

PETROLEUM INDUSTRY ORAL HISTORY PROJECT  
TRANSCRIPT

INTERVIEWEE: Tom Wark

INTERVIEWER: Jim Wood

DATE: November 1984

JW: . . .October 25<sup>th</sup>, 1984, my name is Jim Wood and I'm at the home of Mr. Tom Wark in Calgary, Alberta, 8540 Atlas Dr. S. E. I'll be interviewing Mr. Wark on his career in the petroleum industry. This is tape 1, side 1. Okay Tom, I wonder if we could then start this afternoon by finding out where and when you were born?

TW: I was born on a farm out at Gladys Ridge in the spring of 1916, April 10th, 1916. I was born on the farm. I have a birth certificate that reads that I was born at Gladys, Alberta.

JW: Where is Gladys Ridge?

TW: It's about 15 miles straight east of Okotoks. Our farm was 12 miles north of Blackie, and 2 miles west. My father homesteaded there, approximately 1902 I guess, 1901 or 1902.

JW: Where was he from?

TW: They came from down east, in Quebec. They came up here right around the 1900's. My mother came from England, I believe she arrived in Canada about 1903 or 1904. My grandfather was an old country English butcher and my father and mother were married in 1909, December 29<sup>th</sup>. There was 3 boys older than myself, I was the 4<sup>th</sup> boy. There was 9 boys born in our family and 3 girls. So consequently, we had to work outside the home, there wasn't that much work, the farm couldn't occupy us all.

JW: Did it support you all?

TW: It did, up till we left home. It supported us fairly well. Of course, we lived through the hungry 30's. I don't ever remember going hungry. A lot of times there wasn't that much variety but we always had something to eat.

JW: Did you go through high school down in Okotoks?

TW: No, I went to Pine Canyon school all my life, it was the only school I ever went to. I went to grade 10 in that school. Actually, it was a public school up to grade 8 but at that time, 1930 and '31, you couldn't afford to send people to board away from home. And there wasn't too many children, the school would accommodate up to 25 in that one room school. So they let several of us go through to grade 10 in that school and it was a good school.

#043 JW: Did you have summer jobs?

TW: Yes. I worked out whenever there was any work at all. I worked for an old timer there, Harry Connell, at \$10 a month. I worked in 1932 on a ranch down by Lake McGregor, the Lazy H Ranch, they had approximately 3,000 head of cattle. I worked there for \$250 a year. He had 2 townships of land there and I'd ride. . .

JW: 2 townships?

TW: Yes. For grazing land and I would ride all spring, during calving time, ride the range. In the wintertime I'd haul hay and feed cattle. In the wintertime, after we started feeding

cattle, I would have 2 loads of hay pitched off before breakfast. I'd get up at 5:00, hitch up the horses and go out and unload 2 loads of hay, put the team in the barn at 8:00 and then go and get my breakfast. Then I'd haul hay all day and leave the 2 racks full at night, next morning, 5:00 you'd be out unloading hay again. This was for \$250 a year, which was good money at that time, for a young fellow. There was all kinds of people working on farms for \$10 a month and their board. So I did that for a year, then I broke horses for a living and worked for my uncles during summer fallow, driving horses. I drove up 16 head of horses, pulling a combine and anything at all that was to be done, we would put our hand to it.

JW: Did you ever go into the Stampede?

TW: Yes. I rode around Acme, Carstairs a little bit. But we just didn't have the money to spend to go around to enter these places. At that time there wasn't any consolation or junior events, you rode against the best ones. The Wattran??? boys was riding then, Pete Knight was world champion and you had to be very good at it. I did horse breaking. Every Sunday during the summer we'd go to a little stamped somewhere, just even a gathering in the neighbourhood and rode horses and stuff. We did that and I worked for my uncle out at Davisberg there, breaking saddle horses and farming. Then I got a job, or went to Turner Valley to see if I could get work. While I was working for Uncle Jim Suter, out at Davisberg all the tractors at that time had steel wheels. A salesman come out there and wanted to sell Jim a set of rubber tires to fit that Alice Chalmers tractor. Jim didn't figure that they would be any good for farming, all right on the road but no good for farming. So it wound up that the fellow gave him a set of tires for the tractor. Jim had this new Alice Chalmers. So he couldn't lose by that. The fellow also promised that he would get 10% of all the tire sales through this demonstration. Anyway, we put the tires on and they were 100% better than steel wheels, even out in the field. You could pull a bigger implement in a higher gear than you could with the steel wheels. Consequently, that was about 1934 and that was about the start of rubber tires being used on farm tractors.

#099 JW: Did you have any career aspirations at that time, when you were on the ranch there?

TW: Not really. There wasn't that many opportunities. Just to survive was more, just going to make a career out of surviving I think at that time. Then I went to Turner Valley.

JW: How come you went over there, what was the . . .?

TW: I had 2 uncles that worked up there, Uncle Bill, my mother's brother, or my mother's 2 brothers, Bill and Walt Vardy. They were up there and thought that I could probably get work in the valley there somewhere. I stayed there quite awhile, doing just anything at all, odd jobs of any kind. A little carpentry work. My Uncle Bill had about the second house that was build in Royalties, Little Chicago, and so many people working down there and they wanted him to start up a restaurant, in conjunction with his garage. So I used to help in the garage and I served food in the restaurant for Aunt Annie. Did anything in the meantime, I'd be around chasing these guys for jobs. We'd walk down to the Mercury plant, over to the BA plant, anywhere we thought there was a job, we'd be there in the morning. I used to see old Woodrow Wilson at the rigs and I guess he just got tired of me

chasing him for a job and decided to put me to work.

JW: When was that now, still in 1934?

TW: No. That was in '36, when I went to work there. I went out to the Banner in '35, my uncle Walt was working out there, as a fireman. That was a cable tool rig out by the Prince of Wales' ranch. Kind of a wildcat deal. He was firing boilers out there and I used to go out there with him. But then it was pretty hard to get jobs of any kind. I used to work around just to help people, something to do. Wasn't getting paid for a lot of it.

#131 JW: Were there a lot of guys out there in the same situation?

TW: Yes, there was quite a few fellows, experienced men that didn't have jobs. In '35 I was 19 years old and pretty husky. I did pick and shovel jobs, pipelines, dug ditches. We had automatic ditch diggers then but they had to be on pretty level ground. Anywhere that was going through a coulee or up over a hill or something, that would all be dug by hand.

JW: No kidding.

TW: Yes, we dug that by hand.

JW: That would be the pipe into Calgary?

TW: Yes, and also pipelines from the various wells into the plants. There was the Sterling gas plant at Royalties, Imperial hooked up all their lines into that gas plant. They'd have a main line and we could tie into that from different wells but you had to lay your own pipeline.

JW: So they wouldn't use power shovels or anything?

TW: No, no, we dug ditch by hand. We would dig it 4' deep or 5', whatever it required. We would be given 12-20 feet of ditch to dig per day, according to how deep it was, how wide they wanted it dug. Well, you had to dig it wide enough to work in anyway. I done lots of that.

JW: Were these pipeline companies? Who were you working for, a pipeline company or . . . ?

TW: Worked for Royalite Oil Co. They had a gang there, they called the Flanders Gang. Earl Flanders was the boss and he used to look after all that stuff. A great deal of it was for them. I used to build rigs, I worked for Cliff Shaw and Boyd Johnson rig building. We got 35 cents an hour, 40 cents an hour and I would be running steel. I drove truck, anything at all.

JW: You hauled cement for awhile, didn't you?

TW: Yes, I hauled cement for Crown Lumber there. It was all bagged cement then, there was no bulk cement. I remember getting on that truck at 6:00 one night. Between then and 8:00 the next morning I handled 48 ton of cement and drove 200 miles. I got \$4.80 for it.

JW: That was all unloaded by hand?

TW: Yes. I piled her 9 bags high in the shed and I unloaded it out of a boxcar onto the truck at Okotoks. The truck would haul 6 ton so I made 4 trips and it was 50 miles a round trip, so that 4 trips was 200 miles. I would load the truck at Okotoks out of a boxcar, then I would unload it and pile it 9 bags high in the cement shed at Royalties. And we didn't think anything of it, it was just work. I could load that truck with 6 ton of cement in 15 minutes. There was no problem there.

#182 JW: You were digging cellars at that time too weren't you?

