

ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Ted Rozsa

INTERVIEWER: David Finch

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David: So I'll start by introducing us. Today is October 8, 1999 and we are with Mr. Ted Rozsa at his offices in Calgary. My name is David Finch. Would you start sir, by telling us where you were born?

Ted: Well, I'll start first by saying my name is Ted Rozsa which you have repeated. The proper pronunciation of the name is Hungarian. It means [Rosja???]but when my father got to New York and knowing that it meant rose, that was as close as he could come so he said rose but somehow he got an 'A' on it. But I was born in Grand Rapids, Michigan, June 12, 1915. I'm now a bit past 84.

1:27 David: Now what brought your parents to North America?

Ted: My father left Hungary, of course that's very common for most. . . , a lot of Europeans to want to migrate to North America. My mother was born and raised in Michigan. Her heritage included French, Irish and English. But it's all English that was spoke, nothing but English.

1:52 David: Describe your childhood for us would you?

Ted: Yes, the childhood was quite interesting. We were a nice family, the three children, my brother a year. . . , fifteen months older and my sister fifteen months younger, the three of us. And we were always interested in things. One of the things, I think, maybe. . . , oh I should just go ahead and talk about this. In a matter of education we were, all three of us were very interested in improving our status. My father was a barber and during the Depression he earned \$100 a month and yet my brother and I both got through university at Northern Michigan. I worked for the university an hour a day and got \$15 a month. My sister got through business school in Grand Rapids, but at home, initially starting at quite young, that's in the days where there was no electricity. We were on the outskirts of Grand Rapids, no electricity, we studied by an old lantern and when they came in with those newer lanterns with the filament where the light was white, it made a big difference. The family doctor would drop by, didn't live too far, we were out on the edge of town, maybe a mile or half a mile out of town, and he would see us studying after dinner and he would fuss at my mother and say, well, why do you make those kids work so hard. And she said, I never have to ask them to do anything, as soon as supper's over they start in studying. And that's been the case. And my career, I did very well in grade school, in high school I decided I wanted to learn everything I could learn. In four years, not counting any summer school, I had 5.6 years credit. I carried 40% overload all four years and covered everything I could possibly get in at the time. And it was in a very large high school and

in my second and third year I was the number one student and the fourth year I was number two carrying this high overload. I originally thought about becoming a lawyer, I had a scholarship and I could have gone to Michigan, University of Michigan. The only stipulation was there, that I had to prove myself every year. That didn't concern me but the fact that it would take me 6 years and no money, I decided that I would go to Houghton, Michigan at that time called Michigan Technological or Michigan College of Mining and Technology. It's now Michigan Technological University. And when I got there and the very first time I went to the Dean, I had signed up for 50% overload and he said, oh you can't do that, he hadn't looked at my grades from high school. So anyway he allowed me to take it and I carried a 50% overload and from the time I entered university until I graduated was two years and eight months and I had 10% extra credit and I had over a 92% average. So that's a bit of my background.

1:05.54 David: Good for you. Now what were your interests, like what specific subjects or were you just interested in everything?

Ted: At the time I wasn't exactly sure what I was going to go in, it was an engineering university, and I'd given some thought. As a matter of fact there I took Physics, Chemistry, I took Mining, Civil Engineering, the one thing I didn't go into was Electrical. But also I took, the very first year, studying geology, and that intrigued me. And so I guess, my total direction was toward geology although I covered practically everything else. If I'd have had another year I could have had a degree in Chemical Engineering and in Mining Engineering and in Civil Engineering. I covered so many subjects.

1:07.04 David: Good for you. What did the Geological Engineering Degree prepare you to do?

Ted: It prepared me to try to find a job. It was. . ., in the Great Depression, you just can't explain how serious it was. In Northern Michigan as I said earlier, the second and third years I earned \$15 a month and put in an hour a day and got \$20 from home and that's what the two of us lived on. We had a one room apartment with a bed and a two burner stove, hot plate, that's all it was, and a table and chairs. And the unemployment in Northern Michigan, mines, copper mines were shutting down at the time. Unemployment was about 40% and that's in the days when the women didn't work much so you can imagine how severe the situation was and it stayed that way in the States. The overall in the States in the 30's was probably 25% unemployment and it wasn't until Roosevelt got us into the war, after the bombing of Pearl Harbour that things began to pick up. And now of course you can read, war of course, always improves the economy mainly because it takes a lot of the working people out of the working force. And everybody needs to try to improve the facilities for the Armed Forces so naturally the economy jumps ahead. But it was very, very severe during the 30's. And I'll add to that too. My brother also went there 4 years, he graduated as a Metallurgical Engineer. He went on. . ., he wrote 50 letters, he got one reply from Republic Steel and his average was over 90. I got not one single reply, I looked all over Michigan, eventually I just found nothing. . ., I went down to Oklahoma and after a week I got a job with Shell.

1:09.34 David: How did your. . ., what was your first job with Shell?

Ted: As a computer on a seismic crew. In those days everything was done in the field. The crews were generally in small towns, I think from '36 to '39 I was in at least 15 towns. We moved as little as 5 or 6 days and maybe as much as 2 or 3 months you know, but different places we'd be shooting. The computer would help prepare the records and make the computations for surface corrections, for elevation corrections, for weathering corrections etc. And the assistant party chief of course, would also work on that but also start doing some of the interpretation. And the party chief did a lot of the straight interpretation of the records.

1:10.35 David: So you had no specific training in geophysics?

Ted: None.

David: None. But you started on as a computer. Some people won't understand just what kind of technology you were using. Can you explain to us what that field crew was doing?

