

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Peter Bediz

INTERVIEWER: David Finch

DATE: March 2000

Video: 12:00.54:20

DF: Today is the 28th day of March, in the year 2000 and we are with Mr. Peter Bediz at the offices of the Canadian Society of Exploration Geophysicists in Calgary. My name is David Finch. Could you tell us your story, starting by telling us when and where you were born?

PB: Yes, I was born in Istanbul, Turkey, some 86 years ago. To be exact, 1914, January. I'm the third boy of a four boy family. My father was a photographer, the very first Moslem, Turkish photographer. In those days religion was very strong and many fanatic people. He had rather some problems with the religious people. In those days they did not take pictures with electricity, this was about 90 years ago I'm talking. Anyway he had a big studio. To finish the story, they often agitated and threw rocks at his studio, which was the frosted glass and so on, to use the natural light. The poor man, he had to replace them and so on and so forth.

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Anyway, I'm his son and he also, besides photography, taking pictures, he also was importing photographic supplies, cameras, etc. and he had about 100 people working for him, which was unusual. But it's been a good lesson to me, he didn't follow the new progress. By that I mean, he refused to use electrical means taking pictures and other people did. People look nicer with electric light, so he lost all his clientele, he went bankrupt. So I'm using that as a means of a reason for being open minded on the new developments, technologically and otherwise.

Video: 12:03.33:11

#027 DF: Tell us about your schooling?

PB: In my schooling, I started in a school called Galatesarie???, that is in Turkey. Now they have an affiliated football club, which I understand they are in Europe in the finals now. This school, although it was a Turkish school, the courses were given in French, practically all courses, except literature and Turkish history. We had teachers from France. This school was established in 1481, I think that's before the discovery of the Americas, isn't it. Anyway I went to that school and graduated from there. As I implied a little while ago, my father had gone bankrupt in his business, so I was fortunate enough to win some competitive exams and get bursaries for the elementary portion of the same school and junior high and senior high and so on. After that I had great desire for further education.

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With my mother's influence especially, she was well read and well educated. I couldn't afford it, my dad couldn't afford it, so there again, I took a competitor examination and I was fortunate enough to win it. I was told, Peter, we're going to send you to Germany to study coal geology. You couldn't be too choosy, I said sure, otherwise I couldn't have gone into higher education. So all of a sudden. . . in the meantime I was teaching to make a living, assistant to a teacher rather. Anyway, I get a call in that school. .in those days, it wasn't a call we didn't have telephone communications as well as now, it was a telegram from the people that were issuing the bursaries for the higher education. They said, by first means, please come to the capital city of Rankavar ???, to discuss some of the matters regarding your future education.

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I immediately said, it's somebody with pull or something, they're going to tell me, we made a mistake, you're not going nowhere, but they apologized and said, we have changed our mind, instead of Germany, we are going to send you to the United States of America. This was in 1937. . because we've made a mistake, somebody else was going to go there to Germany and we made a mistake. Well, come to find out after I've finished my studies and returned, I had some friends to rely on and I asked them what happened there. Well, the fellow said, I know, I remember that, I know, I'll look it up. We looked it up. To make a long story short, you know what happened.

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In those days, Germany, in the eyes of the Middle Easterners, including the Turks, was the country and everybody loved to go there to study and so on and so forth and America was too far away, a bunch of Indians and New York here and Los Angeles there, in between nothing. So he used his influence through his uncle, who was a Minister of something or other and he wanted his nephew to go to Germany, not to the United States, so that's why we changed you. To make a long story short, the war came, he couldn't finish, I was fortunate enough, he was the loser and I was the winner in the long run. This is the way life goes. Then they send me to Colorado School of Mines. I studied there, I got a degree in Geological Engineer, even though I studied geophysics.

Video #12:08.57.21

Audio #074 Mind you, geophysics was at its infancy at that time. They weren't sure where geophysics future was going to be. To protect the students, the management of the Colorado School of Mines, would not issue. . they issued a silver diploma, saying Geophysical Engineer, because I might not get a job, they thought, so they gave us an engineering degree in geology. But if the future employer wanted a certification that I had studied geophysics, they were willing to do that. This is quite interesting for the new generation. The School of Mines, thanks to Dr. C.A. Heiland, Carl Heiland, had decided to give a course in Applied Geophysics.

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There were schools, universities, engineering schools, that gave theoretical geophysics, you know, dealing with earthquakes and other aspects of the theoretical phase of

geophysics but Dr. Heiland was set here from Germany by a company called Askania. I think they're still in business, manufacturing instruments, geophysical instruments. They sent him to the United States, as an engineer, to convince people that geophysical instruments do indeed, in fact, work. Dr. Heiland himself, under whom I studied at the Colorado School of Mines, a very intelligent man and a very knowledgeable person.

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To me, it's rather ironical, during the First World War, he was, being a German citizen and a scientist, he worked for the German Navy, I guess, to degauze the ships for torpedo attacks. And then in the Second World War, he had become an American citizen by then, he did the very same thing on the American side. He was a very interesting fellow. I don't think too many people know, and I'm not taking anything away from his technical ability, he was very good indeed, but he was also a very good businessman. He formed Heiland Corporation, I think he called it. He built some early instruments, called Heiland and he had some features in there, a compander, which turned out to be automatic gain control.