TW: Yes, contracted digging cellars. There was the 2 Walleter??? boys and another farmer there. He had a team of horses. The cellars under the rig at that time were 12' square and 18' deep, with a 32' runway in them. We dug those for \$100. And on the Granville cellar we made good money. We made about \$7 a day per person digging that one. Then we got on the 3 point, we dug that one and it was harder than a superintendent's head. We had to pick that one all the way down and only made about \$2 a day per person on that job.

JW: Who were you working with doing a lot of this stuff, anybody that continued on in the industry?

TW: No. We just did this little bit of contracting ourselves. Bert Franklin was the farmer's name that was there and Trevor and Charlie Walleter and myself, there were the 4 of us that were doing this kind of work. We used to haul mud, there wasn't any patent mud for drilling mud, we used to haul that by truck. Hartel's hauled a lot of the mud, they had a dump truck and a winch. I'd go along and hold this slip, load the truck up with the slip and the winch line. Then I'd usually work somewhere in the daytime and then I'd do this at night. I could sleep in the truck going back and forth to the pit.

JW: How would you get on with Earl Flanders, would you just show up in the morning and hope he needed you or how did that work?

TW: Yes, you would go down there, they had a place there where the crews would show up and he would hire you. It was more or less day work. You were hired by the hour but down at the Royalite plant you'd show up there and he'd pick up so many. They were a pretty fair bunch of guys, they would know who had worked and who would need a week's work or something, to keep him living. They worked it that way, they split the work up, that pick and shovel work and stuff. They gave it to whoever, they were pretty fair that way, all those fellows. They knew just about who would appreciate a week's work to keep them going.

#229 JW: When did you get on full time with anybody down there?

TW: 1936 I started roughnecking for Head and Snyder. They were the biggest drilling company there. Woodrow Wilson was the field superintendent, Clarence Snyder and Hillary Head owned the company. When I went to work for them Woodrow was pushing tools and he had 8 rotaries and 1 cable tool rig running and he looked after the whole bunch of them himself. The drillers and stuff that he had at that time had more experience. They were actually capable of running the deal themselves, pretty well. They were fellows with a lot of experience. In fact, you had to have considerable experience in order to get a drilling job. I worked for almost 4 years before I got a drilling job and I was the youngest driller in Turner Valley at the time I went drilling. This was the way things were at that time. You just worked longer. Like, if you started racking pipe you would know your derrick job by the time you got it. You would know about pumps and stuff from working with the derrick man. You would also go up and work in the derrick on the next guy's shift, just for the experience. You did this just to learn the jobs. Today, they get a promotion and learn about it after they get it pretty well. But at that time you had to know your job in order to get a promotion. There wasn't that many rigs running. The deal

when the boom was here, a lot of guys were set up in a year from the time they went drilling. But we just needed the men, the number of rigs increased so quickly that we didn't have the experienced people to put on them and consequently we set up a lot of fellows that we were probably pushing them pretty well. Today, one tool push operates one rig only. Whereas when I started pushing tools you looked after at least 2 rigs all the time.

#276 JW: Well, you mentioned Woodrow Wilson pushing 8. But they were drilling a lot slower then too.

TW: Oh yes. Yes, our drilling was much slower. At that time we didn't carry as many drill collars, didn't have the weight on bottom, couldn't utilize as much weight on the drilling bits. We could turn them just the same as they are now but if we put more weight. . .we only used one stand of drill collars at that time. If you put more weight on your differential in your drill string was up in your drill pipe. So we had a lot of twists off, where pipe would twist off. We would fish it out, we didn't have any fishing companies as they have today and you call a fisherman, we would fish that stuff out ourselves.

JW: We'll talk about that in a minute. I wonder if you could just, maybe what you remember about Woodrow Wilson, what kind of a fellow was he and then some of the drillers that you were working for then?

TW: Woodrow was a real fine fellow. He was a real seasoned oil man, he came from the States originally I believe. He was a very good hand, and he could handle men, he could handle people real good. He could tear a strip off you and do her in a good fashion if you had it coming to you, he would sure let you know about it. But he would never leave you with a bad taste in your mouth. And rig operations wise, he was about as smart a man as they came. He had experience fishing, anything like that, he was real good.

JW: This is the end of side 1, tape 1.

#### Tape 1 Side 2

JW: Tom, you were talking about Woodrow Wilson there before the phone rang and mentioned that he was a pretty good fellow to work for.

TW: Yes. I worked for him or worked for a driller under him. Shorty Hockland??? was the first driller I ever worked for. I started racking pipe for Shorty Hockland and that was Shorty's first drilling job on the Granville. It was a steam rotary rig and working in a wooden derrick. The same type of derrick as this one up here only it was taller. It took us about 11 months or 10 months to drill that Granville to 7,300'. It took approximately 99 bits, if I remember right, to drill that. Today you would drill it in 3 weeks with probably 6 or 7 bits. That is the change that has taken place in the oil patch in the last 48 years or so. The metals that they're putting in bits is so superior today. Tungsten carbide and gauge buttons, to keep the hole out to gauge and so forth. We didn't have any of that hard metal back in the early days. Consequently, when your hole got a little bit under gauge, it took sometimes, 2 bits, to bring it back out to gauge so you weren't drilling small holes. But a bit that would run 4-8 hours was considered a pretty good bit.

JW: And then you threw it away?

TW: Yes, they were all thrown away afterwards. The bearings were gone in them, most of them, we didn't have the metal to build the bearings in them. Today you can run a button bit, with proper running, it will give you 125 hours in the hole then your bearings will wear out. In those days, 4-8 hours was the life of the bearings. We just didn't have anything to compare with today's metals.

JW: That was a Newell and Chandler rig, or Snyder and Head?

TW: Snyder and Head was that rig, then Newell and Chandler moved in in 1937. I did work for Newell and Chandler.

JW: Maybe you could talk about, there were different drilling outfits and different companies operating. Did one outfit have a reputation for running better rigs than another, would Woodrow Wilson say, keep his equipment in better shape than some other outfits?

TW: There was about 6 or 7 outfits drilling at that time. Royalite had their own rigs, that was a subsidiary of Imperial Oil. Royalite ran their own rigs, Head and Snyder had about 8 rotary rigs and a couple of cable tool rigs, Newell and Chandler ran up to 8 or 9 rigs. Anglo Canadian Drilling, it was run by Ralph Will, they had I would say, 6-8 rigs. Bowler Drilling Co., Glen Bowler, had about 5 or 6 rigs at one time and Okalta Oil. Okalta had 1 rig there to start with, then they had 2 steam rigs. Commonwealth Drilling Co. started down there and they bought a new rig. Then there was Davie Drilling, they had 1 rig. So there would probably be 30 rigs or so running at one time down there in '37.

#052 JW: Would there be any of these rigs that you wouldn't want to work on?

TW: Not really. They were all about standard rigs at that time. Some of them were in a little better condition. Royalite always ran good rigs, and Commonwealth. Head and Snyder's rigs were older but they were as reliable as any of them of that period.

JW: You mentioned, we talked a little bit about Woodrow Wilson and you mentioned Ralph Will a minute ago. Who were the real innovators or the prime movers in Turner Valley in the 30's?

TW: The oil companies were Home Oil, R. A. Brown was the head operator of Home Oil Co. and he was connected with the Dingman well that was first drilled there. Okalta Oil was an oil company there run by Bill Hain???. Bill Hain Sr. was also connected with the Dingman well. Sam Coltis was the head man with Royalite. He was in charge of the drilling operation with that. There was another man there that was extremely well thought of in the oil patch was Charlie Visser. He was an Imperial Oil man or Royalite Oil Co., he worked for. And Gandy Woolridge, he worked for Imperial for 30 odd years. R. A. Brown's well, Turner Valley Royalties, was the one that started the oil works in the south end of Turner Valley and originated in that.

JW: I was going to ask you about that and I guess now we could. What was the impact of that Royalties well in '36, when it came in in Turner Valley? Did that set off a real boom?

TW: Yes, it set off quite a deal. Turner Valley Royalties was the only rig running down there at that time. After it come in they started up the Granville, Commonwealth, the whole west flank. National Petroleums, they all started drilling down there. And as the field progressed south and went across the river. . .the field wasn't that wide, it wasn't much

over 3/4 of a mile wide but it was quite a long field. They more or less had to just follow it from drilling. We had no seismograph or anything like that to pick out anything on it. Just from a geologists knowledge of what was down there.

