

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Mike Hriskevich

INTERVIEWER: Nadine Mackenzie

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NM: This is Nadine Mackenzie speaking. I am interviewing Mr. Michael Hriskevich. Mr. Hriskevich, thank you for having accepted to participate in our project. Can you tell me when and where you were born?

MH: Well, it's a pleasure for me to be interviewed. I was born in the mining town of Timmins, Ontario, it's in northern Ontario in March of 1926.

NM: What did your parents do?

MH: My parents. . my father was employed for some time as a miner in one of the gold mines, one of the large gold mines in northern Ontario and he was a labourer, a common labourer. They immigrated. . first my father came from Russia in 1903 and found that it was a good place to work and live and then, went back to Russia, married my mother and came back with a view to bringing her out with him. So the first war interfered and it was only in 1922 that my mother was able to join him and four years later I was born.

NM: Are you the only child?

MH: No, there are four of us, two girls, the oldest one was born in Russia, her name is Sasha and then there's Anne, my sister, who is three years older than I and I have a younger brother.

NM: Are they all in the oil business or are you the only one?

MH: No, I'm the only one. My brother works in the mines up in northern Ontario.

NM: So you went to school in Timmins?

MH: Yes, the grade school and high school. Then I went on to university at Queens University.

NM: What did you study at Queens?

MH: First, like many students entering university, I thought that possibly aeronautical engineering might be something worthwhile. And then when I registered I found that they didn't have a course in that so chemical engineering sounded good. Then I found that a scholarship was available in mining engineering and knowing a little bit about mining, being from a mining town, I changed. Then eventually, I became more and more interested in geology and so I did post-graduate work, first at Queens for two years to get a Master degree in geology. Then I did further post-graduate work at Princeton in New Jersey in the United States.

NM: And you got your PhD in '52.

MH: MH: In '52, yes.

#026 NM: What about your summer jobs?

MH: Well, I had a variety of summer jobs. As students in mining and geology, we were encouraged by our professors to get jobs which would help us in our future life. So that

we got jobs doing geological mapping or being assistants to geologists who were doing geological mapping or looking after prospects where there was diamond drilling going on. Just jobs that were giving us experience in our chosen profession. So I spent 7 or 8 summers working in the woods, doing a variety of jobs, mostly geological mapping.

NM: And what did you do after your PhD, what was your first post.

MH: My first post was this and it happened this way, I specialized in mineral deposits and in petrology, igneous petrology. As I was preparing my final thesis, I didn't really have too much of an opportunity for job hunting, so when a person from an oil company, Mr. Morley from Staniland Oil and Gas Company, came to interview students, I got an interview with him and he convinced me that I should give the oil business a try. I thought I would for a year or two and that was almost 33 years ago.

NM: So which company did you start with?

MH: I started with Staniland, it's Standard of Indiana, it's now called Amoco Canada. I worked with them for several years and then with three other companies before I joined Banff Oil. . . Banff and Aquitaine, actually, which eventually became Canterra.

NM: When you started working for Staniland, where was that?

MH: In Calgary.

NM: So you moved to Calgary?

MH: Yes, moved to Calgary when it was a relatively small city of about 145,000 people.

NM: so things have changed.

MH: Oh, quite a bit.

NM: Where were the offices of Staniland?

MH: They were in a building which no longer exists, it was across the street from Eatons and it was called Zellers. Zellers had a department store, mostly lady's good and the second floor was rented out to Staniland Oil and Gas and that's where their exploration department was. It was a building which was somewhat uncomfortable because it was a bit drafty in winter and it had no air conditioning and it was very hot and miserable in the summer. So for a few months of the year it was relatively comfortable. And thinking now about working conditions as we have them in Calgary, I don't think anybody would work under those conditions.

#055 NM: That's right. Can you tell me about your work?

MH: I started with Staniland doing some well site work, which was then part of their informal training program. Gradually I was more and more involved in looking at samples to determine what the potential for oil and gas would be in certain areas. I spent actually, a year examining samples from all of the wells that had been drilled up until that time, north of Peace River. And that's a large area but there were relatively few wells then. So I did what is called stratigraphic work. From that I devised some what they called correlations, establishing the age of different rock formations, from one part of the province to another. And at the same time, looking for indications for oil and gas.

NM: And did you find any?

MH: Well, it's a very interesting experience that I had because in the process of looking at these samples, I came along some very interesting indications of the possibility that reefs

could be present, organic reefs could be present in the middle Devonian part of the stratigraphic section. I certainly wasn't the only one, because at about the time that I finished my work, Dr. James Law, who was working for Chevron, published a paper, with which I was delighted because he came to pretty well the same conclusions that I did. Except that he published it and I hadn't, which was . . . I felt good about it because here were two people working independently that had come pretty well to the same conclusions. One of the most meaningful little phrases, it was almost the last sentence or two that Jim Law had in his article and that is that he predicted that hydro-carbons would be found in reefs, in pinnacle reefs of middle Devonian age. So later on, and I'm sure that other people had the same idea, later on I was lucky enough to be involved in the discovery of oil in such reefs.

NM: How long did you work for Staniland?