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Also he could see money to be made in synchronizing the flashlights on ordinary photographic cameras and he built that and he made a lot of money and he sold that to Hathaway or some other company. Anyway the point I want to make is he was excellent technically in geophysics and I personally would call him the father of applied geophysics in the United States. And the School of Mines, somehow they realized the importance of the future of geophysics and they got in touch with Dr. Heiland and he came to the school as a professor and set up a geophysical department there. So I graduated there, with this piece of paper saying Geological Engineering. Even though we took a lot of geology course, we had many other courses, scientific courses, maths, special physics and so on that was required to be a geophysicist.

Video #12:13.57.16

#123 DF: Can you tell us more about Dr. Heiland, he sounds like a very interesting person?

PB: He was indeed a very interesting person, a very capable person. He had great foresight. He spent a great deal of time in helping, especially seismic work. As you know, geophysics is composed of 4 or 5 different branches, gravity, magnetic, electrical and seismic. He was knowledgeable in all those areas, but seismic was the most practical and successful tool that we used in those days. Especially with the salt domes in the United States. The equipment was very simple in those days, but nevertheless it was easier to find the salt domes because most of them were very close to the surface. Primarily based on the differential in the velocity, we had what they called fan shooting and so on.

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Now, back to Dr. Heiland, as I mentioned, he also was a business man and he did very well in that respect. I think I'd like to give you, if I may, a couple of stories, true stories about Dr. Heiland. The graduating class of Colorado School of Mines, those who were taking geology and geophysics, had a summer course at a place called, Lyman, Colorado, on the prairies, similar to Saskatchewan. There we were practicing all the geophysical methods, which gave us practical experience, it was an excellent course.

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Of course, this little town, we were staying in the hotel and somebody discovered that Dr. Heiland was very scared, frightened of lizards and there were lots of lizards. Of course, Dr. Heiland, being a German, he loved his beer and after having had many beers, when he went to bed, my friends had put a lizard in his bed. We were all in our rooms, waiting for him to scream. Well, sure enough, we heard him scream bloody murder and we got a big kick out of it. Sometimes a big man like that is scared of some little lizard.

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Another thing, and this is a fact too, he was married and he was living in Golden, Colorado, where Colorado School of Mines is. I think there was a house owned by the school and he was either living there free or very little rent, but he decided to build a house for his wife. He never said a word to his wife. He went ahead and halfway between Golden and Denver he had this house built. Without mentioning a thing to his wife and he thought he would surprise her. Well, the house was completed. To make a long story short, he took his wife for a ride, a Sunday ride and he took her to this house and he slowed down the car in front of the house and then he stopped and he said, honey, how do you like this house. It looks nice, well, let's go and take a look at it. He said, this is your house, I got it for you, and the poor lady went in there, she disliked the house. I think it was more psychological because she had no input in the house and so on. Well, this is the type of a guy he was.

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He was well respected internationally. He also maybe devised, I will say practiced the seismic principals during the First World War, to determine the location of the big guns. It's a simple matter really, it's a triangulation. Nevertheless for those days, that was quite a thing. And the students liked him. He was very calm. Another story that might portray Dr. Heiland, he was lecturing one day and we had in our class a Chinese fellow and he had Ph.D.'s from I don't know how many American universities. From Ivy League stores down to whatever. Very smart, very intelligent but a professional student. So he had come to Colorado to be a student of Dr. Heiland's. Dr. Heiland was lecturing and he was deriving a big formula on the blackboard, a long one and everybody was just confused.

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So he said, this is the formula and then everybody got real quiet, trying to understand what it was. We heard this squeaky voice, by this Chinese fellow, whose name was Chiang Yee Fu, from the back row you heard this squeaky voice, Dr. Heiland, I totally disagree with you. Everybody just stood there and didn't know what to say and he walked over to the blackboard and he got a piece of chalk and he said . . . this is that, that, that. . . therefore this should be that, not yours, he threw the chalk away and went back and sat down. Dr. Heiland, with great poise, he said, you may have a point but let us don't take all these students time now, come and see me after class. After class Dr. Heiland hurried up and got his coat and hat and got out of there in a hurry. He didn't argue or anything. And the Chinese fellow was right. Another distinction of Dr. Heiland is the fact that, believe it or not, we did not have a geophysical text book, an applied geophysical textbook.

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When he was lecturing, he was giving us mimeographed sheets and so on and he, being a German and in Germany this geophysics had advanced much more so than here, at that time. Some of those mimeographed sheets were translations from the German, but nevertheless it served the purpose. Anyway with the help of all those mimeographed sheets and his knowledge, he sat down and he wrote the very first applied geophysics book. I think I was a junior at the time in school. I might add that my class, including myself, we helped him to write that book. In fact, he was very open minded, he told us to criticize him and so on, which we did. It's a big book. Strangely enough, 3 or 4 months there were other books that came out but his was the very first applied geophysical work written that we used as reference. Prior to that we did not have that.

