

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Hugh Leiper

INTERVIEWER: David Finch

DATE: March 2004

DF: Today is March 15th in the year 2004 and we are with Mr. Hugh Leiper at his daughter's house just southwest of Calgary. My name is David Finch. Could you start by telling us when and where you were born sir?

HL: I was born at Didsbury, Alberta in 1927. My father, who was a Scotchman, arrived in Canada in 1910 and he worked on various ranches in southern Alberta, the Bar U Ranch was one of them. Then when World War I came. . .

DF: Can you tell me about your dad's work on the Bar U Ranch, when that was and how long?

HL: That was between the years. . . now, he worked on several ranches, the names of course, naturally escape me, but he worked on ranches in the Caleigh area, High River area, and of course, the Bar U. So those years were between 1910 and 1915. When World War I came along Dad joined the Canadian Army and went overseas and fought in the trenches from 1915 right to 1918 and fought at Vimy Ridge and Passions Darrel??? and the Psalm???. He was injured twice. At the end of the war when he came back to Canada, they, meaning the federal government, offered veterans what they called the Soldiers' Settlement Farms. They placed Dad on a small quarter section of land east of Didsbury. Dad said that one year you'd be dried out, next year hailed out and of course, those years right after the war there in the early 20's, price of wheat was 10 cents a bushel and all that. So Dad pulled up stakes in 1929 and moved to Turner Valley to work in the oil patch, or the oil industry. Now my mother, she came up, their family, which is the Joseph Blaine family, came up from Iowa, right at the turn of the century. My grandfather farmed and ranched in the Okotoks, DeWinton area. Mother met Dad prior to Dad going off to war and when Dad returned from the war they were married, in 1919 and then of course, they settled on that little farm at Didsbury. Now in Turner Valley Dad worked for a year named Mr. A. H. Mayland. Mr. Mayland owned several oil companies, he was quite an entrepreneur, Mercury Oils, Mill City Petroleums, Miracle Petroleums. He also had a big ranch at Tilley and he owned the former Union Packing Co. plant in Calgary. Incidentally, the Mayland Heights in Calgary is named after Mr. Mayland, I don't think many people realize that or realize who the old gentleman was. Dad worked on a battery and what they were doing back then, now keep in mind this was in the early 30's, they worked shift work on these wells and all they were doing is flaring the gas and extracting the naphtha. Right at the Mercury camp there was a loading facility there where the naphtha, or the straight run gasoline was stored. I, as a little boy, can vividly remember, farmers coming in from all over, even horses back then, pulling wagons, loading up with this straight run gasoline. And trucks from all over and so on. It was quite a really, going

concern.

#045 DF: Was it processed in any way?

MM: No, it was just straight raw naphtha and it stunk to high heaven, of course, with H₂S content. As a matter of fact, the City of Calgary used to buy it for their city buses and it was called skunk gas. You could smell it for miles of course. But that was quite a lucrative business for Mayland. Now in 1934 Mr. Mayland bought a used oil refinery, a cracking unit at Big Springs, Texas, west Texas. He hauled it up to the Mercury camp and he erected it there on the banks of the Tongue Creek, which is a small, little creek below the Hartell. It employed probably, in its heyday, I'm going to say about 80 men. He also added an ethyl unit, which of course, gave the gasoline better octane ratings and so on. And one thing he did, during the war, when we had the British Air Commonwealth training scheme, or command, he installed aviation facilities. So the plant manufactured aviation gas for all these stations up and down Highway 2, and as far as Moose Jaw and so on, other air training stations. I grew up there, at the camp. The man in charge for Mr. Mayland was a Scotchman named Bob Cameron. Bob was the chief of all Mayland's interested in that area. Back then of course, the roads were impassable and of course, it always rained. Dirt roads and very little gravel. The road between Hartell is where we really called the plant, and Calgary, and particularly from Black Diamond to Okotoks was a dirt rutted road. Being a little 5 years of age, 6 and so on, I used to come in to Calgary, ride with Mr. Cameron when he'd bring all the cash in that had been taken in from sale of the straight run gasoline. Mr. Mayland had an office in the old Lancaster Building. I can remember Mr. Cameron, he just shoves all that cash in that jockey box in that old car and away we'd go. Walk in the Lancaster Building to Mr. Mayland's desk and dump the cash right on his desk.

DF: What's a jockey box?

HL: Glove compartment. And so I went to grade school at the Mercury school. I used to have this big collie dog and I started out hanging around at the camp there with all the men and I started selling day old Albertans to the men. Some of them were very kind to me and they would buy the odd one and so on. That led to me getting a paper route, the Albertan paper route. So I used to get up early in the morning with my father and the old dog and I'd hike off at 5 in the morning to various batteries where they were operating 24 hours a day, delivering the Albertan, come home, have breakfast and then I'd take off for school, with the dog. The dog would go up with me, then he'd run back home. In the afternoon of course, he would be waiting at the door of the school waiting for me. I had a school teacher named Ethel Burns, very, very fine lady. She was being courted at that time by this young engineer who worked for the British American oil company that had a scrubbing plant just east of Longview. So in the spring of the year when the snow was melting and it was good for making snowballs, when I would come out the door this fellow would throw a snowball at me and of course, the old collie dog would take after him. Good fun. That went on there for a few years. The reason I tell that story, because that was Ken Jameson who ended up as Chairman of the Board of Exxon years later. And of course, prior to that, he'd been President of Imperial Oil and President of the old International Petroleums, which was an Esso company in Venezuela. So that was quite a deal. In any event, they built the South Turner Valley High School at Royalties, or Little Chicago, in 1939. Of course, I arrived there in Grade 9, 1942 and it was there I graduated

the same year the war ended. Now the last couple years there was quite a shortage of workers in the oil industry in Turner Valley because of the men serving overseas in the Armed Forces. So the one's who were fairly husky in the high school bunch, I used to work on weekends on the drilling rigs. This gave you spending money and it really helped, there was no question about it. Now after graduating. . .

#116 DF: So during high school you were working on rigs on weekends?

HL: Yes.

DF: What were you doing?

HL: Working on the floor as what they called a lead tong man or a pipe racker. It was hard work and I can remember telling my mother, there's got to be an easier way of life than this because I'd come home just arm weary from racking pipe and sawing. Keep in mind, I was only 15 or so.

DF: So these were rotaries?

HL: These were rotaries, steam driven rotaries, yes. So when I finished school, my desire was to be a petroleum engineer. I was naturally so interested in the oil and gas business. So I worked all summer in the refinery down there, I worked in the lab, it was called a shift chemist, saved my money and so on and I enrolled in Mount Royal College to take petroleum engineering. At that time they had a liaison with the University of Oklahoma.

DF: Just a second, you said you were a shift chemist, what was that?

HL: Really, what you were doing was taking samples on the hour, bringing them in the lab to test them, all the various gasolines, the blends, just taking the end points and the vapour pressures, this sort of thing.

DF: And what was your training for that?

