

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Fred MacKinnon

INTERVIEWER: Nadine Mackenzie

DATE: August 1983

NM: This is Nadine Mackenzie speaking. Today is Wednesday, the 3rd of August, 1983. I am at the home of Mr. and Mrs. Fred MacKinnon, 2314 - 7th St. S. W. in Calgary. Thank you very much Mr. MacKinnon for having accepted to participate in our project. Can you tell me, where and when were you born?

FM: I was born in 1917 on Friday, the 13th of July, right here in Calgary.

NM: What did your parents do?

FM: My father was a pioneer in Alberta. He came to Calgary in 1886 from Ontario. He was age 21 when he arrived in Calgary on the 10th day of March in 1886. His father was a sawyer, operated a sawmill.

NM: Why did your father come west?

FM: I think probably because things were badly depressed in Grey Country, Ontario. I'm told that my grandfather had built a new house for his family and when this was all completed he owed \$250 which at the time, was a debt that would take a man a lifetime to repay. So my father came out here to help. He became a ranch hand and a cowboy and eventually established on his own and raised a family of 6 sons and 7 daughters, and I'm the youngest of those sons.

NM: Can you tell me about your brothers, are you the only one who went into the oil patch?

FM: Yes. My brothers remained in agricultural pursuits and I think because of my father's notions about the mineral wealth of the north, he encouraged me to go into geology, or mining engineering. It turned out to be geology. And I think I would have preferred to remain at the ranch but in any case I went off to university, the University of Alberta in Edmonton and graduated in 1940 with a bachelor's degree in geology and 2 years later, in 1942, I received a Masters degree in geology.

#029 NM: What about your sisters, did they marry people in ranching or in oil?

FM: I am the only one in the family that really pursued the oil business. My sisters married a variety of men, all good men mind you but none of the rest of them went into any connection with the oil business.

NM: Tell me about your studies, you spent 2 years at the university?

FM: In the end I spent 6 years at university. I was not a particularly great student but I did well enough. I don't know what in particular you want to get out of that. When I finished university, after the Masters degree, I had already committed to the Navy in the spring of 1942. And I was assigned to HMS Tecumseh here in Calgary and was starting in courses in signals and navigation but it wasn't occupying much of my time. And so I hit the streets so to speak, and eventually took a temporary job with Imperial Oil. My assignment

at first was on field mapping, geological mapping in the wildcat hills northwest of Cochrane. I spent 3 months out there. That 3 months was supposed to be the period in which I would be called to active service in the Navy. The Navy didn't seem to respond to any pressures of mine, so I found myself still, at the end of 1942, working with Imperial Oil. I went to Brooks in southeastern Alberta and that's where I met Bill Hancock and together we did the geology on a wide ranging program of geological work, seismograph surveys and wildcat drilling. At the end of 1942 Imperial had become involved in the Canol project and I was asked if I would go to Norman Wells in 1943 to take part in the Canol geological surveys. I took the stand that I was committed to the Navy but Imperial took a different view and through the connections with the U.S. Army Corps of Engineers, there was a request made to the commanding officer of my naval establishment to have me released to go on the Canol project. And that's in fact, what happened. I was given 6 months leave of absence. That was later extended by 12 months and subsequently I received a letter from the Navy requesting my resignation. So I ended up working with Imperial Oil. For the years 1943, '44 and '45 all of my work was based out of Norman Wells. And in the spring of 1946 I was transferred by Imperial, back to Calgary and I've been in Calgary ever since, I've lived here ever since.

#070 NM: Can you tell me a bit more about the Canol project?

FM: The Canol project was initiated by the government of the U.S. and operated by the U.S. Army Corps of Engineers. Imperial then, acted as a sort of contractor, in the sense that the work they did was under the direction of the U.S. Army Corps of Engineers. The object of the game was to provide a safe, secure supply of crude oil from inside Canada, that would be moved by pipeline from Norman Wells to Whitehorse, where a refinery was constructed and it was intended to provide supplies for what was know as the northwest staging route, in which the U.S. was moving tremendous amounts of war material and aircraft from Alaska to the USSR. The reason for all of this was that the Japanese had occupied some of the islands in the Aleutian chain, Japanese submarines were a menace to the shipping lanes off the west coast and the Canol project was to establish a means of providing fuel supplies to circumvent the threat of Japanese on the west coast. It's rather interesting that the Canol project, under this program continued until early 1944. By this time the Japanese menace on the west coast and in the Aleutians had been eradicated and so the whole thing was shut down as a Canol project. But Imperial on their own then, having all of the opportunities provided by the base established at Norman Wells, undertook to continue the geological surveys to try to find more oil fields similar to Norman Wells. That program went on for 3 or 4 years and while we didn't succeed in finding any new oil of any consequence it did result in a tremendous amount of geological survey work and the drilling of perhaps, 18 or 20 wildcat wells up and down the reaches of the Mackenzie, between Fort Wrigley and Fort Good Hope. As a result of that the geological knowledge of the country was enhanced considerably. Those surveys terminated in 1946 and I returned, as I said, to Calgary, where my main job, in the next few years, was to supervise all of Imperial's field geological surveys in western Canada.

NM: Who hired you first to work for Imperial?

FM: Ted Link.

#110 NM: Can you tell me about Ted Link?

FM: Ted Link was a marvellous man to work with and to work for. He had a great sense of purpose and he was very kind, at least to me. He liked to put a man on an assignment and then let him run with it without interfering with him. And certainly during the period that I was responsible for field geological surveys it was left pretty much up to me how things were done, once I understood the assignment given to me in the first place. I'll never forget the first interview I had with Ted Link, and this was some years before I went to work for the company. I suppose it was probably during the Christmas break and I had gone around in various offices to find summer work and I found myself in Ted Link's office one day and I suppose it was rather unexpected as far as he was concerned because he seemed suddenly to look up and said, who the hell are you. So I explained to him who I was and that I was an undergraduate in geology at the University of Alberta and was looking for summer work. He said, are you any good, I said, certainly I am, he said, what can you do. Well, he had me beat there because I hadn't done any what you would call commercial work in geology, but anyway he said, here's an application form, you fill this out and if we have something you may hear from us. I didn't. My summers, as an undergraduate, I worked with the Geological Survey of Canada, again, on field mapping in the foothills in Alberta. But Ted I think, was really an inspiration to a generation of geologists. Imperial, during that period, was the most active of the companies in Canada. And while they were carrying on a wildcat drilling program that lasted for many, many years unsuccessfully, at the same time they were doing an exceptionally wide ranging coverage in geological work in western Canada. In the end I've often felt that it was the right thing to happen, was for Imperial to make the discoveries at Leduc because certainly they had pursued the exploration in western Canada harder than anybody else and for a longer period of time.