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He liked to give examinations, we called them quizzes. . quizzes, open book quizzes. And of course, we had his book and so on. Believe me, that was the hardest quizzes we ever had, because you relied on the book, you had only 50 minutes to write it and you spent your time trying to find the subject matter to write. He was very good about allowing people . . . his theory was, in business, in your profession, you're going to have access to the books and information, so you better learn now. So I had a great deal of respect for him. He passed on several years ago. Then after graduation from there I went back to school, the same school, Colorado School of Mines and got a Masters degree. A Masters degree, they would give you a degree which read, Master of Geophysical Engineering. So I got that. In the summer months I worked on geophysical crews, seismic, mostly contract crews to get some experience.

Video #12:24.38:08

#236 DF: What did you do on those crews?

PB: That's interesting, I hope I'm not going into too much detail but. . .

DF: No, this is good.

PB: My first job, I think that was between my junior year and senior year, was with other 3 fellows, my classmates, we were hired by a company at that time, called National Geophysical, which was purchased by Teledyne, it's Teledyne now. So they sent us to Dallas, their headquarters. They assigned us to their laboratory, a very excellent laboratory, by the airport, Love Field. In my case, they took me to a place, they said, we had a little fire in here, so we have to salvage as much stuff as we can. You see this pile, I said, yes, the pile was composed of a bunch of screws, all sizes, wood screws, metallic, other kinds of screws and so on. Believe me, the pile was about 4' or 5' high. And they said, you see all these drawers here, yes, we've got a sample of one of each on the drawers, so you start now and sort them out for us.

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Well, what they were doing in those days, they were testing your patience, you acceptance of difficult jobs and so on. Among these three fellows, one was an American, then I was a Turk, and then we had a Columbian fellow, who came from an uppity-up family, a richer, bitcher family. He didn't like the way he was treated so he quit. He came there for

experience anyway. But I stuck it out and they left me there for a few days, I didn't have to get to the bottom of the pile.

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And then another incident, they asked me if I was able to drive a truck. Well, in the geophysical business, you can appreciate, you've got to know for the field work, you've got to be able to drive a truck. Well, I really had not driven a truck all my life, I'd driven a car and a pick-up. I said, of course, sure, they said, you see this, they had a bunch of trucks lined up in the back yard, you see this water truck # such and such, yes sir. Would you take that and get a load of water, there's a little lake not too far from here, they gave me the directions, get a load of water on that truck and come back here and then just water the lawn in front of the building. Yes, sir. So I get in the truck and try this and try that and I got it going.

Video: 12:28.02:24

I went to this little lake, I backed into the water, I got the load of water with a little difficulty, mind you. Then I got in the truck, with the load and sunk into the mud, I couldn't get out. Finally I emptied the water and moved the truck and extended the hose, I made it. Of course, it took some time. When I got back to the office or to the laboratory, I could see all these big shots looking and laughing from the windows. After that they sent me to the field crew. There again, the field Party Chief assigned me to the drills, the dirtiest job you can have, helping him to drill these sump holes, for accumulating water for circulation. Mud all over you and so on. And then finally they put me in the office.

Video: 12:29.08:28

DF: Okay, we're going to change tape, this is wonderful, you're doing very great. These are really good stories.

End of tape.

Tape 1 Side 2

Video: 13:00.37:10

PB: After I got my Masters in Geophysics from Colorado School of Mines, I worked a few months in the field, I wanted to get more experience and I applied to Massachusetts Institute of Technology, MIT, for a scholarship. To my amazement and great satisfaction, they offered me a teaching fellowship, where I could continue my studies toward a Ph.D. degree, also do a little teaching, substitute for the professors and so on. So I was given that chance so I moved to Boston, I lived there and went to MIT, working on my doctorate.

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I'm sorry to say, I came very close to getting my Ph.D. I met all the requirements, even I had finalized my thesis, except not officially accepted but accepted by my professor for

presentation and for some, primarily financial reasons, I had to drop out and go to work. Now at that time, the seismic industry was flourishing, it was during the war too, there was a shortage of people. I thought I'll drop out and then come back later on, well adios. Once you get out, you don't go back.

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Of course, there were reasons for that, they kept insisting I stay, they gave me nice flowery letters, congratulations and a few raises and so on and I thought, well, I'll wait another. . . at MIT we had quarters, not semesters. So I never went back. After that I worked in the United States. Since I had the scholarship from the Turkish government, actually I consider that from the Turkish people's money. And I had an obligation to meet, we were under a contract, we had to serve as many years physically there as we studied. And I thought it was time for me to pay that debt. So I was planning on going back to Turkey.

Video: 13:03.43:27

In the meantime the people who had sent me to study, the branch of the government, the office called MTA. It's roughly translated as Mining Search and Research Corporation, it's somewhat like the USGS or the Canadian GSC, somewhat in that order. Anyway, I had some correspondence with them, asking me to investigate the availability of seismic instruments and associated instruments and equipment, including drills and spare parts. Mind you, this was during the war time, it wasn't easy to get things. Even the American people would have problems getting it. But somehow I was successful in having the company commit themselves. They gave me a proposal, so I started effectively working for MTA, trying to pay back what I owed to the people.

