

PETROLEUM INDUSTRY ORAL HISTORY PROJECT  
TRANSCRIPT

INTERVIEWEE: Ray Tull

INTERVIEWER: Susan Birley

DATE: January 1985

SB: It's January 22<sup>nd</sup>, 1985 and it's Susan Birley interviewing Ray Tull at his home in Calgary. Mr. Tull I wonder if we could just start with a little bit of your early background, where you were born and raised?

RT: I was born and raised in Oklahoma on a farm.

SB: What town were you nearest to?

RT: The little town of Prague, Oklahoma.

SB: And was there much evidence of oil activity around there when you were growing up?

RT: Not a great lot immediately close to home but within 10 miles there were a couple of fields. So I had seen drilling rigs all my life, yes.

SB: You worked on the farm then probably, most of your childhood?

RT: Yes. Until I was 18 years old, I worked on taking up an old greasy muddy pipeline, my first experience in the oil field. That was just bull gang work, by hand. I worked there a couple of months, in the fall I guess it was, 18 years old.

SB: Then when was your first job on the oil rigs?

RT: In the spring of 1944, I started roughnecking.

SB: And how old were you then?

RT: I was 19.

SB: Was that a young age for people to start working on the rigs, or did you have any problem that way?

RT: No, I don't think so. I guess most of them, they wanted them to be 18 years and older. I have seen since that time, or have heard that there's a few of them, we had a few in Canada that worked before they were 18.

SB: And what company was that for?

RT: Falcon Seaboard Drilling Company from Tulsa, Oklahoma.

SB: Were they a major operator around the field there?

RT: I think they had approximately, I don't know exactly, around 11 or 12 rigs at that time, in Oklahoma and Texas.

SB: So what was your job when you started out with them?

RT: Just plain roughnecking.

SB: What kind of position was that on the rig?

RT: That's the bottom position on the rig or the lower one. One of the floor hands.

SB: So you'd help running the tools in and out of the hole?

RT: Yes. Well, you were the bull gang, you'd slip the tongs and etc.

SB: Did you stay with them then for quite awhile?

RT: Yes, we worked for 2 holes in Oklahoma and then moved out to Texas, close to the little

town of Dumas, Texas. We worked out there in that area about 13 months I guess, in the general area, around Dumas, ??? Texas.

#033 SB: Was it a different kind of situation than Oklahoma?

RT: Pretty well the same thing actually. They were shallow rigs, we were working on 3,500-4,500' stuff.

SB: What about the style of drilling rig then, what kind of power was driving in and that kind of stuff?

RT: Well, the early rigs they had at that time were all diesel. They had some gas also but the rigs I was working on were diesel.

SB: So everything was covered in, they didn't have chains open or anything like that?

RT: Oh no, no, the rigs were modern type, they had guards on everything.

SB: So after Texas, where did they move you to?

RT: We left Dumas, Texas and went to Rayville, Louisiana. That was in the September 1945. I roughnecked at Dumas up until, I think it was along about the middle of August I started working derricks. While we were working at Dumas, that was during the war years, crews were hard to find. It was short handed most of the time. I worked double shifts 3-6 times a week all summer of '44 in Texas there. I got a lot of experience in a hurry, which I enjoyed it. I had nothing else to do, I was single at the time.

SB: Do you remember what your wages were at that time?

RT: Roughnecking was 99 cents an hour, derrick man was a dollar and ten cents an hour.

SB: I guess it stayed pretty much the same for quite a few years did it?

RT: Yes, it didn't change a lot. Before we went to Rayville, Louisiana I had worked a lot of double time shifts and the tool pusher said to me a couple of times, what's the details of certain things on the rig, how did this happen, how did that happen. I said, why are you so interested in it, and he said, you're the only one that's showing so much interest and willing to work at any time on the rigs. We're going to purchase another rig later on and I'm grooming some of the boys for drillers and I think you'll be one that I want. So I was very fortunate, I was promoted to start drilling on January 17<sup>th</sup>, 1945.

SB: So they you were responsible for the operation of the whole rig?

RT: Yes, right.

SB: Do you remember any of the people that were with you on those early crews?

RT: Yes, I know several of them. The driller that I originally worked for has passed away. ??? Harry Sledge, several different ones at that time. It was quite an experience, of course, I was very young when I was promoted to drilling, I was 20 years old, I was pretty lucky.

SB: Did any of those guys come up into Canada later on?

RT: No. None of the boys with Falcon Seaboard that worked at that time, actually went to Louisiana, in the fall of '45, we worked around Rayville, Jena and in the Delhi field. I met Ken Germond, a geologist on the well, who was drilling the Delhi field for Sun Oil Company. That would be, I would think about February of '46. So Ken Germond came up here. I didn't see him till he came back up here, that was 3 years later.

SB: So in Louisiana then, where did you go to after that?

RT: We moved one of the rigs back to Garber, Oklahoma, went up and drilled one well, then

went back to Louisiana and went back there for the summer and the fall. The late fall of '46 we moved one of the rigs to Wellington, Kansas and worked in the Wellington, Winfield, Kansas area 14-15 months I guess, overall. During this times there were period that the rig would be down and I would go back across into Oklahoma and work on one of the rigs that was working there as they had, I think, 8 or 9 rigs working in Oklahoma at the same time. So I stayed pretty busy all through that period. I was promoted from driller to tool pusher in the spring of '48 I guess it was.

#082 SB: Did they used to work 2 weeks on and 1 week off or what kind of arrangements were made that way?

RT: No, in those days there were no restrictions. You could work 7 days a week, 365 days a year I guess, if you wanted to, or if there was work for you to do. The smaller rigs, of course, drilling shallow holes, they're up and down and moving a lot and they don't have work sometimes for a couple or three weeks and that's when I would go back to Oklahoma to the other rigs to keep busy.

SB: Were there a lot of people that would get employment in the oil industry then, was it looked at as a good thing to get into?

RT: I think it was. Well, to a farm boy, you had no money at all. Something like this was, we thought, lots of money, big money to us as a kid from the farm. And it was one of the better paying jobs at that time.

SB: So as tool push how many rigs were you responsible for then?

RT: The first 6 or 8 months I only had 1 rig to look after. We moved it around quite a lot. We went from Kansas, back to Oklahoma, then back up to Woodward, Oklahoma. Then they give me a larger rig, moved me up on to a larger rig which was a 9,000' rig. The little rigs were 3,000-4,500' at a time. And drilled a well at Woodward then I went up into Harper, Kansas again and drilled a well, back to Oklahoma. Moved around quite a lot. I think we worked in 8 or 9 different areas of Oklahoma in that next year. Wound up at County Line, Oklahoma. I looked after 2 rigs there for about 4 months. I was living in Duncan, which is about 35 miles away from County Line.

SB: So was the Oklahoma oilfield really expanding then or was it kind of petering out?

RT: They were finding, this ??? field there at County Line was quite active. There was about 50 some rigs working there to develop that field. Most of the time on the rigs in Oklahoma you are wildcatting, moving around to different areas.

SB: Had you heard much about activity in Canada then?

RT: No, I hadn't heard a thing. I think it was in about March of 1949, I was phoning my report in to the Tulsa office and the vice-president said, Ray, what would you think about going to Canada. I said, I don't know, why, he said, we're thinking of sending a couple of rigs up there. I would like for you to go but the president says it should be an older tool pusher with more experience that's been around a lot longer than what you've been in the oilfield. I said, whatever you say, I'm easy, if you think I can make you more money there than I can here, sure, I'll go. So we left things alone at the time. I believe it was about the 25<sup>th</sup> or the 26<sup>th</sup> of April and one morning I was phoning the report in, he came on the line and he said, have you got your red flannel drawers yet, I said no, why, he said, you're the

man, you better get them. He advised me to meet the truck pusher at rig #2 near Anadarko, Oklahoma the next day and decide what I wanted to go with the rig to Canada and so forth, etc. I said, fine. We couldn't send no steel buildings or water tanks at that time up here because there would have been extra duty to pay on them as they could be built here easy enough.

#124 SB: So you'd have to pay duty on all your rigs?

RT: No, no. Not on the components that could be manufactured there, couldn't be manufactured here. They were duty free. But like a steel building, or a water tank, something like that, just simple, it could be built here you see. And they charge you duty if you brought them in.

SB: So can you remember what the rigs were you brought up with you?

RT: Yes, we had a Franks 5000 and a Houston portable. The 2 rigs were both a capacity of about 5,500'. Ideal for 3,000-4,000' stuff but you could drill to 5,500' easy enough.