HL: Just picked it up by being shown, that was all. Keep in mind, I'm still going to school and all that jazz. I'd worked one summer in the plant doing that. So I enrolled in Mount Royal. In order to go to Mount Royal I used to have to, every Friday night, take the old Calgary train out to, it used to terminate just this side of what is now Chinook, at Manchester, it had the car loop there. So I'd take the streetcar from Mount Royal area, then I'd hitchhike out to Turner Valley. Many times I walked past the grave there at Okotoks trying to get home because I had to work on the bull gang the next day to get \$6, which gave me \$16 a month. My room I rented from a lady named Mrs. Ash was \$10 so it left me \$6 in order to live. After a few months I was literally starving. My father was the type that, being an old Scotchman, he never helped me, which was always really a sore point with me because he could have but he didn't. So I thought, I can't go on like this, so I went down to the Lancaster Building and there was a drilling company named Can-Tex Drilling Co. It was

#154 run by a Texan named Dick Harris. He was a huge gruff individual. I went in to see him and he was sitting behind the desk there with his cigar and I told him I needed a job. He had a rig working down at Foremost. So he asked me what experience I had and I told him who I'd worked for there during my high school days on weekends. I always remember, he said to me, in his Texas accent, "I don't operate like those guys". I said, how do you mean Mr. Harris, he said, I make them work. Well, I said, I'm not afraid of

working so he said, I'll tell you what I'll do, you go down to Foremost and you see a tool pusher named Art Babbs. I was very fortunate because at the camp I delivered newspapers to many of these fellows and I knew them and I certainly knew Art Babbs. The problem was getting down there. All the money I had in the world, I had \$2.10, I'll always remember that. So I went down to the refinery and of course, there's trucks coming in from all over the province and Saskatchewan. Finally a truck came in from Rantham, there was quite a blizzard blowing that night. So I got a ride with him, the idea was to get off in Lethbridge. I'll always remember, he stopped in the bus station of Fort Macleod and he went in to get something to eat. I knew I couldn't afford to pay anything because I only had this \$2.10 so I sat in that cold truck waiting on him to come out. He came out and I could see he was perturbed because I hadn't bought him anything. However. We pulled into Lethbridge there, the old hotel, the Arlington Hotel if I recall right. He let me out on the main drag there and I'm carrying a big duffel bag with what clothes I had which wasn't too many. So I walked in the lobby and there was a night attendant washing floors and I asked him if I could leave that bag there while I found out where the bus depot was because I knew I had to get a ride from Lethbridge to Foremost. So he yelled at the top of his voice, no bums allowed, get out of here and all that. So I walked down the street and it just so happened the bus depot opened to let some people to get their luggage and so on, so I inquired about the price of a ticket, he said, it was \$2. The only thing is, it didn't leave for two days. So that howling blizzard, typical of Lethbridge, I walked the streets of Lethbridge night and day for two days. Oh, I bought a ticket for the \$2 so all I had left was 10 cents. Along the final day and in those days you could buy a cup of coffee for a nickel. So I bought a cup of coffee and there was a fellow eating down at the end of the counter and he left one of those big rolls. I can remember I hadn't had a roll but I couldn't take it, it wasn't mine. Anyway, the old bus came along, it was one of the old Brewster touring buses they'd purchased from Banff, canvas flaps and all that and away we went off into the blizzard. We had to dig that thing out and got into Foremost about midnight. I hadn't eaten for about three days but I ran into a kid I'd gone to school with who also was working on the rig so I borrowed a couple of dollars and went in and had a meal. So I worked that winter and we were drilling for California Standard then. This was of course, a Can-Tex rig.

#202 DF: How old were you?

HL: What was I, 18. That was a terrible winter that winter, it was blizzarding all the time. The first while, I had a baseball cap, I played a lot of sports, as a matter of fact, I'd had an opportunity for . . . I played a little bit for the Calgary Royals there while I was going to Mount Royal but not too much because I didn't have time. But I was offered a contract to go down to Oakland at one time but I decided to stay in the oil business. In any event, I had this baseball cap and in that cold blizzard I would tie rags around my head and I had a pair of oxfords, a cheap pair of oxfords that the soles kept coming off so I used to drive nails into the bottom and bend them over. And that's the way I went through until I finally got a pay cheque. I had no gloves and if somebody would discard an old glove I'd pick it up and use it. In any event, we finished there in the spring of the year and after

break-up we rigged up at Princess. Again, for California Standard. The tool pusher had a drinking problem and all that, he came out when we were ???, still rigging up, inebriated and raising particular hell around there. So the whole crew quit. I pretty well had to follow with the rest of the fellows, although no money, or not very much anyway. I was batching with a couple of other fellows there in Patricia and next morning I ran into, again, one of the fellows I had delivered newspapers to in Turner Valley at the Mercury, a great fellow named Sandy Addison. Sandy was rigging up a steam rig for General Petroleum to drill a well in south Princess for Henry Flock, out of Calgary. Actually, it was a discovery well. We finished that well and the next deal was on to Leduc in the first part of July, 1947. But prior to when Sandy hired me, there was a fellow working on the same crew at Can-Tex, he was older than me, he was a war veteran, he was going to OU and he needed a job. I asked Sandy and I remember Sandy saying, has he got any experience and I said, no. Well, he said, I've got too many inexperienced men here now but I'll give him a try for two weeks. Of course, this fellow was Ed Barrell, A. E. Barrell, who ended up of course, vice-president of production for Mobil Canada. So away we went, we had to get up to Leduc

#250 and the Stampede had just started, Monday morning parade. Ed and I went to the Stampede then we caught the old train out that night, it used to run around midnight to Edmonton. Got off in the morning there at Leduc and we still didn't know really where to go to catch up with the drilling rig, where they were rigging up that is. So I looked down the street and I seen a Commonwealth Drilling pickup parked in front of one of those Chinese restaurants so I walked in and sure enough, again from Turner Valley, I knew the tool pusher and it was big Tiny Evans. Tiny was heading into Edmonton and he knew approximately where Sandy's rig was being rigged up so he dropped us off there at the Nisku corner and Ed and I walked in the several miles to where the rig was rigging up. The rig was on a well to be known as BA Perch #1. It was a steam rig again and fortunately, we missed the reef. We just missed the east side of the reef. So a bunch of the oil companies contributed money to deepen the well so at that time it was the deepest well drilled at Leduc. After we finished BA Perch. . . incidentally, about a year later, I don't know what company it was but they moved in a rig less than 100' to the west, drilled a well and got a well, that's how close we were to hitting it. We took that same rig, it was GP rig 10, moved her over to Atlantic quarter. This was Atlantic Oil Co. that Frank McMahon and George McMahon had started. As you know their other company was Pacific Petroleums. They also had another company at Turner Valley called Oil Ventures, which was more or less an operating company. Now, we drilled Atlantic 1, no problem. We skidded the rig over to Atlantic 2 and no problem. We moved south one location to Atlantic 3. In those days there was really no requirements with regard to the amount of surface pipe. A terrible mistake, drastic mistake. In this case I can remember I was up on the stabbing??? board, we were running surface pipe, we only set 115' of 10 3/4" surface pipe in that well. So off we went, drilling the well and we encountered the reef, we lost circulation very badly. We pumped everything we could down that well trying to regain circulation, to no avail. The things we pumped down there, people would just scratch their heads and look at you. We pumped mountains of straw and hay, feathers, chicken

wire, even golf balls on top of the chicken wire. Anything we could get down there to plug it, to no avail. At the same time, the uphole gas from the Viking was hitting us so we were also fighting that uphole gas. Now back then, BOP's were in use but they were totally ineffective. The most popular BOP then was what they called a Hosmer button. It was a