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Then I ended up in Turkey and I was instrumental in setting up the seismic division of the geophysical department. There were other fellows, they set up the gravity and magnetic together and electrical and so on. When the instruments came I had the job of training the people. People had never heard of seismic and geophysics. These were good intelligent people, some of them college graduates and they picked up and we were, I think quite successful. Along with us, we also made. . . and I was instrumental in selecting, contract crews from the United States, and I was involved in the selection of it. My choice was not accepted by my people.

Video: 13:06.14:03

This may be a sideline but of interest, psychologically people will be interested, they preferred United Geophysical Company. And when I asked, why United, United Geophysical Company's President at that time, was Herbert Hoover Jr. the old President of the United States, son. And they told me, after all, this is the American Presidents son's outfit, it must be good. Well, I said, they may be good about this and that, they overruled me of course. So we used them, they were nice people, they were good people but economically, others could have done it for a better price. Anyway, so we had a United Geophysical seismic crew and a United Geophysical gravity crew in a district called Adana, in southeast Turkey. We prospected there for oil. I was what they called Chief of Camp by then, District Geophysicist in our terminology and responsible both for

getting our own crew trained and operational, successfully and also looking over the work United Geophysical crews were doing.

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So that was quite interesting. After having accomplished that, and for some political reasons, I thought the time had come for me to go back to the United States. Mind you I had a child and an American wife and they played a role as well, I don't deny that. I had paid half of my obligation by physically working for the institute and I agreed to pay the rest back in cash, which was agreeable per agreement plus interest, which effectively at the end I did, with American dollars. So I owe them nothing. I owe nobody nothing, here in this country or in that country. I even had to serve a military service to get out of the country. So I did all those things. But there are certain things you cannot pay with dollars.

Video: 13:09.28:15

I still feel a great obligation to the Turkish people, to the peasants and the like. It was their money, in the form of their taxes. The government gave me an education and I recognize that, I'm grateful to them and I'd like to use this interview to confirm that again. Any chance I get I try to mention this thing. Okay, then I came back to the United States, worked for awhile. I found a job with Century Geophysical Corporation of Tulsa, Oklahoma. Didn't have any trouble getting a job. I worked there for awhile and then. . .

Video #13:10.25.21

#089 DF: When did you come back to the States and how long did you work there?

PB: I came back to the States in 1947. Correction, about Christmas time of '49, not '47. I was in Turkey approximately four years, including one year of military service. At that time, the technical exploration people's big talk was Leduc, Canada, Alberta. I'd heard of Leduc because I always try to keep up with the literature but didn't even know where Alberta was. So they told me, they gave me a description of what had happened in connection with Leduc and so on. And we want you to go there.

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Actually I don't mind mentioning it at this time. It seemed at that time, Shell Oil Company had told Century Geophysical people that we'll hire two of your crews. And at that time the crews were hired for an indefinite period of time. You became a part of the organization if you worked, and even though you were a contractor. They said, we'll give you the contract for two crews but we want a supervisor that can meet our standards and our requirements and here are our requirements. So in order to get me to flattered to accept the job, they said, da, da, da, da, da, we'll send you there for 3 months, don't worry, we'll get you back in 3 months. In the meantime, we'll work on Shell and we'll finance another fellow, train another fellow under you and we'll take you back there and that guy can take it over. Well, three months became three years, and nearly thirty years.

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The interesting thing part is . . . they told me to leave my family, you're coming back here, so I was here on single status. Believe me, in those days, this was in '49, early 1950, the hotels were full of people, exploration people, most of them from the United States. Life was difficult because the city wasn't prepared for this sudden expansion. But anyway, I

kind of liked what I was doing. . and while I'm thinking of it, I made a study, with the help of some other geologists to find out how much was done in Alberta, when I first came here. And I found out that on the average, there was only one single hole per township in the whole Alberta. So the geological information was concentrated on the foothills, Turner Valley and now Leduc, near the foothills and was very challenging.

Video: 13:14.40:04

I hate to use that rubber stamp cliché but it was challenging and with my background, interest in science and what have you, I found it very interesting. So I liked it here and I liked the people. One day, like I said, my family was there, I was on single status here, the big Vice-President came, I said, whatever his name was, what about me, what's happening, I can't go on like this, I either go back to my family or bring my family here. And to my amazement they said, you mean, you wouldn't mind staying in Calgary, in Canada. I said, of course, not, ooohhh, what a sigh of relief. Well, they said, we'll make it good Peter, don't worry. Anyway I was then sent here as a Supervisor, Assistant General Manager. Eventually I became the Manager. Since we are in the premises of the CSEG, I missed being a charter member by maybe, the most six weeks, I think more likely about a month. Anyway of course, I joined the society and enjoyed that. I was fortunate enough to be recognized and elected as a President. At Century here, we did a lot of work all over the province and Saskatchewan and British Columbia as well. It was very interesting.

