

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Bill Twaits

INTERVIEWER: Nadine Mackenzie

DATE: June 1984

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

BT: I was born in 1910 in the town of Galt, which is in southwestern Ontario. I went to school there and then I went to university at Toronto and eventually ended up in the oil refining business.

NM: What did your parents do?

BT: My father was a manager of a manufacturing concern.

NM: And where was your early education?

BT: I got my grade school education in Sarnia and then went from there to the University of Toronto.

NM: What did you study at the University of Toronto?

BT: I started out in civil engineering and then switched to a very difficult course, which is primarily mathematics and economics.

NM: Why did you choose these subjects?

BT: Because it was a challenge and because I went to university in 1929 and shortly after that the Depression began and there were lots of engineers looking for work. So my father persuaded me to, he said, you can always get the other stuff but get your mathematics and your economics and you can turn anyplace, which I found was true.

NM: That was a very good idea.

BT: Yes, it turned out to be very useful.

NM: When you were at university did you take any summer jobs?

BT: Oh yes, I worked every summer from the time I was about 16 or 17, mostly in construction. So I was all over the place, I was in northern Quebec and I was up in the Great Lakes. I think it's a very useful thing to do summer work because, in the construction business particularly, it shows you how things are done and how people have to work together.

NM: That's right. How long did you spend at the University of Toronto?

BT: 4 years.

NM: And after that what did you do?

BT: I went almost immediately to Imperial Oil at their Sarnia refinery, on what was Imperial's first start at a university recruitment management development program, which I'm sorry to say broke down but it reappeared later.

NM: Do you remember who hired you?

BT: Oh yes. The man that hired me is now dead, or who got me into it. He was then a vice-

president of Imperial but the man who really okayed my job was a man named Charles Lever, who was general manager of manufacturing at that time. So we went into an extensive program. I worked at everything from filling barrels, to you name it, all the way through the refinery.

#033 NM: And for how long did you keep this first post?

BT: We were rotated, at least I was, rotated about every 6 months into some other form of job, be it one department of the refinery or another.

NM: So it was very good training.

BT: Yes, it was invaluable. Then from that I moved into. . . I should have included the control laboratories and shipping and various things like that. Process work. But from there I moved into the research department to work on development economics.

NM: Which year was this?

BT: 1937. I think.

NM: What was Imperial like at the time?

BT: It was, by today's standards, somewhat ancient because the process equipment was quite primitive at that time. Of course, there was no sense of computer operation as there is today in a refinery, which is almost run by computer programs these days. It was an exciting place to work, there was a lot of variety in it. But it bears no comparison to what there is in a refinery today. At the time I started to work at the Imperial Sarnia refinery the capacity of the refinery was 20,000 barrels a day of crude oil. We employed about 5,000 people because there was so much maintenance on the type of equipment they had. Today that refinery can run about 125-130 thousand barrels a day of crude oil and they have 1,000 people.

NM: An incredible difference.

BT: There's an incredible difference.

NM: So after this training, what did they give you as a job?

BT: I went through a whole lot of jobs. I was production controller at Sarnia, I worked on productivity improvement for a number of years. Then I moved to Toronto as assistant economic coordinator for the company, which was a relatively new job. There I worked on various corporate problems. Then I formed and managed the first corporate planning department in Imperial. That would be in 1946, '47. And a few years later I moved into the producing business and went out west. But as you note from my correspondence there, I was involved in that before I moved into the producing department with this committee that was trying to decide whether we stop looking for oil in the west or take another crack at it. It was quite an argument I can tell you that.

#065 NM: Really. People were not in favour of. . .

BT: Well, we'd spent an awful lot more money than we could afford and we hadn't found anything. So it's all stated right there. Finally, the committee decided to gamble on a very weak anomaly in the Leduc area.

NM: And that was a fantastic find.

BT: But it was Leduc #2 that was important, not Leduc 1, as you know from Doug Layer.

NM: That's right. Did you travel to the west often?

BT: I moved out west. I moved to the west in late '48. I was out there. . .well, whether I lived out there or not, I spent better than 50% of my time out west for 5 years.

NM: What was the reaction in Toronto at the time of the Leduc discovery?

BT: Exultation naturally. Because we were really in serious straits as far as the supply of crude oil went. Turner Valley was declining quite rapidly and people were scared stiff of that foothills play because we did not have the seismic or various other exploration techniques that we have today. I think that the change in techniques, particularly the explosion in geophysics has been one of the most important technological revolutions, no question about it.