#095 JW: That boom in '36 was still in the midst of the Depression. So you had the Depression on one hand and then an active oilfield on the other. Were there a lot of jobs all of a sudden available, and lots of work or did it change that much?

TW: It expanded quite a bit at that time. The experienced hands that were there, they got their drilling jobs and so forth and we hired quite a few hands like myself, that hadn't much experience. Most of them were farm lads and stuff. I had 2 brothers that went to the oil field, brother Joe and brother Bob. They came up after I got a job, we built a shack and they came up and stayed with me and in turn they got roughnecking jobs and drilling jobs. Brother Bob, he's still living, he's retired, he's 72 now. Brother Joe passed away in '77. He got to be president of Hightower Drilling Co., he was president of that for a number of years and then he was in charge of Westburn International, looked after most of their overseas work. After that, later on, in the 40's, 3 more brothers came to the oil patch. Well, there's 4. Brother Pete worked at Commotion Creek on a steam rig there, he and Bob both worked up there in 1939 and '40. The twins, Russell and Charlie, started working in the oil field a little later, around '44, '45. And brother Donnie, he started in the oil field in 1949. Russell is now working in Nigeria for Texaco. Charlie is working on the north slope, he's been in Alaska for 10 years or more. Brother Don is working in Jakarta, Indonesia.

JW: Did you run into him when you were down there?

TW: No, he went over after I came back. He's presently managing an offshore drilling platform in Indonesia for Arco.

JW: How about brother Pete?

TW: Pete worked for approximately 3 years in the oil field and then he went in the Army and served 4 years overseas. When he came back they needed help on the farm so he stayed there on the farm and worked on it until present.

JW: And Bob then?

TW: Bob retired and he was living in Edmonton for quite awhile. Now he has moved out to the farm, where we were all born.

#139 JW: Did he stay in the business though?

TW: Yes, he stayed in the oil field for almost 50 years.

JW: You guys almost have your own old timers convention when you get together.

TW: Yes. The Wark brothers were honoured at the last old timers down here. Brother Bob and I were the only ones there, the other boys were all overseas at the time, or away. But between, in the one family, I think we have 254 years in the oil field.

JW: That's got to be a record I bet.

TW: Yes, I think so. That's the total time that we've worked on the rigs.

JW: Just the number of people from one family that ended up in the business.

TW: Yes. I still go out on the rigs. Just the first of this month I was drilling a well up at

Boundary Lake. I just came back from there. Then I stopped through at Carrot Creek and cleaned up 3 locations for Golden Eagle.

JW: Back to Turner Valley for a bit here. Was there an influx of Americans say, in '36, or after the Turner Valley Royalties well came in?

TW: Yes, Newell and Chandler brought in all American drillers with their rigs. Or the head drillers more or less, were Americans. Ralph Will came up from the States for Anglo, Cody Spencer and a few of those people. Mainly the head drillers and stuff, on each rig, for Newell and Chandler. Anglo only had field sups under Ralph Will were Americans.

JW: How did these Americans fit into the Turner Valley scene primarily in terms of a drilling environment? I understand, a little bit different than what they were used to.

TW: Yes, it was a little different down there. They fit in all right because most of our rigs in the 30's were rigged up. In '48 when Leduc started, Parker Drilling Co. brought a bunch of rigs up from the States and brought American tool pushes and they had a lot of grief. Some of those fellows didn't think they had to winterize the way that our rigs up here were winterized and consequently they froze up a lot of pumps and froze up a lot of equipment and spent a lot of money thawing stuff out. Diesel fuel and stuff that wouldn't even be allowed today. The first year was a real expensive operation for them. After that they hired a bunch of Canadian people to get the rigs rigged up, to winterize them, so that you could drill in our climate.

#186 JW: Was there ever any attempt that you knew of, in the 30's primarily, maybe even up to about 1942 anyway, to unionize oilfield workers?

TW: No. We never had any union at all in the oil field or any talk of it here. I understand that in California they went union down there, rig builders unionized. Got to charging such prices as the people that owned the drilling companies decided that they couldn't pay this. The climbers and steel men kind of had the edge on them a little bit because it isn't every man that can run steel, climb those derricks and build rigs. Their prices got out of hand down there so a chap by the name of Lee C. Moore said, your prices are too high, he said, I'll build a rig laying down and we'll stand it up. We can put it together on the ground and stand it up in one piece. This was how they developed a jackknife derrick. I worked on one of the first jackknife derricks that was raised in Canada, in 1941.

JW: What one was that?

TW: That was Newell and Chandler, ??? derrick on a Lucy??? rig. It was brought in to Taber area, east of Remthem??? there, we drilled a well. Charlie Hawk was pushing tools on it, Art Bapps and . . .another old boy. . . and myself were the drillers on it. It was the first triple jackknife that had been brought into Canada. But this was caused through the unions wanting such a big price for building conventional steel derricks.

JW: In California?

TW: In California. And it was unionized down there. But we never had the unions here and I think that most of the operators up here seen what was going on with unions down there and discouraged them as much as they could. In 1948, in the Leduc field, the unions come in there and tried to organize. Tiny Bevans, he worked for Commonwealth and myself, I was pushing tools for General Petroleums. We went to pretty near every meeting that the



union had there and would ask questions and so forth, that kind of kept these unions from getting in. We would make sure one of us was at one of these meetings and we would just keep firing questions at the organizers. They weren't oil men anyway, that was organizing it, so consequently we didn't have too much trouble confusing them on quite a bit of that. The union wouldn't work in the oil field because the work is too diversified. You could go out, you could have to roughneck maybe, if there wasn't too many rigs running, you'd been drilling, you'd maybe have to go back roughnecking. Well, under a union, if there was a roughneck laid off somewhere, he'd have to go to work first, you were classified as such and such, you'd have to wait for that job to open. It just wouldn't work. We used to use men, when the drilling crew was laid off, we would use them to lay pipelines or rig up boilers or whatever it was, just to bring in a dollar. Under a union set-up you couldn't do that. Everybody would be classified. In fact, when you were running casing, somebody would form a casing crew, well then, the roughnecks would all go home until that casing was run, type of thing. Everything would be classified. You might work for your one outfit for 3 years, be entitled to a drilling job but if there was another driller wasn't working then they'd have to hire him before they could put you to work. This type of thing. So by asking these questions and stuff, we defeated the union in 1948. Once they're outlawed they're not allowed to start up again. Or once they're defeated in a vote, they weren't allowed to instigate another union for a certain period of time. Consequently, we kept them out and it's a good thing.

#269 JW: You and Cecil Bevans primarily?

TW: Yes, Cecil and I were big instigators. We had help. There was a little fellow worked in the office with General Petroleums, a smart little guy, he was the first aid man too with them when they first started in first aid work. General Petroleums was one of the first drilling companies that promoted first aid. This little guy would go to the meetings with me and he'd write these things down for me to get up and fire at them. Tiny and I had all the help in the world from different ones but we were both pretty big guys, nobody was going to bother us too much. When Tiny and I worked together down at Jenner, Tiny weighed 360, I weighed about 280. There wasn't too many of them that bothered arguing with us. But anyway, it was a good thing to keep the union out.

JW: Yes, I was just wondering if there were attempts?

TW: There were, just that deal up there in Leduc. I remember, when I was down home here I told my father about it. I said, we're beating them, he said, no, you won't beat them, they'll get in, they always do. But things got better in the oil field. They were good then. But people just couldn't work if they had that union in there the way they were used to.

JW: Well, that's right. I understand that Royalite sort of was fairly responsive to changing times and set the trend in the oil field for a shorter work week and better pay and that sort of thing, is that right?

TW: Yes. They were the major operators. When they changed it to 5 days a week and so forth . . . they also, during the war, they ran buses to haul men to work and so forth because fuel was rationed and that sort of thing. Whatever Royalite or Imperial did, the other companies went along with it pretty good.

JW: Maybe just talk a little bit more about Turner Valley and so forth. You mentioned you were living in what, a skid shack for the most part down there?