SB: And what field did you go up to in Canada?

RT: We brought the 2 rigs into Edmonton. I found a yard the north end of Edmonton, Nordheimer Manufacturing Company, stored the rigs there for 2 weeks while I had the Nordheimer people build some steel building, some water tanks etc. for me. Then we took the #2 rig, the Franks rig to Redwater, about the 22<sup>nd</sup> of May I think it was. We crossed the border on the 6<sup>th</sup> day of May coming in here. Set up and drilled a well for Canadian Gulf Oil Corporation. Almost in the town of Redwater, it was only about 120 yards from the Dominion Oilfield Supply store there in Redwater.

SB: Had they already got the contract when you were in the States, the Falcon Seaboard?

RT: Yes, they had made arrangements and Frank Bridges was here in Calgary at the time, they set up an office for him here and they got the contract with Gulf. I think we drilled 2 holes on a footage basis and then more rigs moved in and the competition got a little more competitive. They took a 10 or 12 well contract, straight day work basis, for Gulf. When we moved the second rig out there and started this day work, work, they were supposed to have sent another pusher up here to help me run the 2 rigs but Gulf said, no, we'll give you straight day work price and we'll have enough engineers and drilling foremen out there that one man can look after 2 rigs. I don't think Falcon Seaboard boys realized the complications we really had here. Being used to, in Oklahoma, you could pick up the phone and run over here to the supply store pretty quickly or call them and they'd run something out. The supply stores were in Edmonton. At that time we had bit salesman, just one, we had no field salesmen and no supply stores to deliver anything. You picked up your bits at the supply store, hauled them back to the rig yourself. It was a pretty tough situation. Of course, I was young, it didn't hurt me a whole lot. I had 2 new 1949 Chevrolet cars, the one I drove up from Oklahoma and they bought one here in Calgary and sent it to Edmonton for the other pusher that was going to come up. Well, they didn't send him so I would drive one car a week while the other was in the garage being serviced and looked after and switch cars by the week. Drove the 2 cars from the middle of May till December '49, over 40,000 miles. At least 35 of that was on dirt, gravel roads between Edmonton and Redwater. I spent more time in the car than I did at home, as a

matter of fact, I slept more in the rig than I did at the house. Kelly Gibson and Wayne Powell moved up here from, I think Wayne came out of Kansas and Kelly came out of Oklahoma, I'm not sure, to work as foremen for Gulf. But drilling that 10 well program on day work, if one rig wasn't moving the other was running pipe or something, you didn't have any time. Any time you had a couple of hours that one wasn't doing something you wheeled into Edmonton and picked up something to keep the rigs going. It was a little tough getting crews also. The boys weren't experienced, we brought 3 drillers for each rig and 3 derrick men up for each rig. But after the second hole I think there was 3 derrick men and 2 drillers didn't like it, left and went back to Oklahoma.

#179 SB: Was the weather that hard to adjust to?

RT: No, at that time it was nice weather, beautiful weather. We couldn't believe how long the days were at that time.

SB: So Kelly Gibson and Wayne Powell, would they be doing running around too to get parts?

RT: No, no. They were just foremen, make arrangements for all the stuff for the Gulf Oil Corporation. My responsibility was running the rigs. They were supposed to have enough men out there, I was not supposed to spend that much time running casing, worrying about this and that. But we completed the wells in those days and there was something going on all the time, you just didn't have any time to be away from it.

SB: I guess the rest of the field was caught up in the same pace as development. It was a period where everything was going really fast.

RT: Yes, it was. The action was very fast. I think Parker Drilling Company had the same contract with Gulf as we did, Dutch Komar??? was pushing the rig for Parker. He had 2 rigs and I had 2. So we worked close together all the time. We visited a lot between the rigs and the car.

SB: How did the drilling go in Redwater, was it all development?

RT: Yes, everything there was just developing the field. Well, there were some ??? wells in it but basically it was just development wells. They cored practically all the wells.

SB: I was wondering also, we should mention who the people were in Falcon Seaboard, the managers and the owners?

RT: Theodore Law was the president, Jerry Stauss??? was the vice-president. Jim Brown was production foreman at the Tulsa office. When the rigs came up here Falcon Seaboard Drilling Company furnished the 2 rigs and Frank Bridges and 4 fellows, individuals from Tulsa, put up the money, and we came up here as a subsidiary of the Falcon Seaboard Drilling Company. Here it was called Falcon Seaboard of Canada Ltd. So essentially Falcon Seaboard owned half of this and these 5 gentlemen owned the other half of it.

SB: Were the other 4 Canadians?

RT: No, no they were Americans. I can't remember now exactly who they were, that's too long ago.

SB: So you drilled all the wells in Redwater and then what was the next area you went into?

RT: We moved one rig north of Calmar in December of '49 and drilled a well out there. I believe it was in February of '50 we took the other rig from Redwater across the river to

Bruderheim. When we took the rig to Bruderheim then I finally talked Tulsa into letting me set up another tool pusher.

#221 SB: Because I guess there would be quite ways . . .

RT: Too far apart, there was no way I could spend that much time. So I set up one of my drillers to a tool pusher. That was my philosophy, hiring the roughnecks, as soon as they get enough experience and seemed eager or willing to work, I would set him up to a derrick man and keep moving him up to a driller. We carried that philosophy all the way through up here as we built the company down the years.

SB: I was wondering also about Frank Bridges, where had he started out?

RT: Frank Bridges, I think he worked for the old Gypsy Oil Company originally, then the Gulf Oil Corporation bought out Gypsy. This is going back several years. Frank was always in the land department for the Gulf Oil Corporation.

SB: So with Falcon Seaboard, was he handling contacts and things like that?

RT: Yes. It was his responsibility to contact people in Calgary here and arrange contracts, along with the Tulsa office. I worked strictly out of the Tulsa office. Frank didn't get reports, well, he got a report but I had to talk back and forth to Tulsa. The reports carried out of there. The payroll and everything was coming out of Tulsa until they sold the company out to Frank Bridges and a Toronto group.

SB: Were there any events that happened on those early rigs that were close calls or that you remember particularly well?

RT: Nothing particular in Redwater. Little things, but nothing severe. We were running a drill stem test north of Calmar and we had a little flash fire there on it, but it wasn't serious.

SB: Flash fire on the rig.

RT: Yes, a drill stem test and we broke the thing off and oil was pushing out and it caught fire. It was quite a little fire, nothing serious. We got it cleaned up and we had to repair the draw works and chain some things and we finished the well all right.

SB: Was it when you went to Bruderheim that you built an ice bridge across the river or was that later?

RT: No. When we went to Bruderheim we didn't build an ice bridge, they use that crossing there every winter, all the cars do. It's just a road and they cross on the ice. Well of course, I'd seen the cars going across, I'd driven across it but when we started moving the rig I figured we had to take it down to Fort Saskatchewan, cross the bridge and come back up. Ralph Shirley, Shirley Brothers Trucking said, no, we'll drive it across the river. I said, not my rig and he said, I took a D-8 cat across there last week, it cracked but the ice is thick enough, it'll carry it. I said, I can't believe it, if you want to cross there, it goes down it's yours. He said, no problem. We moved the complete rig across on the ice.

SB: And you built it up to help support the weight?

RT: No, we didn't. You generally don't build them up. What happens, we have built ice bridge since that time, going across the river back in the bush where there's been no crossing there. You build your approach down the river and start going across, you take a small cat in there and you brush the snow off the ice so it will get more severe frost, it will go deeper. Plus the fact then, you go up the river, take a water pump and you pump

water out on top of the ice, let it run down on top and you build an ice bridge thicker. You don't want to try to cross a river with a big load till you get at least 2' of ice there. To start with when you go in to brush the snow off you take a little D-4 cat or a very small one that will cross on the ice.

#282 SB: So how did they drilling go while you were in these other places, like Bruderheim?