#319 device that, on top of the drilling nipple you had a ring and the Hosmer button was a hinged device that had fins on it. So you put it under the tool joint, you shut it and then you lowered it down through the drilling head below that ring and then the fins went out and collapsed and that was supposedly your safety deal. Well, you can imagine, well blowing like that, trying to fit something like that in, it was impossible. Plus the fact that most wells are drilled crooked a little bit, so your drill pipe is always hanging to one side to the rotary table. So you had to centre, snatch box and so on, dead centre on a trial run, let alone when a well was blowing. Well, Denton and Spencer Engineering was doing the engineering on this well for Frank McMahon. In their wisdom they decided to drill dry. What I mean by drilling dry, it was a steam rig so we were pumping water from the boiler house, straight water down the drill pipe. We started drilling in the afternoon, resuming drilling that is, and I was on the daylight shift and we had a short change that night, we had to come back out at midnight. So I came out at midnight, I was working derrick then and the crew going had one of the Phillip lines into the wellhead was froze up. So another chap and I named Cliff Covey, meanwhile we were drilling, we'd added a few singles and so on and drilling this thing dry with the water being pumped down the boiler house, we were in the cellar and all of a sudden it threw up over the drilling nipple, lost circulation material and so on. I said to Cliff then, let's get the hell out of here. So we got out of the cellar and before we got out from under the rig one of the rotary table bushings, it was an Oilwell 70½" rotary table, two men couldn't pick up one of the sides of those bushings, you had to use the catline all the time. It landed right in front of Cliff and I as we were running out. The other went up over the crown, why it didn't set on fire then I'll never know and we never did find that. Presumably it went in the sump or whatever. This was at 3:00 in the morning, it was 25 below Fahrenheit and it was an awesome sight. As daybreak broke it was sifting up through the crown and reports came in later that farmhouses for 8 miles were being hit with oil. We got in there with what tools we had to knock off. . .the rig was boarded in with tin and we went in there and knocked the tin sheets off so we could get air moving through there.

End of tape.

Tape 1 Side 2

DF: Okay, go ahead.

HL: So the daylight came of course, and I described what was going on there. The oil was building up all around. From then, the next few days we kept pumping, put up wind socks for the wind direction, we kept the boilers fired up but we could shut them off at an instant's notice, so we could keep the pumps going. Meantime we were rigging up Haliburton and Dowell out to the road and running lines into the well. I always

remember, of course, now spring was here, this was March 8th, 1948, I might add, 3 a.m. is when it blew. They had bought some old 45' 5" drill pipe and that was killers to handle with men. We were bucking that up in the mud from the road into the rig. One of the guys I had grown up with, he was older again, a good fellow named Jack Emsley who was later on killed at Mameo Beach, Jack and I decided, this is work for horses. So there was a farmer down the road named Jimmy Holwa, so we went down and we were just roughnecks. We rented his team of horses for \$2. Of course, coming from Turner Valley I'd never been around a horse but Jack had. So we came down the road with this team of horses and we were going to have the horses pull the drill pipe in and then we'd buck it up. Well, the horses, as soon as they got real close to where the well was blowing it was deafening, they bolted, ran down the road and Jack and I were chasing them, running after them, trying to catch them. So that was the end of that. They brought out these huge tongs, they were about 48" tongs to buck up this pipe. Oh, it was tough. But anyway, we finally got the line in. The snow hadn't gone yet, there was about 3' of snow so this particular day I was about half way in, I was shovelling snow for the line to come through, or where we were going to put the line, and this Cliff Covey that I earlier mentioned, I see him go by and it crossed my mind, now what would he be going into the rig for. There was nothing in there because all the pumping equipment was now located out at the road. Next thing I know, I look up and I see a fire. The toilet is on fire and it was quite obvious, he was quite a smoker, he'd gone in there and lit a cigarette and threw the match down the toilet hole and of course, it went. So I yelled at the crew out at the road and we all come running in. Nowadays of course, I'd be running the other way with everybody else but when you're young, innocent, you don't realize the danger. We went in there trying to fight it. All we had was wet gunny sacks, melted pools, soaking it in the pools laying on the ground, trying to swat it out. It was on the banks of the sump, it was a miracle, just absolute miracle, why that whole thing didn't go up I'll never know to this day. But I can remember, I'd swat it out over here and it would pop up another 6' over. But miracles are miracles, we got it out. So we kept on pumping down there, hoping to kill the well and one night, I'm on afternoon tower, Cody Spencer, the owner of the drilling rig came up and he said, you, I think we got her. On the bud gauge on the pump, the Cameron mud gauge, it showed a decrease in pressure. A few minutes later Dave Grey, who was an engineer at Denton and Spencer came up and he said, you know something, it's blowing out of shotholes a quarter of a mile away there in the ditch. That was the start of the cratering of Atlantic 3. It just went from bad to worse and so on. So eventually, what had to be done then was to drill two directional wells, which was West Relief and South Relief were the names of the wells. Along about then Sandy Addison had moved a rig in across . . .

#051 DF: Just a sec, so what was happening down at the bottom of your well?

HL: The bottom of Atlantic 3, it was out of control, the whole quarter section was cratered and there was rumbling. Now after, I've brought some pictures out, I thought you might be interested. I've got some dandy pictures just so that you could see what we were up against and I can show them to you.

DF: Yes, but just for the record, on the tape recorder, explain to us what was happening to us down at the bottom, down in the earth?

HL: Well, it had cratered. First of all, the pressure from the well with only 115' of surface pipe, it broke around that, it broke around the surface pipe. When it does that it's out of control, you've got no way to stop it. From then, it gradually with the turmoil, the tremendous gas and oil, now keep in mind this is making 10-15 thousand barrels a day, not counting the amount of gas that's coming with it. And it's churning and things were rumbling and caving in and so on, all over. That's what that quarter, the northwest quarter looked like. So Sandy Addison was rigging up on the north side of the Saskatchewan River and he drove over and he wanted me to go drilling. Boy, this was great for me to get off this. I guess I should mention, we were making \$6 a day then and every time we went out on shift, when you came off shift you just threw the oily rags, your coveralls, everything, you just threw them away. And we had to buy our own clothes. Later on, people got danger pay that worked miles away, we never got a cent of course, working on that rig. Just to tell you how it was killed with the two relief wells, a water line was laid to the North Saskatchewan River, pumps there and pumping in both wells, South Relief, West Relief, who had penetrated close to the old Atlantic 3 well bore. Along about the 5th day you could see steam starting to rise. Then all of a sudden, it was out. Meanwhile everything had tumbled down these craters, the derrick, the substructure, the pumps, the buildings, the boilers, you name it. And that's still down there today. So Sandy wanted me to go drilling and I was really pleased because I was still very young and this was a feather in my cap. Gosh, getting to be a driller, I was going to really be somebody. So we drilled a well on the north side of the river for Co-op, Co-op #2. Then we moved the drilling rig to wildcat down in Saskatchewan. We moved it the first time to Compeer. We hit that heavy oil there in Compeer and Macklin, along the border. Then we went over to Unity and here we hit gas and wells, we hit salt and we got potash. It was very lucrative. As a matter of fact they built the Unity Salt Plant and there was a potash mine there. I don't know what's going on there today. Of course, they're using some of those salt caverns for storage eh. From Unity I met a girl there in Unity that I eventually married, Irene.

#092 DF: What was her maiden name?