NM: When you moved west Mr. Twaits, where did you live?

BT: We lived on Prospect Ave. in Calgary.

NM: And how long did you stay in Calgary?

BT: I was only located in the sense of my home there, for a couple of years. But as I said, I continued to spend most of my time out west, flying back and forth out west.

NM: A lot of travelling.

BT: Yes, a lot of travelling.

NM: How was Calgary in 1946?

BT: You wouldn't recognize it compared to what it is now. Calgary was essentially a ranchman's town. Of course, there had been oil fever before that, going back to 1914 so it was always a city of something new was going to happen. But also, they were still trying to recover, like the rest of the country was, from the Depression of the 30's.

NM: And that takes time.

BT: Which took a long time.

NM: Where was your office?

BT: Our office was just west of the Palliser Hotel, what street is the Palliser on?

NM: 9th Ave.

BT: Yes.

NM: A small building?

BT: Yes, it was a relatively small red brick building.

NM: And after 2 years in Calgary what did you do?

BT: I came back here and I was elected a Director of the concern, but one of my responsibilities still was the producing and exploration business, that's why I spent so much time out west.

#106 NM: What was your job exactly, what did your job entail at the time?

BT: I was equivalent to vice-president of the company in charge of exploration and production. The operation was run out west of course, but in connection with budgets and policy matters and so on, it was my responsibility to recommend to the Board of Directors what I . . . and I'd like to note that I had already worked in a variety of departments in Imperial. Aside from manufacturing I was one of the co-organizers of the supply department, which now comes in under logistics. They're responsible for crude oil supplies and product purchases and so on. I also worked in the marketing department, so

I've been all through the business.

NM: That's incredible.

BT: I'm rather peculiar.

NM: You must be the only person who has this type of training in all departments.

BT: Well, the only person in Imperial anyway. I don't know about other companies.

NM: And for how long did you keep this post?

BT: In the 50's I was made, officially, a vice-president. Up to that point I was just a directory. Then I eventually became executive vice-president and then I became president in 1960. I was president from 1960 to 1973, president and CEO. Then I became chairman in 1974, preparatory to retirement. I retired early, we had too many guys underneath that needed advancement.

NM: Mr. Twaits, during the earlier parts of your career, ??? the discovery of Leduc #1, you were involved in the decision to sell several Imperial subsidiaries to raise money. That must have been quite something.

BT: Imperial needed a lot of money to finance the western development.

NM: Was Imperial really in trouble for money?

BT: We weren't long on it I can tell you that, and this was gobbling up much more money than we had. So we made several decisions. One is we sold off our majority interest in International Petroleum, which operated in Latin America, in Peru, Columbia, Venezuela. We sold off several marketing subsidiaries, including amongst others, Irving Oil Company and Supertest. In that way we raised money. And I might say at the time there was some criticism that we were selling out a proven source of supply of crude oil from Latin America, in return for gambling on the potential of western Canada. And it was valid criticism, we knew the risk. It happened to work out that's all.

#147 NM: What about all the negotiations, selling these companies, did it take a long time, was it difficult?

BT: It wasn't easy. Of course, as far as International Petroleum went we sold it to the shareholders. We simply offered the shareholders a chance to buy our interest. And those shareholders included, at that time, Standard Oil Company of New Jersey.

NM: And Royalite Oil Company was sold to Canadian interests for \$15 million.

BT: Yes. It was sold fundamentally to the Bronfman interests in Montreal. Or a group controlled by the Bronfman's. That was not such a matter of raising money, that was fundamentally a conflict of interest. We couldn't run 2 exploration arms that we owned. So we tried to persuade Royalite, come on, let's put this thing together. They were particularly stubborn so we sold our interest, very cheaply I might add.

NM: So you have seen Imperial expanding all the time.

BT: The company has changed dramatically. In the late 1950's 2 things happened. First of all, we got into the chemical business in a big way. That is another part of background because I was very much involved in the formation of Polymer Corporation, the synthetic rubber, which is now called Polysar???. That was the start of the petrochemical industry in Canada. I worked on that for several years before I moved to Toronto. Which incidentally involved one of the most complex supply contracts, with the supply

department of the government, that was negotiated in the last war. A very complex agreement which is too technical to elaborate on. So we started into chemicals in Sarnia and now have a very large chemical operation across the country. About that time the digital computers began to come in, or shortly after that. That has been a revolution within this industry because that revolutionized the geophysical business. Going from trying to interpret sound waves to digital readouts, has made a tremendous difference in the industry in its ability to assess anomalies and so on. And in the refining and chemical business of course, have you been in a refinery?