Ted: What we would do would be to shoot a charge of dynamite and record the sound wave that goes down into the earth and comes back. In those days by the way, it was quite a bit different, there was no such thing as continuous profiling. You know, it's so common now, as a matter of fact, continuous profiling today is outdated by 3-D but in those days what we would generally do would shoot. . . , and have the six geophones is all we had at the time. . . , about fifty feet apart and maybe 800 - 1,000 feet away to get away from ground roll. We would take these jump correlations, you know, several around a section or sections, rarely did we ever go inside of a section, and try to interpret that and find out what was the geology, what the work represented in geological terms.

1:12.00 David: What were your recording devices in those days?

Ted: Well Shells. . . , the geophone for instance was a size of a large milk bottle, five inches in diameter and eight inches tall with a very, very sensitive spring, if you dropped it you'd break the spring. And those had to be planted below the surface of the ground. The recording truck of course, would pick up the signal from the cables and it was reflected onto sensitized paper, just ordinary photographic paper. In Shell's case at the time they had a six trace harp, very, very thin. . . , I don't recall what it was, I'm sure it wasn't metal and those were very sensitive too and the recording would be made from the movement of these half a dozen strings in the harp. And at the time, then of course, as soon as that particular shot was completed and you're in a dark room in the truck, it was put into the development hypo and so on and then when it got into the office we'd generally have to wash it again because it really smelled of hypo, there just wasn't enough facilities in the truck to rinse it well enough.

1:13.40 David: So what did you learn on the job there, what about geophysics were you picking up on the job?

Ted: Well, I guess that was the geophysics. We were trying to relate geophysics to geology of course, and so that's what we were actually doing and interpreting it. And by the way, everything was done in the field, all maps were made in the field, nothing was sent into the central office. to be processed, it was all done in the field.

!:14.15 David: So you were learning from the party chief as you were going along?

Ted: Yes, I think. . . , it never really seemed like a school of being taught at all, I don't think they were all that experienced really either, at the time. But yes, I was being taught you know, what we wanted to get from the records, how we were going to record the data, how we were going to process it and interpret it. Of course, as I mentioned first we had to make all the surface corrections, elevation corrections is just the height but for weathering corrections we had to use refraction work to make the surface corrections. And what we would do for that, we would set off maybe a quarter of a pound on each end of this short spread that we had out and record the refraction data at each one and then interpret that for the surface corrections.

1:15.28 David: So how long did you do that work for Shell in the States?

Ted: To start with, over 13 years but not. . . , I better back up and give you a little history. I was on the crew, I started in Oklahoma, went down to Ardmore then to another little town to the west and that would have been 10 months maybe. And they were putting out a new crew that was going out to western Kansas and the party chief, Glen Lambert and I was elevated to an assistant party chief. I was definitely doing some of the interpretation after that and so I was in that position as an assistant party chief for several years, I know worked for different party chiefs. Also I was in the Midland office and that would have been in '42, I guess, let's see. . . ,yeah, '41 is when we moved to the Midland office. And by that time it was getting a lot more sophisticated and by the way, by that time, continuous profiling was coming in whereas before it was jump correlation. So interpretation there, for instance, migration was all done by hand. You know, you put it on a large table and plot down the lines and then take a swinging arc from the surface to that and find out where that data migrated from. I believe in. . . ,oh, maybe May or something of '42, six years after I started, I got the first crew. I was party chief, I was sent to Illinois with a crew and they wanted to look at a few things, and that's during the war. So, in those first. . . , well, in Illinois five, six weeks, whatever it was and then they moved us to Michigan and we were there for three years and we made four different towns at the time. I had a crew, Shell had two other crews there and we worked. . . , started in Bay City to Alma, then down into Flint and back to Bay City. I know at Alma for instance, usually we were getting a little bit better place. The seismic crews in the early days were getting pretty poor accommodations and of course, there were no trailers like there are today. But at Alma we had a nice, small apartment on the back side of a funeral home.

1:18.44 David: So you just had to get whatever you could get, hey?

Ted: Yes. Then when they moved us from there to Flint that was the first time we had a real place. We were there I think, six months and there was a young couple that was moved, I don't know, somewhere, they wanted to rent it for about that length of time. It was at least a five room house, very, very nice, very new and that was the first decent place we'd ever lived in.

1:19.15 David: You were married by this time?

Ted: I was married September 4th, 1939 and now two months ago, on September 4th, we had our 60th anniversary and we had a party for a lot of our friends at the Calgary Golf and Country Club.

1:19.36 David: Congratulations.

Ted: Thank you.

David: So once you became a party chief, tell me how you. . ., you worked your way up to party chief. so tell me what a party chief would do, his responsibilities in 1942.

Ted: Well the party chief was responsible, when you moved into a town to locate places for the equipment to be stored. You were responsible for interpreting the records, making maps. In fact you had the total responsibility, you had to make sure that the surveying was done properly. We really didn't have to do too much about the truck type because we always had a party manager on all crews that looked after trucks. But during the war we were short of personnel and it wasn't too long after we were in Bay City that we lost our operator for the crew. Well I had been studying the operations and his father took ill and did die but he left and didn't come back and Shell left me. . . ., I ran the crew in the field, took the records, and bring them in at night and work till at least midnight. . . , and we didn't have a computer then, we were short a computer so the assistant and myself would work on records till midnight and I'm up at six going back to the fields. And I did that for close to a month and I had one major failure that I couldn't solve in the field so I had to shut the crew down and I came in and I solved it back in Bay City. So I learned quite a bit about equipment.

1:21.38 David: I'll say. Now you say when you went into a community you were responsible for finding a place for everyone to say and so on.