HL: Jones. Irene Jones. We moved back up to Woodbend and we were going to drill this well for Neil McQueen. Now Neil McQueen, when I mentioned earlier about the BA Perch #1 well, it was actually, technically, Central Leduc, BA Perch #1. So Neil McQueen had been involved in that very first well that we had drilled and this was his well. We were wire-line coring and I was on tower. We were cutting 3' lengths. We'd pull 3' out, take a look at it and so on. I pulled out this 3' of core, put it in the core box and went into the. . . and this was 5:00 in the morning, I went in the tool shed, by gosh it was just bleeding full of oil. So I went over and woke up Neil and I said, we've got to test this. Back then there wasn't too many drill stem testers. Haliburton had a tester named Red McKittrick. So he came out and it surfaced oil in just a matter of minutes and that was the discovery of the lower Cretaceous field there at Woodbend. Neil had kind of taken a liking to me and he

came up and he said, Hugh, you can name up to \$10,000 worth of Central Leduc stock, I'm going to phone my broker from the farmhouse. Well, he might as well have said \$1 million or \$100 million, I hardly had \$100. I could visualize me owing, the thing going bust, \$10,000 so I naturally turned it down. Well, of course, the thing took off sky high and so on. Anyway, from Woodbend, went up to Colin Lake, up by Athabasca, Rochester, a series of wells for the Stanolind Company and over to . . . out east there, for Stanolind, I forget the name of that place. In any event, then back up to Whitemud Creek, drilling wells pretty well all over.

DF: Were you a driller by this point?

HL: I was drilling then, yes. Which brings me, the big strike then was Redwater. So I got set up tool pushing in Redwater on a brand new drilling rig of which I was very, very proud. And keep in mind, I'm still awfully young. As a matter of fact I got written up, I remember, at the time, in the Edmonton Journal, about being the youngest tool pusher in the business. In any event, we used to drill these wells in 7 days. In the wintertime what I'd do, you were moving one location to the other, 40 acre spacing, I would pay the farmer so much money, I would flood between one location and the other and then we'd just, with the Cats, just pull it over just like a skating rink and rig it up on the new one. Now in the summer months of course. . .

#135 DF: So this had never been done before, right?

HL: This was the first time, yes, that had been done. Then they came out, there was a firm came out that had purchased these huge bomber tires, airplane bomber tires, huge tires. They put hydraulic jacks on them. So all we did then was place these two big steel beams in the sub, of course, you would clamp them down to the substructure, hook them up to these giant tires with the hydraulic jacks, pump up the rig, two Cats on it, away you'd go.

DF: How many tires?

HL: There was eight to a set, 8, 8, 8, 8.

DF: So these are trucks of eight?

HL: Yes. Now one time I had to go down through this steep ravine and up so we were lowering the drilling rig, here it is standing 140' tall and all that, we were lowering that slowly down, the line broke. My heart was up in my mouth because that big rig went down and back up the other side and down, like a pendulum on a clock till it finally came to rest. I could see the end of my days with General Petroleums wrecking that drilling rig. Fortunately it didn't.

DF: It didn't tip over, it didn't break anything?

HL: No it didn't. I just stood there with my heart in my mouth watching that thing. From Redwater, I drilled an awful lot of wells at Opal, Redwater proper, the Simmons field in the south end and Bruderheim. Drilled a lot of directional wells under the North Saskatchewan River. Then, they were drilling at Acheson, they meaning GP, they were drilling at Acheson for California Standard. They were having a lot of trouble with this rig, the crews were drinking and I was a fairly big fellow back in those days, kind of a hard-nosed guy, I have to admit it. So they plucked me out to go in there and clean it up. I remember firing 13 of those guys within a day, cleaning that mess up, it was a terrible

deal. They were drinking all day and would come there and want to sleep and so on. Anyway that was a cold winter, lost circulation, fighting lost circulation all the time at Acheson. Then from Acheson, I went to Woodbend for Imperial Oil and drilled many, many wells for Imperial which was happy days, great times. Then moved the rig down to Marwayne, Dewberry and that's when we had our second son at the time, who we lost.

#176 DF: How did that happen?

HL: Well, first of all, I had the boy first, our first son Hugh, named after me. He was just a baby then, about 13 months and Irene was pregnant. So I rushed her in to the Vermillion Hospital, she gave birth to a little boy. Well, there I am left with a 13 month old baby by myself and she's in the hospital. So I drove to Devon, I had an uncle in Devon, Mark Blaine and I left the baby with them about a week. I had to drill a well at Duchess so we moved the rig all the way from Marwayne to Duchess and left Irene at Turner Valley with my folks. He had some obstruction somewhere down in here and the country doctor, Dr. Landers, they didn't catch it. Had he been in Calgary I'm sure they would have found what the cause was but anyway, we lost this little boy, which Irene never got over of course. And drilled that well on CPR land, you could see for miles there drilling that well, for a company out of Toronto called Challenger Petroleums. One day I'm coming down the doghouse steps and of course, there's a lot of cattle grazing, that's what it was, a huge CPR grazing lease. I looked across in the distance and I saw something moving out there and I thought, that's strange, that doesn't look right. So we were making a trip, the rig, so I had a couple of hours to kill so I started across there and of course, it was a nice hot day, the old heat waves you could see them. I walked a couple of miles and I came across a man. He was a local rancher and that morning he was out on his horse and he was trying to get a bull out of the herd and the horse shied and threw him backward. Of course, his leg was caught in the stirrup and the horse bolted, dragging him and finally, with the twisting deal he managed to get out of the stirrup. Now he knew that drilling rig of mine was there several miles away so he started with his hands, one knee and dragging that bad leg. And of course, the cactus and all that. After awhile his hands were like raw beef. Then he got on his elbows dragging himself. He finally gave up and he took his shirt off. He was waving like that and that's when I was coming down the doghouse steps and I just happened to catch it. So I ran back to the rig and I got my car, it was a 1951 Chevrolet, drove across the old bumpy prairie. He was a big man and I wrestled him in and I took him into Brooks hospital. He survived. I don't know his name, I've forgot his name. But he came out about two weeks later and he said. . . oh, on the way there, I'll always remember, he said, what kind of car is this, even in all his pain. I said, it's a Chevrolet, he said, I've got a Cadillac and this car rides better than that Cadillac of mine. But I had to take him into his ranch to tell his wife, which I did, then I drove him into the hospital and so on. He came out about two weeks later and he wanted to know what he owed me and I said, you don't owe me a damn thing, I'm just so happy I happened to spot you. So he said, everything I've got in life son is yours. I said, no, no. Anyway, went from there to Drumheller and Great Plains was the development company, it was a fairly new company. They were starting to drill on the old field on top of the hill there at

Drumheller, drilling reef production. So I drilled some wells for them. Then when that went out Cody Spencer and Gene Denton had a company, an oil company, called New Spirit Oils.

#240 DF: New Superior.