MH: I worked with them for two years. Then I went, I worked for two years with Triad Oil Company, which was later to be called BP Canada. Then I spent almost five years with Petrofina and then two years with Atlantic Richfield Company, it's called Arco now. Then in 1964, I joined Banff Oil, which at that time had formed an alliance with Societe Nationale Petrol d'Aquitane???. Later on, Aquitaine Company of Canada, which was a subsidiary of the French company, and Banff, were merged into one company, in 1970 and this persisted until 1981, when CDC, Canada Development Corporation purchased Aquitaine Company of Canada and merged it with two other companies, CDC Oil and Gas, and Texas Gulf to make Canterra.

#094 NM: Let us go back to Staniland, do you remember who was working for you or with you at the time?

MH: Oh yes. There were some very competent people working for me then. The senior management was American and that's most understandable because in 1952, there were relatively few Canadians who had any kind of experience in the oil business, particularly in exploration. So the United States companies sent men here, they tried to recruit as much local staff as they could but they brought a few other people with them. So these are the people from whom we learned. There was a stratigrapher there whose name was Bob Smith, from who I learned an awful lot. There were some geophysicists that had quite a bit of experience, some geologists that had again, quite a bit of experience, they knew what kind of maps to draw and how to approach problems in looking for oil and gas. By this time there was a middle layer of supervisors and I worked with two men that were very good, one was Bruce Bailey, a very competent man, who's now in semi-retirement and John Rudolph, who's left Canada and is working in the United States. These were my supervisors at the time of working with Staniland.

NM: And after two years, you left Staniland, what were the reasons?

MH: A young man is usually idealistic and I had a problem of reconciling the approach of another supervisor who had come in over top of these two men that I mentioned, and I felt that my liberty as thinker was threatened. So I began to look around. Once you look around for another job then the decision has been made and I had an attractive opportunity to go to Triad. I went there actually, for less money than I was making at

Staniland because the opportunity looked good.

NM: And you were happier maybe?

MH: For awhile. But perhaps in retrospect, I was expecting too much because it really took me about four companies before I became settled down.

NM: What did you do at Triad.

MH: At Triad, I was designated the Senior Sub-surface Geologist and my job was to prepare regional maps and to evaluate areas for exploration, to make recommendations to acquire lands and then to do seismic and then eventually to drill. And hopefully to find oil and gas. It was purely exploration work that I was involved in.

NM: With whom were you working?

MH: Well, there again, some of the senior people were imported from Britain. There was a man that I enjoyed very much working for, his name was Thomas, A. N. Thomas. He and Peter. . . I've forgotten his second name. . . these were the two people who were eventually responsible for finding Prudhoe Bay and were given . . . Peter Kent, Sir Peter Kent, were given special recognition by the Queen, a medal and a prize that they had for discovering Prudhoe Bay in northern Alaska. So I was very fortunate to have been associated with these people. Again, one of the advantages of working for a number of companies is that you have the advantage of different kinds of experiences from various people that you're working with. Now I don't think I exactly planned my career that way but that was one of the benefits from it.

#140 NM: And after two years with Triad you left?

MH: Yes. My friend Bruce Bailey was working for Petrofina and he had a Senior Geologist job available so I spent almost five years working with them. Again, that was a very pleasant experience, except that, Petrofina was in such a financial condition that their exploration budget was relatively small. As a consequence we had worked up a number of very good prospects and the frustration of not being able to act on those prospects and seeing other people having the same idea eventually, because they had the money they could do it. So an opportunity came to work for Arco, who were expanding their operations and I went to work for them. Now, why did I leave Arco. . .

NM: I was wondering, when you were with Petrofina, you worked with Trian Nitiscue???

MH: Yes. I didn't get to know him very well because he was the big boss and I was some distance down but I shall always remember Trian Nitiscue with much affection. He was a man of such upright character, he was an extremely honest man and a very kind man. He did many kindnesses to people and very little advertising of those kindnesses. You know how some people blow their horn, well Nitiscue did this in a very gentlemanly way. He was a very good President in many ways, he kept the company running, he developed a feeling of really belonging to a company. Petrofina Canada was never considered to be the best paid of companies but they had a staff that was extremely loyal and very dedicated. Eventually when they were taken over by Petro Canada, to see this very good, cohesive body of people, very dedicated and very, very economically minded, swallowed up by Petro Canada, it was a bit sad to see.

NM: And you worked also with Bill Clinise???

