for some internal U.S. policy. Now, I figure as a Canadian and as a member of the AAPG, they shouldn't represent me. I don't have any business to be represented by them on an internal bit of politics and this is where the danger comes.

DF: Yes.

MH: If you're going to become a lobby group the rules are different.

DF: It's different isn't it.

MH: So I think the Society has tried very hard to maintain that kind of an independence. Yes, they have corporate members but no company, during my tenure of the ASPG or CSPG, and in my experience with the conferences that I've been involved in, no company has ever dictated what we should be doing. They gladly endow us with funds but they don't try to run us and that I think, is a marvellous way for it to be.

DF: Well, on behalf of the CSPG and the Petroleum Industry Oral History Project, I'd like to thank you so much for getting together with us this morning and allowing us to interview you again. Thanks again, and we'll end the formal part of the interview at this time.