HL: New Superior. They had entered in, some of the local business men out there, and there was a coal buyer named Fred Stockton, Fred was a witcher. They witched this land in the Munson area and they went in and they filed on it, so they got this land right south of Munson. Of course, they didn't have any money and Cody Spencer got wind of it so he cut a deal with them that he would do all the drilling and the completion and take 50% and they were quite happy. Now they were going to get wells drilled and 50%. And all those fellows became multi-millionaires, every one of them eventually. So meanwhile, while that had been going on, I was drilling these wells and word got around that I didn't believe in this witching, which I still don't of course. So I'm having coffee one morning in the corner café and this Mr. Stockton came in and introduced himself and he said, young fellow I understand you don't believe in witching, I said, yes, that's correct. He said, I'd like to show you something, have you got an extra hour. I said, well, I think I could find that. So we drove out to Munson, went to Sharp's Corner they call it there. Gulf Oil Co. was drilling a well so he gets in the back of the car and he's got this box and he pulled out this kind of a tube, about 2½' long and he had two handles on it. So the deal was, you held one of these handles in your right hand and you joined hands with him and he threw this thing up. We did this at this Gulf location, the damn thing just stood there straight. We went down half a mile where we were drilling there for Spencer, threw it up and that whole thing, I was pretty strong and felt it, that took my arm out, it was throbbing at the ground. We went half a mile south where another GP rig was drilling, threw it up and there was a slight pull on it. He said, this is the end of the field. So help me god, that's the way west Drumheller, the D-3 reef field, was developed. And even to this day, and I could tell you more stories about witching but I don't believe it, but in any event I was well known in the area and one morning I was gassing up at this Drumheller Motors and the owner, a little short, heavysset fellow, he called me in his office. . . now this is before they'd cut the deal with Spencer. He said, Hugh, we're going into Calgary, cut a deal with somebody to drill this property, they said, do you want in on it. Me being the scientific guy, I knew that there had been seismic run over that land and no reflection. I said, you've got to be out of your mind, there's nothing there. There you go, it turned out to be a hell of an oil field.

#297 Matter of fact, I was drilling a well at Wayne for Great Plains when the word came the discovery well, Comet Drilling Co. drilled that discovery well. And I drove out there because I happened to know the tool pusher. The discovery was in the D-2 and they had the cores spread out and I looked at those bugs and that in that core and, oh my god, boy, I knew then they were really on to something. That was only the D-2, the D-3 was better. So finished there, moved the rig up to Niton Junction, off the Jasper Highway. Drilling for Canadian Oils, Mahaska they called it, that area, Mahaska. I'm a very impatient man, wanting to get things done, make a hole, make more money for the company, all this sort

of good things. We had a string of new drilling line. Now the previous fellow that owned that drilling rig had taken a pump out of one of the slurry pumps and he'd bent it, made a hook out of it. These big travelling blocks, they used to hang them on this hook up in the derrick and then using what they call a snake skin, you'd put one on the new line, one on the old line and just thread it through so the old line then, was all on the drum. Well, it wasn't going to fast and me being impatient, so I get up on the derrick floor with a sledge hammer, working on this spool, trying to spool it right so we get the maximum amount of line on the drum. That damn hook broke and down come the travelling blocks and everything. I'm underneath all that. They rushed me into the nearest hospital at Edson and I was on the operating table 7 hours. So I spent a month at Edson hospital, they moved me into the General at Edmonton, got to be a great friend of the surgeon, Charles Allard, fine guy. He had to do all these skin grafts on my leg. You see, my leg was broke two places, my foot in nine. But it peeled all the meat off the right side and you do all this skin grafting. So while I'm in the hospital, Dave Mitchell, of Great Plains Development Co. came in to see me and he wanted me to go to work for Great Plains as superintendent. Well, I'd had enough by this time, of the drilling rigs and it was time, we had a family, to put them in one place. So I left General Petroleum then and joined Great Plains Development Co. and that was in the spring of 1954. So drilling wells all over with Great Plains. The Joffre field was a big one, doing a lot of wildcatting, a lot of flying, a lot. . .

#361 DF: What do you mean a lot of flying?

HL: We were working up in the north. We were running all these drilling rigs and I'm the only field man, trying to get around, running three rigs at Joffre and maybe a couple out here at Harmatton-Elkton, and up there in the Peace River area, and I was all by myself. So I used to hire a lot of Cessnas out of Calgary, Cessna 180's, which got to be pretty hairy at times. One time up over Bat Lake there in northern Alberta, in those days they had wooden props on some of those planes, a piece of that prop broke and that's like riding a bucking bronco. We crashed that into the beach on Bat Lake. None of us were hurt or anything. And then another time, trying to get to High Level in a snowstorm. We had to land on the highway, boy that was a hairy del in between those cars and trucks, but anyway, I'm here today.

End of tape.

Tape 2 Side 1

DF: Okay, so you got us to High Level.

HL: Yes, well, we were drilling wells pretty well all over. Great Plains was a hustling, bustling company then, headed up. . . it actually, Great Plains was formed by the well known company out of Dallas, Texas, DeDolyer and McNaughton. Mr. McNaughton used to come up quite frequently. So I worked with Great Plains for a few years until 1957. During that time of course, I attended various courses, drilling completion, production courses in Kilgore, Texas and Odessa, Texas and so on. But in 1957 I was approached by Charles Hetherington and Al MacIntosh. Their superintendent, a fellow

named Scottie Tosh, wanted to retire at the end of the year and they needed a replacement so they wanted me to go to work for the, take Tosh's job as drilling superintendent. But I had to go to Fort St. John for six months. I had the family of course, I'd bought a house in Calgary but the big deal was that the increase in pay was \$250 a month, which was a lot of money back then. So I left Great Plains, moved up to Fort St. John and that was the same day as the bridge across the Peace went out. So my furniture was on the truck and it had to be routed through the back way, ferries and all that and by the time it really got into Fort St. John a lot of our stuff was wrecked because the trucks had been in the ditches and so on. Now at that time Fort St. John was a beehive of activity. It was just at that time, drilling wells, completing wells, putting them on production, building compressor stations. At the same time the McMahan Plant was being built. Pacific cars were then painted black and orange with orange noses, orange hoods and there were literally hundreds of these in the area. It was just, like I said, a beehive of activity. It was really, in retrospect, it was a great time to see that amount of activity. Now the West Coast Transmission just finished being built so all the gas we could find was going to be put in there, of course, through McMahan plant at Taylor, B.C. there. So the wells were turned on that fall. The pipeline was designed originally for 450 million cubic feet a day flow through capacity but by the summer of 1958 all the production we had dropped to around 90 million and things were in bad shape. So at that time, the Pacific company was being run pretty well as a promotional company, Frank being a great promoter and George and so on. They knew

#041 enough that that had to change, they had to put this company on a sound basis, make it a sound production company and so on. So they hired Kelly Gibson from Gulf Oil in Stettler. Kelly was a stern taskmaster. He was a very, very hard nosed individual. He'd hired on as a ditch digger with Gulf in Oklahoma, worked his way up, come to Canada in 1949 as a production foreman at Redwater and then moved along and so on. And of course, he ran the Stettler-Big Valley field with an iron hand and of course, everybody was terrified of Kelly Gibson. Well, Kelly came to Pacific, and I'd met Kelly when I was at Great Plains at Drumheller. I met Kelly two or three times when he was visiting the Gulf operation at Drum and so on, didn't know him well but had certainly met him. When he came to Fort St. John on his first visit, he was hired incidentally, as VP of production. Now I was only supposed to be gone six months, that was part of my deal, go up to Fort St. John, learn the business, come back to Calgary as a superintendent. Of course, in the meanwhile Frank McMahan hired Kelly and naturally Kelly had his own ideas how he was going to run the company. But I'll always remember when he walked in to the Fort St. John office he said, Hughey, you're the only one in this whole organization I know. So we got into the office of MacIntosh's, you see, Mac was the General Manager. He had a list of hundreds and hundreds of employees there and Kelly had his old black crayon out. Of course, I'd only been there a few months but I'd got to know a lot of things and so on. So Kelly went down that list, now what about this guy, he does this, well, do we really need him, I'd say no, stroke. And he purged that, really purged it. But it did the trick. It started being a sound oil company for the first time. Of course, Kelly in Calgary. . .now Kelly had big ideas too, he wanted to reach the top, he was a very aggressive individual,

very complex individual. The next position above him was the managing director, which was being held by Charles Hetherington. Now this is the same Charles Hetherington of course, went later on with Pan Arctic Oils and so on. So a power struggle developed there, a tremendous hatred developed I might add. Kelly told him many times, you know, some of the stuff. Meanwhile, Frank didn't want to lose either of them so he moved Hetherington out to Vancouver, to West Coast Transmission. Kelly now became President of Pacific Petroleum, CEO. He brought in, again, an ex-Gulf guy named Merrill Rasmusson, first of