Ted: No.

David: No? Oh, the crew chief. . ., or the manager did that?

Ted: Well, each one of us did.

David: Oh, okay.

Ted: I don't think. . . ., well obviously if anybody found something that he didn't want, it was immediately passed around. But no, everybody in those days was responsible for himself to try to find a place to live.

1:22.07 David: Okay. And where did you store dynamite? Any stories around that? How did you store the dynamite in the new community?

Ted: Oh there were always special precautions. the dynamite was a sizable metal trailer and we had to find places to store dynamite that was acceptable to the local governments. So that. . . , you were responsible for that.

David: That could keep you busy sometimes eh?

Ted: Yes.

1:22.41 David: Any other parts to your career while you were still in the States, before you came to Canada, any other developments?

Ted: Yes, from Michigan after three years, we were sent back to Tulsa and I was there for awhile , I think that was the third time I'd been, twice earlier when I was on crews I was in Tulsa. Then I was sent to west Texas, then they decided to open an office in Jackson, Mississippi and I was sent to Jackson, Mississippi as District Geophysicist in charge of crews in that area. And that lasted from. . . , I was going to say from '46 I guess about '48 although the latter part of '48 and '49 I was in New Orleans. We had usually about three

crews and I was responsible for the seismic work, I was not in charge of the entire office. Then Shell had started a lot of water work out of New Orleans, we were moved to New Orleans, I was, the summer of '47 and the office wasn't even open. They had temporary quarters and they were building the offices there or renovating or whatever for Shell at the time. So all of southeastern United States was operated out of New Orleans. Of course, the original Gulf Coast was out of the Gulf Coast, Houston and Tulsa for the mid-continent and of course, the west coast had their own. So yes, we were there, but then I spent quite a bit of time on the water works out on the boats to check to see how it was being done and so on. then in early '49 I was sent in charge of the Baton Rouge office with the stipulation we'd be there for five years. A couple of months later, why they decided to come back in Canada and we were sent to Canada.

1:25.09 David: Okay, before we take you to Canada, could you tell me what this water works, is that geophysical work?

Ted: Yes.

David: Okay, can you explain how that worked?

Ted: Oh yes, very much like on land except that on land you lay the cables out from the truck. When you're in the water you drag the cables on the ocean bottom. You stop, put a charge to the water and move ahead and take another one. And that's the way you do it in the water works. Of course that's become much more sophisticated since then, the problems of all the reverberations in the water and so on have been greatly improved, I mean the ability to solve those problems. But initially it was sufficient that we could find the domes, salt domes etc. I don't think you would do, almost flat topography sub surface and do much. You needed to have steeper dips to show in those days.

1:26.19 David: Okay, so you came to Canada in 1949. Can you tell us about that?

Ted: Yes. In 1949, from Baton Rouge we called, my wife called her mother, her father had already died, and she said oh gosh, isn't that nice, Ted's going to be closer to his family. Well in Baton Rouge we were 850 miles from Grand Rapids, in Calgary we were 2,200 miles [laugh]. ., and that put me closer to my folks. Now we arrived in Calgary, we drove up, we arrived in Calgary on April 26, 1949. When we crossed the border they asked us a number of questions, why we were coming. Well Shell had pretty well arranged, you know, that we could get in. But one of the inspectors said well now, where are you from and he asked me, I said, well I was born and raised in Grand Rapids. So he turned to my wife, well where were you born, well I was born in western Oklahoma, well where was your daughter born. Oh she was born in Ollie Texas, well where was your son born, he was born in Mississippi, Jackson, Mississippi. He looked at us and said, well how did you all get together. So anyway we get to Canada and there was practically no office space whatsoever. In Canada I was the chief geophysicist for Shell of Canada. We started out above the Wave Theatre, that was the main office just above a restaurant and I don't think it had ten offices in the whole thing. The vice-president, our vice-president that ran the whole thing was there, the land agent, production manager, exploration manager were all there. Well then they got some more space a little farther down, about across somewhere from the present Loughheed Building, a rickety second floor, no partitions in the thing, the geologists were sent there. And as we needed much more space for geophysics because

almost immediately we were supervising four or five crews so we moved to a place, a house in lower Mount Royal and that's where the offices were for geophysics. I mean even the [Bamlin??] building was not even built at that time, there was not a single new building. And the Lancaster building was the only, what is it, six or seven stories, and of course, that was pretty well occupied.

1:29.23 David: Where were you first doing geophysical work when you came?

End of Tape 1

Tape 2

2:00.37 David: So when you were working for Shell here in Calgary when you first came here, where were you doing the geophysical work, where was Shell's field of play?

Ted: We had one Shell crew that came up I believe in September that worked south of Calgary but most of the work was north. We had two general crews up in the Peace River country. And to go back a little bit in Calgary, when we got here there was again, no place to live. There was no such thing almost as an automobile, a new automobile, in Calgary. When we came to Calgary there was one Cadillac, not owned by our group, one large Buick and we had a medium sized Buick and those were the only new cars in Calgary right after the war. There were none available to buy. And there was no place to rent, we lived the first four months in the Palliser and then we found a little house on the north side that we rented. And nobody else was finding anything or willing to take something inferior, we'd been used to that. And so they eventually bought houses for all the senior personnel and that made it much easier and then worked. . . ,well the living, everything went smoother.

2:02.04 David: So after you'd been in Canada for one year you decided to become a consultant. Can you tell us about that transition, why you made that decision?

Ted: Well, the term consultant is not applicable. I stayed with Shell from April 26 until the end of June of 1950. At that time the intention of bringing the Canadians to Canada was to train Canadians.