#150 NM: So after your first meeting with Ted Link, he did not hire you, he hired you later on?

FM: He hired me in 1942.

NM: To go and work for the Canol project?

FM: No, he hired me to work on surveys out of Calgary. As I said, was in the foothills, the wildcat hills northwest of Cochrane.

NM: What were the conditions of living like in Norman Wells?

FM: Norman Wells was a rather large camp. I'm not sure but I would imagine there would probably be 1,000-1,500 people there. For the first year and a half or so it was entirely a man's camp but eventually they began to find ways to hire women to work in the offices or in various other establishments around the camp. Some married couples were able to go. My wife joined me in the summer of 1945 and we lived at Norman Wells until the spring of 1946. Our oldest child was about 8 or 10 months old when my wife came in. It was a good camp and a very interesting existence. I'm really very fortunate that I had that experience. Not too many people did. I mean, not too many local people from these parts.

It was my own choice that took me back to Norman Wells in 1944 and again, in 1945. At the end of the 1943 season there were probably more than a dozen geologists employed by Imperial Oil and Ted Link gave those people the opportunity to choose where they would prefer to go. The range of choice was to work for Imperial in geological work in western Canada out of Calgary, eastern Canada out of Chatham, I guess they were headquartered, in Ontario, to go to work for some of the Jersey affiliates, Carter or Humble in the U.S. or in South America, which was at the time the foreign area that Imperial was most involved in. And at the time Imperial owned 2 South American companies, one was Tropical, the other was International I think. So a number of our Canadians had the opportunity for that experience in South America and out of the whole lot I was the only one that took the last remaining choice, it isn't the last, wasn't as far as I'm concerned but that was one of the other alternatives offered was to go back to Norman Wells. And I said, I'd just as soon go back to Norman Wells and I'm glad I did.

#195 NM: So what did you do there?

FM: In 1944 took part in geological surveys fairly close in to Norman Wells. The thing there was. . . I have to go back a bit. . . in 1943, I believe in total there were 13 geological parties and it would involve perhaps 50 geologists and assistants in total. This was organized in a period when it was difficult to get experienced field geologists and certainly none of us had had any experience in that area before. You see, Ted Link had done survey work in there in 1919, 1920 and the Norman Wells field was discovered in 1920 or '21. While there had been quite a lot of survey work done during those periods there was virtually none of consequence done in the period after the early 1920's. So none of us really went in there with very much knowledge before we began these surveys. So in 1944, there was a small group of us who spent our time on the tributaries of the Mackenzie, say between Fort Norman and Fort Good Hope. Really, going over the reports that had been submitted in the first year, checking out points where there were inconsistencies and trying to bring the whole thing into a geological rationale so that we could understand it. And that was mainly in 1944. In 1945 we were wide ranging again and I had 3 or 4 parties and we were involved in surveys all the way from Fort Providence in the south to the Delta and across on the north slope of the Richardson's, all along the Arctic coast and one expedition went up to the head of Rat Pass and then went down the Dale??? to the Porcupine and continued over as far as Old Crow in the Yukon. Those were exciting because, again, it was reaching out into areas that had really not been covered before in any recent periods. I suppose way back, around or even before the turn of the century, people like McConnell had done surveys through parts of that northern area and other Geological Survey of Canada parties had submitted reports in the early 20's in some of the Franklin Mountains and the Mackenzie Mountains. So we were really getting back into the outposts you might say. And it was fascinating. I've always been very glad that I had that opportunity. In 1946 back working out of Calgary, again, I had supervision over parties that, well, we had one in Manitoba, we didn't have any in Saskatchewan, in total there were about a dozen, several were in Alberta, some in the foothills of northeastern British Columbia and my job was to keep track of them, visit them all, see how they were getting on, were they

fulfilling the assignments that they had been given in the first place and did we have problems to solve and so on. As a consequence of that I really travelled a lot of western Canada and had the opportunity to learn probably more about it than anybody else in the company at that time. A lot of this arose from having the opportunity to make aerial reconnaissance surveys, where we would be off for days on end, flying over areas that we knew little or nothing about, where the maps were poor. And finding areas where there would be outcrops or looking for areas where there might be some anomalous feature that would draw a geologists attention to a particular area. Quite often, in new areas, your attention is drawn to things that you can see from the air that are unusual or as we say, anomalous. If it looked as though you could get enough information by putting people in there on the ground then we would go and do that.

#272 NM: So were you flying a lot?

FM: Yes. I was.

NM: Can you tell me about the planes at this time?

FM: In the Norman Wells surveys we used almost entirely the old Norseman, Nordine. This was a marvellous aeroplane, it was a single engine, it was a canvas fabric on the frame, it was entirely on floats in the summer or on skis in the winter. You could lash your canoe on a pontoon and fly off for hundreds of miles into some area and land on a lake or wherever and that's the way most of us got around and got to our survey points during the Canol work.

NM: How many persons could you put in these planes?

FM: It would have seats for perhaps 4 but you could bundle another 3 or 4 in there. Sometimes you would have, I flew over to Old Crow one time with the pilot and a mechanic and myself and about 7 dogs and that was not a very. . .

NM: Very safe.

FM: It was safe enough but . . .it was interesting. They were not noted for heavy payloads but they were noted for their versatility in getting around. It was all by instrument flight rules, you would never get above any amount of cloud in a Norseman and if the weather was bad you just kept below the clouds and if the clouds got that low then you'd find yourself flying a few feet over the Mackenzie River until you got to a place where you could stop and find a haven.

NM: Where were the pilots trained?