- MH: Yes, Bill was the Exploration Manager and Bruce Bailey was the Chief Geologist and I reported to Bruce. I was the senior sub-surface geologist, again, I had about 7 or 8 geologists working for me at the time. So that was the hierarchy.
- NM: Did you stay mostly in Calgary or were you travelling around?
- MH: Yes, I've lived in Calgary for 33 years. Except for the travelling which I did when I was working for Aquitaine, all my work is here.
- NM: So you are a true Calgarian.
- MH: Almost. I've been here long enough now to acquire citizenship.
- NM: So after five years, you left Petrofina?
- MH: Yes. And was working for Arco. In December of 1963, SNPA, Societe Nationale Petrol d'Aquitane, decided to enter Canadian operations. They did it in a very logical manner. They looked to find a small Canadian independent that had people in it that showed some measure of success and were that familiar with the local situation. They made an arrangement to buy a controlling interest in this company and then set up their own subsidiary, Aquitaine of Canada, and so have Canadian talent leading them in the exploration effort that they wanted to participate in.
- NM: Can you tell me, why was the Society interested in coming to Canada?
- MH: Why, because they had made a number of exploratory visits here, found that there were still some good potential for finding oil and gas, found that the fiscal regime and government was stable and welcomed such investments. And there's always been a reasonably close connection between France and Canada over the years, so this was a logical place for SNPA to come. At this time, they were realizing the benefits of their gas discovery in the Lach??? field in southern France and this provided them with a source of income. The prospects for oil and gas exploration in France were rather limited so they chose a number of companies and Canada was one of them. The boss at Banff Oil, the company they selected, was my friend John Rudolph. So John, with increased activities, needed some extra help and he called me and presented me with an opportunity to be Chief Geologist and an opportunity to share in the success of the company. It was too good an offer to resist. So after grasshopping, jumping from job to job for a period of 12 years, I stayed with one company for a period of almost 20 years.
- #208 NM: And then with Banff Oil, there was the Rainbow oil discovery. Can you tell me about that?
- MH: As I mentioned to you, a number of people had the idea that there could be oil in the Rainbow area. Some companies, like Esso, for example, published a paper, based upon the evidence that they had, published a paper suggesting that this area was more gas prone than oil prone. When I joined Banff in 1964, Aquitaine, SNPA was interested in exploring in the wild cat areas, whereas Banff was a small company and could only afford to explore in the areas where oil was already known and where they could extend a pool or be involved to some small extent in not too expensive projects. Aquitaine wanted to get involved in more the wild cat venture. And while I had been working for, not only Staniland but all of the other companies, my area of specialization was northern Alberta. So I had drawn essentially the same maps, at least three times in working for these

companies. And had the idea that there could be reefs in this area and that they could contain hydro-carbon. So this idea was in my mind and when I was working for example, working with Fina, I made the recommendation that we acquire acreage in this area. It was turned down. Now, other people were doing the same thing with their companies. Finally when I was with ARCO, we had a proposal from Mobil to farm out some acreage to us. As a matter of fact, Mobil sent this letter to every company, every large company and some small companies, in Calgary. And it was the area that I thought might have some interest. So on behalf of ARCO, a geophysicist, Tom Hitchcock and I, went to visit Dawson Creek, where Mobil had their regional office. At that time they showed us some information and the first seismic section they showed had such an obvious anomaly on it that it was really. . .that was a reef. Now, why didn't Mobil drill that. Mobil was a big company and they had many, many prospects and this area was considered to be more gas. And worse than that, sulphur gas, which was very difficult to deal with. So that they were interested in farming it out. Rainbow was down on their list of prospects, below the level at which they could afford to invest. They would run out of money. So we came back, Tom Hitchcock and I and wrote up our recommendations and presented it to a special meeting of the brass from Dallas. They congratulated us on our work and said it was good, but their budget was also limited and if it hadn't been for more chance to get gas than oil they might be interested, but it's a good piece of work, sorry we can't take it. So now we come a year later.

NM: You must have been very disappointed at this time.

MH: Well, yes and no. Because this happens very often. This is the multiple hypothesis approach, a lot of people have the same ideas and if you're in the right place at the right time, then it gets done. So the right place and the right time was coming but it's really quite interesting how it happened. Because as I say, Aquitaine was very much interested in getting involved in a wild cat venture. So I checked to see and this particular land was still available, so we again, sent a consulting geophysicist up, just to confirm and he returned with the same verdict. Of course, knowing that there was a higher probability for gas than there was for oil, this is what everyone thought, then would it interest Aquitaine. Aquitaine of course, specialized in sulphur bearing gas. They could see that sulphur in the future would be a commodity of real value. So they took the money from the sulphur budget, to drill the exploratory well. Of course, the discovery was some sulphur bearing gas but a lot of oil was discovered. That's the way Rainbow came about. My part in it was having recognized that a play existed, recognized the significance of the anomaly and being in the right place at the right time. Can you imagine, a sulphur budget, used to drill an oil well.

#280 NM: But you were instrumental in the discovery?

MH: I think so, yes.

NM: And then what happened?

MH: Then came a most interesting period of time because it really was a unique position for a small company to be in. We made 3, 4, 5, 6 discoveries, one after the other and it was obvious that there was a lot of oil there. Now, how to get it out. We had a lot of core

information, a lot of seismic information and in order to maximize the recovery of the oil, there was a group of very intelligent people employed to determine what kind of mechanism, secondary or tertiary mechanism could we use to eventually extract the maximum amount of oil. They devised some very ingenious schemes and were only able to pursue this because this was the advent of the computer. The computer allowed them to do extremely complex, mathematical calculations, instead of many years, it was man hours or computer hours.

NM: That was making a big difference.

MH: It was. So they were able to develop three dimensional models, actually simulate the reservoir in the computer, then press certain buttons to pretend that oil was being injected or gas was being injected from the top or other means and so, devise the most economical and the most productive way of exploiting these reservoirs. This was an extremely exciting time. Another thing that happened was that we were also at the forefront of using seismic to define these reefs. It's not that we were the most intelligent people but we found the way and we had it exclusively for a period of maybe six months to a year. So we were able to do our exploration in a very secret manner and take full advantage of our abilities at the time. Now, another thing, which I really had quite a lot of enjoyment out of and which I think was a real feather in the hat of the exploration department of Banff Oil, and that was that we took the techniques that we were using to find reefs at 6,000' in the Rainbow area and fully developed them to look for reefs in the Strachan-Recinas area at 15,000-16,000'. I remember very well working with the geophysical people very closely. There were two people there, a young man by the name of Don Clark

NM: This is the end of the tape.