2:02.39 David: Okay can you start again, you said the intention of bringing Canadians to Canada.

Ted: Oh, bringing the U. S. Citizens, I'm sorry.

David: Okay, start again with that idea.

Ted: Yes, the intention of bringing U. S. citizens to Canada was to train Canadians to take over all the positions. And so after one year they had told us that they would probably be sending us back to the States. And I think some may have left, I know by June I had decided, well, I don't want to go back to the States, I think there's an opportunity here. However Shell was very good, they had said, well, if you go back you probably will drop back one position but for no more than say, six months, which turned out to be the case. But I decided that I would rather take a chance, I saw an opportunity to start a geophysical company and find work to do recording for different companies. Actually we put our first crew out for Shell. When I gave my resignation to Shell in June there was a situation that I will describe. When this happened. . . , oh many years earlier, when people would resign

and I happened to be in the Tulsa office, if anybody said they were resigning they would be escorted to their desk to make sure they didn't take anything. the reason being there was an awful lot of geology and geophysical data being peddled on the street so they wanted to make very sure that you didn't take anything. When I resigned from Shell, they asked me to stay on, I'd given them plenty of notice but they didn't have a replacement, they asked me to stay on as a consultant. So starting in June until the end of the year I was a consultant. I put the first crew out for Shell on the second of November, I still came back and put out the monthly report. In November and December I had full access to all of the information and this is to me an incredible faith in my integrity. Shell is a wonderful company.

2:05.13 David: That's wonderful. Can you describe to us what you did to start a new company, what you called it and so on, it's early operations?

Ted: At the time we were aware of some new equipment, all quite expensive. When I left Shell the retirement fund which was called a [provident??] fund probably was worth 15, 16, 17 thousand dollars, we didn't own a home, we owned a car, that's about all we owned. It was a gamble. I wasn't too worried about it, I thought well, if I fail I can always get a job. So anyway I decided to start a crew and I knew that Shell would. . . , I'd already gotten a contract. so I had to acquire the equipment, personnel and so on, and of course, I knew the proper component of it and we got the first crew out on the second of November of 1950. three of the fellows that came with me eventually became supervisors, Eddie Rutledge was one, Dick Bailey and Sandy MacDonald. And then in 1952, Wilf Bailey who I'd worked with in Mississippi when I was there, they sent him from Canada as my assistant in Jackson, Mississippi. Well then they sent him to New Brunswick and I was here but I was still supervising Canada, then they moved him to Calgary. And when I decided to quit he thought he would too but they went on vacation and I guess his wife talked him out of it. So anyway I started by myself, I knew it was a risk but I felt that I could handle it.

2:07.25 David: How many crews did you have in the field?

Ted: The maximum we eventually had was seven and also two slimhole rigs and both those slimhole rigs were working for Shell. We would generally drill, anywhere from say, 12, 1400 feet up to 2,000 feet. We had our own logging equipment to log the holes. Shell felt that they could get enough information from shallow data to help direct their program so we had two slim hole crews, the purpose was to take induction logs mainly is what we did take.

2:08.12 David: So you were doing two very different things though, one was the seismic and the other was the slim hole work.

Ted: That's right. And incidentally Wilf Bailey decided to join me, didn't start in '50 but he came with me I think, in February of '52 and I took him in as partial owner of the company.

2:08.35 David: What was the name of the company and how did you come up with that name?

Ted: Well, we seemed to be in a frontier land so we called it Frontier Geophysical and it stayed with that name for a year, then we called it Frontier Geophysical Ltd. Because to start with it was just essentially in my own name.

2:08.54 David: Now can you tell us how the methodology changed in geophysics in that decade when you owned that company?

Ted: Oh, it changed tremendously of course. Everything has long since been continuous profiling but then magnetic recording came in. We had two different type of systems, one was an AM and one was an FM system and all the crews were equipped so everything would be recorded in the field. And, although the interpretations were still being done in the field, it developed later on that tapes would come in and final records would be made in Calgary and interpretations would be made there. This is why the word consulting, I don't think, really fits. Because what we were doing was recording this data in the field, interpreting it but not consulting with them as to how to use it. It just went to the companies we worked for, we had three crews for Shell, we had a couple for Gulf, we had one for what's another company, I can't think of. . . , oh, Texaco and then one other off and on.

2:10.23 David: Now you say that when you first came to Calgary vehicles were pretty scarce. What kind of vehicles did you use when you first set up your first crew? Any stories there?

Ted: By '51 or '50 there was adequate, but as I say in '49 they weren't even sending any equipment into Calgary and Calgary was only 85,000 people, it was just a small town, now it's 850. But yes, I had no trouble getting trucks although I had from June until November you know, to assemble everything, assemble the people. As I mentioned Wilf's brother that I'd hired before Wilf came with me, he had graduated from Saskatchewan two years earlier. He was up in Flin Flon in the mining industry. Sandy MacDonald was down at Taber working for a coal mining company and Bob James had just graduated from university. And those three started and then within one year, well the first year I was the party chief, I was in the field. I'd get home maybe a day or so every three weeks, my wife had. . . , and there wasn't much money. . . , I don't quite think the story is exactly right but she got awful tired of soup and beans. And I know we lived pretty frugally because there just wasn't much money. And we were considerable in debt, even one crew, you know, by the time we bought a couple of shot hole rigs and so on, we were \$100,000 in debt. I don't know how much I got in debt. But we always had a job and then as it went on things began to slack. It wasn't any problem until, I believe, about '58 and then every single contract crew was laid off. There wasn't a single one operating, I could be off a year or two there one way or another. The only seismic crews that were operating were the ones that were owned by the oil companies. And we kept all of our personnel except the labourers and in three months we just about lost everything we'd made. But we kept going and eventually got it back on it's feet. By 1960 it dropped again, But I had recovered, not wealthy by any means, nowhere near a millionaire or anything like that but anyway, I decided well, with things this bad, I had these three top people and they were going to have to go back and run crews after they'd been supervisors. So what I did, I turned the company, half of it over to them at no cost. What I said was this, I want to get