RT: We had no problems at Bruderheim. No difficulties. Then we moved the rig up from Bruderheim up to the Smoky Lake area and worked in there that spring of '50 and moved the rig then from there, down to the Hannah area in the summer, fall of '50. Wound up drilling down at Empress, Alberta in January, February, which was a great experience. That was out there in the bald prairie where it blows the snow very bad. We had the crew snowed in there 3 or 4 times. We flew crews in on a little single plane a couple of times, on skis. The other rig worked around Devon and Atchison. In the spring of '50 at Atchison, we had a little difficulty there. We were coring a well for Standard Oil of California. After we had run the long string we were coring the well with 3 ½ drill pipe, through the 7" casing. And we lost circulation in the reef trying to combat the lost circulation and so forth, the core barrel plugged and we couldn't circulate. So we kept filling the hole through the annulus and pulling the pipe out of the hole to take the core barrel off, go back in with the bit and try to solve the lost circulation problem. Well, evidently we couldn't hold enough fluid and while they were pulling out of the hole, I think we had 4 joints of drill pipe left and the 50' core barrel or 2 joints of core barrel when the well blew in. Closed the high drill preventor on the pipe. Of course, we didn't have room in the substructure then, to have the shafer on with ram type also. With the core barrel plugged, going through the 7" casing, it worked like a hydraulic ram. We put chains on the pipe but it broke the chains and it blew the drill pipe and the core barrel out over the crown of the derrick. Through all this commotion we broke the fill-up line off the side of the Christmas tree, or the well head, the tubing bow actually. Now we had a real problem, oil going over top and out the side. At that time Standard of California phoned in Myron McKinley, as the old wild well fighter. I believe Red Adair was working for him then or he started working for him just shortly after that, just as a young fellow at that time. But Myron came up. We finally solved the thing by assembling a sort of a type of clamp with connections on it and got it around the tubing spool. While we were installing this of course, the oil is still going over at the side. We've got it directed out one way. I was in the cellar standing in oil almost waist deep with Myron McKinley myself in that transaction. It was quite an experience. If something had happened we'd have been fried of course. But I guess somebody's got to go ahead and do it.

SB: I guess there were a lot of cases where you were almost risking your lives to get wells under control.

RT: Oh yes, when you have a wild well there's always a danger if something happens.

End of tape.

## Tape 1 Side 2

- RT: During the time Myron McKinley and myself was in the cellar, trying to install this clamp, I just happened to glance under the substructure down below the rig there and saw 2 little real faint lights and I wondered what was going on. As the RCMP had the location roads all surrounded so nobody could get in and out of there and the engineers were sitting in their cars and the bunkhouse up above, watching. But somehow this pick-up, a Dominion Oilfield Supply pick-up was delivering something. They had ordered out some kind of connections. This fellow knew the country and had come in on a back road, across the field a different way. So I jumped up out of the cellar and I was very upset, I told the engineers you guys are not watching what you should be doing but we're the ones risking our lives. I guess I ate them out a little but that's beyond the point, those things should not happen. He drove that pick-up through a little stream of oil running across the road down there where he came in at. One spark, we'd have been fried.
- SB: So I guess they hadn't anticipated anybody coming in by the back way.
- RT: No, they hadn't but someone should have been a little more alert, watching what was going on. That's the disastrous part of it, fortunately disaster didn't happen.
- SB: So about 1950, you acquired a 3<sup>rd</sup> rig.
- RT: Yes, we did, we purchased a Cardwell trailer rig in the spring of '50 and we moved it to Macklin, Saskatchewan. The rig that was down at Empress we moved over into Saskatchewan, around the Kindersley area, drilled all around Kindersley, Brock, Eatonia etc. for Phillip Petroleum Company. The other rig came down and drilled around the Cessford area, the one from Devon. We drilled the very first holes that Canadian Delhi Oil company drilled in Canada, out at Cessford.
- SB: Were Cardwell trailer rigs just coming in then?
- RT: Pretty well. Cardwell had had a little small rig but this was the first really good trailer rig that came out. I believe that was the second one. McIntyre Webster had one, we bought the second one.
- SB: And how deep could they drill?
- RT: They were 5,000' rigging. We actually drilled a couple of holes 5,800 with them, which you can do, you can go a little below capacity in most cases if your well is on good solid ground and good substructure beneath it.
- SB: So in Saskatchewan, was there a lot of activity out there or were there just a few units going around?
- RT: Basically in Saskatchewan at that time it was wildcatting more than anything else. We'd just from one location to different areas. I think the trailer rig started at Macklin, Saskatchewan, went to Luseland, Kerrobert. Then in the fall we went up east of North Battleford. And on up to Meadow Lake north of North Battleford through the wintertime. We brought the rig back down to Biggar, Saskatchewan in January of '51 then, and came on over to Drumheller, Alberta in February '51. The other rig from the Kindersley, Saskatchewan area, we moved it from there up to Manning, Alberta back in the bush. Rig 2, let's see, from Cessford, we moved it up east of Stettler area, out at Coronation area

and worked there, just wildcatting mostly.

#057 SB: And were you still doing most of your drilling for Gulf Oil at this point?

RT: No, several different companies at this time. The first one that went to Saskatchewan, the Cardwell trailer went over there, I can't even remember it was so long ago, what the company name was, Stu King was involved in that. I'm sure you. . . Stu King came up here. . .

SB: Yes, Canada Southern?

RT: No, it wasn't Canada Southern then I don't think.

SB: Or Albercan?

RT: Albercan, that's what it was. We drilled wells for them with the trailer rig first. And the rig that worked around Kindersley was for Phillip Petroleum and as I said, I think 2 at Cessford was for Delhi. So we worked for different groups then, all around. I believe when the Cardwell trailer rig came back to Drumheller it was for Great Plains Petroleum. Then it went from Great Plains Petroleum to Big Valley, went back and worked for Gulf Oil Corporation. Rig 1 was up drilling for Phillips Petroleum Company up at Manning and Fairview. So we worked for different groups all around at that time.

SB: What about the drilling technology, was it changing very much in the early 50's?

RT: Not in the early 50's, it didn't change a great lot. There was a fantastic change down the line. Originally when I started roughnecking on the rigs we only ran 1 or 2 drill collars on the rigs, and ran about 350-500 lb. of pump pressure. Of course, the bearings weren't good enough in the bits those days, you couldn't run them, well, 12, maybe 16 hours outside. If the teeth wasn't wore off the bearings would be wore out. But during the late 50's, early 60's, technology changed fantastic. We went to the gyp??? bits and increased your pump pressure from 5-6 hundred pounds up to 12-15 hundred pounds. And from running, originally as I said, 1 or 2 drill collars, then through the mid early 50's we run 4 or 6 drill collars on a rig and then in the 1960 area we went from 16-24 drill collars on a rig.

SB: What's the drill collar, what difference does that make, running more drill collars?

RT: The biggest factor there is to get more weight on the bottom which is right on top of your bit. The bearings were improved and the technology on bits was improved so fantastic that in the early days we run a maximum 10,000 lb. weight on a bit. After the bearings were improved and with the jet drilling we ran anywhere from 35-55 thousand pounds of weight on the bit.

SB: Were they mostly the 3 cone bits when you started?

RT: Pretty well. There were always some 4 cone, flat-bottomed bits around but the 3 cone bit basically was the main one, it just outperformed the flat bottom bit.

SB: What about the derricks, were they, I think they called them, standard rigs mostly?

RT: In the early days, Falcon Seaboard we brought jackknife rigs up here. But there was still quite a few standard rigs working in Canada in the early 50's. The old days, the standard derrick was all they had. You had to get the builders out and do it and they were more room to work on the floor and a lot of room to get down but so much more expensive. The jackknife derricks you could move them and finally, after the trailer rigs come out

you could move one from one location over to the other one in 3 or 4 hours and have it up and drilling again. That's the biggest factor was the cost of assembling and moving.

#102 SB: So in 1951 you bought your 4<sup>th</sup> rig? What kind of rig was that?

RT: Yes. We bought an GB 500 Draw Works, from Continental Imsco???, which is a 7-9 thousand foot rig. The very first hole we drilled with it, we put it up on a standard derrick. We ordered a jackknife, until it got in, we drilled the first hole with an old standard derrick up between Leduc and Calmar.

SB: Where had you acquired that one from? Was that the one that you got from somebody else?

RT: No, we bought the Draw Works motor and pump and rotor table and travelling, bought all that equipment from Continental Imsco but in the process, after Falcon Seaboard sold out to Frank Bridges and the Toronto group. . . Let me retract just a minute. I think it was June 21<sup>st</sup> or 22<sup>nd</sup>, 1951 when Falcon Seaboard and the 4 gentlemen that put up the money for the partnership sold their interest to Frank Bridges. Frank Bridges got a group out of Toronto which was the Newkirk Mining Group to back him and bought the rest of them out. At the same time he talked the mining group into forming an oil company separate from the Falcon Seaboard of Canada Ltd. Of course, when they bought it out they changed the name to Cambridge Corporation Ltd. and they formed an oil company, Marigold Oils Ltd. In that process Marigold Oils Ltd. bought Bob O'Meara's he had a producing well at Barrhead, Alberta and an old rig up there. Through the transaction they pawned what was left of the old rig off on the Cambridge side of it and I said, I wouldn't run the old draw works, it's not economical and it's too hard to rig up. So we purchased the new GB 500. We were buying the rig complete, except the odd stuff we could use off the old rig. But we drilled out first hole with a standard derrick because the new substructure and derrick didn't arrive in time to drill the first hole we took the contract on.