Video: 13:16.35:19

I have some very interesting comments to make. We had a crew for Hudson Bay Oil and Gas. They told us to go move the crew. . may I interject something else, like I touched to it a little while ago, at that time, when a company had a crew, that was their crew. It wasn't this hire them and fire them business. During the road ban time, would you believe, they paid 75% of the contract fee to retain the crew. A lot of young fellows don't even think or know about this, but it's interesting and it shows how important the seismic crews were to them. The demand was great and that was the only means of . . in a semi-virgin country, really that's what it was, not quite virgin, but semi-virgin.

Video #13:17.57.19

168 Back to the Hudson Bay crew, they wanted some of us to go, I think it was Fort Vermillion, east of Fort Vermillion, it was at that time, a very difficult place to get to. Somehow we did it, it was in the winter, we crossed the frozen rivers and so on, that's no important. We started shooting, I always, as a supervisor, I always was on the crew for the first few days of each project because that's very important, to set up the parameters. Today the parameters are still important, but not as important as that because we were using analogue paper records. You took one shot, that was it, you had to put everything in it. Maybe if you were lucky, you could have another second or occasionally a third shot, but them in most cases, the holes would cave, so only one shot. So I didn't know this, in what we call the first breaks, a very high velocity, a velocity of 20,000 + feet per second.

Video: 13:19.16:10

That's the velocity of reefs. Very dense formations. So immediately everybody thinks, when you have a thing like that, there's something wrong with your instruments. I didn't

discount that possibility. We tired again, the same thing on other holes and so on. In the meantime I got hold of our instrument supervisor and I told him, get on that plane, get over here immediately. He did, he checked the instruments, he said, nothing wrong with the instruments, everything is okay. So I began to think. . .fortunately I had quite a bit of geology and geological interest. . I began to think, what was it. I thought, the first breaks are an indication of a near surface formation, so the high velocity wasn't near surface, so this was unusual. There's a very high velocity stuff. I couldn't say what it was. So I rushed back to Calgary, I went to see Lindy Richards, we used to call him Rich Richards, who became the Hudson Bay Oil and Gas President afterwards, many years later.

Video: 13:20.49:10

A very fine gentleman, bless his soul. I said, Rich, the geophysicists called him Rich, when he got to be a big shot, other people called him Lindy. So I said, Rich, there is something funny here, I said, I don't know, so I told him the story. He said, well, we'll think about it, meaning I'll talk to other people, I'll call you back. He said, everything's all right, keep that crew there. I said, okay, I'm suspecting something Rich, could Devonian be outcropping there. No, no such thing. So a couple of days later, I get a phone call in Calgary from Rich Richards, Pete, move that crew out of there, take it to such and such. So what was happening, it's actually the Devonian, which we were trying to map, thinking it's way down deep, it was near the surface. The reason I'm saying this, to indicate how little we knew. I'm not throwing rocks at Hudson Bay or anybody else, but we didn't know, we didn't have the information. And these young fellows today, they should be grateful, with all the improvements in technology, in their tools that they have in their hands and the geological information they have available to them. It's a heck of a lot easier to find oil today and increase the rate of discovery, which they have done.

Video: 13:22.48:25

I give them a lot of credit. In my early days, if your discover rates. . .I shouldn't say if, we were looking at a discovery rate of, from about 4 to about 8%. The 8% was when you used old information, geophysics and well data and so on. 4% a wildcat. Today they are doing better than 90%, many companies. That is in the western Canadian basin here. That's great, when you think how expensive it is to drill and so on. So the information was almost nothing. And of course, with the numbers of thousands of holes being drilled, some of them shallow mind you, but nevertheless, we have a lot more information today.

Video: 13:24.00:03

All right, back to me, then the main office in Tulsa, we had new management. . in the meantime, they made me a corporate Chief Geophysicist and so on, even though I was residing here, in addition to my responsibilities here. They decided they needed me there. Maybe I made a lot of mistakes in my life, but the biggest mistake was, under duress to accept that transfer. By under duress I mean this, I first refused it. And it went on, the argument back and forth for a few months, and at the end I was told, straight forwardly, with almost these word, if you want your paycheque for next July, you better get your, you know what, down to Tulsa in June. So the kids in school and so on, what are you going to do. Okay, so anyway I went down there.

Video #13:25.19.27

#244 DF: What year was that?

PB: That would be '65-'65 approximately. A little later than this, I think '67. There was, within the company, quite a bit of mismanagement and they had lost their contracts and so on. I had the job of rejuvenating. . .by that time Century Geophysical had become a small conglomerate of electronics companies and so on, electric motors and what have you. They gave me a promotion to go there as an Executive Vice-President and then later on I became President and Chief Executive Officer. I was getting away more and more from interpretation of data, you know, true oil finding responsibility to what I call tomatoes, potatoes, people, wives complaining, so and so got a raise, why didn't my husband, all that kind of stuff.

Video: 13:26.47:13

It got to the point, I was reaching retirement age anyway, I must have been 64 or 65, no about 62, 63, then. I also went through a divorce. All these things combined, I was under tremendous pressure and stress. One day, I said, to myself, is it worth it, I'm not really doing what I like to do, I haven't studied to be a manager, paperwork and all that kind of. . stockholders, it was a public company, little old lady phones from New Jersey, I find out later she only has 20 shares. She's the one that beefs a lot more than another outfit that has maybe 20,000 shares. Things like that, all of these things combined, I decided I'm going to quit. I'm going to quit and if I can do a little consulting or something else, I will. Which I did. I quit. I came back to Calgary.