#082 all he brought him in as production manager and then as he moved up the ladder, he eventually made Merrill VP of production and that's who I was reporting to really. Later on, I was, I was still reporting to MacIntosh. But the power struggles were there. We were really busy in those days, drilling and completing wells and so on. I was far removed on what the power struggle was of course, going on. So there I'm in Fort St. John so they came to me and because of the expansion of the company, going so fast, they required production managers. They didn't have people with experience so they wanted me to go to Drayton Valley, to the Pembina field, learn production. Now to do so I took a \$250 a month cut, which really hurt. Moved down there with the three kids and Irene, didn't have a place to stay at all, ended up renting this trailer. Meanwhile I'd had this house in Calgary and a nice house in Fort St. John and I ended up in this little trailer in Drayton Valley. Finally after awhile, there was a three-way property that Pacific was in with the old Seaboard and Sinclair, they called it the three-way property, Kelly pulled enough strings that they had one house with two bedrooms that I got. Now mind you, I had to pay rent for it and so on, which I was only too happy to do, to get the family in decent quarters. So I learned the production out in Drayton Valley, then they promoted me to production superintendent. That didn't last too long, I was made production manager in Edmonton. That's the job I really liked, being the production manager, I was on my own up there, had a big district, it was a sweetheart of a job as far as I was concerned and I very seldom seen anybody from the Calgary office. But good things have to come to an end. MacIntosh came up there, MacIntosh was operations manager at the time, so he came up to Edmonton and he said, Hugh I need you in Calgary to help me out, I've just got to have help down there. I fought it for a few months, I didn't want any part of it because I knew it was a trouble job for me, that's what it was. So eventually I of course, had to say yes, so I moved the family to Calgary and I became operations manager then for Pacific. Times were hectic with the amount of drilling going on, I was in charge of all drilling, completions and many of the engineering deals was under me. And I might add, I forgot to mention, when I was in Edmonton as manager the Society of Petroleum Engineers at that time, this was 1963 so it's a long time ago, they had a method that if you were sponsored, recommended, vouched for by four professional engineers that you could become a member of the Society of Petroleum Engineers and there was some test you wrote too. I

#125 just forget about that. But in any event, I was elected into the Society of Petroleum Engineers because I had no trouble with people backing me and I still retain my membership in that today. So things again, were hectic, Pacific was expanding, as a

matter of fact, the first year they came out with their annual report it was titled, The Breakthrough to Profit. So that was the first year, 1961, that Pacific Petroleum ever made any money. And that was to a large degree to Kelly Gibson. I went to a meeting, something told me, I don't know what, premonition or what, but there was an official from the Dresser organization up from Dallas, Texas. That was in 1957 and they, at that time, Russia had sent over, or tested, a couple of turbo drills with Shell Oil Co. down at Waterton but it was a complete failure, mainly on account of the bearing structure. But this official from Dresser talked about Russia and about the living conditions and all that and I have to admit I was always intrigued but I was more intrigued with this turbo drill. I kept thinking about this turbo drill, a down hole motor. To me, it didn't make sense, in order to turn with our conventional method of drilling wells, to turn a whole drill string, drill collars, drill pipe, just to turn a rock bit. This worked on my mind for months and months and months and months. All of a sudden, in 1972, the Canadian government and the Soviet Union entered into a scientific, technological exchange agreement. This covered various sectors of industry, forestry, fishing, manufacturing, oil and gas, etc. Well, in order to do anything with the Soviets we had to have an association. So sixteen oil companies here in Calgary, we formed the Canadian Drilling Research Association. I was made the chairman of this. Now, this was an exchange agreement. I wanted to test the turbo drills in Canada, under Canadian operating conditions. My thinking was this, now this was 1973

#170 and turbo drills had been in here in that ill-fated adventure at Waterton. Sixteen years had elapsed during this time, meanwhile the Soviets had put up Sputnik in 1957, keep in mind the Cold War is on, it's a secret society. But I'd been going to the various Tulsa oil shows and so on and met many Americans and I'd heard rumblings about, you know, the high altitude flights, American flights, the U-2 flights and so on that Francis Power eventually got shot down, that they were noticing huge amounts of activities in western Siberia. Large mounts of drilling rigs running, abundant flares, oil being burned, this sort of thing. So I thought, you know, with all we've achieved in space and all that, surely to god, in sixteen years, they've improved that turbo drill. So I went to Moscow in June of 1974, spent two weeks negotiating a deal with the Soviet Oil Ministry and Machino Export. Under their system at that time, anything leaving the country had to go through Machino Export. So I'm dealing with two bodies. It was very hard negotiating with the Russians, one day they'd say this, next day they'd say the didn't say it. At times you thought you were losing your mind. But in any event I got to know an awful lot of the fellows in the Soviet Oil Ministry, the top people and there were some very good men there, no question about that, some good engineers. The deal was signed, they shipped, eventually, five different sizes turbo drills to Canada. We selected five locations, each having a different depth, different conditions to test these turbo drills. Companies offered wells that were part of the association, the bigger companies. I offered one of our wells at Riscinis, Hudson Bay at Edson, Shell down at Waterton, Imperial out in the mountains, I just forget the name where they were drilling at the time. So we tested the drills, the problem was, number 1, under the Soviet Union they didn't have to worry about directional, which

#212 way, where the well was bottomed. Everything was state owned, controlled, they didn't

give a darn, it could end up anywhere. That's a no-go with us, we have to have a way of getting a survey instrument down to the bit. So in other words, they had to modify the turbo drills to become a hollow spindle, so you could get the directional tools through. And, secondly, very bulky, it took very, very long to service this turbo drill. These were 90' stands and it required hours and hours of other hole making the switch. The other thing was, they didn't have any fishing necks on them. Over there, again, if they stuck one of these things, they didn't care, they'd just drop a cement plug on top of it and whipstock or direction off to the side. Well, we had to have that modified. So they agreed then, to make the modifications and to return the drills back here for retesting. However, two years went by in order to do this and when we got them back they had put inferior steel in them, they fell apart, so that was it. Now in the meanwhile, while all this testing was going on, and I'm still running Pacific Petroleum, the operations end of it and I'm running this association and making trips back and forth to the Soviet Union. I'm also in charge of our drilling in the Mediterranean, in the North Sea, the United States, I'm just all over. Our part of the bargain now was to drill a well for them in western Siberia using our Arctic expertise. Now this was a monumental task. To start with, they gave us very, very little information. At that time the Soviets had three different ministries to drill wells, one was the Ministry of Oil, one was the Ministry of Gas, one was the Ministry of Exploration and there was no liaison at all between those groups. So all we had was some very, very strange inferior logs to try and program a 14,000' well, inside the Arctic Circle, close to the Kara Sea and so on. The deal was this well was to be known as Vosei 100, to be a 14,000' Silurian test. Well, the Soviets arranged for a \$10 million line of credit to our export development bank and this enabled them, the idea being the Soviets would use their big iron, use their drilling rig, their sump, the derrick, their pumps, but all the other equipment and material was to be Canadian material. In other words, casing, tubing, mud, automatic boilers and so on. So it took a long time to put all this together here in Calgary and Edmonton to buy all this thing and put it together, make the shipping arrangements. All the material was sent from here down to the port of Montreal, loaded on Soviet cargo vessels and shipped to the Baltic and the Archangel. It was unloaded, then it went by rail for thousands of miles, to eventually, it was unloaded on the banks of the Pechoria River. There it was barged downriver 900 miles, unloaded, then it had to wait of course, for freeze-up, to go overland to its final destination. Now it was a long ways, mind you.