SB: Then you carried on drilling with the 4 rigs?

RT: Right, we got the derrick and substructure, I think it was about August or September of '51 and moved it to Big Valley, to work with the Gulf Oil Corporation.

SB: Did the working situation change when Frank Bridges made this new arrangement?

RT: Not necessarily changed, except that I wasn't sure that I wanted to stay and run the rigs for the Canadian company. I had worked for Falcon Seaboard for several years. Jerry Stauss was the executive vice-president for Falcon Seaboard and he said, Ray, that's still a young man's country up there and I think you should stay and help Frank because he hasn't got anybody to run it. And probably if you can make things work right and the company progresses, you've got potential that you could be advanced quicker than you can working for us. However, if it doesn't work out and you're not happy after a trial of 6 or 8 months or a year, just give me a call, you can always come back here and we'll have a superintendents job for you here in Oklahoma or Texas somewhere.

#150 SB: What about Frank Bridges and the mining company, were they that attuned to the demands of the drilling business?

RT: Not really. As I said earlier, Frank Bridges was always in the land department for the Gulf Oil Corporation and Frank, working for a major company in the land department, I think you have a scope ???, it's a mammoth organization. This is the way Frank thought. Well, Marigold Oils they took a couple of deals and had a well drilled and I said, Frank I don't think we should do that, that's an awfully expensive situation. But however he said, if we hit here we'll be a major oil company in a hurry. I believe the Toronto group arranged finances, they had something like a couple of million dollars in the kitty for the oil company but it didn't last long because Frank promoted the thing and bought a big rig down in Wyoming and drilled a deep hole, which he thought was going to be a big success and it turned out to be a dry hole and a flop. I went by and looked the rig over and I advised him not to take it, however they went ahead and took it on his word. They had quite a fishing job I guess on the well and this and that so it cost them about triple what it should have cost to start with. Each time the little company of Cambridge got a few dollars ahead the mining company would take the money and put it into some mining investment deal or something like that. Finally I said, if this is what's going to happen I don't think I'd going to be happy with this situation. Every time we get a few dollars ahead you're struggling to make your payments on the next thing then. I told Frank, every time I found something that looked half decent I was going to put a bid on it if it was okay with him, and purchase another rig because I think we could make him some money if they'd give me some good rigs to run.

SB: By this time I guess, you weren't just a tool push anymore?

RT: No, after I put the rig in Bruderheim and the one in Leduc, then we bought the third rig to go to Saskatchewan, I put a pusher out on each rig and I was the superintendent, I had 3 pushers out. I was the superintendent all through this until after Frank got the group and bought out the group. I moved into Calgary in August '53 and they set me up as a vice-president of the company, in charge of the field operations also.

SB: So when did he buy out the company, what year would that have been?

RT: That was on the 21<sup>st</sup> day of June, in 1951. We bought out fifth rig, I think it was in the spring of '53.

SB: That's under the new organization?

RT: Cambridge Corporation yes. Then we purchased the sixth rig from Continental Imsco Supply again, it was one they'd taken in from someone in the spring of '54.

#193 SB: So was the drilling business really going in Alberta at that time?

RT: It doesn't run on a level keel, busy all the time. The drilling industry has always been noted to be, it's got its highs and lows, it levels off low for awhile, it levels off high for awhile. The graph on the drilling, we kept that in the CAODC office, we kept one for years and you could walk up there and look at that graph and see every time, of course, when the spring break-up hit it just dropped straight down, nobody could move. And it starts building back up, and the summer, some summers are high but most of the time, the high peak is when the winter operations comes along and the muskeg areas are frozen over and you can get back in these areas. That was generally always a high and another high was in the summer or late fall. But some years it ran off there reasonably flat. There

were some real ups and downs. That's basically how we started acquiring these other rigs. When there was a real low someone started up a drilling contracting and just didn't have enough capital or cash to carry on and they went broke and the rig wound up being on share sale or something or a supply company took it back and we bought it from them. That's the way we started building it up and continued that. We bought the 7<sup>th</sup> rig, I think was in the fall of '54 and the 8<sup>th</sup> rig in the spring of '55 on those kind of basis.

SB: What kind of ways could you, you know, with the company, were you trying to cut corners or anything like that?

RT: No, I didn't want to cut any corners at all. The only thing, as I said before, in the early years, the Toronto group took over the company and changed it to Cambridge Corporation, we made some fairly good money the first while and they wanted 80,000 this or 100, something like that. We were doing very well and every time we got a little ahead they took it, put it in something else and as I said, I said to Frank, I don't think this is a good idea, our company, we can make them more money than they're getting out of that, we're not getting any advantage out of what they're doing with it, I think we should build the company up and he agreed and that's the way we proposed it. Each time I talked to Frank I'd ask him if it was okay and then he'd have to tell the Toronto group what kind of a good deal we'd found and we got the approval to go ahead and do it. We were running it strictly but still you want to talk to the boys up above to let them know what's going on.

SB: So when you became field superintendent. . .?

RT: Actually that was in the spring of '51.

SB: Was it a change of pace again for you, were there other things you had to train yourself in to. . .?

RT: Not really. It was just more to coordinate and to help each tool pusher each day, to phone in a report, to keep them on their toes, to stay out of trouble is the biggest thing. A little more responsibility I guess, but it was easy compared to the first 6 or 8 months in Canada, when I had the 2 rigs out there. At that time, I even had to figure out the unemployment insurance book for the boys and if somebody fired somebody I had to figure out the time to pay them off. They kept a little chequing account in the bank in Edmonton for that purpose. Working out of the Tulsa office was a very hard situation. It was too far away. You'd phone and tell them this guy's quitting and he's got to have the cheque if you fire them and the unemployment insurance book, it was quite a chore. I really looked back and think I don't know how I got through those first 6 or 8 months. I went to sleep in the car a couple of times on the road, but however, I managed to survive.

#250 SB: What about accommodations for people working on the rigs. In the late 40's, early 50's, was it hard to find a place to stay when you moved into a new community?

RT: Yes, they were very scarce actually. It was a chore. A few of the boys had trailer homes and they moved them. It finally eventually came down to, I'd say by the middle 50's, we had 3 or 4 if not 6 or 8 trailer homes with every rig just about. The boys bought their own because we moved those small rigs so often. But in the early '49 and '50 it was really a problem. We had to drive from Edmonton to Redwater all the time, that was a tough

situation, then the same thing with Bruderheim, until we got accommodations for them to live in. In the early days we had a crew truck to haul them back and forth. But that's a tough situation, it doesn't pay off, it's always somebody wrecks it or bangs up this or that and we finally decided, that wasn't a paying proposition and we paid the boys a little more money for travelling. If they could find accommodations closer, 1 or 2 of them could, he just got a little more money out of it, not having to drive that far. Eventually, it always has been, if you went up north, back in the bush, there's no accommodation around you had to take a camp for every rig and live out at the rig. That has become more it so happens out on the prairie now when you're quite a ways from a town of any size. I think almost half the rigs have a camp for them nowadays. I'm not sure of that figure recently. But when I sold out we had 10 rigs and we had 5 camps at that time also.

SB: Do you know when the first camps would have started coming in, the kind of unitized camps when everything was built. . .

RT: That would be in the mid 50's, when Atco really started unitizing the camps, easier to assemble and move and so forth.

SB: This was in the mid 50's, you were spending quite a lot of time expanding then and looking for new rigs to buy?

RT: Well, I just always had my eyes and ears open and if I would hear of something I went by and had a glance at it to see what it looked like. If it looked anything decent at all then you got interested and you put a bid in on it.

SB: Would you ever buy ones that you had to overhaul or where you could make one rig out of several rigs or something like that?

RT: No. We only did that one time, this would be in about '57 I think. We bought 3 rigs at Virden, Manitoba, from Tom Cleary's company, it went broke down there. They were up for sheriff's sale and we were only interested in one of them. So we put the bid in, purchased the one rig from the sheriff's sale and then the sheriff's sale came back to us and afterwards and these other 2 rigs, they had some fairly good components, some parts of them and said, and said, we'll make you a real deal, you can have these for this and that. So we couldn't turn it down, went ahead and bought the other 2, we bought the 3 of them. We were only going to make 2 of them operational, all at once, wang, the activity picked up there and they were looking for rigs to move in there. So we took some extra equipment and did make the other one, we had all 3 of them working in Virden, Manitoba at one time. Every rig we bought, I was very fortunate, I had a real good mechanic. As far as I'm concerned, the top mechanic. Not only an engine mechanic but he was a machinery man, he understood the fundamentals of the operations of draw works and equipment. We would take and go through every draw works we bought, we went through it completely. Just checked the bearings, we changed all this and that, and he said, it's runnable like this and so forth. And run the motors and if there was any question we overhauled them before we started them. But we were very fortunate to have a man of that capacity.