Tape 1 Side 2

MH: The other geophysicist was George Costashuk???, a good friend of mine with whom I had worked at Triad. George spent . . . he and Don were responsible for the processing of the seismic data that was acquired and again, using the computer, they were in, really the forefront of using the computer to eliminate multiples, to eliminate noise, extraneous material, so you get the true picture of the sub-surface. I remember one morning, George coming in to my office and laying a section on my desk and he said, I think I've got it. I looked up and he hadn't shaved, and he was looking rather dishevelled. I said, do you always come to work like this, he said, hell I haven't been to sleep for 24 hours, here it is. So there was a lot of excitement and people in the reservoir engineering department and the exploration department, you didn't watch the clock, the job was so interesting, there were so many things happening, so many exciting things happening that people really didn't concern themselves with such mundane things as salary, or vacation. It was so exciting. Now, when the excitement of Rainbow and Strachan-Recinas died off, the people who had been so challenged by. . . the reservoir engineering people, so challenged by the approach to reservoir engineering that the computer allowed them to make, they became bored and we lost quite a few good people. Not because they were dissatisfied with the company but there was no more challenge there for them quite a few of them went on, later on, to very successful careers elsewhere. So it was an exciting time, a very rewarding time as well.

NM: Anything else happen while you were working with Banff Oil.

MH: Well, Banff Oil was trying to pursue a course, because, although it was controlled by Aquitaine, it was still trying to pursue in some measure, a course of activity suited to its financial structure. Whereas Aquitaine of Canada, supported by the French parent, had much more money for rank wild cats. So they developed a little bit of a dichotomy, as between the purposes of the two companies and then finally the decision was made to merge the two companies. Already the control of Banff was essentially in the hands, I think they had somewhere between 45 and 50% of Banff Oil. So they decided to merge the companies. They then decided to make the resulting company Aquitaine Company of Canada, to make them a Canadian company. And they issued stock, there was a stock issue. Aquitaine took a very, very serious interest in the cultural life of the community. Not too many people know this but when Jose Eterbe???, who may not have been the best conductor for the symphony orchestra but was a well known personality and really got people interested in the symphony here. This was 1968, '69, '70, somewhere in there. In order to attract people of the caliber of Mr. Eterbe, not too many people know that he was given the option to buy some Aquitaine stock.

NM: Really, so that must have helped then.

MH: I'm sure it must helped. So that was kind of a quiet way, I don't think too many people know about this, a quiet way that Aquitaine used to establish. . .helped to, not establish

but helped to further the cultural life of Calgary.

#041 NM: Can you tell me, what else did Aquitaine do for the community here in Calgary?

MH: Besides sponsoring or getting groups started. . . and I'll give you an example. The Calgary Concert Band is a very fine aggregation of musicians and I say that because I am one of them. We have a concert band of about 40-50 people and we play concert band music. Now there is a symphony that fits the needs of . . . there's a country and rock, but for the average Calgarian who likes to listen to a summer Sunday concert, there wasn't very much of that. So a proposal was made to Aquitaine, would they sponsor a series of concerts to get this concept under way. And they sponsored five concerts. Well now, the Calgary Concert Band plays 20 times during the summer, in the various parks in the city, we play in front of the Esso building two or three times, Esso co-sponsors the concerts. So a tradition has been started and they sought to do this in many ways. The one third, ninth, was also their sponsorship I believe. In addition to this, when it was pointed out by one of their employees that the father of Manitoba was buried near Poole???, in the city of Ortez???, Aquitaine agreed to rehabilitate the gravesite because the original trees that had been planted by the grandson of Lord Selkirk, just at the turn of the century, were dying or dead and they actually posed a hazard because limbs were falling and breaking off. You could hardly read the inscription.

NM: Did you see the grave yourself?

MH: Yes, I saw the grave myself. It was quite interesting because when we came to the graveyard at Ortez, we checked in at the gate with the man who looks after the yard. Oh, he said, you want to see the grave of the Englishman, they still refer to it as the grave of 'the' Englishman. It was quite likely he is the only Englishman buried there. So we found that it was in a very sad state of repair and then through the efforts of Dr. Jack Macmillan, who was a geologist at the time, working for Aquitaine of Canada, we convinced the parent company that they should restore the grave, which they did. Then they had a dedication ceremony or a re-dedication ceremony, at which time the Canadian representative at Bordeaux came and the orchestra from the school played the three national anthems of . . . played the Marseilles, God Save the Queen and O Canada. And I must say that they played the anthems of Canada and Great Britain much better than they played the Marseilles. A professor from the university at Bordeaux gave a very, very, fine and lucid 20 minute talk on the last days of Lord Selkirk, he gave it in French and most of us that had had some French in our lives were able to follow it along just beautifully. It was altogether a very interesting occasion, the bringing together of three countries.

NM: What else did Aquitaine do?

MH: I'm sure they did. . . .

NM: Sponsoring more concerts or. . . ?

MH: they have always sponsored symphony concerts, they still do, there are one or two concerts a year, in which they are the major sponsors. They have always looked upon, and I'm sure they've done this with a number of smaller groups that are wanting to get started, it was Bill Clark. . . he was the Senior Vice-President and one of his responsibilities was dealing with problems like this, he was very anxious to get new things started. As long as

Aquitaine got them started, into the limelight, if they were worthwhile, somebody else could pick up the. . . he used the expression seed money.