#277 DF: And you were in charge of this?

HL: Yes. Along with still all my other duties I might add. However, I didn't regret that, this was a great experience. The biggest problem drilling the well was, this well was located in what they call the autonomous Republic of Komi. Well, you had a drilling division, oil and gas division, [their own]???. Now all of a sudden the hierarchy in Moscow is telling them, we're having a group of foreigners come in here, we're going to drill a well and they resented it to no end. Here was a group of foreigners coming in going to show them up or possibly show them up. So everything we recommend to speed up the operation they wouldn't do it. They would agree to do it at meetings and then nothing would happen. It was like hitting your head against a stone wall, very, very frustrating. In any

event, the well took ten months to drill. I said publicly many times, we could have drilled that within two months here, same conditions. We cased it, put it on production and it never did get properly, they didn't have the proper testing equipment but it was somewhere between 10 and 15 thousand barrels a day, beautiful well there in western Siberia. Now in the meanwhile, they toured me around, they were very good to me. I visited all their major oil and gas fields, not gas fields, oil fields. See, the gas fields was the Ministry of Gas, had nothing to do with them. But the big fields in western Siberia, like Tumin and Samatla I visited. Then I ended up in Ukta. Now here they oil mined. They talked about oil mining and I was very interested in this, oil mining. So I made arrangements to spend a day there and then I spent a day down in one of their mines, the constructed a large diameter shaft.

#322 DF: How large?

HL: It would be, I'm going to say about 15-20 feet diameter. They sunk it down about 800' level. At about the 750 depth was the top of this heavy oil sands. It was about 50' thick. At the top of the reservoir the constructed dozens of different tunnels going out in every direction. Like if you're looking down on top of a wagon wheel. From there they drilled into the top, cased it, ran lines back to the surface, pumped steam down. Now at the bottom of the reservoir, the same thing, they'd constructed these tunnels all out in different directions, they went in about 180' horizontal and cased it with slotted liners. The oil and water then, this was every 3' located, the oil and gas then would be caught into a basin and pumped up the surface for treating. They'd been doing that since the end of World War II. This wasn't new, this business. I talked to some of these fellows, through an interpreter of course, they'd been down those mines 17 years. So it wasn't new but it was new to Canada. See, this was the forerunner, this information was turned over to AOSTRA and they eventually, as you know David, they did sink some shafts up, I think there was one or two shafts sunk. But the information that I came with was given to them. I spent the eight hours down there and we had protective clothing, I've got a picture of me down that mine, as a matter of fact, it's right on top, I brought it over for you. That's me down that mine, I'm second from the right in the front there, that's down at the 800' level. I'll always remember, when I stepped in that elevator that morning, there was a big Russian woman running this elevator and it was slapping from side to side. She let the lever go and away we plunged down in the darkness and I said to myself, Hughey, what in hell are you doing here, you don't have to be here, just for your own curiosity. Not for my own, I was thinking for what it could do for us back here at home. But what a ride that was with that old gal in that elevator. In any event, we'd had protective clothing as you can see, got up, took a steam bath shower. I went from there to, we had an operation going in the North Sea with Zapata so I spent a couple of days out on the North Sea out of Aberdeen and then I got home, it was about ten days later, back in the office and you know that oil was still coming out of my pores onto my white shirt. And I always thought of those men that were working down there for seventeen years and that being absorbed in their bodies. I never got over that.

End of tape.

Tape 2 Side 2

HL: There was other things they had brought up that I wanted to see. One they always talked about, artificial diamonds and I thought, what a market that would be for our oil and gas industry, for our diamond bits. I asked repeatedly, repeatedly, but they never would show me that. What was happening there at that time in the Soviet Union was this, the military was being given all the finest, the best steel, industry was second fiddle and that showed up in these turbo drills later on with inferior steel. I witnessed, out there in Siberia, lakes, huge lakes of oil because of pipelines, broken pipelines. At that time they never used cathodic protection, they never x-rayed welds on their lines, they used old steel because that's all they could get so they just buried the raw pipe in the ground. Well, all those hot spots in that land of muskeg, it's eventually going to go. I kept alluding to this a lot to some of these fellows. They could have cared less at the time, oh, it's state owned, we have many thousands of miles of land and so on. But that oil was being gradually seeping into their lakes and streams and so on, it was a bad deal. The other thing I wanted to look at was their secondary recovery methods, see how far along they were over what we were doing back here and there again, I was very disappointed. They were behind us like most things. I said many times publicly that they were twenty-five years behind us in many, many things. It was just because of the system. It wasn't because some of those fellows weren't good engineers, they had nothing to work with. I made eleven trips during those years, into the Soviet Union. I can remember the first trip when I was eventually signed the turbo drill I was quite apprehensive going into that secret society and once you got in there, there was no contact, you were gone, it was just like you were lost. It was a funny feeling. But eventually, of course, with eleven trips I got used to it, used to their system. Now getting back to Canada when we were testing the turbo drills, I had a Russian turbo drill crew of five men staying at the International and they were a handful with their drinking and so on. These fellows, one actually, a professor ??? was the son of the modern day inventor of the turbo drill, a very highly qualified engineer. But of the five in the group there was one KGB guy. Once a month he went to Ottawa, reported everything that went on, every word those fellows said was reported back to Ottawa. And of course, he was hated, hated intensely by the other group. Over the years of my association I got to be where I could pick out these KGB guys because they were all educated in the same school and they spoke English the same way. They would pronounce it the same way, I could trigger on to who was KGB and who wasn't. But they were always with you, no matter what you were doing there was always a member of the KGB with you. The head of the Oil Ministry was Yuri Toronchev and Yuri came out of the caucuses, he was in charge, very limited education but a very highly intelligent man. He wanted to improve the system and that's the reason this exchange deal was. And he worked very closely with me over the years but his hands were tied just because of the system.

#050 DF: What did you learn about the turbo drills when they were here?

HL: We learned enough that the fundamentals were there. The fundamentals were there, the basics were there, it just didn't stand to reason losing all the energy for 5,000, 10,000, 15,000' string turning a rock bit. So it was a matter then of improving the techniques, of the mud and the hidden turbines and so on, which the Americans picked up on and came out with the modern day mud motors which we use today, by the hundreds. Of course, my thinking back then too, David, was the fact that day work rates were increasing, we were drilling in the Arctic, we were drilling in the foothills, deep wells in the mountains, day work rates were escalating and I thought, if we can reduce the number of days with these mud motors everybody is going to benefit. More wells are going to be drilled, contractors are going to drill more wells, more men are going to be employed and so on. And I think that's what happened, you can see it today. Eventually there was thirteen members of the Soviet Embassy there in Ottawa were caught in a spy deal so the Canadian government kicked out thirteen, the Soviet government in Moscow reciprocated, they kicked out thirteen from our Embassy staff and that was just when we finished the turbo drill and finished the well in Siberia. That was really the end of the relationship. So I was the chairman of the CDR right from the year we founded it, '74, to 1979. It was a great experience and we learned a lot, even in view of the circumstances but we did learn something. I made sure they didn't learn anything from us. The technology used in the wells we drilled in their Arctic, you could get in any American trade magazine. As a matter of fact, in one of the office in Moscow I was waiting one day, one of the professors was coming in to interview me and I looked down and here's the Oilweek magazine sitting on a desk and I thought, so odd. And there was pictures on the wall of the American Thumbs??? operation, you know on Long Beach Harbour. So I mean, they were abreast of what things were going on. As a matter of fact, I had given a talk to the Desk and Derrick Club about Russia at the time and that had apparently been quoted in one of the Oilweek magazines, this professor asked me how I liked speaking to a group of women. I just about fell out of the chair. So they were certainly aware of what was going on in the rest of the world.