SB: What was his name?

RT: The first one was Bill Anderson. Bill stayed with me a long time and he had another good mechanic, Martin Borza, that he knew very well and we hired him as Bill's helper and trained him. The 2 of them worked together in the field and so forth. Later on, we let Bill

spend more time in the officer. We got to the point where a safety supervisor was very important so we promoted Bill to the safety supervisor and Martin as maintenance man. If we got in a bind, were a little short or something, Bill always went out and did mechanical work anyway. But we were very fortunate in the 2 men.

End of tape.

Tape 2 Side 1

SB: I guess by this time your personnel was building up quite a lot, you had more than just a handful of people working for you.

RT: Yes, we didn't increase our office staff a great lot. But we did have, I think it was in '53, we purchased a truck and we got a second truck to haul the small equipment, the hot shot work between the rigs and so forth. ??? of hiring someone, and he helped do the rigging up and so forth, it cut down on some of the expenses. But after I came into the Calgary office I promoted one of the tool pushers to a field superintendent, and after we bought the last 3 rigs we wound up having a superintendent and an assistant superintendent to look after the smaller area. As I said before, the biggest factor I think, we were fortunate, the first men we hired were basically farm boys or had been subject to manual work. We told them if you will learn to do it our way, what we prefer the way it's done, we will promote you if you work at it. I think give the boys an incentive, they feel like they're a part of the organization and they will do an awful lot more for you. We didn't hire, I think in the whole operation we didn't hire more than half a dozen drillers through that whole span of expanding. We promoted our own.

SB: Were you still doing well completions in the early 50's?

RT: That pretty well started dying down, originally there weren't too many service rigs around to keep up with the pace but companies started building up. Bigger organizations in service rigs and there are lots of service rigs around now, lots of them. The big rigs don't do any completion I don't think anymore at all. There might be the odd, very small occasion it happens. But in the early days we completed all of them. That's where your trouble develops, your completion jobs on a big rig.

SB: Were there any other examples of problems with completions that you can think of?

RT: Yes. We had several disastrous things during the completion of wells. We had one in Swan Hills, completing a job for Home Oil Company and we had one down at Seven Persons for Home Oil Company. They were both doing completions. Connections broke or something happened. The one in Swan Hills was just a failure of a plug to hold that they put in the tubing while we take the blow out preventors off. They set a plug and it didn't . . . it held for a little while. Had the blow out preventor unbolting and picked it off and the plug let go and it was disaster. The rig caught fire and burnt down. We only had 2 occasions in my experience as far as wells blowing out and disaster. The one at Atchison, that wasn't a well blew out, we already had the casing run, that was one of those things that happen, we lost circulation and those can develop. But we had one at Flatbush, we were drilling a hole for the Gulf Oil Company, drilling around 2,700' I think, when it happened. The boys were making a connection and the well started unloading fluid. They

closed the blow out preventors on it, and when they did put the pressure on it the surface casing, cement job I guess wasn't a good cement job and it started coming out around it. It held for about 15 minutes when they closed the blow out preventors, everything was quiet. They were getting organized, mixing mud etc. and popped what little mud they had in the tanks around it and all at once it started popping, flinging, in the cellar. It blew out around the outside of the surface casing and it caught fire, burnt the rig down. Created a big crater and we had to move a rig in and drill a correctional hole and kill the well. That was about a 45 day chore altogether. The second rig to complete it and get it cleaned up. And we had one, it happened at Tilley later on, just east of Brooks. We were pulling out the core, no, we had cored, just put in the core barrel again, and the well unloaded on us. Closed the blow out preventor on it and the high drill held it while the boys went down to close the ram??? preventor on it and it unloaded the drill pipe again, started blowing it up and knocked the bushings out. And it caught fire and we lost the rig there. So we had 2 of them lost that actually blew out and lost the rigs. We didn't lose all that, just lost the draw works, derrick and component parts. The outbuildings weren't hurt in that one. That one we brought in Red Adair to solve it. So I've been involved with Myron McKinley when he was a firefighter and Red Adair was a junior at that time for him and then Red took over after Myron retired and run his own business. I've seen Red 3 or 4 times on different jobs I wasn't involved in when he was up here.

#058 SB: So about 1956 you were mentioning that you got some equipment from Devon Drilling Company.

RT: I think that was in '58, I can't remember. I was trying to think here a little while ago. Devon Drilling Company, I don't know whether they went broke or what the score, I don't know the details. Lorne Falconer was involved in that company. They wanted to get out of the drilling business and we arranged to buy the 3 rigs complete, through the Continental Supply Company. Continental took the rigs from them and we turned around and made a deal with Continental on a small down payment and a cash payment each month as we went along. So like I said, we lost a rig at Flatbush and we lost one at Tilley. This was afterwards. And we sent the one rig to Aberdeen, Washington in, I think that was about '58. Drilled 4 holes down there, 2 for an independent group and 2 for Sunshine Mining and we sold the rig to the group down there and left it there.

SB: So how many rigs. . .?

RT: We wound up, when things were all cleaned up, we lost the one for Home Oil at Seven Persons also, and we cannibalized one rig. So we finally wound up our operation, the last few years, running 10 rigs. We then concentrated in that time on building the rigs up, improving them to the best of capacity we could. We bought a National 55A draw works and put on rig 6 to increase capacity of it where we could go to 10,000' depth. Most of the rigs we had were 3,500-5,000' rigs. Then we had 5 that were 7,000', 8, a couple of 9,000, we got the one that was 10,500 then.

SB: Was drilling equipment hard to come by at certain periods?

RT: Yes, it was, in the early years it was very hard to come by. But in the later years, the 60's on, there was no problem getting draw works at that time. Because there was lots of them.

A second hand ??? at a sheriff's sale or an auction sale. At times through the period drill pipe was a little hard to get. That's one reason we decided to go ahead and purchase the Devon rigs. Each rig had a good string of drill pipe on it, plus the fact they had 7,000' of brand new drill pipe in the yard. We thought that was, price wise, you couldn't beat the deal so that's why we purchased that really.

#092 SB: What about casing, was it. . .

RT: Casing, yes, at times through the period of the 50's and 60's, I don't remember the details up and down, it had up and down periods. You had to beg and borrow to get casing for some of the wells. It was scarce at times but then at other times they had lots of it. So that's the trend I think. When everything is down and nothing going on, they sort of set the mills back for awhile and then all at once, somebody gets a field, something is discovered, and all at once, bang, you need . . . Say, there's half a dozen major companies drilling there and you've got to have 20 strings of casing in nothing flat. There's a period when they have trouble catching up I think. I was never involved in that particular end of it, as we just strictly drilled the wells. But sometimes you'd hear the other guys saying, I just can't get the casing, we'll have to wait or we'll get it from somewhere else or borrow it. So they borrowed a lot of casing back and forth, to keep operating sometimes it happened when it was scarce.

SB: Were there any manufacturers in Canada that were producing casing and that kind of thing?

RT: In the early years there was very little. There is now, yes, there is ??? Tube, there is Stelco, Alberta Phoenix, there must be 4 or 5 that manufacture it now. There was quite a bit of casing came from Japan also in that period.

SB: Were there different quality, were there some that you wouldn't want to use because of an inferior quality or anything like that?

RT: I think they had a little of that happen. I wasn't involved in it but sometimes we have seen the odd casing that the threads and couplings weren't really up to standard. This was in the early years when they first started manufacturing it. In the last decade I don't think there's any problem. It all has to pass API specification and so forth.

SB: What about with the derricks themselves, you were mentioning before that sometimes with the jackknife derricks you'd have problems or the trailer derricks you'd have problems with them toppling over?