#087 NM: Let us go back to your career now, so you were working then for Aquitaine, what was your position?

MH: Yes. My position was Exploration Manager and then towards the latter part of the 70's, I was promoted to Vice-President of Exploration and then in 1980, if I recall correctly, I was made Senior Vice-President.

NM: Did you travel a lot?

MH: Yes, I did travel quite a bit. First of all, as manager of exploration and then as vice-president of exploration, I had the job of being sure that the relationships with the French company, with the parent company, in the exploration area, were carried on in a good manner so that good flow of information. We were involved for example, in the research program of SNPA. They had a very extensive research program, in all facets of the oil industry, from drilling to seismic to geology, all facets, geo-chemistry. So here was a unique opportunity for a Canadian subsidiary and Canadian geologists to become knowledgeable about various aspects of research work. So I would make rather frequent trips to France on that basis and of course, budgets had to be discussed and five year plans and that sort of thing. Then, during 1980 and '81, actually from 1979, '80, '81, Aquitaine was invited to make some visits to the financial communities of New York, Boston, Toronto, Montreal, in order that these financial institutions could have some idea as to the nature of the company, because it was listed on the market. So that required a lot of travelling. My best trip of all was when we bought a coal company in the United states, that had some concessions in the Philippines.

NM: How come?

MH: The parent company thought that to get involved in coal mining in the United States was a good venture. But this particular coal mining company had some oil and gas concessions offshore in the Philippines and it was delightful job to go there and to evaluate. So I spent a week working pretty hard, evaluating the geological, geophysical merit of . . . and I was met on that trip by a representative from France, who was Jean-Marie Fabert???. Fabert later came to work for us as Exploration Manager and eventually was promoted to Vice-President of Exploration. He was a very good explorationist and before he left to go back to France, had quite a few offers of employment here.

NM: But he wanted to go back?

MH: Well, I think he wanted to go back because France is his home eventually and his children are there. But from the satisfaction of working, I think he had more fun here than he would have had in France. More opportunity to become really involved in the activities of the oil industry.

NM: Then Aquitaine became Canterra, can you tell me about that?

MH: Yes. In 1981, in June, the parent company, by this time Societe Nationale de Petrol d'Aquitane had merged with another French company Elf???, and became Societe Nationale Elf Aquitaine. The decision was made that because the future for oil and gas exploration in Canada was somewhat clouded by the NEP, that they would sell Aquitaine

of Canada and reinvest this money in oil and gas exploration and in chemical activities in the United States. This was done, it was finalized in the last days of June in 1981.

#135 NM: So was it a big change?

MH: yes it was. Because working for Aquitaine of Canada, we had a good cash flow, we were plowing back all of our cash flow, in some cases even borrowing a little bit of money but not too much, because we were in a very good financial position, in order to further exploration. Then when the purchase was made, it was made at a time of premium price, the CDC paid a premium price for Aquitaine of Canada, as did Petro Canada, when they bought Petrofina, as did Dome when they bought Hudson Bay Oil and Gas. As a consequence, when the smoke of this acquisition cleared, Canterra, the resultant company, was now a company saddled with the debt of its own acquisition. Since that time, of course, the price of oil has not risen the way they predicted, prices for gas have dropped due to a variety of reasons. So Aquitaine, or Canterra now, is saddled with a very high debt and have in the last couple of years, particularly with Mr. Esochay??? leading, have done a remarkable job in arriving at a relatively stable position. They still have a long way to go to become as active as they wish and to be able to devote more effort to exploration but they've come a long way with a big load of debt.

NM: What is the position of Canterra among the other oil companies here in Calgary?

MH: I think most of the people in the industry see Canterra as generally peaking, independent of control of the Canadian government. Because you know, the Canadian government does have 49% interest in CDC. So the ultimate biggest shareholder of Canterra, is in fact, the federal government. Having worked for Canterra, I know there was never at any time that we received any direction from the federal government as to what we should do and how we should do it.

NM: So the government stayed out of it?

MH: They stayed out of it. CDC was our parent and they helped to establish the policy or established the policy for Canterra. But there is always a little bit of suspicion amongst people and I'm not sure it was completely eradicated. Because the majority shareholder was in fact, 49% and the Canadian government, that there was some kind of a tie between them. As to whether or not this affected the company's operations, I don't think it did at all. But you asked me how was the company perceived and that's the way it was perceived. As a very aggressive company, tough to deal with, but pretty successful.

NM: And you retired in 1983.

MH: Yes, in September of '83.

NM: And since, what have you been doing?

MH: I've been enjoying myself, I've been having a very good time. First of all I have some friends in the industry with whom I consulted, because even though I had been thinking of early retirement for almost a year before that, actually doing it is quite a different thing. It's just like diving into a fairly cold stream. It's not bad for a few minutes but then the shock hits you afterwards. I did some consulting work, some small jobs for various companies, then I did a consulting job for the Geological Survey of Canada. They wanted to know how their efforts in the area of petroleum, their geological efforts were perceived

by the industry, so I spent some time doing and writing a report on that. Then I had an opportunity to be associated with a very good man, who was very capable in drilling and completing wells. So I participated in my first venture. So now I am an oil producer you see, a small amount. And I'm enjoying that very much.