#186 NM: No.

BT: Some of these days you ought to get into that Strathcona place out in Edmonton and you'll just see batteries of computers.

NM: It's quite something I imagine.

BT: It's amazing.

NM: Where were the people recruited to work for Imperial?

BT: Particularly in connection with the development of the west, we had no body or supply of skilled earth scientists in Canada. Outside of our own meagre resources, so first of all we were able to persuade a number of people working in Latin America for our subsidiary to come back. We also recruited very heavily in the mid continent area in the United States, particularly from our affiliate, the Carter Oil Company. That's where an awful lot of familiar faces still in Calgary, now working for Imperial, that's where they came from.

NM: What about people doing research?

BT: That's a different thing. The research, production and exploration research now, I'm not talking about chemical and petroleum, was started as almost a one man operation by one of the most brilliant men I've ever known, Jimmy Young. He's famous in the organization. Jimmy had, I don't think ever got past high school but he was one of the most learned men I've ever associated with.

NM: So self taught.

BT: He pioneered all kinds of research equipment in our place, which I could spend hours on but he's a revered figure. He's dead now unfortunately but I was delighted to see that some years ago the University of Alberta gave Jimmy a PhD in engineering I believe. My god, he was an engineer, he was a chemist, you name it. He was quite a fabulous man.

NM: That's incredible, he taught himself then?

BT: Yes. He was also a specialist in explosives and a specialist in water treatment. Yes, somebody should write a history of Jimmy Young.

NM: Where was he from?

BT: I just assume that Jim was from Alberta but I'm not sure of that. I think so.

NM: So he must be really a historical figure.

BT: He's really quite a man.

NM: And what about people in the refining business?

BT: You mean recruiting?

NM: Yes.

BT: That's quite different. There you're looking for engineers primarily, chemical engineers,

well, chemical, mechanical, it doesn't matter because we've got to train them to be process engineers anyway. And of course, we have extensive training programs for recruits into operators, as distinct from engineers. And likewise we could recruit very well in Canada for chemists and the various disciplines that are involved in chemical and petroleum research. Again, separating that from production and exploration. Because their research, while it combines and it coordinates, it is essentially different in nature.

#239 NM: What about the equipment for refining?

BT: You wouldn't recognize the refinery of 40 years ago with one today. There have been tremendous developments, one of the major ones being catalytic cracking in the 40's which revolutionized the method of rearranging molecules to make higher value products out of crude oil and increase the net yield. But all kinds of catalytic processing.

NM: Where was the machinery coming from at the time, was it from the States?

BT: You mean the equipment?

NM: Yes.

BT: At one time years ago, we had to assume that 80% of the equipment, we were building a new refinery, had to be imported. I'm not sure of the current figures but I think we're up to something over 90% Canadian made. As a matter of fact, we helped a lot of people get into that business. And I give great deal of marks to the Imperial purchasing department for developing Canadian sources of everything we buy.

NM: And what about the supply and transportation business?

BT: Well, in supply and transportation of course, the first thing we were faced with was we had a supply of crude oil out west and what were we going to do about it. It was in the wrong place. We had refineries at Regina, Calgary and B.C. B.C. at that time, prior to Leduc was supplied with crude largely from Peru and California. However crude oil in Alberta was no use unless you could get it there. Our first job was to get crude oil east. We looked at the idea of building a pipeline for Regina. Well, once it stops at Regina, where do you go from there. So we tried to persuade some American operators in that territory to join us in a pipeline venture into the U.S. Midwest. They wouldn't have any so finally we had to go it on our own. That's how we came to build Inter Provincial, the financing of which I'll come to in a moment. We built it initially to Duluth, then moved the crude oil by tanker into the Ontario market. These at the time were very large tankers. Something the Great Lakes had never seen before. But to finance that was really a horrendous experience because the normal debt lenders or senior underwriters in Canada, just had no feeling for pipelines or oil at all. The only way we got that financed eventually was to agree that we would take a 30 ??? equity and that we would guarantee the entire debt. That's how we raised the money, most of it from the Metropolitan and Prudential Life Insurance Company. Subsequently we got other money but it was only in the early 70's that that debt guarantee to Inter Provincial was resolved.