the depreciated value of all the equipment out of it, not new prices or anything. In '62 I turned the other half off and two or three years later the industry was booming and they paid me back for all of it. and they sold out in '66 and I think each one of them got more than \$200,000. things had boomed that much for them. and you know, people say, well why did you want to give that up. Well, it was either give it up or lose a lot of good people. They all did very well, they're all retired.

2:14.24 David: That's good. So that's one of the challenges, the booms and the busts isn't it?

Ted: Pardon?

David: One of the challenges of doing this work is the booms and the busts?

Ted: Oh, yes. Actually when it hit in '50, I could see that the work was in demand in Canada and I wasn't too concerned. As I said earlier, I could always get a job if I had to but it gave me the opportunity to acquire people. If it had been boom times, it might have been a lot harder, because the people I got were all top grade people, I mean excellent students and so on. Incidentally in my experience in geophysics I found that the best people are those that are a little more rounded, which I was not in university. I took no humanities to amount to anything. I didn't get into it till later on as I mentioned, we were in New Orleans, we started going to the symphony and so on. But it was all work for a long time. These fellows were all somewhat more rounded, they were all close to A students. But I can recall hiring two top students, one from Vancouver and I fired him six months later. And he was a very, very good student but once he got a job the world owed him a living. He was going to direct other people to do the work, he wasn't going to do anything. And I worked with him and worked with him, and the party chief I had on had been with me for quite awhile, he said I just can't put up with him. So that was the end of it. There was one other. I didn't exactly let him go. I went up to the crew and the party chief wasn't very happy with him and I think he kind of had a feeling. Anyway he talked to me and he said, I don't really fit in this business, I want to go back and get my Ph.D. And he did. So, I don't normally let people go, I try to work around the problems.

2:16.43 David: Another one of the challenges as you said, the large amount of money that was necessary to buy equipment. Where did you go for that money?

Ted: Well, the recording equipment, I put very little down. I bought it from Southwestern Industrial Electronics out of Houston and I knew the people and I didn't have to put much money down. Eventually it didn't take too long to get it more in shape. The trucks I had to put money down but of course, they weren't all that expensive at the time, you know. The financial position of the countries was much different than it is today. When we first came to Canada we were still hiring fairly experienced people, hands, but not say, geophysicists, at \$300 a month. That's unbelievable today.

2:17.51 David: So did you have to get a bank loan for like, the rigs and so on?

Ted: No, I didn't.

David: You were able to do it all yourself?

Ted: Yes. Well, I mean, I prevailed upon the trucking company to buy the trucks. Actually, I'm not sure, I don't think we bought any shot hole rigs on the first crew, I think we rented

those. But then after that we began to buy the equipment.

2:18.24 David: Tell us more about the period when you owned Frontier. What else happened in that period, technology changes, well you say magnetic came in during that period. what else happened in those ten years?

Ted: Well, I guess the technology was mainly in the recording and also at the time, everything was in line, not 3-D, but because it was recorded on magnetic tapes, then you could increase the multiplicity of each shot. You know, we shot generally, along the line I think we would probably move forward only about 200 metres, and probably not that, I think at that time it was feet, like 200 feet and another shot, so that you had a duplication but with all different arrays, some vertical and some spread out. And all of those had to be corrected to vertical in order to interpret them and that could be done because it was not recorded on paper, it was recorded on tape.

2:19.50 David: So that was a major change.

Ted: That was a major change. There was no digital at all. That didn't start until. . . , oh, I would say maybe one or two of the companies might have done some digital work in the very early '60's. But by '64 or 5 it was really coming along.

David: When did the magnetic tape come in?

Ted: Oh, '54 or 5, somewhere along in there.

2:20.22 David: Now some of the people I talked to about you said that you were always right at the forefront of bringing in the newest technology. Can you tell us about that? What was your interest in that?

Ted: Trying to do better work for the people that we were working for? I don't recall Shell or Gulf or anybody demanding that we put magnetic equipment in but it was just the thing to do. I mean if you're going to keep abreast and have a company that's viable you have to bring in the newer equipment and so we always tried to keep the equipment new.

2:21.05 David: So, when you sold Frontier, what year was that?

Ted: '60 and '62. As I said, half of it '60 and '62, and between that and '66 when they sold out, well before that, they paid me for it.

2:21.26 David: Good, good. Once you got out of Frontier what did you do next and why did you make that decision?

Ted: Well, by that time I was interested directly in the oil business. I got involved with drilling a well, or drilling some wells down south of Vauxhall. No. . . , south of, oh can't think of the name of the town, it's west of Taber about ten miles. I think I drilled about five or six wells and I never took any salary and I finally got rid of it and I lost \$105,000. I found some oil but it was heavier and the problems were there and the roads were poor and if we went in onto a lease being irrigation country you could easily get the truck stuck and so on. And so I wasn't too happy, I disposed of that but I went right back into it. In directly south of Taber. Barnwell was the town where I had those first wells and the very first one was just south of Barnwell.

2:22.49 David: So your first venture into your own drilling didn't work out very well?

Ted: No.

David: What did you do next?