FM: There were a few, well I think most of them were trained in the companies that were predecessors of Canadian Pacific northern routes there. I can't recall the names of those companies but there were people like Vant McConnachie and Wapmay and Ernie Dalsell. . . I find right now I just don't think of their names. But they had their training in bush flying. Of course, during Canol we had the benefit of aeroplanes operated by the U.S. Army Air Force. Although many of the pilots were Canadians they were flying for the U.S. military. But they were using basically Norsemen. There were a few other aeroplanes, like the Lanka, it was a little bigger than the Norseman and Barclay that was the first metal skinned aeroplane that we used for that work, a bigger aeroplane, a twin engine thing on floats and could carry more stuff. But the Norseman was by far the most

versatile of the whole lot. Norseman haven't been made for a long time, I'm surer there were very few of them around. The Beaver is somewhat similar, it's larger and of course, much more modern than the Norseman but the Beaver and then subsequently the otter again, much bigger.

NM: End of the tape.

Tape 1 Side 2

FM: [in mid sentence] being on the ground, depending on the areas that they would be in, they would be serviced by pack horses. We were not using helicopters, they weren't available in those days. Pack horses, or in some places, vehicles, pick-up trucks or panel trucks or what have you. In remote areas it was virtually all pack horse work at that time. So while that was going on we also were looking for other parts of the country that had not been mapped in any detail. While we had fairly good topographic maps of the whole country, good enough that in flying over you could identify from the major streams or large lakes and so on, and be pretty certain where you were on the map from somewhere up above. And this would be flying at an altitude of probably, a couple of thousand feet or so. To supplement this, we would take pictures with our own cameras. Although at one time Imperial got hold of a very good hand operated Fairchild aerial camera and we used that, I had access to that for a number of years. It was a marvellous camera. It would take very, very good oblique photographs and remarkably fine definition.

NM: Was it a big camera?

FM: No, it was only, perhaps 8 or 10" in length. It was easily held with a hand grip. And of course, if you're taking pictures you really have to have some means of identifying the picture and the spot on the ground so we had to be careful about that. But those pictures were good enough that they were of tremendous help in assembling rudimentary maps, prior to having any survey work done in those areas. A lot of the country that we covered with those aerial reconnaissance flights, that's what we called them. . on one particular situation we were using the aeroplane that was on lease to Imperial from I think, Carter. And this was a good twin engine aircraft and we covered the area from somewhere around the Fort Nelson vicinity in northeastern B.C. down through Fort St. John, across to the Peace River country, all the way across northern Alberta and then across in to northern Saskatchewan and as far east as The Pas, Manitoba. We were involved in this for 3 or 4 days. Mind you, they were rather interesting days. We liked to get out early in the morning when the air was best, before you got too many currents. In the afternoon the flying was apt to be rather rough because of air lifts and so on.

#034 NM: Quite dangerous then?

FM: Oh no, it wasn't dangerous at all. But the thing is, if you get it up to take off at 8:00 in the morning, that means you've already been underway for an hour or so before that. By the time you've done this for 4 or 5 or 6 hours you're really worn out so we'd find maybe, by mid afternoon, 2:00 or so, we'd be through for the day. So we'd go back and spend the afternoon getting ready for the next day or working over the notions that we'd picked up

in the morning or on that day. So 3 or 4 days of that, it was fascinating but it was rather exhausting too.

NM: How long did you do this type of work for?

FM: Do you mean the field surveys?

NM: Yes.

FM: Through 1946 and I think into 1947. Of course, in the early part of 1947 the Leduc discovery changed everything. As Grant Sprat said one day, it succeeded in commercializing the oil business in Canada.

NM: You were not involved in Leduc at all?

FM: No, not at all. The program of Imperial, in the years that we're speaking of had changed rather dramatically, in that, in 1942 Imperial had rather extensive survey work going on in Saskatchewan. Then in the next few years, with the change in government in Saskatchewan and rather threatening postures taken by the CCF as it was known as then, Imperial really evacuated Saskatchewan I suppose and started in eastern Alberta, somewhere around, perhaps around Lloydminster and began working westward from there. I know that in the spring of 1946 I had come out from Norman Wells and gone to an AAPG meeting in Chicago and from there I went over to Toronto and took part in a sort of in house seminar on what we ought to be doing in exploration in Canada. The word from that came out that we should high grade the Edmonton hinge line, to use a term applied by Lewis Weeks, down dip from the Athabasca tar sands, looking for lower Cretaceous oil reserves. And from time to time, to drill a deep test for stratigraphic information below the Paleozoic unconformity and so that program took Imperial through the Edmonton area and one of these deep tests was drilled at Leduc. So that changed things considerably. But I was not involved with that program with Imperial at all. All of my work with Imperial had been either in the Norman Wells area, Mackenzie Basin, or in these other surveys in the foothills of Alberta and in the plains of northern Alberta or in the one that I mentioned in Manitoba.

#078 NM: What did you do in '48?

FM: In 1948 I was working as a geologist in the Calgary office, assigned to the geophysical department. That work really involved a geologist and a geophysicist talking through the prospects. To put it another way, each geophysicist seemed to be assigned to a particular area and as he developed the seismic features that appeared to be interesting, he would be required to write a report on that and as a geologist working with him I was also required to write a report from the geological standpoint. The two of these things came together and created what would be known as a prospect report and they were named or numbered or what have you. I remember one in particular, it was on the roster of prospects under the name of Golden Spike. The geophysicist was Bud Coote and he worked this up and the two of us came up with this report. Incidentally, when we were doing this we were required to grade the prospects, A, B, C or D, in descending order. One of us rated it D, I don't know whether it was Coote or myself and the other one rated it C. So we didn't think a lot of it and in fact, it wasn't any better or any worse than 100 others that we could look at. But eventually the thing was drilled and it turned out to be this magnificent

Golden Spike reef, which is limited in area but it's immense in thickness and it's just a marvellous accumulation. About that time, Imperial started a new system of naming the wells and instead of naming them after a post office or a school or some other geographic land mark, they began naming them after the individual on whose land they were drilled. This guy's name was, I don't know how you pronounce it, it was spelled, Schoepp. So this well was drilled as Imperial, Schoepp. And it came in as such a marvellous well that the name was quickly changed back to Golden Spike.