#296 NM: Why were people not interested in pipelines?

BT: They were very cautious. Going to run out of oil, that was the thinking at the time. And at that time, don't forget, we were building one of the longest overland pipelines in the

world. And we were running head on, in this market, into competition with foreign crude oil particularly from Latin America. A fact that nobody seems to appreciate, you can move crude oil in a large tanker at 1/3 to 1/4 the cost of what it cost you to move it by pipeline. To put it another way, if we have a 1,500 mile pipeline carrying oil that costs the same as it does to a foreign operator to move 6,000 miles.

NM: So it was really a money. . .

BT: So that was a monumental argument I can tell you that. Eventually, with the government because cheap crude oil and products from crude oil were still moving into Ontario and depressing the price of Alberta crude oil.

NM: So that was solved later on?

BT: I wouldn't say it was ever really solved but eventually it worked its way out. There was a lot of detail that I don't think is important.

NM: You were also involved with petroleum economics.

BT: Oh yes, all the time as a matter of fact. We had, I told you that I formed the first corporate planning department. That was essentially, we didn't call it corporate planning, we called it coordination and economics. We were concerned with rationalizing capital budgets and generally helping out or trying to frame the strategic planning for the company. Because we were moving at the speed of light at that time, in a variety of direction. Not only did we have the west but we had to modernize the whole refinery system, which had been allowed to lapse during the Second World War.

NM: This is the end of the tape.

Tape 1 Side 2

NM: You were involved also with organizing subsidiaries of Imperial abroad.

BT: Not organizing them. Watching, or handling our interest in International Petroleum, which as I say, operated in 3 countries in Latin America and produced and refined crude oil.

NM: Did you go yourself to South America?

BT: Oh yes, many times.

NM: Which country?

BT: All 3 of them. I was in many countries but in the countries that we had an interest in, why, Peru, Columbia, Venezuela. Then I also travelled extensively in the Caribbean where some of our affiliates were in Central America.

NM: Did Imperial find a lot of oil in these countries?

BT: Well, it's kind of complex in Venezuela. We had an interest in a company called Mene Grande, which was our principal source of Venezuelan oil. But then we had wholly owned companies, that is by International Pete now, not by Imperial. But through International Pete they had wholly owned subsidiaries in Columbia and in Peru. And of course, the Peruvians eventually took over that operation, but that was after we had sold it to the shareholders.

NM: And what about Venezuela, there was a lot of oil there?

BT: Yes, there was a lot, still is a lot. And of course, Venezuela eventually took over the oil

industry too. Columbia is still operating but I wouldn't want to talk about the settlement because it was very much different let's say, in Venezuela than it was in Peru. And the Peruvian takeover was, if my memory serves me correctly, went to the Hague court. Peru just wouldn't pay any attention to it, that's all. Which is not unusual.

NM: So was it mostly a political question, political problem?

BT: Why does any country nationalize an industry. It's become one of the fascinating questions because it doesn't add anything to employment, it loses a lot of expertise. And you could make the same point about Petrocan. We shipped an awful lot of money out of the country to build Petrocan and the Canadian public haven't gained anything out of it.

NM: Imperial was very well known for being a very good training ground for people and then they would leave Imperial and work for some other company. What was the feeling at Imperial about that?

BT: At first when we found all these competitive offers for our skilled people, there was a sense of annoyance and frustration. Here we've spent a lot of money on training somebody and then he goes out to the ABC Oil company with stock options. Then we gradually realized that it's not all bad. Sure you lose good people but you turn the organization over. We just had to come around to accept the fact that we were going to staff the oil industry. And you look around the oil industry in Calgary and see how many of them are ex-Imperialites.

#041 NM: Absolutely, everybody at one point was working for Imperial.

BT: Yes. Bill Friley. Bill Friley came to Imperial originally from Carter I guess, as a landman, assembling land or mineral rights. There's all kinds of them out there.

NM: And they were trained on the job, where nowadays people are trained at universities.

BT: Oh no. You get a basic training at a university and you emerge with the basics, we still have to train, industry still has to train.

NM: But maybe it was more open to the idea at this time that people could be self-educated too.