RT: We only had one occasion that we had one turn over. It has happened to different people at times. Our happened, unfortunately we were drilling on a well out close to Chinook, Alberta that was the smaller trailer rig. It was just about spring break-up time and you have a problem, your frost is going out so your substructure foundation gets to settling and it gets all . . . it leans one way, so you try to jack it up and build up to get your derrick straight. We were out of the hole one day jacking on it to straighten it up and brought a pipe from the derrick and we had the guide wires loose on one side, the wind came up, got real strong, and whipped it around and turned the trailer and the derrick both over with the drill pipe in it, on one little rig. Made a real shmuzzle of the derrick. It didn't hurt the drill pipe much, it bent a little, we had to have some of it straightened. We

brought one of the other little trailer rigs in there, and finished the hole. ??? but we got a new derrick, bought a new derrick in place of it.

#131 SB: You were mentioning also that safety, you had to develop safety programs and all that.

RT: Yes. In the early years they were pretty lenient where the safety rules were concerned. As you have disasters and different things happen in the field, like any field that you go into, they will get more strict and certain regulations you have to conform to or they shut you down. This is a great thing and you've got to have this. I think there's something happening right now in regards to what's going to happen in this H<sub>2</sub>S, poison gas stuff and the Conservation Board is going to get very, very strict on certain areas. You will have to have all kinds of different types of controls and safety factors. The rig will, it will be like a city itself almost for some of these wells.

SB: Did you ever have any encounters with sour gas?

RT: Yes, we've had a little. Fortunately we never got anybody seriously hurt. We had guys get a little shot of it, but we carried gas masks on every rig and that's what you have to have. Of course, that was a regulation. You had to have them finally. In the early days we didn't but they passed the rules, you had to have gas masks on all of them and that's a great thing. You need them. Because you can't tell what can happen and when it can happen.

SB: So towards the end of I guess it was 1956, Frank Bridges was thinking about getting out of the business?

RT: It's kind of a hard thing to say exactly how this developed. After we'd had a couple of problems with things I suggested to Frank to not take the situation. He wouldn't listen, he went ahead and took the deal and I said, Frank, we'll have trouble. This happened 2 or 3 times, of course, he was the president and part owner and I was just working for them. I came back from a little vacation I took down to my sister's place in Vienna, Virginia and the Toronto office asked me to stop by and visit with them so I did. They approached me what they wanted to do and I said, that's fine if that's what you want but there is no way I can continue operating under these conditions, I'm ready to pack it in. They said they felt the same way and they were going to buy Frank's interest out and promote me to president and run things for them and asked me if I would consider doing this. I said, that's fine, it was hard to say that, Frank was a fine gentleman and I admired him but he again, as I said, he had worked as a landman all of his life until he got in this organization and worked for a major oil company and of course, they can do things in a big way and he still thought big. So they made the arrangements and bought his interest and asked him to retire is the way it developed.

#171 SB: So you did decide to carry on as president then?

RT: Yes. I ran the company for them then, until I think it was in '59, they said, they thought. . well, Brian Newkirk Sr. had passed away and Brian Newkirk Jr. had had polio when he was a boy and he was wheel chair bound. He was getting tired and he said that he wanted to get away from the grind of everyday worrying about this and that and he was strictly a mining man, just wanted to do a little bit of mining promotion and so forth. They wanted

to sell the drilling rigs and get out of the oil industry. Bill McKee was the secretary treasurer of it, he said, Ray I want you to have it, I want you to buy it. I said, I can't buy it and he said, we want you to have it, I said there's no way. I talked to a couple of supply companies, of course, at that time money was pretty tight, scarce to lend it. We had just purchased those Devon rigs and we had payments to make on them yet. So it's pretty hard to borrow money from a supply company when you've got money already borrowed from a supply company to make payments on the other rigs. They let it carry on through, they came back I think the next year, this was '59 or '60, they came back the next year and said, Ray, we're going to sell it regardless of what happens. But we're going to sell it on the basis that you go along and run the company for whoever it is, go with that company. I said, that probably won't work out very good but whatever you say is fine. They didn't find a buyer for it and they finally said, we are going to put it up, an announcement up for sale. Someone, Norm Wilson I think it was said, Ray go see John Scriminger, he probably would have some money for something like that because Norm Wilson knew Bill McKee very well also. Norm and I had been to the Grey Cup game once or twice with our wives and he got to be good friends with Bill McKee. McKee wanted me to have it because I'd built the thing up from 3 rigs to 10 at the time. We had 11 at that time, we lost the one at Tilley after that. Bill says, I want you to have it and when he came out with the figures I said, holy mackerel, you're serious. I showed the figures to John Scriminger and he said, when do you want the money, tomorrow, we can't afford to turn it down. So I really got a very good deal, I was very fortunate that McKee wanted me to have it so badly. Bill Atkinson raised the details for me to purchase the company. I couldn't buy Cambridge Drilling because it was a wholly owned subsidiary of Claybar Uranium and Oil Ltd. So we had to purchase all the stock that the Toronto group had in Claybar Oil and Uranium in order to get control of Cambridge Drilling.

#214 SB: And you had been buying stock all the way I guess?

RT: I had been purchasing a little stock of Claybar Oil and Uranium, a little here and there as I went along before this time for the last 4 or 5 years. Because I said, if we kept building the drilling company up and got it going, the Claybar stock has got to be worth something one of these days. I bought it at a fairly reasonable price. As you know, mining stock has up and downs like everything else. They participate in the odd well and there's some mining deals and the stock would drop down and go back up, drop down, I'd catch it on the lows and buy a little every time that I could. So we bought all the stock, they just controlled 56% I think it was, of the stock. The deal that John and Bill Atkinson made with me was that they would hold the Claybar stock and give me a 10 year option to pay for it, out of money coming in from the rigs and so forth. Through this period Bill Atkinson was pretty sharp with figures and he and my accountant, Don MacGregor sat down and worked out the fundamentals of the whole situation, along with Dick Matthews, the attorney, so that everything was worked out proper and above board, clear, how it could be arranged. They said, this is what we propose now, we propose that you have a reduction in the capital of the stock, the stock was listed as value, \$1. They reduced the capital from a value of \$1 to 90 cents, that gives you 10 cents a share on

every share. Well, in the process, before we did this I had been purchasing the stock. After I bought the rigs what little few dollars I had of my own I bought all the stock that I could possibly get hold of at that time and when they made the reduction in capital I had about 74% of the stock. The 10 cent a share reduction in capital gave me a big lift of money, cash flow to carry on, just turn it over to John and Bill. Which we ran that through Dominion Oilfield Supply and I had to purchase, we agreed I would purchase at least 75% of my bits and running supplies for all the rigs through Dominion Oilfield Supply. So we had a pretty good relationship and it worked out very good, with the reduction in capital and 2 ½ years operation, I paid for the rigs. But again, as I said, I was very fortunate, I got them at a very good deal. It was Bill McKee, who is gone now, he passed away 3 years ago, was a super fellow and he thought highly of me and wanted me to have the deal because I had built it up.

#260 SB: So that was in 1962 that you . . . ?

RT: Yes, early '62 I got things all finalized and purchased the rigs. I had them paid for before '65.

SB: So did you change the operations at all or do anything differently?

RT: What we basically did after we. . .no, didn't change the operations of the rigs or the fundamentals of it, we did do one thing. We had to take and wind up the drilling company after we bought it from the Toronto group, wind up the drilling company and put all the assets in the parent company, which was Claybar Oil and Uranium. Then we changed the name of Claybar Oil and Uranium to Cambridge Oil Exploration Ltd. We couldn't use Cambridge Drilling because it was the name the company used before. So we just changed the Claybar to Cambridge Oil Exploration and got it approved. We operated under that name then until I sold it on July 31<sup>st</sup>, 1970, to John Thompson, Thompson Industries actually.

SB: So how would you decide, when a company calls you up and asks you to bid on drilling a well, how would you decide how much you were going to charge and things like that?

RT: When they call up and ask you to put up a bid they generally tell you how deep they're going to drill it, what formation they're going to drill through and how they're going to handle it, what kind of mud program and everything else. Then you set down and you take some logs of wells in the general area, look at them and try to coordinate how those bit records went through it and think drilling so many days, so many bits and you sit down with a piece of paper and you work out exactly what your costs are per day with the rig you're using, what your moving cost in and you come down to the bottom and you say, 15% profit and put the figure out there and bid it on a footage basis. We tried to work on a 15% profit in most cases. Some areas we misjudged and we'd be a day or 2 longer so you make less profit. In most cases I had a good engineer working for me, he wasn't a qualified engineer but he'd roughnecked and drilled for me and pushed tools for me and I brought him into the office to help the other superintendents. That was his chore, to sit down with all the electrical logs and draw the picture out on the well next to it, the closest one to it. He used red pencil and this and that and told them basically where to change the bits and how to run them, and if it got a little rough in certain areas to slow the rpm's

down. And we were very fortunate, we had a nice little operation. We cut 2 or 3 days off this hole once in awhile, of that one and that's just money in your pocket. That's why we did so well I think we were pretty fortunate. Well, I've still got to go back and say, the crews make the rig. If you haven't got a crew out there that will perform or feel that they are part of the operation and obligated to do something, that'll make it, if you don't you've got trouble.