NM: That's a German name.

FM: Yes. He was the land owner on whose land the well was drilled.

NM: But his name did not stay.

FM: His name didn't survive.

#110 NM: And you were working from Calgary?

FM: Yes.

NM: Out of what type of offices?

FM: Imperial's office, at that time, had become the building on the corner of 2nd Street and 9th Avenue S.W. that was demolished last year and still remains, I think, a hole in the ground. Imperial took that building over from the Albertan morning newspaper, when they moved out to a new building, I think the one up on 10th Avenue at 8th Street. Anyway Imperial took that over and that's where we were. I think that's what we were infesting at the time.

NM: Did you have only one office at the time, an office building or did they have several of them?

FM: I think, well, let's see, during part of this period, when I first came back to Calgary, we were occupying the building that we called the Tecumseh Building. During the war it was the headquarters of HMCS Tecumseh and this is where I went to take signals and navigation. But after the war Tecumseh built their own place up on 17th Avenue and Imperial had that building. And they had also the building next door which was, I think, just a ground floor building. Tecumseh was about 3 stories but not very big. But when I first went to work for Imperial, they were on 2nd Street at 6th Avenue. This had been the total Imperial headquarters building in western Canada and it was 2 stories, it included the marketing people, and all of the exploration people that I had met in 1942 worked out of that one little building.

NM: So you have seen Calgary growing a lot. How was Calgary in the early days?

FM: It was quiet and small and not very interesting in many ways.

NM: Very, very small town.

FM: No, I don't recall it as a small town, I suppose, but I do recall it with a population of maybe, 40,000 people. And I remember it very quickly after the war, growing to a couple of hundred thousand. I remember talking to the mayor, Don Mackay at the time it reached about 200,000 people and was building like mad and everybody wondering where all the folks were going to come that would occupy these buildings. He said, well, once the city gets to be a couple of hundred thousand it generates its own growth. I don't accept that particularly but certainly, the happenings in the oil and gas industry had fundamentally,

the main impact on Calgary's growth, there isn't any doubt about that.

#149 NM: What did you do in 1949 Mr. MacKinnon?

FM: In 1949 Imperial disposed of their holdings in Royalite Oil Company. Our object isn't to give a history of Imperial Oil but I could give just this little background. Since away back in the 20's, Imperial had controlled Royalite. Royalite was the main operator in Turner Valley, operated the Madison Natural Gas Company and the Valley Pipeline. The gas company delivering natural gas to the city of Calgary and the pipeline delivering crude oil from Turner Valley to Imperial's refinery in Calgary. This continued for quite a long time in a happy relationship, with Imperial owning something better than 80 or 85% of the shares of Royalite, Royalite operating quite happily in Turner Valley. It owned a number, maybe half a dozen or so of the big old steam rigs for drilling wells in the foothills, would occasionally drill out of the foothills as a contractor for Imperial Oil. A number of the early foothills wells were drilled and even some plains wells were drilled by Royalite as a contractor for Imperial Oil. After the discovery of Leduc, Imperial found some difficulty in that there was their minority shareholder of Royalite who was not given the opportunity of participating in this new exciting thing and so Imperial naturally attempted to buy up these minority shareholders and unsuccessful in doing so, in 1949 reached an agreement whereby Imperial disposed of their whole lot of Royalite shares through Dominion Securities and they were put on the market and created Royalite Oil Company Ltd. as a new Canadian exploration company. This was really very exciting. Royalite, operating as a sub of Imperial Oil, had virtually no technical staff that was available to them instantly to begin a program for this new exploration company. So Imperial undertook to provide a certain number of key people to go over in to the Royalite organization and get it started and I was offered the opportunity to go to Royalite as Exploration Manager, working for Bob Heard, who was the President of Royalite and a marvellous man to work with. I didn't spend very much time worrying about this, I merely asked myself one question, not can I do the job but what would I ever think of myself if I didn't try.

#192 NM: It's a good way to approach it.

FM: So in Royalite we had a little money, I think probably about \$6 million. I went over there, I think it was on the 15th of February 1949, and within 2 or 3 days after that, in one of the very first sales of Crown lands in proven areas, such as the Redwater field. . by this time the government had established this Crown reserve business. So there were Crown lands coming up for sale in Redwater and we spent \$3.15 million and bought section 15 in the middle of Redwater, which at the time was undrilled. But close in to production. So this was the first job in beginning in February, Royalite took over this operation and there were many, many people, production people and engineers and so on, removed from Turner Valley to Edmonton and operating this thing at Redwater. This of course, section 15, turned out to be one of the prime parcels in the Redwater field. There were other subsequent acquisitions of Crown lands made by Royalite and some partners in there, so this developed a good base of production and cash flow for Royalite and we set out on an exploration program that covered extensively the plains of western Canada. Over the

period of time we were successful and it was great fun, the whole business was fun. But the Royalite people were particularly proud of their company and it was a small enough group that we worked well together and just had a great time.

NM: What does an Exploration Manager do, what were your responsibilities?

FM: Okay, the way it was set up at that time, exploration required geologists, geophysicists, land people and access to lawyers for agreements and so on and so forth. So the exploration division, if that's what you call it, really included those main elements, geology, geophysics, land and access to good production engineers, drilling engineers. The drilling department was not necessarily part of exploration because the drilling department drills exploratory wells and production wells. So drilling and engineering tend to be one group, geology, geophysics and land tend to be another and this is the Exploration Manager in here.

#233 NM: You have to coordinate all those.

FM: All those and coordinate or be in on the coordination between these guys and the drilling and production people, engineering people.

NM: For how long were you Exploration Manager?