BT: I think that was true. Of course, anybody can be self-educated. I don't believe that you have to have a university education to be educated. I think it was, probably not, but attributed to Churchill, who said that education will give you knowledge but only experience will give you wisdom. What we have always asked from universities is a good training in the basics. And again I repeat that a foundation for people who are adaptable and flexible is mathematics. Because mathematics is logic and it's the basis of all science in one way or another so it gives you a sense of logic. We have chemical engineers who became geophysicists and you name it.

NM: So they have to be flexible then?

BT: Well, I hope they're flexible because if you're ever going to be a manager you've got to be flexible, you can't be confined to one discipline. You've got to at least know enough to ask a proper question.

NM: Mr. Twaits you were company president in 1960. Can we talk about that?

BT: I don't know what there is to say about it. My predecessor, Jack White, decided to go to New York and join the parent organization so I became the president.

NM: As the president, what did you do?

BT: You know, I've got to give a talk to an executive program in Massachusetts as to what is the role of the CEO, the chief executive officer. And that's a tough thing. Everybody has their own management style. I would say the first thing for the qualification is you've got to have leadership. What do you do? What you do is you pay a lot of attention to strategic planning, where is the company going, what are its strengths and weaknesses. You get a lot of assistance in that because you involve your colleagues. You are not involved, unless there's a crisis, in day to day operations or anything like that. Now are you nearly as involved in the tactical planning, that is, how you do something. You're concerned with strategy. You have to take a deep interest in the socio-political environment, particularly in the oil business where you're involved with government at every step in the road.

NM: That's right. I was going to ask you, what was your relations with the government?

BT: Your relations had to be constant. I mean, your contacts had to be constant. Which means when you're out talking to politicians you've got to show a pretty broad knowledge of your company too, and your industry.

#083 NM: And then you became Chairman and Chief Executive Officer in . . .?

BT: No. Preparatory to retiring I become Chairman the last year I was there and turned over the CEO's job to Jack Armstrong.

NM: Then you were re-elected chairman in '73.

BT: Yes, that's right. I was Chairman and Chief Executive Officer, then I became Chairman and not CEO, preparatory to retirement. So you were right. It's a definition.

NM: As Chairman, what did you do, what was the difference of your work?

BT: I think you must realize that, as I said, this was a transition stage, with a new man taking over in preparation for my departure. So we shared a lot of duties. As Chairman you officially chair the Board of Directors meetings. But you try during that period, to turn over the whole thing to your successor.

NM: And your successor was Jack Armstrong?

BT: Yes, correct.

NM: Have you been knowing him for a long time?

BT: I've known Jack for many, many years. When he first came back to western Canada I didn't know him. Jack worked in a number of places, he worked in the U.S. exploration, he worked in Ecuador, which you can get him to talk about, and then he was out in western Canada in exploration during our futile days of drilling dry holes.

NM: Why was he chosen to take over?

BT: Well, I don't know in the sense, why.

NM: I mean, were there other candidates.

BT; Oh sure, there were other candidates. But you try and balance it all out. But see, what you've got to do is have the agreement amongst your senior colleagues, who is the man. And that's a very interesting exercise. That takes quite some time to solve that one. But that's the way it goes.

NM: When you retired in '74 Mr. Twaits, what did you do?

BT: I've been very much involved in a variety of things, consulting work and I've been a

director of a variety of companies. I still am several companies. But my real avocation is productivity, which I think is the name of the economic game in this country. So I've been associated with some people who are involved in this and that's where I devote a lot of my attention.

NM: It seems that oil people always go on working.

BT: Well, of course, I think it's a prerequisite of staying alive. If you've had an active life and particularly in a fast paced business like the oil business, you suddenly walk out and put your feet up and the rocking chair syndrome they call it, you're not going to be healthy very long. Because physical health is closely associated with mental health. So you've got to be active. Now there are some people who have to retire, or are glad to retire because of medical reasons or other problems. But basically, I find that most CEO's, not just in the oil business, that I know of, they're just as active afterwards as they were before. As long as they can be, that's the point.

#130 NM: So their mind is always busy.

BT: So your mind is challenged, sure.

NM: Which is a very good thing.

BT: The biggest difference when you retire of course, is that you don't have a secretary to look after all your daily banking and everything else. So you've got a lot of work to do yourself.

NM: You have more work doing the secretary's work on top of your own.