#192 NM: So you have been keeping busy.

MH: Oh yes.

NM: That's something I've notice with oil men, they just don't retire and do nothing, they just slow down.

MH: You can't do that. I've had such an exciting life that to suddenly quit and to do nothing but golf or play bridge. . .

NM: It would be too boring for you?

MH: Oh, it would drive not only me crazy but my wife as well.

NM: Mr. Hriskevich, what do you think of the National Energy Program.

MH: I think everybody has judged that as being a monumental failure. I think that it is, for this reason, that already the oil industry was going to be in trouble without this. It was the straw that broke the camel's back. When companies that were already evidently in trouble financially, were suddenly deprived of approximately 25% of their cash flow, this led directly to a lot of companies failure. But I must say that the companies that have failed and are in trouble now have themselves to blame to a large extent. I think things were going so wildly during 1979, '80 and '81, and banks were so free at lending money that when the crash came, it came very suddenly. At that time, the National Energy Policy was imposed so the effects of one, rather poor management and poor outlook and two, too much easy money from the banks, there was perhaps a lack of responsibility there and then three, the National Energy Policy. What makes the National Energy Policy so bad is that, they predicted that the price of oil would keep rising. The people who constructed the National Energy Policy are considered by some government people to be really geniuses. But one basic thing was overlooked, amongst other things, but I think one very basic thing, and that is that when the price of a commodity reaches a certain level, people stop buying it. Take for example, you probably like perfume and if your favourite perfume was tripled in price, you would probably buy less of it or maybe not at all. Somehow nobody foresaw that at a certain level, people would turn to smaller cars, not go out for the Sunday drive. As a result the price of oil did level off. Now if a guy was really smart, he should have been foreseeing that. Now, what's happened in reverse. The price of oil now has dropped considerably and in the United States, U.S., you can buy gasoline for less than \$1 again. That's the regular leaded gas. Well, for the first time in about 3 or 4 years, the consumption in the United States is rising so it's obvious that between \$35 a barrel where people stop buying and \$25 where they are starting to buy more again, is a reasonable price for oil. Now, I think also, what was bad about the National Energy Policy was the unilateral confiscation of an interest held in exploration rights. No country in the world did what Canada did, to confiscate a part of the interest held by investors from all over the world. At that time, Aquitaine brought to Canada, a lawyer of considerable experience. He had been all over the world, dealing with problems

with a variety of countries and I remember him saying, he said, not even Iran confiscated without some sort of reparation being paid. So this reputation that Canada got, of being so nationalistic, so much more nationalistic than anybody else really caused a lot of people, caused Aquitaine to move out. They sold their interest.

#255 NM: And many small companies just disappeared.

MH: That's right. So this is a consequence of it. You can blame part of the problems of the oil industry on poor management, within the industry. There should have been somebody seeing that this was not going to go on forever. I remember even in 1982, the mayor of Calgary predicting that the city of Calgary would reach 800,000 people by . . . this was in '82, when things were really going down and Mr. Klein was still predicting. . . And then on top of the banks being too free, on top of this the National Energy Policy descended and it couldn't have been timed worse. The affects of all of these catastrophes, as I think they can be called, is that many companies have gone bankrupt, many service companies have gone bankrupt, the drilling activity has slowed down, seismic activity has slowed down. There is some encouragement though, because this year, for example, it's difficult to get rigs with a depth capability of say, between 5,000 and 8,000'. So those rigs are all busy. Perhaps in a year or two when the demand for gas is renewed, some of the deeper rigs that are now stacked without work, will be involved. For the first time in a number of years, all the seismic crews are busy, so it's hard to get seismic crews. I asked one of my good friends in the seismic business, how things were, Mr. Sinclair from Teledyne and he said, well, 1984 was good. We lost less money in '84 than '83, we're looking to break even in 1985 and maybe make money in '86.

NM: So how do you foresee the future of the oil industry?

MH: It's very difficult now to make any kind of a prediction. The future of the industry is depending to some considerable extent on the price of oil, established outside of Canada, established essentially by OPEC or by people that are ready to sell on the spot price at a discount. So I would say that as has happened already, in the United States, where the price of oil has dropped in the last two years, from about \$33 or \$34 a barrel to now about \$27. The amount of exploration activity in the United States has decreased substantially. The same thing has happened to Canada, for somewhat the same reasons, but a bit different, with the National Energy Policy being one of the problems. So now we are fighting our way out of this. To invest in the oil business now is good, if you don't have a debt around your neck. And there are companies that were never in debt, always managed within the limits of their cash flow, never went to the bank to borrow money and they have never had any problems with regard to staying alive. Their success has been such that they have continued to plow back in their cash flow to exploration. There are quite a number of these companies.

NM: This is the end of the tape.

Tape 2 Side 1

NM: Could you comment on the ups and downs of the oil industry because you have been a witness to them?

MH: Yes, there have been several ups and downs. The peaks and the valleys in the past have been notable but they have never approached the kind of peak and valley that we are now going through this last cycle. It's normal, I think, in an industry which is governed essentially, by supply and demand. So that there are cycles like that. It's obvious that if exploring for oil and gas is good and rewarding because the prices are high, many people get involved, there's an influx of money. Lots of discoveries are made, then comes a time of over supply and the prices drop and then you don't need the geologists, you don't need the seismic. . .

NM: Just like a yo-yo.