Ted: Then I got involved in south of Taber and there was a geologist and an engineer, promoters. And I got involved in it. And there was also Matt Newel had taken an interest in it. So anyway we drilled some and I guess they were all not too enamoured with it so I bought them all out eventually and went ahead and did very well then. Doing my own geology. I became very familiar with the field operations, I consider myself to be a good production engineer as well. I learned an awful lot about recording, logging in the field and if anything could go wrong, it went wrong for me. I had things dropped in the hole, even [Slumberjay ???] dropped a major tool. Fortunately I'd over drilled but not down to the bad water situation and they wanted me to pay for it and they said it was my fault and I said, no way. What had happened and this is common, if Slumberjay or any recording company is out there, the rig hands always help. Well they take over the rig, you can't tell them then. They're then responsible for that rig hand and I let Slumberjay know that if they tried to push anything I would sue them to get that damn piece of metal out of the hole. Well as it turned out I could run casing, it was a good well, I could run casing and set it above that so I didn't need to worry about the tool in the ground. And you know, as soon as I got on my high horse a little bit they backed right off. But oh, I had another fellow drop a big wrench down the hole, and that lodged in there in such a way, we couldn't seem to get a hold of. That took a hell of a time to get it out of there because we couldn't continue drilling. If it could happen, it happened.

2:25.30 David: So it was a big step from running, working for Shell or even running Frontier to creating your own oil company.

Ted: That's right.

David: How did you learn. . ., like the geology and the bookkeeping and the law and the landman and all that work, how did you learn all that?

Ted: Surprisingly, and I hadn't thought about that until yesterday, thinking about what questions you might ask me, how did I know anything about business. As I say, in high school I took everything that was there, I took two years of business, I knew how to keep books, I knew how to draw financial statements and so that part was not particularly difficult. Of course I'd always used my geology in seismic work because we were always trying to tie seismic to geology. And we always had a reasonably good idea about the drilling because we'd be interested, especially if they were drilling on one of our prospects, why we'd very likely want to go out there and see it and so on. I think, it didn't seem to me to be much different than for instance, running Frontier Geophysical which was at one point 150 employees and a lot of people, I mean a lot of equipment and business to manage. So all I was doing is continuing the same thing in a slightly different field.

2:27.10 David: Good for you. So what was your next venture then after those wells that didn't work out so well?

Ted: It was the wells directly south of Taber.

David: And did you form a new company to do this? Is this when you formed Bassett?

Ted: Oh no.

David: No, that was later.

Ted: I'm not sure. I was going to do an explanation of why we forget some things and what is the problem with the brain but I won't go into that right now. I don't think I formed a company but I may have. I believe I must have. Anyway eventually after it was developed I sold it to a company in Edmonton and I don't remember the name. And then the Twin Oils, it was run by two brothers, the Elias brothers, Bob and. . . , the other name escapes me. Bob was really in the oil business. Joel Harris, a very, very good geologist was doing the geology for him so that he could promote it. So he promoted a well to the north and I took a 25% interest. And I think as in those days, they would sell three parts for the total cost. Each one would pay one third of the total cost and also recompensate them for the work of the geologist who was Joel Harris and he carried an override so anyway we drilled this well [13 of 12, 12, 14 ???] which was a good well and that would be about, say, 15 miles north of Taber and 15 miles east. A very nice well, it started out good, it had about, at that time we referred to it in feet, about 13 2 feet of oil, with no real indication of water, maybe half a foot at the most. Well, Twin Oils was the operator and it only took them six months to ruin the well. It turned almost entirely to water. What they had done was perforate the top foot, five shots, all the top of it and the bottom shot just a foot lower at the top of the sand and that is something that was being done very commonly in Canada. Well I knew right away what was wrong, I said you're going to cone all that water up and that's what happened. They coned it all right to the surface and we were getting practically nothing, so much water, we couldn't handle the water and no oil to sell. They had drilled another well, it was a pretty good well just to the north but then they drilled about three dry holes, one of which we used for water disposal. But they had kind of lost interest in it. So one of the partners was Ernie Funkhauser who is dead several years ago. I bought his interest, of course I had 25%, Twin Oils had 25% and the two brothers became dead enemies, they wouldn't even speak to each other and so they wanted out, I bought both of them out

End of Tape 2

Tape 3 of 3

3:00.37 Ted: Well to continue on, after having purchased all of that, then even with Joel Harris I bought his overriding royalty. In the meantime we had picked up quite a bit of land to the east and the original well was drilled on a grid oil farm out. Well, they had one other well and it turned out to be on a major oil field down there and you could have had the whole damn thing for peanuts. They didn't know what they had and they had run a test on the well and said, well there's just no aerial extent to this when they ran the test. Anyway when we picked up land to the east. . . , and not all of it, they didn't participate in some of it but they had the original land on that first well. Well I bought them out for something like 100 or 110 thousand, I was just buying everybody out of it. I wound up with everything except one quarter that I couldn't get and eventually it was sold to another company but along with a lot of trash and so on. But of all of the land to the east and northeast, a large part of that, I had most of the interest, which was fortunate. But this

other company wound up with 12 2 % of the best pool, and the poorer ones I bought that interest from them so. . . And by the way, you asked when did I form the company, I had mentioned earlier about our Bassett dog which I showed you in the picture out there. I decided when I started back into the oil business I'd form Bassett Oil and so I operated from late '60's to '79 as Bassett Oil.

3:02.55 David: And then you sold that company?

Ted: I sold that to Oakwood in 1979.

David: And then you turned right around and formed another oil company and that one you named after yourself. Tell us about that.