BT: You've got your own banking work, your own bill paying, a whole lot of things that somebody else did for you for many years.

NM: Can we talk about your professional affiliations?

BT: I've been associated with a lot of business associations and oh, the conference board, Stanford Research Institute, C. D. Howe, you name it. And of course, I was very much involved in the formation of the Business Council on National Issues and was co-chairman of it during its formative years.

NM: Can you give me more information about that, what was it?

BT: The Business Council was formed largely due to frustration over a period of many years in developing some credible consultative process with governments, notably the federal government. Because there was a time when consultation was free and easy and it successively became more difficult and more frustrating. So a group of us got together and they asked me to put together a concept, which I did over a 2 year period and which emerged as the Business Council on National Issues. They represent about 150 chief executives and they work very hard. They work through task forces on various subjects that the policy committee decides we should tackle. And they've done a great amount of good work in both social and economic fields, policy issues.

NM: So you were very involved with that?

BT: Very much so.

NM: And what were the results?

BT: The result has been that the BCNI has achieved a level of credibility that I don't think any other business organization has achieved in my history of the business environment.

They've made recommendations on parliamentary reform, on the pension question, on a great host of issues. They are listened to.

#167 NM: Can you compare the training of the oil people in your time to what it is nowadays?

BT: I would say that. . .of course, I entered the business at a time when we were just very naively getting into training programs. It matured very rapidly in the immediate post-war era, after the pressure of trying to supply fuel and other things was off. Even more so by the enormous development that was taking place. Not just in western Canada but the need to rebuild all our refinery system and transportation and everything else. So the company utilizes a great variety of training techniques. But there has never been a substitute for on the job training. Sure, we send people to executive programs at a variety of universities and so on. But that's primarily a broadener for people who may have been confined to one hairy discipline. But on the job training. On the job training also includes rotational assignments. Taking people out of their chosen line and throwing them into some other line.

NM: So they would have a broader. . .

BT: See if they sink or swim. Because one of your objectives is to, and this is extensively followed in Imperial, is to try and detect as early as possible those people with potential or those people who are never going to be happy in the business, because they better go out and be happy someplace else. Or happier.

NM: You have seen the ups and downs of the oil business, what do you think about that?

BT: Are you thinking in terms of the outlook now or . . . Of course, the word for today more than it ever was before is uncertainty. It's uncertainty, not just because of the global situation but in recent years the uncertainty has been one of government policy. Nobody, least of all me, in my extensive contacts for many years with governments, had any idea that any civilized government could produce a document like a National Energy Program, which has been a disaster. It's not just a disaster for the oil industry. Don't forget, there's an awful lot of industries in this country are suppliers to the oil business. So it's hit steel, it's hit everything, the equipment manufacturers and so on. Now as is noted in the paper this morning I am finally becoming a little optimistic that some sense is getting into this ball game. Now as to the level of world prices, which also is important to Alberta, again, I'll say, anybody who will forecast that with any degree of accuracy is a fool or a wizard. There's only one thing you know, and that is that the cost of replacing oil is still going up. If you want oil you're going to have to pay for it. It is still a cheap commodity if you take out the taxes. If anybody wants to lower gasoline prices in this country, just take out the taxes, you could lower them very substantially.

#221 NM: That would be the solution.

BT: Sure it is.

NM: What do you think of nationalized companies?

BT: They've been a disaster worldwide. First of all, if you look at the commodity business today, oil, minerals and so on, the most significant thing that's happened to upset the

world supply problems has been the entrance of governments into the business. Take the situation in copper. Chile, Zambia, Zaire, are going to produce copper no matter what the price is, because they need the foreign exchange. It's not a free market at all. So that's a general answer to your question. Specifically, all you have to do is look at the history of nationalized industry and it's a disaster. The English did it and they almost went bankrupt on it. Now they're busy trying to get rid of it. I think you're going to see a trend in Canada. I don't know if you'll ever reverse Petro Canada but the thing that we should emphasize is that Petro Canada didn't add one job or one barrel of oil to this scene.

NM: But the money was pouring into. . .

BT: We not only poured money in but we poured money out in U.S. dollars to buy these entities at fantastic prices, and the Canadian tax payer is paying for it.

NM: So how do you foresee the future of the oil business here in Canada?