FM: I think it was 8, maybe 9 years. Let's see, I began there in February 1949 and I left in February 1958. One of the interesting things that Royalite started into at the time was in the McMurray tar sands. This was . . . well, it was a very interesting thing to be involved in but tar sands projects are obviously far beyond the capabilities of companies the size of Royalite. Perhaps it took a while for Royalite to discover that. But anyway, I was given the assignment by the company to assemble the best properties that we could find in the Athabasca tar sands area and so in Royalite, we put together the package of lands that now is being mined and developed by Syncrude. Royalite filed on those and owned them. Subsequently, having discovered that sort of business is much too rich for a Royalite sized company, brought in City Service and Richfield. Richfield was subsequently taken in to Atlantic, eventually Imperial bought their way in and then, subsequently, a few years later, Royalite was merged into Gulf and now, by that time, you had Gulf, Imperial, Atlantic Richfield and City Service. All I'm saying is that the lands that they were occupying are lands that our exploration bunch in Royalite put together for Royalite. Okay. Royalite spent quite a lot of money in field experiments in these properties, in the Athabasca Tar sands. And at the same time, Royalite had ventured into refineries and service stations. Royalite bought a company in Saskatchewan known as Highway Refineries, it had a refinery in Saskatoon and a number of outlets throughout the province. Royalite built the refinery in Kamloops and started out on a program of opening new service stations. I think some of the promotions at the time said there would be one new service station a week for the next budget year. And as a consequence of all of this, the cash flow that had formerly been available for expenditures in exploration was no longer available for those purposes. So it left us in exploration without a lot to do. Exploration people really can't stand very much of that so in 1958 I left Royalite and just moved over as Exploration Manger in a company called Triad Oil Company Ltd. By that time BP, through Darcy Exploration, a BP company, that is the British Petroleum

Company from London had found their way of entering the exploration game in Calgary by taking an interest with options to extend that interest in this company called Triad, which had been locally formed and had a little bit of production. They were partners in some of the acquisitions with Royalite in the Redwater field and they had also, Triad, had continued to develop some exploration ventures on its own. We knew them pretty well, we in Royalite knew them pretty well, had done some deals with them. I think by the time I went to work with Triad they were carrying on quite an extensive exploration. They were doing it fundamentally under the supervision of people that had been seconded here, as they used to say, from the parent company. So they wanted to get more Canadian involvement, so anyway, that's where I went. Triad eventually became a company known as BP Oil and Gas. By this time BP Canada was getting pretty firmly established as its own entity, separate from BP Oil and Gas. BP Canada had different shareholders than BP Oil and Gas. So in the early 1970's we found an opportunity to merge us into one ball and that became BP Canada and by that time I had become President of BP Oil and Gas Company and in the merged company I was Senior Vice-President. I continued there until I retired, which was in 1977.

NM: This is the end of the first interview with Fred MacKinnon. Thank you very much for this interview Mr. MacKinnon.

FM: A pleasure.

End of tape.

Tape 2 Side 1

NM: This is the 2nd interview with Fred MacKinnon. Mr. MacKinnon can you tell me a bit more about Triad and how it became a company known as BP?

FM: Okay. Triad Oil company Ltd. had been formed by Canadian financial groups and had already acquired producing interests, mainly in the Redwater field but subsequently, started expanding into the beginnings of exploration programs, with land acquisitions and so on. But by 1958, when I joined Triad it was already in control of the British Petroleum Co. of London, England. BP had acquired an interest in Triad and had rights to increase that interest and eventually, took over Triad completely and merged it into the Canadian company, BP Canada.

NM: Was Triad a big company?

FM: No, Triad was a very small company.

NM: How many persons were working for Triad?

FM: When I joined Triad there were about 170 people in the total company. A couple of years later there were fewer than 100. It was a small company and had been doing exploration programs under the guidance of BP, but without enough cash flow to support the programs. So in effect, Triad was exploring on borrowed money and that's really not a very good thing to do. So in 1958, when I joined the company, Triad had acquired interests in very large holdings in the foothills of Alberta and British Columbia. These are very expensive exploration programs and they take a long time, it takes a long time to get

your exploration work done in such areas, such as they were then anyway, not a lot known. And in fact, from those programs that began around 1958, it was more than 20 years before . . . well, some discoveries had been made, it was a good 20 years before any revenue began to come back from that. And the point that I'm making here is that a company like Triad really couldn't support on going work of that kind without injections of large amounts of capital and this of course, was the role that BP, the parent company, played. In the course of those activities, there were certain acquisitions made that strengthened Triad. The other thing we were always attempting to do was to try to more closely identify Triad with BP. So that the tendency to think about these programs in terms of we rather than in terms of they. And that was really what was behind changing the name of Triad, we called it BP Oil and Gas and I was General Manger of that company and subsequently became President. That was the company that finally, about 1973 I believe it was, was fully merged with BP Canada. BP Canada had become established back in the middle 50's by building a refinery in Montreal and starting the development of a chain of service stations. So it was a refining and marketing company but not involved in exploration. The other part, with BP Oil and Gas, which was involved in exploration and production but these two companies had different shareholders. So in the end an arrangement was made to merge them into once company known as BP Canada and at the time I retired in 1977 I was Senior Vice-President of BP Canada and my job was responsibility for exploration and production in all of Canada.

#058 NM: Were you travelling then a lot, all over Canada at the time?

FM; Yes, we managed to obtain representation in most of the interesting and prospective areas of Canada, including the high Arctic, including the Northwest Territories and the Yukon and eventually, in the Atlantic, off Newfoundland and Labrador.

NM: What were you doing in the high Arctic?

FM: In BP we took a farm out from Pan Arctic and drilled 3 wells in the initial program. That was rather interesting because we, through a drilling contractor, assembled a rig in Edmonton and it was trucked from Edmonton to Yellowknife and flown directly from Yellowknife to the location that had been prepared on Bathurst Island. There was nothing unusual about that but it was new for us. This took, I believe it was 3, Hercules aircraft loads and it was all accomplished in a matter of just a few days.

NM: That's fantastic, very quick work. In the Yukon what were you doing there?

FM: In the Yukon and the Northwest Territories it was just ordinary run of the mill kind of exploration for oil and gas. Some years later we also became involved in mineral exploration and coal. But this was not too long before I left the company and other than having the opportunity to help initiate such programs, I was not all that much involved.

NM: Can you tell me a bit more about BP, the history of BP?