TW: Yes. Brother Bob and I built a 12 x 20 shack and that's what we batched in for quite a long time. Then we rebuilt it, we put another 12 x 20 on it, made it 20 x 24. That was in Royalties there, in Little Chicago. I had been up hunting in the mountains and I found a big set of mountain goat horns and I nailed them up on the front of the shack and we called it the Horn Inn. Quite a few people would remember that. We lived there. Bob went to work at Commotion Creek in B.C. and I got married in 1940. So I bought him out and lived in the house myself. Pretty well all of them were shacks, unless they were company build affairs that the company would build for their employees. But the rest of them, most of us build these ourselves. When I moved out of there, I sold that place, it was a 4 roomed house then, I sold it for \$400.

JW: Did you buy the lot that it sat on?

TW: No, that was rented. They wouldn't sell any. We had a gas line behind the house in the alley kind of, where the alley should be and there was a gas line run down there and we had 150 lb. of gas pressure on that thing most of the time. It sure didn't take us long to burn out garbage and stuff with that.

JW: I've got to change the tape.

#### Tape 2 Side 1

JW: Tom, we were talking about you having that shack there, got it into a 4 room mansion.

TW: Yes, it was a 4 room mansion with the outhouse out back. Each house had its own regulator, the main gas line had 150 lb. on it and it was a wonder there wasn't more people hurt. Buster Hanna and his wife got burned, the gas line went alongside of the house and it was covered with dirt right beside the house and the gas line had cracked during the winter from frost heaves. The gas went in underneath the house and built up down there and either from the fire of the furnace or from electric light or something, it ignited and blew their house up. I just don't remember whether Mrs. Hanna died from that accident or not. The same thing happened in Black Diamond. The fellow in the lumber yard, I'll think of his name in a minute, he and his wife had a house there beside the lumber yard and the gas line came from the alley. A heave out in the alley cracked it and the gas followed the line and the line went in to the cellar below the ground level. It was froze so it had to follow the line and it went in there and filled the cellar. She went down there to get some fruit for dinner or something and when she opened a trap door to go downstairs and she switched the light on the house blew up and she died from it. They had it investigated and they couldn't find anything. The gas that was coming in by the gas line was so small that it took quite awhile for it to build up enough in the basement. Anyway, the manager of the lumber yard, he asked 2 fellows that were working for him, Marvin Hayden and young Dodd, to go and clean up all of her clothes and stuff and they went in there and the damned house blew up again. Burned them a little bit but not too bad. Anyway, they re-investigated and found out that the gas come in from outside. It was a wonder there wasn't more houses or more people injured with that high pressure gas out

there because we set our regulator right up beside the house for most of it. But we put in most of the pipelines ourselves. But most of us were pretty familiar with piping. I remember, after I moved up to Leduc, after the Leduc Hotel blew up, they put the gas in the town there. I told them they had to bring the gas line up outside of the basement wall, then through, into the basement above ground. I had quite an argument with the gas company. They said we've been doing it this other way for a long time and I said, well, it's the wrong way and I don't want it that way. Bring it up outside of the wall, through the wall and then down to the furnace. After that hotel blew up they decided maybe that was the way it should be done. I see, in this house right here that I'm living in now that is the way it is, it's up outside the house, through the wall and into the meter box inside. Those are things that we found out the hard way through the years.

#047 JW: What kind of medical services were available down in the Turner Valley area in the 30's?

TW: We had pretty good service down there. They built a hospital at Turner Valley and Mrs. Burke, her husband had been a doctor, Dr. Burke, in Blackie and High River for years. He was our family doctor for 40 years I guess, 30 years, from the 20's on. His wife was the matron in the Turner Valley hospital, Dr. Burke had died. We had 2 brothers, Dr. Harry Lander and I can't just remember the other fellows name. They were in Black Diamond there and they were very good doctors. They looked after the oil patch pretty well. Any accidents, they would be out there in good time. They were the ones that came out when these 4 got gassed there, Spider Thomas and Cassidy died and Landers came out to that one.

JW: Maybe you could just talk about that a little bit more, what was that Tom?

TW: That was in the north end of Turner Valley there, west of Millarville store. It was North End #3, I was working on #4 for Bowler Drilling. Head and Snyder were the ones that these boys were working on and they were 1/4 mile apart.

JW: Was that a Home Oil well?

TW: No. That rig was Head and Snyder's and I forget what oil company it was offhand. Anyway, we had acidized. These were the first wells drilled in the north end pretty well and we weren't familiar with H<sub>2</sub>S gas. In fact, I don't remember it being mentioned at the time when we drilled these wells. They had acidized, this well that Head and Snyder had drilled was completed and the tubing was run and it was acidized. The cellars were only 8' deep at that time. It was deep enough that they couldn't get these guys out very well. But they had acidized the well and consequently a little acid spills over and gets in the cellar. And there was oil and we thought it was sudden fumes from the acid and so forth that had knocked them out. We didn't realize that it was H<sub>2</sub>S gas, at least I didn't. And I heard no one mention about it being H<sub>2</sub>S. That had happened, I believe, in '39 or '40. I'd just been drilling a short while when that happened. When it happened, as I recall, it was around 5:00 in the evening or 4:30. They got these guys out, Spider Thomas and young Cassidy were the first 2 that passed out and they fell down in the cellar. Sam Hector wasn't working on the rig, he just happened to be there and Bill Murray was working on the rig and they run in to get these fellows and they passed out. By that time

they got some other ones there and they got them all 4 of them out. But Cassidy and Spider Thomas had fallen face down in this oil that was in there and they'd got a pretty good shot of it, I guess, possibly drowned in it by the time they got them out. We worked on them, we gave them artificial respiration there for 3 hours. We kept 2 of them alive. Of course, the doctor got out there before that time was up, Dr. Landers, and he helped us work on them and we saved 2 of them and the other 2 were declared dead there at the rig. Bill Murray drilled for me afterwards in the Leduc field for quite a long time, he died about 8 or 10 years ago in Calgary here. Sam Hector just died a year or so ago.

#105 JW: What was the impact on the field down there, when they realized that H2S was something that you were going to have to pay attention to?

TW: We lost quite a few separator men, production men that were running separators. They would have to go up and gauge the tanks and this gas would knock them out if they didn't have a gas mask on. A lot of them didn't. Newt Blaylock was killed with gas, Bill Bowey, a neighbour of mine, he was killed with H2S gas out here at De Winton. There was quite a number of them before they really pinned it down, that it was that bad.

JW: That must have been a frightening kind of experience and time.

TW: Yes, it was. We never realized. With the cable tool rigs, I don't recall the cable tool rigs drilling deep enough to get that. On some of the wells that we drilled in '36, when we completed them, were sweet gas wells. Today they are sour gas because we have used too much gas in Turner Valley that the sour gas was down below, it's heavier than sweet gas and it is migrating up to displace the sweet gas off of the top. They say that those wells, the Davies wells, National down in the south end, they were all sweet wells, I worked on them and today they're sour gas. We've used the sweet gas off the top and this stuff is migrating up a little bit I guess.

JW: When you realized H2S was a factor, what kind of precautions then were taken?

TW: They came out with the gas mask set-up and so forth. But safety wasn't practiced that much until about 1948. By that time I was in the Leduc area. GP started running St. John's Ambulance courses and everybody was taking them. I thought it was a real good deal, I held a medallion for First Aid in 1950 I believe it was, or '49, I had a medallion for First Aid. We hired full time First Aid men to go around and educate the people at the rigs and this sort of thing. But before that there wasn't that... we always had a First Aid kit and stuff at the rig but we didn't have First Aid people and didn't have people that were that proficient in handling H2S. I don't remember of any other drilling personnel being killed with it, other than those boys on that one rig.

#146 JW: What about other kinds of accidents, looking back on that era? Was it particularly dangerous or less so than today?