#313 SB: Do you remember how much a rig would have cost to drill, say comparing the 50's with the 60's. Was it getting a lot more expensive?

RT: No, it didn't. You mean per foot wise. It didn't change a whole lot because the efficiency and technology changed so much through there that the footage rate didn't change very much from say, 1950 right through till 1970. In most areas it changed very little as far as per foot because we cut the days off so much and we kept streamlining the rigs and made them economical to move. Speed was the thing, cut time off. I'm not saying we speeded up the operation but I mean we made it so you could move it and assemble it so much quicker and then everything was set, less truck loads, just cut all ways we could. Except the efficiency was the big thing.

SB: How much would the total cost be of drilling a well then in the 60's or something?

RT: In the 3,000-3,500' range, generally speaking, you were talking in the \$3 a foot range. Some of them \$2.50, some of them \$3.50 but around \$3. When you got into the 5,000' range, in certain areas you could drill them for \$3.50-\$4. It fluctuates, it depends on the area you're in. Basically, I think we drilled in southeast Saskatchewan it was about \$4.50 a foot and they finally got that down to where it was \$3.50, \$3.25 even. Down towards the end I guess it was \$3. But your technology and . . . the improvement in the bits was a big factor. A bit could run so much longer, the bearings could stand so much, so every time you could run a big longer you cut days off. Say, you drill a hole out here of 6,000' and you had to use 15 bits. That's 15 trips to change bits. The bits improved so much down the line that you could do it with 6 and 7, I mean you're taking days off your operation right there, plus wear and tear. Every time you take that pipe in and out of the hole that's wear and tear on everything, plus your drilling line and everything else. I don't think the footage price changed, well, just say it like this, from '50 to '70 in the general area, maybe in '50 we got a little bit more. Let's go back and say about '52 to '70, it didn't change more than \$1 a foot anywhere in the area as far as the cost for drilling it. Now then that could change to the company different wise because they might use a different mud program, different logging, it cost them to complete a well could be different. The casing and everything else got higher, the stuff you bought, but the rig itself, I mean we just drilled it faster, less days, less hours on the bottom.

SB: What about the wages of the people working on the rigs, the roughnecks to the tool pusher, what was that. . .?

End of tape.

- SB: I was just asking about the wages of the people working on the drilling crews.
- RT: The wages in the early 50's, it gradually came up as you went along, just like everything else did basically. But not a great big change until the last, right now, I don't know what the wages are exactly for roughnecks but it's about 4 times what it was in the 50's, give or take, it could be 3 ½ times, it's about that. I think it's \$6 and something an hour or \$8 an hour, I'm not sure what they get on the rigs. I haven't been involved in so long I couldn't tell you but there is a great change there. And the same thing with your derrick men, drillers and tool pushers, it's just graduated like everything else.
- SB: What about business, did you find the atmosphere of the industry was changing from the 50's into the late 60's, as far as the way you did business or anything like that?
- RT: Yes, there was quite a change. You go back to the early 50's, even up to the 60's, I think it changed, the first great change you would notice would be in the late 50's, or say, '55 on up. Originally someone would call you and say, have you got a rig over in this area and you'd say yes, well, what would it cost you to hole and I'd say, \$3.25 and you'd say, call me back in an hour or so and we'll talk about it and we'd say, okay, we'll drill it for this. And you'd shake hands and it's a deal, you went and drilled the well. We drilled lots of holes in the early days that didn't have a contract signed for. But then the accounting industry got so much more involved in it in the later years and you had to have the contract signed ahead of time and so forth. I think, it was just like everything else, a handshake, you trusted people. Like business today you go out and you're sceptical to just shake anybody's hand, say it's a deal and go do it because half of them won't perform. But in the early days you shook hands and it was a deal. Sometimes it came up later, the company would call me back and say, hey, remember that well we drilled over there and so forth, and yes, they'd say, our accountant says we have to have a contract, one of our partners or something was involved. We may have finished the well 3 months ago or 6 months ago and been paid for it. So we'd get a contract out and date it back to those days and sign it and put it in the file for them if they had to have it. That's because you trusted people.
- SB: I guess there was more competition as time went on too.
- RT: Yes, the competition got tougher. When the accounting industry got so tightly involved in it, it would be a nickle or a dime a foot as one got the job. In the early days, the guy knew the crews and knew the rig would perform better than the other one and you got a lot of jobs where you could be two bits a foot higher than half a dozen others, you'd still get the job, if they knew the equipment and knew the rigs, you know, the personnel.
- #034 SB: So you carried on up until 1970, you decided to sell Cambridge, what were the things that led up to that decision?
- RT: Really what browned me off or upset me basically was, I had purchased the stock, starting in the mid 50's all the way up through and built the company up to where it was at. I had a nice little company and we were running along good and out of debt and so forth, no payments to make, we were in great shape. I don't know, someone in the east decided they wanted to buy a block of my stock I guess. As I said, the old Claybar Uranium and Oil was a public company listed on the Calgary and Toronto Stock Exchange. So we

changed the name to Cambridge Oil Exploration and we carried on being listed as a public company. Someone wanted to buy a block of stock I guess, I don't know who it was or how it started but the stock went up two bits a couple of days, two bits the next couple of days, another two bits. Then it went up a little more and I said, holy mackerel, something's going on. So I called my broker and he said, I don't know who it is, someone out east. So I said, I think I'll just sell 10,000 shares of it and I can make a dollar a share on it and the wife and I will just take a little holiday. He said, check that out, you're the major shareholder, talk to your accountant before you decide to do it. My lawyer said, you can't do it, you've got to have approval from the securities commission. So by the time we got all the transaction and the forms filled out, I think there was 13 different questions we had to answer in detail, it was 4 or 5 pages of it to complete it. Sent it down to the securities commission, it was an Ontario company so it had to be sent to the Ontario securities commission. They finally approved it, said you can sell it, but in the transactions meantime, whoever was trying to buy the stock, they'd bought 100 and some thousand shares of it, I can't remember the exact figure now, decided they weren't going to buy anymore and the stock just dropped back down to where it had been for the last year or so. It dropped 60 some cents or 70 cents a share. I said, well, I don't want to sell it now, forget it, I won't sell it. Then my lawyer and accountant advised me, you know, if you want to sell the company you can sell the company. I said, what do you mean, you can sell lock, stock and barrel, all the shares you've got. A major shareholder of a public company can sell his interest to anybody as a block, at one time. But you can't sell part of the shares. They call that distribution of capital. It's against the law. And I think it's a good law in a sense. But I didn't realize this until I got involved in it. It is too harsh a law I think, on certain individuals like myself. You should be able to sell a little and do something if you've been working all your life for it. So I said to my accountant and lawyer, well, if that's the way things are I'd sell the whole darn issue if somebody comes along and wants to buy it or give me a good price for it, if I can't sell a piece of it and do what I want to do. That's what led up to the sale of it eventually.

#068 SB: And who did you sell it out to?

RT: To John Thompson, well, Thompson Industries actually.

SB: You had known him before?

RT: Oh yes. John Thompson moved out here from the east. He was a CA, a chartered accountant. He articulated with Clarkson and Gordon. Of course, he was a good friend of my accountants which was Clarkson and Gordon and I think that's how the transaction got around that he got hold of it. John was looking for something I think. Basically what John was looking for, he didn't tell me this but I know in my own mind, that when you're a private company and he was a private company. . . He came out here as an accountant for Peter Bawden Drilling and he left Peter Bawden and started on his own, bought a rig and started up, and he kept building it up. He was up to 6 or 7 rigs and decided if something happened, he's a private company and he had a disastrous blow-out and everything just erupted like that and so forth, they can sue you individually, if you're a private company, for everything you've got if you can't pay for it. A public company is

different, they can sue the company, take all the company has got, but the individual, they can't really take your home and everything with them. I think that's what he was protecting against as much as anything else. He wanted it so we dickered around several months and finally, I wanted this and he offered less and I said, no, no way and he finally came back and he finally got within a nickle of where I was at. And we talked again and he said, okay, let's compromise, we'll split it 2 ½ cents. So we did. And made the transaction. John went on to do very well. As a matter of fact, the next couple of years, John moved a couple of his rigs down to the States and some of mine. Some of my tool pushers went down there, the superintendent stayed in Canada and worked for them. John told me about 2 years afterward, he said, Ray if I hadn't had your crews I would never have made it. I knew they were struggling making their payroll and he said, I've got to compliment you, you've got some good crews. I said, yes, I think I had the best. That was my hardest thing to do to let go because I wanted the crews to be involved. Then John got lucky, he participated in some interest in some wells, I think it was in Louisiana or very south east Texas there, with John Fleming, which was Bonanza Oils at that time. They hit a nice little field down there and John came out of it very, very lucky and did very well. Then he wanted to get involved in parliament and he sold it to Atco. And John made a lot of money.