FM: I couldn't pretend to be an expert on the history of BP but I have had many interesting discussions with people in BP and of course, I've read the histories that BP has had written about it. I do recall in the first year that I was with the BP connection I spent a number of days with Peter Cox, who was out here in Calgary, in Canada, from London, on a trip. Cox at the time, was the head of exploration for BP worldwide. One afternoon

we found ourselves sitting at a lake in northeastern B.C. for a number of hours waiting for an aeroplane to come and pick us up and we were talking about a wide range of things. I wanted to try him on a little bit because I hadn't really known him very well up until then and I said, Peter, BP is really not an exploration company at all. It's an accumulator of tremendous amounts of very highly technical and scientific data about oil and gas but it hasn't got any idea how to use this information in the commercial sense as an exploration organization. And to my very great surprise Peter Cox said, you're exactly right. He said, BP is a company that was fantastically lucky in the very beginning, and he was referring to BP's early days in Persia then, and the fact that they made the discoveries away back when. And subsequently most of BP's activity remained in the Middle East. And it wasn't until mid 50's or thereabouts, when BP got thrown out of the country, Persia, that they began to realize that wisdom would take them elsewhere in the world in exploration. But up until about 1958 they really hadn't got used to the idea of being worldwide explorers in the normal sense. Certainly they were very highly technically oriented and they had marvellous people, very capable people but somehow lacked the commercial sense of exploration. And this was interesting too, that having entered Canada, they had to get used to the notion that here, BP would have to compete with several hundred other companies, ranging all the way from the Imperial sized down to the individual entrepreneur who might be a lease broker and a broke leaser next week, and compete with all these guys for odd little quarter sections here. Where in the past, BP had been used to going in and taking over half a country for 50 years and having that on a concession. So I think the Canadian experience helped to teach BP a good deal about how to explore and be competitive in exploration throughout the world. And I'm not about to say that from Canada they learned enough about it to make their beautiful discoveries such as Prudhoe Bay in Alaska and the North Sea and so on. BP on their own, had raised a new generation of explorers in the meantime and they were more capable in what I call a commercial application of their exploration expertise.

- #130 NM: Where were the BP staff coming from, were they coming mostly from England or from all over the world?
- FM: Most of the ones that we had were seconded to Canada from the worldwide organization of BP. So they were from all over really. A number of them were Britons but a number of them were Australians or New Zealanders, at least most of them had worked in a number of those areas. But a lot of them were Australians, New Zealanders. Cox himself was a New Zealander born.
- NM: Did you see their headquarters in London?
- FM: Oh yes. When I first started going over there they had the old headquarters in Brittanic House in Finsbury Circus. Then a few years later they built the present Brittanic House. And I was with the company when that took place.
- NM: In Calgary what type of offices did they have at the beginning?
- FM: Triad Oil Company had built its own building and I believe that that had already been done before BP came into the picture. And this was a good building, I think it was a 3 story building but it was designed to have 8 floors. Triad owned this building and when it

came time when Triad was growing a bit a needed additional space, we of course, thought first of adding to the 3 stories and making it an 8 story building as it was designed to be. But it was a rather expensive building in the first place and to add to it was going to be more costly than some of the other alternatives that we found. By this time a number of the large developers had begun the great program of downtown office construction that we have just recently seen stop.

NM: Skyscrapers everywhere.

FM: And while we were finding out about this we discovered that the developer who was building the new Royal Bank building was rather anxious to have us as a tenant and when we were finding out how anxious he was we found an opportunity to sell him the Triad building and took the lease in the Royal Bank building. After being in there a few years, and this was after I left the company, BP is now in BP House, which they don't own but it was built with BP as the major tenant.

#176 NM: What were your responsibilities as senior Vice-President?

FM: That was in BP Canada. The headquarters of BP Canada were in Montreal and BP had 3 main divisions I suppose, refining, marketing and exploration or exploration, production, which was regarded as one division. So my responsibilities were for all activities in exploration and production in Canada. This included all of the elements of a normal exploration, production company. We had geological, geophysical, land departments, drilling, engineering for production and for reservoir engineering. Subsequently we also expanded into mineral exploration so to that end we had an office in Vancouver and one in Toronto that were entirely involved in mineral exploration. The other activities were generally carried on in exploration production, all of the other activities were carried on, directed from the Calgary headquarters. Of course, we did have field offices in such places as Fort St. John and Pembina and a number of other localities where we had producing responsibilities.

NM: How big was the staff at the time?

FM: I'm trying to remember but I think probably 6 or 7 hundred people, in exploration, production. In the total BP Canada I believe there were perhaps 2,500.

NM: You were on the Board of Governors of the Canadian Petroleum Association, can you tell me a bit more about it and also about the and also about the CPA?

FM: The CPA had been formed away back in the 1940's as the Western Canada Petroleum Operators Association. But about around 1950 it really began to be organized in a way that it was rather the voice of industry and through CPA all of the consultations would take place between the industry and whatever various governments, wherever we were operating, whichever provinces and of course, in the federal government as well. It took a tremendous organization and it took a lot of people. The people were by and large, contributed by the companies who were members. I'm not sure but I think there were probably close to 200 members of CPA. Out of that total membership however, most of the work fell to perhaps 20 companies. The CPA, in the development of the organization required to handle all of these various things, required a large number of committees that would work with government in developing land regulations, production regulations,

drilling regulations and such things as that. Also to worry with governments about their tax regimes and their royalty regimes and so on. In one way or another I seem to have become involved with CPA as soon as I started working out of Calgary in 1946. I don't know when I became a member of the Board of Governors but I was also on the Alberta Division Board and the B.C. Division Board and the Saskatchewan Division Board at various times. I was Chairman of the Board of Governors in 1967 and I remember that because when I was elected Chairman I was featured on the front page of, I think it was the Financial Post and the caption said, a million a day. The reason I'm mentioning that is it was in that year that Canada first reached a capability of producing a million barrels a day.

#254 NM: So the title was not very clear.

FM: Well, in another few years we were capable of producing more than 2 million barrels a day but that didn't last very long. And it's rather interesting, to me at least, that it took probably 40 years of exploratory effort in this country prior to the discovery of Leduc in 1947, it took 20 years to be able to produce a million barrels a day. Within another 5 years we could produce 2 million barrels a day and now, we're way back down to something less than a million barrels again.