Ted: Well as I recall it wasn't a company I formed, I just changed the name, it was one that I'd had, it had some equipment in from I guess way back from Frontier Geophysical and so I just called it Rozsa Oils, not limited, and it stayed as Rozsa Oils and I think it was three years later when I found enough to justify, I incorporated Rozsa Petroleum Ltd. But during that time, when I sold it, I retained exploration lands to the west. Oakwood wasn't interested, well I found a very good field there at [Inchan??] and also I found the gas down at Nappen during that time. That was quite an experience to come across a huge gas well down there. And so I've been operating, well that was under, essentially under my own name, Rozsa Oils and then it went under Rozsa Petroleum and that's where it is now. The name has changed, it's still Rozsa Petroleum but there were some diversifications that my son talked me into that we had to reincorporate the whole thing. One of the best things that ever happened to him is to get out from underneath me because he felt it's all going to be his anyway. He's a very responsible person today. And to get out and find out what it's all about without having to rely on dad to.

3:04.54 David: So you're still very much involved? Tell me about the business part that you work in now?

Ted: Well, up until. . . , I sat on all the wells, Joel Harris I would have him there a lot. For years and years with Bassett and then also with Rozsa Petroleum but I started to staff up in '87 and by '89 I wasn't going to the field much anymore. But before that you know, I was the geologist, the geophysicist, the landman, I had a landman's license. I understood production management, drilling and so on, you know, I was handling the whole thing myself. And that went from. . . , oh golly. . . , I did that from about '69 until. . . , Ruby came with me in '74 and that was the first employee, I was doing all the rest of it myself.

3:06.10 David: How did you become a landman?

Ted: I found that the easiest thing I could do was go talk to the farmer myself. What happens if you send a land service out and you're not careful to give instructions, you know, they may annoy the farmer. But I would go to the farmer and say I'd like to drill here and he'd say, well I've got certain things I'd like to do, could you move it a hundred feet over. I knew the geology, I said sure. So I could make the decision right there. I know one case down at Nappen where I gave him a location which I felt was good but it was done by a land service so there's a little mound about the size of this room, and where do they put it, right on top of that mound. Ridiculous things that would happen. It was always nice to be

there, so knowing that I could go there and so I applied for a landman's license and got it. Things were so much simpler then, I could go talk to the farmer when I was doing all that drilling for Bassett by myself, initially. I'd get the lease, I'd drive into Calgary that night, say for the next well, I'd leave it with the Conservation Board, spend the night with the family. The next day, noon or something I'd go pick the license up and go back to the field. Now it takes at least a month to get a lease, everything has to go through the government in Edmonton and it just carries on and on. I've let the landman's license lapse because I don't go to the field. You know, when it got so complicated I said, well there's no sense to it, I try to direct land people about, if there's any problems give me a call and I can solve the problem for them.

3:08.23 David: Throughout your running of your business it sounds like you've learned a lot in the field but do you also keep up on the reading, on the most current information about geology and geophysics and engineering and so on? How do you keep abreast of all that?

Ted: For a long time I did a lot of reading and I kept abreast of an awful lot of it by doing it and helping the industry. For instance one of the things, and I don't know whether any other place did it but I found that too many companies were getting very, very bad cement jobs on the casing. And I got to thinking, how can we do it better and I even thought about bringing one of these rotating cement trucks out along with the regular ones. And then I find out that all of the, the cementing trucks have two tanks on it, I knew they had two tanks but they said they only really needed one because they had a water truck standing by. So I got them to mix a batch of cement and keep it continuously paddled and when we got the cement, the major part of the cement down, we'd send the tail in cement which would all be good cement. The trouble in those days, with cementing was you had a big bin which was as tall or taller than this room and the cement would come out there in sacks and the hands would have to go dump it in at the top and then it would come out of there and into the hopper with the water. Well the cement wouldn't come out evenly of course, and the hands were banging on the sides of the hopper to get the cement and by the time you get to the last of the cement, very, very poor cement. And that's why there were so many poor cement jobs. Well the major companies like Haliburton and Dow and so on, I feel copied my idea. I know they made big ones, as big as tanks used by service rigs you know, twenty, thirty feet long and have the cement fully mixed for the tail in cement. And that solved a lot of the problem, it doesn't solve them all but it helped a lot. So I feel I've learned a lot and I've contributed a lot to that.

3:10.50 David: Good for you. In 1988 the C.S.E.G. gave you it's gold medal for outstanding contributions. What do you think your most outstanding contributions have been? What are you most proud of?

Ted: That's a very difficult problem to answer. I'm of course, very, very proud to have received it. But I think it's a summation of all of the things that I've been involved in, in business, in geophysics, all summed together and then to be honoured by my profession I think, was a great honour.

3:11.35 David: Okay well let me put it another way then. What part of being a

geophysicist

was most exciting for you, what did you enjoy the most?

Ted: Well obviously the interpretation. And I'm finding that out now. We brought all processing and interpretation into this office a couple of years ago and now I'm not really keeping up with day to day operations except to be fully aware of where they're drilling and to keep track of the well and it's progress etc. But the interpretation, I'm finding an incredible lot more information on the seismic data than used to be available. And this is not by any means a criticism of the processing companies but a processing company cannot make money unless they have a routine and just put it through on a routine basis. But there's an awful lot more data there that you have to examine in different ways and I've spent a lot of time examining data and had some non-successes but I've learned a lot about it and how we can improve it. And really the interpretation, if you come up with something different, it can be very thrilling. I mean, on one I've just completed, the area, one end of it didn't look like it had anything on any horizon and by a totally different technique, all of a sudden I think there's something there. I don't know. So you can get excited about the interpretation of it. I mean that's the whole purpose of it to start with is to get something that will stand up and then put the drill test to it.