TW: That well was Major 3, instead of North End 3. I was drilling on Major 4. After we completed Major 4 I drilled on Major 7. I drilled on that well up to 3,000', that was with a smaller rig and then they brought a bigger rig in there and I went with the small rig. Up on that rig there, brother Bob and I just happened to drive up to the lease one afternoon and the derrick man had just been pulled out of the derrick. They were pulling the pipe

out and he had unlatched off of this stand, they were working Oklahoma style and he pushed this stand out to rack it back and when he went out there, blocks caught his safety belt. It pulled him out of the derrick and it broke the rope out of the back of the belt and he dropped 85'. We just drove up there when this happened and they were just carrying him out on the end of the cat walk there. So I went up there and I cut his boot off. His bones in his feet were all doubled up and busted. His left leg was all smashed. He'd hit his hip, landed on his hip and his left leg. It was severely smashed. His head must have hit the floor too, it was a plank rig floor, it wasn't steel like today. It was a plank floor. He looked in pretty bad shape. We got some rocks and heated them up with the steam hose, it was a steam rig. We heated them up with the steam hose and we got blankets and got a mattress there and laid him on the mattress and piled this stuff around him. Jack Haley was the nipple chaser for Bowler. He wanted to put the mattress in the truck and haul him into town. Peanut Adams was the driller there at Bowlers, he was an old cable tool man that had started rotary. Peanut and I said, no, we should leave him there, the doctor will be out pretty quick and we should leave him there. He's going to die anyway and there's no use bouncing him around in the back of a truck. We figured that he'd had it. So we just kept him warm, kept him covered up, put these rocks all around his body and kept him warm and covered up and told Jack that there wasn't any use moving him. Pretty soon the doctor got out there, Dr. Lander. He said, who kept him here, who didn't want to move him to town. I said, I did, I was one of them, Peanut didn't think we should move him

#199 either and I didn't see any point in moving him. He said, that's the only thing that's saving his life, if you'd have moved him he wouldn't have got very far down the road. We'd kept him warm because he was in shock. The doctor said, you've done the only thing that could save him. They got the ambulance out there and the doc never moved him for another hour after the ambulance got there. After they loaded him up they stopped the ambulance 2 or 3 times on the way in to the city. So Doc rode in with him and they stopped the ambulance, and the guy lived. His left leg was broke in 57 places. He lived. His leg was a little shorter than the other one. But as far as I know, he might still be living. Wilf Gamache was the driller on there, on Tower. He really felt bad about it, it really shook him up that this had happened. It was just one of the rig accidents, different ones did happen. Slim Wells, he got killed on a drilling rig. He got caught in the cat head and it wound him up in the cat line and tore his arm out of his shoulder. But it had beat him going round the cat head, it had beat him pretty bad. That was on an Okalta rig I believe that Slim was working on. There was several people killed with cat heads on those deals. It had happened up in Drayton a couple of times after I moved there, I served on several juries up there on rig accidents. One of them was where a fellow had got killed on a cat head. There wasn't any automatic cat heads or spinning with chains at that time, it was all done with rope. And when I first started out, there wasn't even any guards on the cat heads to keep the rope from piling up. You had to work there quite a while before they'd let you use a cat head. The cat head man would break stuff out with the rope on the far side of the cat head and the driller would snap everything up tight with the rope on his side. When the first chains came out there, oh, the roughnecks hated those chains

worst that the devil hates an angel. They would get their own ropes. The deal was that a chain would last, it was much cheaper than rope so these roughnecks, when they told them, they would save their own rope and they would hang on to that, they'd take it and hide it after they got in the hole. They'd run and hide their rope so that they next guy couldn't use it and break it. It was quite a deal. It took them a long time to get used to that chain, they just didn't like them.

#258 JW: What kind of impact did the Conservation Board, coming in in the late 30's have on the. . .?

TW: It was a good deal. A lot of the people didn't care for them too much. Mostly people like myself that didn't understand what they were doing. At that time they wouldn't tell the people that were working for them what the cost of things were. They wouldn't say, that kelly hose cost x number of dollars or to move this rig cost so many dollars or to supply water to the boilers costs so many dollars. They wouldn't let us know anything about that, that was contract and kept strictly in the office. We weren't told too much about it. That didn't start until in the 60's. Lou Pajack??? was one of the first guys and he was with Bawden Drilling. He took, when he was drilled soup??? for Bawden, he took a contract out there and gave it to the tool push and said, here, fill this out. Find out what it costs so that we can do a better job for the contractor. You guys will know what this stuff is costing when you have to replace something or something is damaged. He said, we want you to figure out what it costs to move a rig and all this stuff. It turned out to be a big boon for the oil industry because it made tool pushes and drillers aware of how expensive all this stuff was. What bits cost and so forth. Well, when I was starting out in the business that wasn't any of your business, they just wouldn't tell you a thing about it. When the Conservation Board come in we didn't understand. They were going to control the production and they were going to do it for a reason but we didn't know what the reason was. It was a conservation deal so that your water drive under the oil could bring the oil up level, and let it produce. We would get more oil out of a place down there than if you opened it wide open. A lot of us didn't realize just what they were trying to do. Then when this gas was all burning off they decided to put in big compressors and pump it back down in the ground again. A lot of people at that time thought we would never run out of gas. That there would be no end to it.

End of tape.

Tape 2 Side 2

JW: This is Tuesday, October 30<sup>th</sup>, 1984. I'm continuing my interview with Mr. Tom Wark. This is tape 2 side 2. Okay Tom, last time you were talking about the Conservation Board a little bit and didn't get a chance to finish. I wonder if you could just maybe relate how the introduction of the beginning of the Conservation Board affected your job, or did it really?

TW: Really, the Conservation Board was a help to the industry. We quit wasting gas. In the 30's gas was just a necessary evil to us. It was a medium of bringing the oil to the surface

and then just burn it up, never figuring that we'd ever run out of the stuff. We would drill wells that were good gas wells that today, would be real valuable wells and at that time, a straight gas well was no good to us. Our gas was probably 10 cents a thousand cubic feet at the well head and you couldn't afford to pipe it out, there was no market for it. But the Conservation Board could see that we were going to deplete our resources so they started pumping the gas back down the hole. After a few years of that it did increase the price of stuff. It was costing to put up these compressor stations and to pump this gas back down to repressure the areas and so forth. But in the 50's, they started selling gas. Consequently, anything that was produced was put in a pipeline and sold.

JW: So they didn't really come along and tell you how to do your job or change the way you were operating on the rigs?

TW: Not really. The Conservation Board as it was at that time, just kept improving their operations and relationships with the people. They decided to have the drilling companies all take ??? or deviation information of the holes and that had to be reported to the Board. If you were off of centre too far you were penalized on your production. Consequently we drilled a lot straighter holes. In the early drilling some of the holes deviated quite a bit. We only had one drill collar and we had quite a deviation problem. The first deviation machine, or check machine was a bottle filled with acid. We would pump that down the hole, leave it sit there for half an hour then pull out and it would eat a ring around the inside of the bottle at the deviation angle. It would tell us we were off of vertical but it wouldn't tell us which direction or anything. Another deal was when you pulling out of the hole, if the drag on your pipe increased significantly, that would indicate that you were pulling pipe out of a crooked hole. Some of those holes went to 20-25 degrees off, we didn't know it originally. But when the drag on your pipe increased 20,000 lb. or more we knew that we were pulling it up on the side of the hole. The Board, the ERCB, started making us take surveys. As techniques improved we could drill straighter holes.

#052 TW: Were there companies down in the valley specializing in down hole survey work at that time or not?

TW: We had Totco??? come in and they did that. Lane Wells and those people would run a multiple survey deal after the hole was drilled, which would show you exactly where the bottom was in relation to the top of the hole.

JW: This would be still in the 30's?

TW: No, that would start up in the 40's more or less. I remember Spi Langston starting to work down there, I believe it was in 1937, with Lane Wells. They were doing survey work and had quite a bit of technical stuff there at that time. When a well was finished they would log the wells and you could get that information. In the 30's we really didn't have that much knowledge of where the bottom of the hole was at any time. In the 40's they come out with Monel??? steel drill collars, in the late 40's. I used them up on Atlantic 3, when we drilled directional holes in that area. HOMECO, Houston Oilfield Material Co., they used Monel steel drill collars. You could run a survey instrument down there and get a true north reading. This would tell you more accurately where you were in the hole or where your deviation was going. From then on we could control where we were drilling,

in case we had to drill into a blow out well or something like that. In the 30's down there, one company used a type of whip stock. I'm not too familiar with it, I didn't work on that rig but a fellow by the name of Knucklejoint Joe was operating the deal. It operated on a kind of knuckle joint set up that you could circulate through and that was done in the 30's. But I'm not too familiar with that job, I never worked on it, I just knew that they were doing her, it seemed to me it was somewhere around Hartel. They had tried it at that time. Prior to when the Monel steel drill collars come in you used to run your pipe in and you would have to sight it in the hole. You would have a clamp on the floor and after you'd screwed the next joint on and tightened it up, the derrick man would set a clamp up there and line it up with the one at the table and you would sight all the way in the hole. It wasn't that accurate but they got it done, it did its job. Eastman Survey used to run that. They could whipstock to a certain extent. Most of our whipstocking at that time was just to go around a fish or something. There wasn't too much whipstocking to drill into a reef as they do today. Today they drill under a body of water, they can whipstock out on to the lake or something like that.