MH: Just like a yo-yo. And in the past this has been the case. Now, one of the up cycles was created by OPEC raising their prices to \$7, the first rise, the second one was raising the prices to \$35. Of course, this made many sub-economic deposits in Canada and the United States worth looking for. Whereas previously it was uneconomic, now because of the price, you rush in. The latest cycle was caused essentially that way. Such a violent explosion in the price, the reward was so potentially great, that people began investing in it. The federal government, looking for sources of revenue, saw this as a solution to all of their economic problems, their budget problems, they were going to take a large piece of this pie. The oil industry didn't believe that they would take as much. So they kept this momentum until the axe fell. And when the axe fell, we have the problems now. Of course, superimposed on the National Energy Policy was the realization by people that they didn't need as much oil and gas. Consumption in every country dropped because the price was too high.

#025 NM: So people then realized they could do with less?

MH: They could do with alternate fuels, they could do with less, turn the thermostats down.

NM: What do you think of nationalized oil companies, for example like Petro Canada?

MH: I have always believed that there is a place to have a national oil company. Every country should have one. There are distinct reasons for it, they can then keep an eye on the industry through this company, they then have an agency that can go and purchase oil supplies if that were necessary. I was one of the very few people that spoke out for Petro Canada. But what I don't agree with is the special, distinct position that Petro Canada has. That is that they are the recipient of these confiscated interests.

NM: So they are not treated like other companies?

MH: No, they are not treated like other companies. Look, they decided to purchase Petrofina, so a tax is put on every litre of gas that you and I buy. Now, the purchase price has been paid but this tax is still coming. I don't know if it goes to Petro Canada or not. And they

grew so quickly and in some cases so irresponsibly, that there's a general conviction in the oil industry in Canada, that the waste, the financial waste in Petro Canada in the last 4 or 5 years, has been a large one. It's a fairly well known thing that Petro Canada, at one time, had one million square feet of office space, for which they were paying, I don't know, somewhere, \$15-\$25 a square foot per year. That space has never been occupied.

NM: That is really a waste. That happens a lot in nationalized companies.

MH: Yes it does, but Canada always prides itself on having rather smart people. This was a horrendous blunder. People were projecting so stupidly for the future. It wasn't just Petro Canada, other companies are stuck with office space, but they pay for it, the companies pay for it. You and I as taxpayers, are paying, indirectly or even directly for this. This is what hurts. As I say, I am totally in favour of having a national oil company that serves the purpose of the country, but not one that has those special privileges over and above that which is extended to other operators in the industry.

#052 NM: Could you compare the training of oil people in your time to what it is now?

MH: That's a relatively difficult thing to do because of course, the sciences have advanced tremendously. For example, geo-chemistry, what is the origin of oil, how is it first deposited, how is changed from organic material to oil and gas, was in its infancy when I was graduating from university. The techniques now for measuring the organic content, measuring the maturation, measuring all kinds of things, its just improved tremendously. The ability to handle the vast amount of geological data with computers is again, a real advance. But I would say that in terms of average intelligence, I think people coming out of university in my time were probably just as smart as the ones coming out at this time.

NM: The only problem nowadays, they come out of university and they can't find a job.

MH: Yes, that's a tragic thing. In the spring of 1982, I participated in the iron ring ceremony that they engineering and geology and geophysical people have. Of course, the downturn had already started and a number of people had been hired, they'd been given jobs, they had accepted the jobs, and then on one night, they called it the night of the knife, they were phoned and said, we are withdrawing our offer of a job.

NM: That happened at the University of Calgary, it was Dome I think, it was 30 students lost their jobs.

MH: Yes, they weren't the only ones. At that time I thought that this waste was really tragic. So I sometimes get on the horse and take my lance, like that famous character and run at the windmill. I thought it was a waste. I got information which suggested that there might be say, 100 or more people without a job that had graduated. The cost of this education is 50-60-70 thousand dollars per student. I added this up and I could see this waste, because these people were not going to work in the profession. I put together a rudimentary plan. I got the support of the CIM, the Canadian Institute of Mining and Metallurgy, the local geological society, talked with the geophysicists and with the APEGGA and suggested that perhaps these people could be salvaged in this way. That if they would be paid a rather minimum salary, which they would be glad to accept, the government could subsidize say, half the salary and the company would take half. So if the company

couldn't afford to pay the total salary, maybe we could save. . . . Well I had discussions with a number of people in government, finally sent the letter off to the Department of Energy and to the Department of Education. The Minister of Energy replied that this was not a matter for the Department of Energy, it was a matter for the Department of Education. I think that he had difficulty seeing that these people would be employed in energy, you know, geologists, geophysicists, chemical engineers, where the hell else would they be employed. But that was his way of getting off the hook. Then the Minister of Education replied, fairly promptly and said, although it was a good idea, if we did it in this case, we would have to do it in other cases. So I was bitterly disappointed by that. Not really, I knew that it wasn't going to stand much of a chance because it would have required a lot of courage on the part of these people to have done something like that. There was every reason for Albertan universities to have had extended to them, to the students from the province that was still sitting on a nestegg of Heritage Fund, some assistance to save all of this talent. These people are driving taxis, they're mowing lawns.

#097 NM: Yes, it's a very sad situation here in Alberta now, especially in Calgary, being the capital of oil.