3:13.40 David: You bet, you bet. Well, you've seen things change a lot in the geophysical industry since you've started. Where do you think it's going to go in the future, what's on the horizon?

Ted: I guess I'm not keeping up with that quite enough. By the way I'll go back and answer the question I didn't answer before, do I do much reading. Since my eyesight is bad, by the way I was born with this eye (points up and off to his left) and it's vision at birth was about 2,200, now it's about 2,400 so I never used it. And this eye was always exceedingly good, on the golf course if somebody hit a ball 250 yards I could see it land. Today I can't see it 100 yards. At the same time I lost the hearing I was telling you about. On September the 8th, four days after our 50th wedding anniversary, we were up at Banff and I went out the next morning to play and I was dizzy, I couldn't see anything, I couldn't figure out what was wrong. Anyway came back to Calgary and had it checked and I'd had a stroke of a tiny blood vessel which robbed me of about 75% of that eye, the only good eye. And that was on September 8th and on October 10th I had the loss of hearing, all in that short a span. As a result of that I limit my reading quite a bit and when it gets real technical, having to reread it and use a magnifying glass and so on, I find it very difficult so I try to find out most of the time by talking to people and letting them explain to me what I'm trying to find out. Because I just can't . . ., I mean a long article, let's say in one of the magazines, twenty pages of technical data, it would take me a week to understand it. I just can't go through it anymore at the pace that I'd like to.

3:16.02 David: So what part of the business do you find most rewarding now?

Ted: I guess the most rewarding is the interpretation, obviously the most rewarding is to make sure that it makes money.

David: Yes, when you find it?

Ted: That's right. Which I'm trying to do with the business, I'd like to make sure that it makes money because we do have about twenty people here, some very, very good people.

When I look back at the time when I was producing 6,500 barrels a day and I had my son and son-in-law and two girls in the office and two fellows in the field and that was it. I can't do that anymore.

3:16.57 David: Where do you see the oil industry going in the future in the Western Canadian basin?

Ted: All analysis says that the world is consuming more oil than it's finding. I don't really see anything but the usual roller coaster, up and down which is going to happen. But I think there should still be a future, I believe there's still lots to be found. Southern Alberta, when I first went down there, that was no-man's land, no oil company would bother with that. Now things are being found. One of the things world wide for instance, all of the drilling done in Russia, cement jobs were so poor they've ruined major fields there and no remedy to them and they've dumped so much stuff on the surface, damaged lakes and surface and so on. there's probably a huge amount of oil there but I don't think they can ever get it out and be a threat. Now it's a little different in Saudi Arabia but Saudi Arabia when there's a sudden demand, they can go full force and can't meet all of the demands. But the press can turn it around, they can say, oh yeah, they can produce twice that much and it's not true. The press more or less controls the attitude towards the oil business. You know it wasn't too long ago, when oil went down to just about \$10 and that's because there was a glut, now it's gone way up because there isn't any oil. And it's all turned around by the newspapers.

3:19.00 David: I'm interested to find out why you became a Canadian?

Ted: At the time, I became a Canadian January 8th, 1976, having looked after my own affairs and for years I didn't use an audit service at all I would make the tax reports to the United States and Canada as being a U.S. citizen. And having to convert everything from Canadian dollars and having to keep track of everything in two currencies, I finally gave up. It wasn't easy to do to give up a citizenship that my father came over and established and gave me an education there. It was hard to do but it became intolerable trying to meet the requirements of two different countries so I decided I would become a Canadian. I didn't even ask my wife to go down. I applied for it about '75 or whatever, maybe '73, whatever was necessary at the time, whether it was a year or three years, I don't recall. And then when I became a Canadian I went down by myself, I didn't ask anybody to go with me. And I was very fortunate and I believe the judge was Judge Stevenson and he just started talking to me and right away he realized that I was an educated man and one of the first things he said is, you know, we're not going to go into all of this normal rigamarole, you know, do you know all of the Prime Ministers of Canada, which I did and the Premiers and an awful lot about Canada. No, he said, what you should really do is think about what you've done and think about the United States. He said, don't forget you got your education there and don't ever look down on where you came from, he said, be proud of it. And I felt very good about that. To be proud of where I came from and why I changed.

3:21.35 David: Can you tell us about getting the Order of Canada?

Ted: Yes, that was done, that was the help of some friends, Mario Bernardi

David: Could you start out with saying, I got the Order of Canada and tell us when?

Ted: Okay. I got the Order of Canada in, I believe, 1991. At the time, it was given out twice a year and I've forgotten how many, some fifty or so that received the Order of Canada twice a year. Ours was in the spring, in April of '91. And we went to Ottawa, and it was very impressive, Hnatyshyn was then the Governor General and he was the one that put the ribbon around with the large medal. And that ribbon around the neck was never to be worn again. You had a small ribbon with the medal up here underneath a formal but not the long medal. And of course, I got a number of the small ones for a lapel that you can wear at anytime but the large medal should only be worn for formal affairs.

3:23.15 David: Okay, thank you for that. Anything else you'd like to say about your career? Anything else you've had a chance to think about?

Ted: Well, I hope I can keep it up for awhile. I've stayed in pretty good health, in spite of poor hearing and poor eyesight. I'm still able to work and I find the work interesting and exciting and believe I want to continue. I've always felt, like people say, I'll die with my boots on.

3:23.50 David: Well, thank you so much, Mr. Rozsa. We really appreciate you doing this with us and we'll end the formal part of the interview at this time. Thank you so much.