Video: 13:28.07.15

#278 DF: What year?

PB: '69 or '70, I think it was. And I looked around, what to do and so on. And I decided to go consulting. Before I even formed my company, I told a few friends of mine here. Now the reason I came back, to be honest, was I had better contacts here, because I was here most of the time, even though I did have some contacts in the States too. And then also the fact that, the oil company management groups are concentrated in Calgary. In the States, you have some in Houston, some in Fort Worth, Dallas, Casper, Wyoming, Denver, Colorado, even New York for foreign jobs, Los Angeles and so on.

Video: 13:29.03:29

Here it would be much easier to get going as a consultant, which turned out to be that way. As I started saying, before I even completed the formation officially, forming my company, I got offers from this and that and the other thing. Among them, from a group from Denmark. And they were interested in prospecting in the west Greenland area, offshore. On shore in Greenland you have only a strip of land, the rest of it is all ice, they call it ice cap. It's as deep as a mile or so in some places, or deeper than that even.

Video: 13:29.54:12

Anyway, so I found that interesting too. And I might add this, you probably begin to gather, I didn't really plan for it but I ended up in most of my technical activity, in remote places, in new areas. You say Canada wasn't, it was when I came here, it isn't now. Turkey, it was. Greenland, definitely so. So somehow I got involved in these frontier

areas. I loved it, because you know, you have to find out what the problems are and you have to find out how to solve those problems. That was interesting.

DF: Good, you're doing really well, this is wonderful.

PB: Am I going into too much detail?

DF: No, this is perfect, you're doing very well.

End of tape.

Tape 2 Side 1

Video: 14:00.37:01

PB: I would like to get back to something I forgot to mention, I think it is important. When I told you, after having organized the geophysical seismic division of the geophysical department in turkey I was ready to come back to the United States, for various reasons. Just as I was coming back, and I had got my passport, ready to go with the family, I had a young family then, the so-called Economic Cooperation Administration, which is known by most as the Marshall Plan people came in there. Now, all along I kept contact with the American people, Embassy Consulate people and so on, they knew me and my wife being American at that time, made it easy to meet those people and my background in the United States and so on and so forth, we had something in common there.

Video: 14:01.49:07

So I had developed a good relationship with them and they used to invite me to non-strongly political cocktail parties of theirs. Well, I got this invitation to go to another cocktail parties, I thought it was another one of those routine ones. Well, it turned out to be that they were introducing the newly arrived Marshall Plan, in parentheses, Economic Cooperation Administration, ECA, introduce to the public, the local people. By that time I had learned how to hold a glass of rye or bourbon with the Americans and talk about the weather, how nice it is with this group and move over there and tell them how terrible the weather was and so on.

Video: 14:02.50:25

So I'm just making conversation, so I met a fellow by the name of Mittendorf. He was in charge of the industry division of the Marshall Plan that had arrived to Turkey. And the industry division also included resources, meaning oil and minerals. They called him for short Mitt, he's an old mining man. So I met some other people as well, so toward the end of the party, before I left, Mitt came to me and said, I want to see you, there are things I want to talk to you about. He's a Mining Engineer, I'm a Geologist, Geophysicist, sure, where's your office. The next morning, he gave me an appointment, actually his secretary called me the next day, gave me an appointment, I went to see him. Pete he said, you're

just the man we need to have around us here, I said, what do you mean.

Video: 14:04.03:10

You know, he said, we're here to help the industry, da, da, da, I said, yes I do. You know, with your background, knowledge of American, geology and so on, we need a man like you and we want somebody and our purpose is to encourage private enterprise. Which until that time, mind you this is right after the war, shortly after, everything was under government monopoly, even salt, salt and pepper, glass and so on. I think one of the hidden purposes of the ECA, Marshall Plan, was to open up the countries to public companies, free enterprise and so on. He said, we want somebody to go to these mines, evaluate them as to their potential, their need for equipment, financial, cash and so on, so we can come and help them. There were a few little outfits private.

Video: 14:05.34:22

As soon as they got big, the government took them over, typical. So I said, no, Mitt, that's fine but I'm going back to the States. Anyway we argued back and forth for several days, then he said, well, Mr. Door, meaning Mr. Russell Door, who was the head of the ECA mission as they called it, Marshall Plan, in Turkey, with an ambassadorial rank. So I get a call from his secretary, she said, the Ambassador would like to see you. Da, da, da, such a day, would you mind? Now, you don't turn that down and I made up my mind, I'm going to go back to the States and live there, I couldn't make enemies of the Americans that time. He talked to me very sincerely, he said, we need you very badly and he also didn't fail to let me know that, and I'm more or less quoting him, he said, Mr. Bediz, I am the official representative of the President of the United States and in that capacity I'm asking you to kindly agree to work for us for a period of time.