NM: So it was like a whole circle, back to square one again. Did you have a lot of meetings while you were on the Board of Governors of the Canadian Petroleum Association?

FM: There are a lot of meetings connected with such an organization as CPA. Aside from the regular meetings of the Board of Governors there are many, many, many committee meetings that are going on all the time. But as I recall I found it, and anyone involved in that sort of activity, finds it really very time consuming. One of the problems is that the individual who has the job of being Chairman of the Board of Governors, of course, it only lasts one year, but that is a very time consuming thing and he's supposed to do that and run the business that he's really responsible for with the side of his foot while he's busy with CPA affairs. What made it so frustrating, it seemed to me, was the kind of involvement that would take us to Ottawa for discussion and argument with various departments concerning regulations or tax regimes or royalty related impositions and to find that after months and months and months of this, you seemed to be making so little progress.

NM: Why is that?

FM: Part of the problem is that a lot of the departments in Ottawa depend on people who have really never had business experience and certainly not oil business experience. So they create their schemes or programs or whatever they would call them and then they construct models that they can run through computers and they get the results of these things and come to their conclusions and take positions and it's the conclusions they reach that we go to argue with them about. And we spend months arguing about their conclusions without ever having spent 15 minutes discussing the assumptions on which the models are based.

#313 NM: So it was you going to Ottawa and not people from Ottawa coming to Calgary?

FM: Oh sometimes it went both ways. It seemed to me that most of the meetings were held in Ottawa. We would have them out here from time to time. I'm not saying it was all bad but it was so frustrating because we seemed to be making such little progress. Maybe we didn't know how. And I'm sure that the CPA of the present day is a much different kind of an organization than it was back then. I know that certainly they've become much more aware of the need for promotion and public relations and that kind of thing. And in the end, the public has got to be knowledgeable and informed if we're going to have a good, ??? viable industry.

NM: Can you tell me a bit about the oil companies image towards the public?

FM: It took the oil companies a long time to come to the conclusion that they really had to begin to tell their story to the public. And for a long time the companies generally ignored the public, not in any sense of contempt but just because they didn't realize how important it would become. An example of this is that they oil companies permitted the ordinary people to believe that oil and gas would be available in unlimited quantities forever at a low price. Now the oil companies never said that but the people seemed to believe that this was so and the companies let them think that was so.

NM: That was the implication in fact.

FM: Well, it was just that sometimes the companies would say, if we can be relieved of this tax and that charge and more funds can flow through the companies into exploration and the more money we spend on exploration, the more reserves we will find. Well, there's only a certain amount of validity in that because no one would ever believe, not even an oil company, that if you had an unlimited amount of money to spend that you would find unlimited reserves, so that's foolish. However somewhere in between there's truth and it wasn't quite evident and the companies didn't work hard enough at revealing it.

End of tape.

Tape 2 Side 2

FM: Another aspect of oil companies pronouncements is that they so often contain a dollar sign followed by a cipher or two followed by a line of quite a number of zeros. So people generally get to think of the oil business as being a very, very large number money game. Sometimes that is true but not always. People I think, have got some ideas along those lines about the oil companies activities that have been rather difficult to overcome. The other thing that I think is not very well understood in the public mind is the tremendously efficient job that the oil industry has done over the years in providing the energy needs of the country. And I think it was being done much more efficiently before we had so much intervention by government. And certainly, at much, much less cost.

NM: Do you think it's a waste of time, all this regulation you have to go through?

FM: No. Regulations are necessary but what we really need is the kind of regulation that permits the companies to operate in competition with one another under ground rules that are well understood and accepted. There needs to be the kind of regulation that protects the public, there needs to be the kind of regulation that protects the environment. But

we're getting so many complications in our regulations because of the kind of interventionist activities of government who are monitoring the industry to make sure that the industry doesn't make a nickle too much, the tax regulations and all of the complexities of the various kinds of subsidy programs that the governments have thought up.

#024 NM: So years ago were things being done faster because of these lack of regulations?

FM: We had a system of regulations that was working well and things were being done more quickly because you didn't have to wait for all of the papers and all of the approvals and the checks and rechecks and so on. And it was a lot more fun.

NM: While you were working at your career, you were also doing a lot of community work, can you tell me about it?

FM: I think I was quite involved in the community. But this is a pretty good community and I suppose I felt that I would like to keep it that way and make it run well, or help. So for a long, long time I was on the Board of the YMCA and became its President. I've been on several different church boards, I've involved myself with the university and took part in their capital campaign in 1968 where we set out to raise \$25 million for the 3 universities in Alberta and I was responsible for the public part of the campaign for Calgary and district. I've been on the Board or the Calgary Exhibition and Stampede and the Stampeders Football Club. So I don't know, I think some people are in the habit of becoming involved and some people aren't and I just happen to be one who became involved and I enjoyed it. Occasionally I would find myself in a box where I perhaps committed some time to some community project that wasn't mine to give. But then I've always had a lot of help in the corporations where I've been too. I think I'd just sum up the community activity by reiterating a remark that I'm not sure I originated but I think I have some rent to pay for the space I occupy in a community that has been so good to me.

NM: Very good. You were also involved with the Chamber of Commerce.

FM: I was on their council for a number of years and for one term I was the Vice-President. That's one I couldn't continue because the time that it would require was not mine to give.

NM: Which year was this?

FM: I think probably, about 16 or 18 years ago.

NM: Tell us about your involvement with the YMCA.

FM: Again, the YMCA has always been a very vibrant and important element of the community. The city was growing and the YMCA also needed to grow in order to respond to the community needs. During those periods we expanded the operation of the Y, built two new family YMCA's in Calgary, developed the outdoor education and recreation branch of the Y that now has established its Kananaskis Centre.

#069 NM: The Yamnuska Centre?

FM: The Yamnuska Centre, yes. And even now, while I've not been on that Board for quite a long time, I'm still involved with the Y and in some of their plans for further expansion into new areas of the city where the Y so far, has not really penetrated.