BT: I tend to be optimistic. Of course, I've always tended to be somewhat optimistic, you can't be in this business without being optimistic. That's why the NEP shocked me so much. But I think it's bound to change. We have still, the main issue is we still have vast supplies of hydrocarbons. We are primarily, we're one of the few industrialized countries, if not the only one, that has as high a ratio of hydrocarbon resources, to population. So when I look at the availability of heavy oil, tar sands, the frontier areas, including Beaufort, it's got to be good. But they've got to get a reasonable price for it or it won't be forthcoming.

NM: Because the cost of exploration is astronomical there.

BT: Yes. That's the funny thing, that's the difference between mining, which Canadians think they know, and the oil business. In the oil business you spend a great deal of your money on exploration, and then the actual drilling of a well, on the land anyway, isn't that important. But now we're hitting the frontier areas where aside from expensive exploration, the development costs are horrendous. And that's why it's going to take a long time for some of these so-called major discoveries on the east coast to actually get into production. They're enormously expensive.

#269 NM: The same thing with the tar sands in Alberta.

BT: Well, the tar sands we're into. I mean, it's on land. The tar sands, good god, we first entered the tar sands in 1958 with several other companies. It was how many years later, 20 years later I think, that we finally got Syncrude into operation. And Cold Lake, we started in there in 1964. We started in the Beaufort in '63 or '64, I forget or the Mackenzie Delta, excuse me. These are long range plays. Long lead times, that's why we need stable political policies.

NM: And that's the problem

BT: That's the problem. Politicians think in terms of 2 years.

NM: What do you think of the contribution of Alberta to the development of the Canadian industry?

BT: It's had a tremendous multiplier effect. It's not only what is spent in Alberta, but what is spent in eastern Canada for pumps and electric motors and steel, pipe, you name it. It's a tremendous factor.

NM: Do you think Alberta is going to recover?

BT: Sure I do. As I say, the business has got to come back if you're going to have a supply of oil.

NM: This is the end of the tape.

Tape 2 Side 1

NM: Mr. Twaits, who were the most influential persons in your career?

BT: Of course, everybody you work with influences you, there's no question about that. Your colleagues are always very helpful if you will allow them to be helpful. I guess one of the men that influenced me and other people of my generation was Henry Hewittson, who was president of Imperial Oil in the late 40's. I would say his enthusiasm had a great deal to do with our perseverance in the crude oil exploration business and the ultimate discovery of Leduc. He was a most enthusiastic, if unpredictable, individual. But he certainly encouraged what has always been typical of Imperial and that is, the pioneering spirit.

NM: Were there any other persons?

BT: That's hard to say, it's hard to pick out people who influenced you particularly. I mean, all kinds of people influence you, particularly a lot of my colleagues, but that covers a lot of ground.

NM: What were the most exciting experiences in your career?

BT: I guess I'd have to say that Leduc was very exciting. Getting Syncrude on stream represented another one, but there's been all kinds of them. The completion of Inter Provincial, Trans Mountain Line, all kinds of developments, they were all exciting to me anyway.

NM: And this is the last question, on the whole what do you think of the oil business?

BT: Of course, I loved every moment of it. It's a very exciting business and there's nothing static about it. Lots of room for gamble, both technologically and in the sense of exploration. And one of the great features about petroleum is that you can make it into almost anything you want to make it into.

NM: What about the competition between oil companies or between people?

BT: Well of course, it's been terrible, the competition at the product level, the refined product level has been disastrous in the last few years. Because consumption in this country has been going down. It's the old story of the one retail service station operator thinks if he puts his price down a cent a litre he'll get more business. And he never seems to realize, the guy up the street is going to do the same thing so nobody wins. And now you're seeing all the games at service stations, which is just another form of competition. But it's been forever thus and it obviously will be forever.

NM: How many years have you spent in the oil business?

BT: About 42.

NM: So quite an achievement.

BT: Well, there's lots of people in our organization who will get that service.

NM: And what do you consider your achievements?

BT: I don't think anybody can claim achievement in a large organization, except as a group.

NM: Team work.

BT: Yes. I mean, you didn't find Leduc because one man was magic and you don't do all the other things that have been done because one man was magic. But I think the great thing in the CEO is a very indefinable quality called leadership and that is the ability to motivate and get your people working as a team and have their respect. If you don't have their respect you're no good.

NM: Mr. Twaits, thank you very much for this interview, I have really enjoyed it.