Video: 14:07.17:03

I said, I've got to go. . . he said, don't worry about it, I'll see that at the end you can get out of here. Okay, but three months, well he said, why don't you talk that with Mitt, the duration. Well, I said, three months, they said a year and so we bargained. We agreed on about six months and I'll train somebody else. It was an interesting job and I felt I was accomplishing something using Marshall Plan's good, acceptable to me, notions of plans to help the country to encourage the private enterprise. And from the Turkish side, to see that they are being helped financially and technically.

Video: 14:08.18:22

This gave me satisfaction, I wasn't taking sides, I was helping both sides. And I enjoyed doing that, but on the other hand I had to think about my family, my future and frankly I don't care to work for any government. I worked for 2 or 3 governments and they're all the same, I don't care whether they're Turks or Americans or whatever. So they were happy, pleased with my work and at the end of the period, I trained somebody else and I came back to the United States. That's when I joined Century Geophysical. This portion I missed mentioning.

Video #14:09.05:06

#077 DF: Thank you. Can you tell us more about what you did after you became a consultant here in Canada?

PB: My consulting endeavours?

Video: 14:09.17:17

DF: Yes.

PB: I'm glad you are giving me a chance to say that. I was involved in regular routine type, what I call domestic, meaning Canadian, in whatever province, for oil and gas exploration. I did quite a bit of that. I helped Sulpetro, which is non-existent now and many other companies. In addition to that, and I started saying, before I even got my company formed, the Danes were interested in me, so I agreed, I had a contract with them. And even though I had many companies, local and outside wanting me 100% more or less, like their employee, only a consultant, I would not accept that, I wasn't that hungry, to begin with. And I knew I didn't have to rely on one company. So I did a lot of work for different companies. Also I committed myself to x number of hours or days for this Danish company, to conduct their exploration work.

Video: 14:10.44:09

Effectively they gave me the title of Exploration Manager of, Grecco, Greenland Petroleum Corporation. And I designed their exploration program offshore, I was instrumental in selecting the seismic crews to work there, designing the program and down to forming the groups of companies to share the risk. I got, through my good friend, Harry Carlyle, Gulf Oil Canada, interested as a partner, Acuten??? the Frenchman and eventually the French company came in from Paris as our group and there were 3 or 4 other groups formed, like a Chevron group and I think a BP group and things of that sort.

Video: 14:12.01:14

We mapped beautiful structures and the drilling showed beautiful sands, everything looked a competitor of the North Sea. But my good friend Mr. David, no source rock, the sands were clean, no stain of hydro-carbon, nothing. Everybody encountered that. They're still working there, but not as enthusiastically as before. And at the time I worked, and like I mentioned frontier areas, at the time I was doing this work for Greenland people, which are really Danish people, we were projecting \$50 a barrel oil in ten years or so. Of course, you know, as I do, that didn't happen. So when that collapsed, the price collapsed, many frontier work, I lost my activity, but I had other things. I have been quite interested, since I was with Century, in the early 1960's, in potash deposits in Canada, mainly in Saskatchewan, some in Manitoba. But you know, life is a series of coincidences.

Video: 14:13.45:25

One day back in '59, I suppose, I'm at the Palliser Hotel, meeting with some people and so on. At a distance I see a gentleman, he looks at me, I look at him, my gosh I know this guy, who is he. Then he walks toward me, he says, Pete, remember me, the School of Mines, the same class. I said, oh yes, Bill. He said, I'm with such and such a company, Duval Corporation, of Houston, Texas, at the time. I'm here near Saskatoon, we've got a reservation for potash, we don't know what to do with it, maybe you can help me. I said, well I don't know anything about potash, you tell me your problem and we'll see.

Video: 14:14.49:14

Anyway they told me their problem. They said, look, we're going there tomorrow, I want

you to come with me. And they had a DC-3 airplane, only five seats and they were comfortable, beautiful. So we went to Saskatoon and the people met there and we went to their acreage, no mine, nothing at that time. So I got involved in potash quite extensively and in my consulting, when other things didn't work so good, even before that, I did a little bit of potash work. What I liked about it, from a dollar viewpoint, the potash people were not as much in a hurry as the oil people.

Video: 14:15.44:11

The oil people want . . . Pete, just take a look at this, I've got to have an answer tomorrow. I can't give you an answer tomorrow, I'll be guessing, you guess. Potash people will say, we're looking at developing that, it will probably be 30 years, maybe 50 years before we get there but we should have an idea as to what the situation is, so we can plan accordingly. So there was no big rush. So if necessary I could put that work on the back burner and do some other things and when I was idle, get it back to the front burner.

Video #14:16.18:29

#151 Not like bragging but I developed some ideas, some methods, some precautionary steps to be taken for the great problems they have. The greatest problem in the potash business is, potash is in the salt mass. It's only less than a meter thick formation. If there is any reason for water to percolate around there, it dissolves the salt. With many, many years, that little percolation creates big, big cavities, full of water. Can you imagine a salt mine, with millions of dollars investment in the electrical circuitry and so on, being flooded with this kind of water, due to somehow they mine into it and then they flood the mine. I know in one case, it took them \$2 million to clean up and restore and get back to production. And this was \$2 million of 15-20 years ago. A lot of money in those days. So with seismic work we can eliminate areas of that kind, of that sort, so that they wouldn't go into it. As long as they stayed away from it, that was fine.