MH: Yes sure. And it's still a little bit heartbreaking to me. During the last week I've had three young students, bright. . . I know they're going to be good geologists eventually, they're looking for jobs and they get discouraged because they go from place to place. The Chief Geologist doesn't have time to see them, they have to see the secretary or somebody from the personnel, they don't get any satisfaction out of this. They leave their applications, they very often don't get replies, very, very discouraging. But we have to look to the future and I think the future does show some promise in Canada, providing we don't turn out too many more students looking for jobs.

NM: That can be the problem too. Let us go back to your career, who are the most influential persons in your career?

MH: In my life, my mother, and my high school teacher, one of my high school teachers. My mother had no education at all, she didn't go to school one day, but she was influential in getting me to go to university. Without her gentle push I wouldn't have gone. But just before that, I had a high school teacher whose name was Helen Elizabeth Carthy, just a wonderful person. Even after she retired we used to see each other. I would tell my wife that I had another girlfriend and I would drop in to see her in Toronto. She was a bright. . . a mind which was bright and wide. I remember in third year of high school, we had five years in Ontario, she called me in and I wondered what I had done wrong. She said, Michael, what do you think you're going to be doing with yourself. I could only think about three days ahead at that time, there's a high school dance coming on Saturday, this is Wednesday, I better start thinking about that. So she planted the idea of going to university. Then I was very fortunate in doing post graduate work at Princeton, where I worked under, I'm sure the best geological staff in the world. These were people with a wide acclaim in terms of their area of expertise. One of the people who really started the idea of continental drift, or kept it going, was a man by the name of Professor Hess at the university. So I had an opportunity to study directly under some extremely competent

people. Not only were they competent but they were kind people. That I think was very important.

NM: What were the most rewarding experiences in your career, maybe Rainbow, I think?

MH: Rainbow was. But being able to use the knowledge at Rainbow to find big deposits of gas in an area which gas was known to exist but a small company like Banff to get in and to drill the first well with the big pay. That was a real triumph. We were just a small number of people but we had the technique and the encouragement to do that and we did it. That was I think, to me very personally rewarding. Now, don't please, get the idea that I did this all myself. I was the Exploration Manager at the time and we had some very fine people working for us, so I think they probably deserve most of the credit for it.

#140 NM: Don't be too modest. Any other rewarding experiences?

MH: I have often felt that I've been extremely fortunate in having been in this place at this time and I've had so much fun, so much enjoyment in working in the oil industry in Canada that I don't think I would ever begrudge or think that I could have done something different. That's never entered my mind at all. I just so thoroughly enjoyed.

NM: So you have never thought of changing careers?

MH: No. Of course, there are times even in the very best when you think it's time for a change and a year before I left Canterra, that's the way I began to feel. That perhaps the way of operating, perhaps the changed conditions wasn't. . . I didn't have the desire. But now that I'm back doing more exploration, I'm having a lot more fun. I may have to retire again if I get too busy.

NM: Can we talk about your publications. What type of publications do you have?

MH: These are essentially technical publications and I can't recall, not that there are that many of them, but I can't recall precisely. I published the results of my thesis which were on igneous petrology and mineral deposits and then I published a number of papers to do with oil and gas exploration and co-authored a number of publications. The Rainbow area, on the Strachan-Recinas area and general papers that have been given, that have been prepared by the staff of the company and I've been involved in publishing those. I think altogether about 8 or 10 scientific papers.

NM: And what about your professional affiliations?

MH: Well, I've been a member of the Canadian Society of Petroleum Geologists since the time I arrived in Calgary. I'm also active in the affairs of the American Association of Petroleum Geologists and in the World Petroleum congress and also the International Geological Congress. I've been quite active in those societies. It's an enjoyable experience to be active because you meet people of a variety of experiences that you can draw from.

NM: What do you consider your achievements, that's a tough question?

MH: That's a tough one. I do think that I have been honest, mostly with myself, but I think I've been honest with other people. Because of the influence of my father, I'm very jealous of my reputation. I don't want to cheat anybody or be seen to be cheating anybody or doing wrong. I think I have developed some good friends, which is awfully important and also I've been pretty lucky.

NM: Before I ask you the last question, is there anything else you want to talk about or anything I've forgotten to ask you?

MH: No, I don't think so. You've asked me quite a wide variety of questions. From time to time little anecdotes pop in but they pop out too and I can't think of anything right now that I might have missed. One of the things that gave me a lot of pleasure was being involved, and this I think will give you an example of what I mean, was that I was asked to serve on the organizing committee for the International Geological congress, which was held in Canada in 1972. My job was to organize the field excursions. There were 72 of these in all parts of Canada. As a consequence I got to know a lot of Canadian geologists, was in touch with quite a number of geologists from other parts of the world and had the joy of participating in a very successful congress put on by Canada. That to me was a real joy. I was in contract with some marvellous people there and worked with people like Jack Armstrong, who was a senior office. . .not the Jack Armstrong from Imperial, there's another Jack Armstrong. And with the Chief Geologist of the Canadian Geological survey of Canada, Cliff Lord, who was a marvellous man and that sort of thing.

NM: So looking back at your career, what do you think of it?

MH: I don't think I would have changed anything. I have no regrets at all.

NM: That's a very positive attitude.

MH: Oh, I've been lucky.

NM: Mr. Hriskevich, it was a real pleasure interviewing you, thank you.

MH: It's my pleasure to have been interviewed by you, thank you.