#098 JW: Did Eastman and Lane Wells and some of these, did they have offices in Turner Valley or not?

TW: Most of them, they had services offices out there but their main offices were in the city, in Calgary here. Most of them had offices or garage type set-ups. Haliburton.

JW: How about fishing outfits? I guess . . .

TW: There was no fishing outfits, we did all our own fishing up until about 1950. That's when the fishing outfits as HOMEACO and different fishing companies started up.

JW: Just jumping ahead a bit but why, what was it at that time, you know, at one point there were none and then all of a sudden, after the 1950's you had all of these companies doing that specialized kind of work?

TW: In the 30's pretty near everybody that worked on a drilling rig had a lot of experience. They were all capable. Then after Leduc hit oil the influx of rigs was so great that we didn't have the personnel that could do the fishing. We had a lot of drillers that went to work within 12 months of the first time they stepped on a rig, they'd be drilling. Consequently, those people didn't have any experience in fishing. So when these other fishing companies it was just as easy to get them. You'd tell them what you had to fish for and they had all the various tools, you wouldn't have to carry the tools with the rig. A lot of times you'd have a fishing job, we mostly just carried overshots for drill pipe and drill collars and we would fish for them ourselves. Whereas if it was a special type of thing where you had to have a tap or something like that, we'd have to fend for it. As I said, in the 50's, we had an influx of people to keep that many rigs running, they just didn't have the experience.

JW: There's some fairly interesting fishing techniques I guess, that were employed in the 30's and the 40's. One that always strikes me is sending down a wax and getting a wax impression. I wonder if you could just talk about some of the different techniques that you might have used that were. . .?

TW: There wasn't too much wax used as I recall. We would fill a fishing tool with babbitt???



or lead and run it in the hole. That would kind of give you an imprint on the bottom of this tool, whatever was facing up. Different things, whether it was a jagged piece of pipe or just whatever, you could get a reading from what was on this tool. It was mostly a soft metal, like solder or babbitt that would make an imprint. There wasn't that much wax used as such, because running in and out of the hole it wouldn't stand up. They would get imprints of this stuff and it would give them an idea. Some of them old drillers and stuff, Charlie Visser was one of them, I always figured he could track a fish through muddy water. He was that good at reading what was going on down hole, exceptionally smart fisherman. He worked for Imperial Oil

#153 JW: So it was lots of knowledge, and then a good innovative sense?

TW: Lots of knowledge and he had an abundance of experience. But he could picture what was down there, what the hole was like. He was extremely knowledgeable in down hole conditions and so forth.

JW: How about machine shops in Turner Valley? Again, in the 30's and even up until about 1942, who was, were there machine shops in town?

TW: Barber's Machine Shop was down there, one of the first ones. It started up in 1937 in Longview, or Little New York. They got quite large, they ran that shop for quite a few years and then they built one here in south Calgary. They ran that machine shop, in fact, Barber's Machinery is still operating. They could do almost any repair jobs right out there in the valley. Most of the steam rigs, they weren't that complicated to repair. When we got into diesel powered rigs they seemed to require quite a little more maintenance.

JW: Who was Barber, was he a driller that. . .?

TW: I met that man and worked with him. He worked out of an office in the city here more than anything. Earl Griffiths was one of his chief mechanics and machinists out there that was in charge of the field shop. He had a number of excellent mechanics, lathe operators and welders and stuff. A lot of their names I can't remember at the moment. But they could do all the threading of drill pipe and so forth, you didn't have to haul it into the city. Most of our stuff at that time was hauled on pole trailers, instead of highboy trucks like you have today. They were just a bunk on the trailer and one on the truck and you had your pipe on that. Most of our casing and stuff came in Range 1 and Range 2 and Range 3. Range 1 is from 15-25' in length. That's what we used mostly on cable tool rigs in the early days because we hauled a lot of it with horses and wagons. You were limited to the length of casing that you could handle. Then later, when they were using pole trailers and stuff on these trucks, went to Range 2. Range 2 is from 25'-35' in length. And on pole trailers, that's what we hauled with those. Then when they got 40' and 45' highboys then we hauled Range 3 pipe. That's 35-45'. It's a lot quicker, you don't have that many connections down hole and it's a lot better running the long casing.

#211 JW: Was Riverside Iron Works in town here, established by that time?

TW: Yes, Riverside was in town, they did quite a bit of work. But I think Barber's had most of the oilfield work cornered pretty well.

JW: I was wondering, there wouldn't be a job that Barber couldn't handle that would come in

to . . . ?

TW: No, very, very few of them. Sam Hector, Hector Machine Co. they did a lot of oilfield work in the city here. Sam used to have a lot of pipelines in the valley there for pumping water to steam rigs. He'd build a reservoir, he had a big one there at Hartel that would catch water and they'd pump it to the steam rigs for use in the boilers and they'd charge so much a day for that, for supplying water. Sam did most of that type of work down there.

JW: I know that you left the area in about 1940. You never were involved with War Time Oils down in Turner Valley were you?

TW: No. I went to Carseland out there and we drilled a well out at Carseland. Then I went down to Taber and drilled around Taber. We had a steam rig down there. We started drilling south of Taber on Kirkoff's place. I drilled there for better than a year and then I was called into the Army. I was working for Charlie Hawks, he was the tool push there, I was drilling at the time. I went and got my medical and everything, passed it. Charlie came out there to the rig and said, I hear you got an Army call, I said, that's right. He said, did you apply for a postponement and I said, no. If you want to get rid of me, now's a hell of a good time, I've got another job. So Charlie went in, Newell and Chandler went in and they got a postponement on this deal because so many drillers had left the oilfield. An awful lot of them had joined up. Royalite people, a lot of the men left there because Royalite made their wages up to what they were working at when they went into the Army. Those drillers that went in there got drillers pay all through the war.

#260 JW: Oh, I didn't know that.

TW: Made up by the oil company. They were very good, anybody that was working for Royalite at that time got quite a deal out of it. Anyway they kicked me out, or took me back on the rigs. From then on, you were practically the same as in the Army, you went wherever they told you to go. But you were classified as a person in an essential occupation. So after I left Taber I went to Norman Wells. I was up in the Arctic in 1942.

JW: Okay, we'll get into that Canol project here in a minute. One quick question, on that rig you were on in Taber, where did they get the water for that?

TW: They were pumped from down at Chin Coulee. The water was pumped from down there.

JW: How far away was that?

TW: We had, when we drilled out there on old Russell Shonert's place we were probably 2 miles from the coulee, we were pumping water. And that was in the wintertime, we had to run a heater alongside of it to keep the line from freezing out so we could blow it out.

JW: That's what I was going to ask, is how you kept that from. . . ?

TW: In Turner Valley we had the gas line run alongside the water line. The lines weren't buried really, to each rig. We'd run them and we had heaters that were heated with gas, it would bring the water up and you'd just pump them and then you'd have to blow the line out if you didn't run it steady, you'd have to blow the line out. We had gas heaters on the line.

JW: Taber and Carseland would be considered then, wildcats wouldn't they?

TW: Yes. Taber had oil, Taber's had oil for quite a long time. They drilled there with cable

tools and had oil to a certain extent.

JW: Was there much wildcatting going on in that time, prior to the 40's?

TW: It was starting quite a bit at that time, there was wildcat wells going in quite a few areas. It was progressively better. When I come back from Norman Wells we went back down to Taber and was working there, then I went down to Jenner and drilled one there. Then I went to Duchess and drilled 3 wells, I was pushing tools then. And I drilled some at Patricia on those jobs. Then I went down to the States. I worked in Cat Creek, Montana. I took 2 rigs down there and was drilling for Tom Brooks in Cat Creek, Montana.

JW: You got kicked out of the States though, didn't you?