#087 DF: Yes. So was there any new technology that the Russians had developed that was of interest to you? You mentioned the turbo drill and the oil mining, anything else that they were doing?

HL: The only other thing David that they were ahead of us, they'd come up with automatic derrick man, they didn't require a derrick man upstairs, which was a great safety aspect. It was quite a slick deal they had invented. That was really the crux of the matter. Yuri Toronchev used to meet me when I arrived in Moscow and he'd take me to the airport and it was always embarrassing because there would be a lineup of people waiting to get on and of course, you'd have to go through, back then, these various checkpoints. He would flash, he was also a card carrying member of the KGB, just flash that card and I'd walk through and people by the hundreds, who is this guy. I used to feel damned embarrassed.

DF: What did you enjoy most about your career?

HL: Actually, getting things done, I'm a very impatient man. Making money, not for me but

making money was a strong desire. Later on in my career I made a lot of money by, when I went to work for. . . that's another story, I don't know if you want to hear it. . . You see, when Petro Canada took Pacific I only stayed four months, I couldn't stand it, the waste of money they were throwing around. Coming out of a tight fist group like Pacific Petroleum and coming and watching that, I couldn't stand it so I quit and when I quit I walked out on everything really, all my years I'd built up but I felt so strong about it. Then I went over as VP of production for Cheyenne Petroleum, a little company, just as an infill there while I really wanted to figure out what I really wanted to do. They took over, they, Cheyenne, Rupertsland Oil and Gas was in financial problems then. That was owned by Dick Bonnycastle. We operated those properties and then Pension Fund Energy of Canada was a new identity, it was a group of pension funds, like Omers??? out of Ontario and Ontario Teachers and Air Canada and some of the banks, they put money into Pension Fund Energy. Well, Pension Fund bought the old Rupertsland properties. None of them at that time were operating people but me, so really, and they'll tell you this, they bought because of me, knowing their production and me in an operational background. And I went over there and we would look at properties to buy, look at the missed pay, what they'd missed, what we could do to restimulate these wells and so on. Consequently we made the Pension Funds a lot of money and I was the executive vice-president there for a number of years. That's what I ended up as, is executive vice-president. In the interim we had formed a public company, it didn't last too long, it was on the Toronto exchange, a little company called Exchange Resources. Again, I was one of the executives of it. But in reality, your question, I loved seeing new technology and still do today, I still read every trade magazine, I still get the World Oil and the E&T magazines and so on, and I read them religiously, just like I was still part of it. I have to admit, I miss it, I guess I always will.

#140 DF: Any regrets?

HL: Yes, I still regret that I didn't get that engineering degree. Even though I ended up in charge of hundreds of engineers but it still bothers me today.

DF: So why didn't you get it?

HL: I was so busy with my job, all what was going on and raising a family. You see, I would be gone for weeks on end, I never did hardly see my kids growing up. But it crossed my mind, don't forget. Meanwhile I'd gone to Banff School of Advanced Management, I'd gone to Atlantic's Business School of Halifax Advanced Business Management. So over the years I'd taken all kinds of courses and so on and tried to keep up on that.

DF: And when it came time to write that test for the Association, that wasn't a problem?

HL: No. No, I studied religiously, all the time. My hobby is still picking up a technical magazine and reading.

DF: Anything else you'd like to tell us about your career?

HL: No, Dave, I think I've pretty well covered it all except that I was very honoured when I was inducted into the Canadian Petroleum Hall of Fame in the year 2002. That was, to me, a wonderful thing. It was great to be recognized by your peers. So I don't know there's much else I can add.

DF: Are you really retired or are you still playing with it?

HL: Still playing with it, I still have a company, Leiper Energy Services Ltd.

DF: What does it do?

HL: I invest in JV's, joint ventures. When I left that short few months from Petro Canada, I formed Leiper Energy then. So that's what, 24 years ago.

DF: And what are you active with now?

HL: Every year I invest in these JV's, usually with Signalta Resources.

#172 DF: What do you see on the horizon for technology in the drilling industry?

HL: You can always, you figured you'd reached utopia but you never do. There's always something going to come along to speed things up, to change things and so on. My worry, not only from a technical standpoint, but look at the progress rock bits have made. I mean, it's unbelievable, the quality of rock bits today when you can go out and drill a well in two days, where years ago it was two weeks and three weeks. So that progress is always there. One thing about American technology, they're always coming up with new ideas and so on. My biggest concern from the Canadian oil and gas industry is that the elephants have been found and from here on in it's a tough sell to try and find enough gas and oil. And you're going to have to rely on, particularly in the gas business, you're going to have to rely on coal methane gas, shallow stuff like that. Like I say, the big elephants have been found in western Canada. It's a major concern because these pipelines aren't going to have the gas available to be putting in them. I think it's mandatory they get those lines built from Alaska and the Mackenzie Delta. The other thing is, and I keep thinking about this, because I worked in the Arctic, I drilled several wells in the Arctic, the high Arctic and the western Arctic. Thanks to the work that PanArctic did, we know there's all kinds of gas available in the high Arctic and yet, nobody mentions about trying to come up with new ideas to bring that gas out of the high Arctic. I personally, one time was on a trip that Charley Hetherington had taken a bunch of us up to the Arctic to that Drake well. I helped him find the wellhead, it was a bitter night, snow had built up around the wellhead and that, and we flared that gas and I'm going to tell you, tremendous amount of gas. So why is nobody even contemplating about how to get the gas out of the high Arctic. You never hear it mentioned, you talk about Mackenzie Delta, you talk about Alaska but nobody mentions that and that's a concern of mine.

DF: Is it possible to liquify it?

HL: That's certain been. . . the only trouble is, now you know, with the climactic conditions, in some of those places you've only got a two week window. Which isn't out of the realm of possibilities, but you've got a two week shipping season there. Now that doesn't preclude, wherever you could pipe that gas, like for example, the Axel Heiberg Island is only seven miles across from Ellesmere. That's a deep trench there, we ran seismic across there and I've been out even on the ice there when we were doing the shooting. But on the east side of Ellesmere, there's a place called Mackinson Inlet and it's year round shipping there. So it's possible to get that gas into an all-weather port but David, do you ever hear anybody talking about the high Arctic?

DF: No.

HL: I know, a number of years ago there was a number of hair-brained schemes, like one guy, it was a dirigible, going to float the gas out, I mean, stuff like that.

DF: Or fly it out.

HL: Yes, fantasy stuff. But let's get some scientists working on it.

DF: Well, that's great. On behalf of the Petroleum Industry Oral History Project I'd like to thank you very much for allowing me to come and visit you today and record you, thank you very much.

HL: Well, Dave, it's my pleasure, I assure you.