Video: 14:18.02:24

One thing I'm pleased that we were able to do, was a prediction. . . or an attempt to predict the percentage of the ore in a given area before you went into mining it. The attempt was based primarily on geological principals, substantiated by geophysical data. If this and this feature is in there, then this and that could deposit more potash than the other, that kind of thinking. It was really more geological at first than geophysical. So I enjoyed that very much. Potash companies were at first lukewarm about geophysics. In fact, I can safely say, I know of many cases, where company A found out that company B had some seismic work done, why don't we do it. So company A does the work but what happens to the data, it's filed away, not used. But as they began to see there were some benefits to be obtained, they became more and more believers of that.

Video: 14:19.53:03

In one mine, in Esterhazy, that's IMC, they had horrible water coming into the mine. It was New Year's day, New Year's Eve or New Year's day, I got a call, Pete I know this is a holiday, New Year's Eve, but this and this happened, will you come there, sure I said. So I got a plane and went there. The problem was where is the focal point of the problem. But you know, when you're dealing with companies, which means with people around

the companies, everybody has got their own ideas and opinions. Mining companies, not really being too knowledgeable about geology and geophysics, they are so dependant on outside people's ideas.

Video: 14:21.17.02

So when we went to that meeting, I noticed there were a bunch of people, even a fellow from Germany, a Dr. So and so. As you know Germany has good deposits of potash and he was an internationally known person. And we had hydrologists, a bunch of guys and they had some other people, mining engineers, and everybody was. . oh, I think something. . .how to find this focal point. In fact, one group suggested to mine shafts and tunnels until . . .and it was being accepted. By that time, we had done some seismic work and I worked day and night, because that was a thing to solve, it was important for me. I don't like bragging, I said, the problem was here. Well, this mixed group that I told you, everybody talking one way, nobody really believed me.

Video: 14:22.36:19

Finally did some tunnel work and so on and so forth and they found it to be in exactly where I told them it was. I was recognized and I was given credit for it, even late, but again, that created other companies, as well as IMC, to require my services. So to make a long story short, I was quite active in the potash business. There again, I worked as a consultant till I was 83 years old, which will put it 19. . . three years ago, '97.

Video: 14:23.35:03

And then my hearing got so bad Dave, and in the meetings, and consulting involved meetings and decision making, I could either not hear or not understand. Deafness is a funny thing, you hear but you don't know what they are saying, it comes to my ear like [garble]. Especially with some people, the type of frequency of voice they have. So I said to myself, well, you've been at it a long time to begin with and good or bad, you've made a name for yourself, let us. . .just don't be another Sinatra. Quit while you can.

Video #14:24.28:17

#232 DF: We've got about five minutes left on this tape and then on the next tape, I want to talk about the CSEG and when you were President. So in about five minutes, can you tell us, do you have any regrets from your career, anything you wish you'd done that you didn't get to do?

PB: No. I consider myself very fortunate. Having been in the field of exploration, especially at the time I was involved in it. We enjoyed mutually, and everybody, not only me, the respect, recognition, trust and understanding of each other. I have done, with Century especially, many jobs that ran into millions, the millions didn't go into seismic work as much as the helicopters and drilling equipment and things of that sort, but nevertheless we were responsible for that. And we have done the work, believe it or not, with a handshake, with the understanding that I will have a contract written. Many a times, after the job was completed, we wrote the contract, we both signed it, so they would have something in the file about it. Now, this showed a mutual trust and respect on each other.

Video: 14:26.14:02

I can tell you a story to prove that thing. Again, with Shell Oil Company, in I guess mid

50's, late 50's. . anyway, they were very much interested in having a seismic crew with track equipment, so that we can work in the summer months and extend the working period. We had . . not only Century, nobody had any experience in track equipment. We said, sure, you're the boss, we work for you, we'll get it. But Mac Mackenzie, one of their Chief Geophysicists. . I said, Mac, I've no idea what this is going to cost us or anything, I really don't know how to give you a price for it. He said, don't worry about it Pete, just set a price and then we can sit down after awhile, exchange ideas, you show my your expenses and so on and we'll adjust the thing.

Video: 14:27.30:26

Well, to make a long story short, our expenses were much higher. . we used Bombardiers incidentally, and they were very expensive to operate and we had little or no experience with it. So that of course, accelerated the mishaps. So I went to Mackenzie after a certain period of time. Like you said, Mac, here's my account, this is what happened, here's the bottom line, here's what you paid and this is what we lost. Okay he said, I'll take it up with management. A week later, Mackenzie called me, come and pick up your cheque. To my amazement, it was, I forget now, just under \$200,000. Now you tell me, who's going to do that today? I don't think that would happen. This is what I'm talking about, I enjoyed the period of time I worked.

Video: 14:28.28:15

DF: Good. We're running out of time here, so I'd like to take this opportunity on behalf of the CSEG and the Petroleum Industry Oral History Project, to thank you so very much for talking to us.

PB: You are most welcome. It's a pleasure to be here and I think it's an honour.

DF: Thank you.