TW: No, I was asked to leave. I didn't give them any static. What it was, I was down there, it was right at the end of the war, 1946. There was a lot of people crossing the border and so forth. I went down there and was working on a holiday permit. I'd go to the border every 29 days and get another permit. I was running these rigs, the labour outfit in the States was trying to eliminate me, to get me out of there. They wanted the jobs. Some of the guys were turning me into the Board but they couldn't prove anything, I didn't sign any papers and stuff. So the 5<sup>th</sup> time I went back there they said, Tom, you'd better go home. I said, I'm having a hell of a holiday down here, real good, I just need one more. He said, no, you're not kidding anybody, you're looking after 2 rigs down here. We just can't prove it that's all, he said, you've got to go home. So I phoned up Delbert Lewis in Turner Valley and said they'd told me to come home. He said, tell them to go to hell, I said, no sir, you tell them to go to hell, you're from down here. If you want me down here you'll have to get me down here the right way otherwise I'm coming home. I'm not going to get crossed up with immigration on account of that. Anyway I came back home at that time.

JW: I've got to change the tape here.

### Tape 3 Side 1

JW: Getting back to these wildcats in Carseland and Taber and prior to going up to, I guess you went to Wainwright too, quite a bit.

TW: Yes, I was at Wainwright for a little while there.

JW: What was going on at Wainwright at that time?

TW: Wainwright had oil up there, heavy oil and they had drilled a lot of it with cable tools in the 20's I guess and 30's. But it was a heavy oil, something in the order of Lloydminster crude. They had drilled there in the 20's with cable tools and we went up there. We had more problems in the early days. We were using heavy rotary mud and I think we probably missed a lot of the stuff that they're producing from today because it would mud off. It had to be a fair little flow or else it didn't show up. Whereas today, with their logging techniques, they can pick these domes out and then they can go to work and flush them out as best they can and they get production from that. Pacific Petroleum, on some of the wells I worked on up there, they would drill down there and they would change the drilling fluid over to a less than 2 cc. water loss and complete them that way. They seemed to do less formation damage with mud. A lot of the wells would make up to 100

barrels a day. They developed a technique for producing that, drilling it without damaging the production zone with mud.

JW: Would you call it an oilfield when you went up there, in '37 or so? Were there a lot of wells operating?

TW: Yes. They had a few wells operating up there. They knew the oil was there, it was just that in '37, they didn't have any modern technique for producing it.

JW: Where did you live when you were there, did they have a camp?

TW: No, just boarded at somebody's place there. No, there was no camps back in those days, just boarded.

JW: Same thing when you went out to Taber and Carseland, I guess you were married by that time?

TW: I had a trailer. Well, I lived in an old cookhouse right out there at Carseland. When I went to Taber I lived in town there, I rented a place and the family was down there with me. I lived in the hotel for awhile and then rented a place and the family was there, the wife and one child at that time.

JW: Before we get into the Canol project, I wonder if you can just, in that era of the late 30's and up until about World War II, you mention the jackknife rig, well, that came in I guess, a little bit later. . .

TW: Yes, that was in '43.

JW: And these Monel steel drill collars. What other kind of innovations in drilling technology did you witness in your early days there, some of the other major changes and innovations?

TW: We didn't change the drill collars, we always drilled with just one stand or 90' of drill collars. We didn't start adding more weight to drill collars until 1948. When they did put on 15 drill collars we cut our drilling time in half. But bits were getting progressively better as we went along. They kept improving bearings, improving the metal and so forth on drilling equipment. Many people have asked me when the biggest change I noticed, well, it's a hard question to answer. The technique has been so gradual. We're changing today, I believe, faster than we did back then. We're finding new metals and new techniques that we never even dreamt of back then. An ordinary Hughes bit, I've seen them dull in 20 minutes in limestone. Some bits would last 4-8 hours, they were good bits. Today you run them for 125 hours, no problem. The well that we drilled in Turner Valley in '37 took us about 10-11 months and it took 99 bits. Today we could drill it in 3 weeks with 5-6 bits. It's been that big an improvement in metal and technique. Today they drill a lot of this top hole with water. Some of them tool pushes figure if it's too dirty to drink it's too dirty to drill with. We never would dream of that back in the early days. You had to have a good mud and it slows you down like you wouldn't believe. These guys today can drill up to 1,500' in one 8 hour shift, drilling with water on top hole. So the techniques have just gradually changed.

#070 JW: This might predate your time a little bit but maybe you witnessed it or heard about it, with the introduction of rotary rigs was there a difficulty with some of the old cable tool drillers, especially the older drillers, adjusting to rotary technology?

TW: No, most of them adjusted pretty well. Old Peanut Adams was an old cable tool driller and he went rotary drilling. Carl Moore, one of the best cable tool drillers. In fact, he started drilling in 1923. He went rotary and made a hell of a fine rotary driller, he was very knowledgeable. In fact, I think that the experience they had down hole in cable tools helped them if anything, it didn't hinder them at all. They probably felt a lot the same when they started out as anybody changing from one thing to another. They would resent it a little bit, figure their old method was the best and so forth. The first rotaries that I heard of came into Turner Valley about 1924, '25. I had an old fellow working for me there, Pete Rockney, he worked on the first rotary rig that worked in Turner Valley. Pete is still living up at Mayerthorpe now, he's living in an old man's home there, he must be about 82 years old or so. Pete worked for me for quite a few years after that.

JW: Okay. You didn't go into the military but you did in a way, going up to Norman Wells. That was in lieu of. I wonder if you could first talk about how you got recruited for that project?

TW: I just applied for it. I asked to go up there. We knew it was a year in and we went up by boat.

JW: First of all, how did you hear about it?

TW: Just through word of mouth in Turner Valley, that Imperial was going to send a bunch of people up. Plus, the U.S. with the Japanese getting in the war in December 7<sup>th</sup>, 1941, with that attack there they figured they might attack the west coast here. All of the oil and stuff going up there had to go up by boat. They decided that they could pump the oil from Norman Wells and supply Alaska from inland. So just word of mouth got around that they were going to go up there and do some extensive drilling. Prior to '42 they had just drilled with cable tools and I believe that Norman Wells field started in about 1919. We took 3 rigs in when I went in, 3 Franks rigs, 1 truck mounted and 2 skid rigs. They were going to do quite a bit of drilling, which we did there, we drilled quite a lot.

#116 JW: Who at Imperial did you go see, who signed you up, do you remember who the person was there?

TW: I forget just who it was down here. Vern Hunter was the general manager up there and Archie Miller was his assistant when I went in.

JW: Maybe you could then just talk a little bit about the trip up there and how you did it?

TW: We came from Calgary to Waterways, it's up there on the Clearwater River, beside McMurray. There wasn't very many people up there at that time. We went from here to Edmonton and then from Edmonton on that muskeg special out there, to Waterways. They'd stop, every trapper along the road would flag them down and they'd stop and drop something off or pick something up. It didn't travel very fast through that muskeg up there. If you were going to change cars, you didn't walk along there, you just jumped off one car and caught the next one when it come by. It took us 3 days to get up there.

JW: Were you taking the rigs up at that time as well, were they part of . . . ?

TW: Yes, they had been shipped up there and they were all put on barges. We got on the old Northland Echo, it was a paddle wheel steamer.

JW: This was at Waterways?

TW: At Waterways. It was pushing barges and we took the . . . I forget, I think we had about 6 barges in front of that old paddle wheeler and we went up the Clearwater to Fort Fitzgerald. Then we had to unload everything there, there's rapids on the Slave River, the rapids that drown they call them. We had to unload everything at Fitzgerald and portage across to Fort Smith. Reload everything on the barges down there and we got on the old distributor and went down there on a paddle wheel boat down the Mackenzie to Norman Wells. Some of us went down on the boat and some of us flew in. They had a twin engine Barclay Grove. For a plane, it was on pontoons and some of them flew in and some of them went down with the stuff. The ones that went in on the boat, it took us 6 weeks from the time we left Calgary.

JW: Did you stay on the boat the entire time?

TW: No, I flew in. From Norman Wells, brother Bob and myself flew in.

JW: Was that the first time on an airplane?

TW: Yes, I believe it was.

JW: Who else was on that trip with you? You mentioned Vern Hunter and Archie Miller and Bob Wark.

TW: Yes, brother Bob was there, Roger McNarry and myself. George Cormack, he had 2 brothers, one of them was a pilot, one of the Cormack boys, Bill I think it was. There was a Cy Cormack, he worked in the supply office up there. Jim Tardiff, he was a big old rig builder, kind of a bull gang foreman, he went up there with us. I forget some of the other fellows.