- NM: You mention also that you were involved with some church work?
- FM: I've been a member of the church most of my life and when we had a young and growing family we also involved them in the church. My wife has always been and still is, active with women's groups and churches, like other organizations, require people to help and so there's various boards or committees that I tended to be involved in.
- NM: Talking about Boards, you are on several Boards still, like the one of Nova.
- FM: Yes. I guess I'm on half a dozen corporate Boards. This I find interesting, this is not something that has happened entirely since I've retired because I was on some of these Boards prior to retirement. But I enjoy it, I appreciate the opportunity. It keeps me occupied in ways that otherwise I would not be and keeps me out of the house and adds to my enjoyment of being retired. But in retirement I have tended to avoid involvement in things that I have to stay on and pay a lot of attention to because I enjoy being free.
- NM: I've forgotten to ask you, which church do you belong to?
- FM: The United Church of Canada.
- NM: This is the end of the second interview with Fred McKinnon.

Tape 3 Side 1

- NM: This is Nadine Mackenzie speaking. This is the 3rd interview with Mr. Fred MacKinnon. Mr. MacKinnon looking back at your career, what was the most exciting experience in the oil patch?
- FM: I couldn't single out any one particular experience that I would say is most exciting but there is a period and that was beginning in 1949 when I began with Royalite Oil Company as Exploration Manager. That was exciting because the whole business was new and expanding. And in 1949, following the discovery of Leduc in 1947 and Redwater in 1948, by 1949, Calgary was almost like a convention city all of the time. We had a great influx of new operators, particularly from the U.S., but not only from the States but from various countries, Europe and Britain. All of that with a new company and with lots of encouragement and lots of room to grow, was a very, very exciting period for the next several years. The Royalite Company itself, was exciting to me because a number of them were old hands in the oil patch you might say, a lot of them were production people and drilling people out of Turner Valley and they also took this as a new adventure in being able to expand and get this new company really underway. So with a group of people such as those, really capable, really enthusiastic, intensely loyal to the company and enjoying so much working with one another, it was just great fun and that was really exciting.
- NM: Who were the most influential persons in your career?
- FM: I think I'd have to start with my father. Because he encouraged me to think about going into the resource business. And it was because of his ideas about the mineral wealth of the Canadian north. And I'm sure that he had in mind mining, rather than oil and gas because oil and gas in the 40's was not all that prominent in Alberta. In fact it was 1936, or 7, '36, I think, when I started university. I was really not all that interested through high school about the prospects of going to university. Not a lot of people went on to

university. I had spent all of my spare time and summers and so on working around the ranch and I enjoyed that and I think I would have been quite prepared to continue to do that except for my father.

#039 NM: You would have liked to stay on the ranch?

FM: I would have been quite satisfied to do that. But with my father's encouragement I began to take his advice you might say, and so I went into geology at the University of Alberta. This being an area in sediments you might say, naturally, we found more of a direction in sedimentary rocks rather than in the igneous rocks in mining geology. And the first opportunities that I had for work in geology were summer seasons with the Geological Survey of Canada where I was attached to survey parties working in the foothills of southern Alberta. Again, in the sediments. So as time went on there began to be more and more activity in oil and gas exploration and so that followed. I'm getting a little away from that question but that was the influence of my father. Ted Link at Imperial Oil also was encouraging and he was a man that awe admired, looked up to. He was a great teacher in his own way. And he was I was going to say, kind to me, not that he was unkind to anybody but I think he gave me opportunities. One of them, although I couldn't say for sure but I believe that Ted Link had a role to play in determining that the opportunity to become Exploration at Royalite Oil Company, this new independent, was offered to me. So that's Ted Link. Another one was the President of Royalite at the time, a marvellous man named Bob Heard. He had been with Royalite and Imperial for quite a long time but he was a man of great enthusiasms and of course, being the head of a new independent oil company, he was all gung ho and ready to go. Very early after I began working with Royalite he got me in his office one day and he said, look Fred, you will never hear from me about things you do but you may hear a lot from me about things you don't do. All I'm suggesting to you is that you don't make the same mistake too many times. Well, that really said to me, this is your job, to carry on this exploration effort with Royalite, to direct it, to build up your staff and get going. You get going. And nobody could ask for more than that. So I think that was another one. Those I think are the three.

#077 NM: The three most important. Can you tell me a bit more about your achievements?

FM: It's rather difficult to single out any particular achievement or any particular area of achievement or kind of achievement. I think in any situation where an individual finds his work so challenging and so enjoyable that there's always a feeling of tremendous accomplishment and in the general sense, that's the way I felt about it.

NM: What was the highlight of your career?

FM: I think it has to be in those formative years of the Royalite exploration program. Because we really made it hum, we got good people together, they were capable and anxious to do it well. And we were successful.

NM: So that was the highlight.

FM: That was the highlight.

NM: Looking back at your career, Mr. MacKinnon, is there anything else you would do differently now?

FM: Yes there is. I would work much harder at expanding my capabilities, not only professionally as a geologist but professionally as a manager. And to elaborate a little bit I began working as a geologist and I know I was doing a good job. It wasn't very long in terms of years that I began to become involved in supervision and management and that happened before I had a lot of years of experience as a geologist. Getting involved in management without ever having had any management training. .

NM: Was it very tough?

FM: It wasn't tough. The things that I had to do I could do. But I never did have any courses in management skills so what I learned about management I had to learn with the side of my foot I guess. One thing I believe I did have is the capacity to work with people, and to generate from the people who were working under my direction a good positive response. So that generally speaking we seemed to get things done and done reasonably well but I always felt somewhat deficient in management skills in that I didn't have a broad enough concept of the management function and responsibility and particularly when I got a little higher in the management end of things.

NM: Did you get help from people at the time?

FM: Oh yes, certainly. There's no such thing as the universal man. We all have to have help from those whose expertise is in different facets of the work. But it's a broad grasp and good understanding of a lot of those things that I sometimes felt a bit exposed. So to do it over again, I think I would be a better student and work harder at that end, take more of the opportunities that were available to develop skills that I really didn't have.

NM: Is there any other thing you would do differently?

FM: I wouldn't really change the fundamentals. There's nothing that has ever happened to me that I've been sorry about if that's . . .

NM: This is the end of the 3rd interview with Fred MacKinnon. Mr. MacKinnon, thank you very much for this interview.

FM: I've enjoyed it.