SB: So were you happy with the results?

RT: In a sense, yes and no. I really wasn't ready to sell it out but when the situation developed that I couldn't sell part of it or couldn't do what I wanted to do with it, I just got disturbed or upset and said, I'll sell the whole thing. I wasn't that old, I wasn't ready to quit, but the deal was with John, when I sold it to him, I couldn't go back into the business and be competitor for at least 5 years against him. The first 2 or 3 years after I sold it, it was pretty hard to console myself and keep active and doing something else. I formed a little company, Tull Exploration Ltd. and got involved in a couple of little deals and I've got a little, small cheque comes in a month from it. Very small. But I found that right quick that it's a lot harder to find oil or take interest in a deal that will hit. Most of them are dry holes. Me competing with 100% dollars against companies that are using 50% dollars, it's hard to compete. So I've been very inactive for the last 4 or 5 years.

#111 SB: I was wondering if you could think of any of the men that worked for you over the years that were really outstanding that you could always depend on?

RT: Oh yes, I had some outstanding fellows. I mentioned the 2 maintenance men or mechanics earlier. My original superintendent moved back to the States several years ago, he didn't stay but 3 or 4 years. But I had Roy ??? worked for me for, he came up and worked for quite a few years, then he decided to get out of it after he got so many years in. He said, I'm tired of the cold weather outside and I'm going to get into something else. But Rennie Blair stayed with me from the time I hired him in '49 till I sold out and he was a super guy and dependable. Hard worker. He was a little bit rougher on some of the men than I liked in some ways but he demanded things and he got a little softer as the years went along and got a little better with them. Heinz Coomer was another outstanding fellow. When I sold it Rennie Blair was the drilling superintendent and Heinz Coomer

was his assistant. That's the last two, the top men. I had some ones before, Lanky Desjardins was a good man, very dependable. But he had a boy that had a real problem with muscles and couldn't get around and his wife just couldn't handle him so Lanky couldn't be away from home looking after the rigs. The boy, she couldn't pick him up, couldn't handle him, he was wheelchair bound. So he had to more or less quit the oilfield and get back, well, live in one place.

SB: And what about the engineer you were mentioning?

RT: Yes, the engineer was Paul Wees???. Did a very good job for me studying the logs and filling the graphs up for the tool pushers to use. Then the tool pushers sat down with the drillers and they'd look it over, and hang them around the doghouse. It could help the young drillers an awful lot. We sort of took them by hand and led them to a certain extent. As long as you do that and they feel they're a part of it and they know they'll get advancement, that's the ones that are serious. We were very, very fortunate. Sure, everybody has fishing jobs, they have little problems, but basically, we didn't have any real orangutans that liked to tear up stuff. As I said before I think in all those years that we built up those rigs from 2 to, at one time there were 14, we only hired about 6 actual drillers that had been drilling for somebody else. We just hired roughnecks and kept building them up and training them. I think that was the backbone of our operation.

#145 SB: You mentioned you belonged to the CAODC, how long were you with them?

RT: We were a member of that, all. . . I can't remember, we joined as soon as it was formed and we were a member until I sold out.

SB: Were there any other associations like that you were involved with, or clubs?

RT: The company belonged to the CPA also, Canadian Petroleum Association. It was Frank Bridges, when it was formed he joined that. Of course, I was a member of the Petroleum Club. You've got to be around there periodically to associate with different people. I kept it for a few years afterwards, I don't belong to it anymore, I gave it up 10 years ago. I think I was very fortunate. I worked hard all my life until I finally got the thing going good. I didn't start playing golf until 1954 I guess it was. I met a lot of good associates on the golf courses and it helped at times to associate with different ones playing a little golf. The public relations situation with different people helped a lot, they would say, we had a good time over there, we're going to drill a well and I'd say, we'd be very interested. So the contact is the big thing there. I hired my brother to come back up here and help me run the company after I was appointed president of it. He came up originally and stayed until '52 and went back to the States and he was still working for Falcon Seaboard. After I got the office, he said, he didn't like being out in the cold up here and his wife didn't like it here either. But to come back and be working in the office to help me, he would consider it and so he did. He helped me run it from '56 till I sold out then.

SB: Were there any events that stand out in your mind as being really terrifying or really exciting or anything like that?

RT: I can't say any of the mishaps, like the blow-outs or the disasters on the rigs were, yes, they're terrifying, they're scary yes.

SB: But I guess at the time you're not thinking about that, you're just thinking about how to

get it in control.

RT: That's very true. The only thing is, which is the best route to take to control the thing and go out there and do it. That was another philosophy I had with my tool pushers, when I first set them up and they called in to the office and said, you've got a problem with something, this happened, I would say, just a minute, we've always trained you fellows and if that's the way it happened, it doesn't sound right to me, there's something wrong. If you're sure that's the way it happened fine, but you better go back to the rig and call me back and tell me exactly how it happened. It doesn't sound right. If it didn't happen that way and I have to come out there and find out it isn't, you know what happens, I'll have to send you down the road or put you back to roughnecking. I think I was fortunate in that respect, starting at the bottom of it, roughnecked all the way up and I had an awful lot of experience in a hurry. Not being facetious or bragging or anything but I got so much more experience in a short time as I worked more than anybody else would in the area at that time, that I knew how things happened out there, and the boys couldn't kid me. They'd say this and that and I'd say, no, it's not right, it won't happen that way, it will happen this way, you go do this and you check this, you'll find that. And they'd generally come back and say, you're right, this is the way it came out. But if you're out there in the field all the time, you're young and working at it, that's your livelihood, you know what's going to happen, what's going to go on. I was very lucky, I had a great concentration or memory of where things were on certain rigs, in the doghouse, tool houses. And when I went to visit the rigs I went out, opened the tool houses and the benches in the doghouses and looked around and seen what was here and so forth and so forth, what they were carrying for extra supplies. Not necessarily the rig supplies but basically stuff that might happen to break, what you can do to control it. They'd call once in awhile and say, we haven't got it and I'd say, you go look in this certain box in the corner back there and you'll find it. I was very lucky in that respect.

#200 SB: Are there any other comments you'd like to make on the industry or your career before we wind up?

RT: Nothing particular. I did get hurt in Louisiana, it wasn't a very fond circumstance. On a rig working back there in the swamps, it was in the summer of '46 I guess it was. Rigging up on board roads. In the swamps you build board roads down through the swamp and then a board turnaround ??? alongside of it. And we were rigging up the rotary table in the side of the draw works and the truck backed up and set on the corner and I picked up, I was drilling daylights at the time and the boys on the other side, have you got the chains hooked, yes, we've got them all hooked. They said, pick it up, I picked it up, one chain wasn't hooked right, just come loose and there were 2 fellows in the cellar. I hollered, get the hell out of the cellar. I dropped the table on the substructure floor then so it wouldn't hurt anybody but when it hit on one end it spun around and broke the post off that holds the Haliburton line and hit me across the head and busted my skull and my jaw and broke my arm. So I was in the hospital for awhile but that was the only accident I had. Little fingers and stuff, you get over those. But I came out of it pretty fortunate. They told the boys, I guess I was pretty wild when I come to and they had 2 of the boys to sit up with

me that night in the hospital. I would want to get out of bed and they'd hold me down. They told them there would be 3 guys in there at night, 3 people wouldn't live that night, 2 of them didn't make it I guess. But that's been a long time ago, so I've been very fortunate in that respect.

SB: What do you feel about the whole oil industry, it's future, do you feel it's going to carry on much the same as it's been?

RT: I really think it will Susan. You'll have your ups and downs, that's the oil industry period. The graph shows that, we proved it, it's up and down, up and down. It will level off for awhile but not too long a period, it will change. But I think we have a very good possibility of seeing an active year coming up, I don't know, in the drilling industry. I don't know why I'm predicting that but just what I read and hear in conversations.

SB: I'd like to thank you for taking part in this, it's been interesting.

RT: Thanks Susan.