#169 JW: Were you really the first group to go in then weren't you?

TW: With the rotary rigs, yes. We were the first group that went in.

JW: In your case, you got off the airplane, what was there at Norman Wells at that time, what did you see when you arrived?

TW: There was just a few log places there. The superintendent, he had a fairly nice log place and a few other buildings. But what we had was just tents. We lived in tents, 16 x 16 Army tents. They had a wooden floor and plywood on the sides, about a 3' wall, it wasn't plywood it was just lumber. It was up above 32" from the floor probably, the tent set down over that. We didn't suffer from cold or anything. We had decent heat. It was steady heat and you can be warm in a tent. Mind you, there was no running water or anything. That was all in a separate wash house that you had to go over there to the wash house. There was 4 men lived to a tent. Bob and myself and Hank Gibbons and Leo Cassidy were at one tent. We never suffered from that. Our cookhouse was a tent. Of course, at that time we had quite a few Army people. The officers, most of them lived up there where we were. They had about 200 Negroes and enlisted men there that were unloading stuff for the Canol project. They had their own army set-up down by the Mackenzie. That was quite a deal. Some of them Negroes had never seen snow in their lives, shipped them right from the south up there.

JW: That actually created some problems, didn't it?

TW: I don't know, I think that they had some pretty good clothes and I think that a lot of the guys weathered is just as good as not better than the people who were used to it. Outside

the isolation type of thing.

JW: You were pretty well separate from the U.S. construction groups and so forth, though, weren't you?

TW: Yes. We had our own camp set-up up there. We would be around them when they unloaded pipe and stuff for the pipeline, we would associate with them and see them and everything. But we had our drilling operation up on the banks of the river there.

#216 JW: What other kind of facilities were in the camp there, you mentioned there was a washhouse and a cook tent and living tents, any kind of a commissary?

TW: No. We had a tent there just for. . . the commissary was in a building there that they had to, you could buy some supplies and stuff and get that kind of stuff there. I don't recall, there wasn't that much recreation. We worked 12 hrs. a day, 7 days a week. There wasn't any much time to be doing much else because we worked pretty hard. By the time they got cleaned up and stuff, and go to sleep, why, there wasn't that much problem.

JW: You were drilling then, up there?

TW: No. Well, I drilled some but I was roughnecking while I was there. Most of the drillers and stuff were set up, they were Royalite hands that went up there, quite a few of them expecting to get drilling jobs up there. I drilled whenever they were short of somebody. I had drilled before I went up there. I originally went up as a roughneck, \$250 a month.

JW: Plus room and board.

TW: Yes.

JW: What were the drilling conditions like? Was it particularly different than you'd experienced down in the south?

TW: Outside of the drilling through the permafrost. The permafrost was from 90-115' deep. We found out that the drilling fluid would take the frost out of the formation and that would let the rocks fall in. On a couple of occasions, they drilled for 12-15 hours and they'd lose 15 or 20' of hole by rocks falling in. They had a cable tool rig up there and it could drill through that permafrost without any problem. Just drill a beautiful, straight hole right through it. Then you could look down with a mirror and you could see how far the frost was coming out of the ground. They had a natural ice house there for keeping meat and it was just dug in the ground and just the frost out of the walls kept everything froze. There wasn't any refrigeration. It was covered over and the frost, it would stay cool all summer. That was about the only problem that we had with the drilling, was just fighting that frost. At that time we didn't have good cement either, that would set up in frost. They kept working on it and developing different things. Frost would break the casing too, if there was enough fluid in there, it would freeze that solid.

#269 JW: I remember Archie Miller mentioning you were out there mixing cement in horse troughs.

TW: Yes sir, we mixed cement in horse troughs and we'd have some fellows dumping it in and some there was shovelled and we just started up. Then we had a wash tub over there full of calcium chloride. You put the calcium chloride in with the cement to make it set up a little quicker and it heats it. We'd get this trough full of cement and stir the hell out of it,

then we would grab this tub full of calcium chloride and dump it in there and dump it in there, stir it for a little bit and then pump her down.

JW: How was the supply situation up there, for drill bits and other kinds of equipment, were you getting what you needed?

TW: We had to take it all in as we needed it. One of the rigs, they had forgot to load the drill pipe tongs on, they had to fly a set of them in. Of course, at that time that was kind of unheard of, having to fly that kind of stuff around you know. I don't know why. There were planes there that flew out of Great Slave Lake there with fish, they hauled a lot of fish out by plane loads. They'd load them little old Pipers up with a ton of fish. Unbelievable, the loads they used to take off with there. But we flew those tongs in. Then we run out of grub there later on, and they flew some grub in from Yellowknife.

JW: How long were you. . .

TW: Out of grub? 6 weeks.

JW: What were you eating?

TW: Macaroni and rice. And then we would change that, we'd have rice and macaroni.

JW: How did that affect the morale?

TW: It was a little tiresome but we realized that it was just miscalculation on their part. They thought that they could just go down to Fort Norman and get some grub. A Mountie met them right at the dock and said, no way, you don't get any grub here.

JW: Why?

TW: You bring it in. He said, we have enough grub for Fort Norman for this winter and that's it. You get your own grub. He just wasn't going to take a chance on running them short. In the north country food is an essential item and I guess he figured that Imperial Oil, they could get it in there. So they flew it in. We had quite a bit of stuff. They started flying it in and it didn't take long then to get it caught up. During that period we were out of grub an Indian lad shot a bear there. We ate that bear. But he just made soup. There was about 200 guys in camp.

JW: Oh, there were that many at that time?

TW: Yes, well, we had a lot of guys ourselves. I don't recall how the Army fared on that deal, whether they were low on grub or not. It seems like they probably were. But we had good cooks and stuff up there, there was no problem.

JW: I'm going to change the tape here again.

### Tape 3 Side 2

JW: Continuing with the Canol project Tom, talking a little bit about equipment and so forth. Any problems with maintaining the equipment up there and getting parts and that sort of thing?

TW: No, not too much, it was all, the 3 rigs that went in there were brand new. Our depths weren't that great, we only drilled about 1,800' to get the oil in Norman Wells. The equipment was new. But then, back in those days, we didn't have the equipment like blow out preventors and all that stuff. We didn't have much on for the blow out equipment. As I recall, well, when Vern Hunter raised that Franks jackknife rig, the first



time it was raised he pulled it right over backwards. Pulled the derrick up and it went right on over backwards and fell down between the motors. Well, it broke some stuff on the motors. But when it fell between them what it broke on the one side of one motor, the other motor, we just took it off and we drilled with one motor until we got the repairs in to fix the other one up.

JW: He must have been a little bit nervous about that for a minute, when he saw that going over.

TW: That's right. This thing, the 2 legs on the derrick were just on a kind of half circle deal, and the back legs set in a set of sockets on the headache??? post there. These just rode up on this deal. It seems to me they should have had something there to fasten them on so it couldn't pull over.

JW: Sort of a stop there.

TW: Yes. But this deal here, and the brake, on the Franks rig, the brake and the clutch were practically identical. When it was up straight, instead of pushing on the brake I think he pushed on the clutch and put it back into gear and it just pulled it on over. It was down for a little while but the mechanics took the part from the outside of one motor and moved them over on to the other one and they got the rig running.

JW: Were you drilling pretty close to the camp, I mean, did you walk to work?

TW: Yes, we walked most of the time. They had some Army jeeps there that they drove. We had some cats that went in there, when we went in and they kept building roads and so forth. We started building the airstrip that they use up there, I guess, today, they've extended it and so forth. But we started building that that summer.

JW: Were there any wildcat wells?

TW: Not too much, no. There was wells that had been drilled out on Bear Island, out in the middle of the Mackenzie and they were producers. But they didn't have any pipelines to pipe them away from there. That river was 4 miles wide right at Norman Wells and the island was about in the middle of it. The river changes so much, the sandbars and stuff wash and change. Bill Cormack was flying surveyors, he kind of was picking out the line that they were going to use to Whitehorse. Due to his flying they picked out the Carcagoo??? Pass and they were going to run the line along the Carcagoo Pass to Whitehorse. Bill had been taking off from this same place on the river every day and this one day he was taking off there and he hit a sandbar and wrecked his plane. Just really smashed her up.

#048 JW: Anybody hurt?

TW: No, neither one of them. The surveyor was okay.

JW: Tom, did you know, or did they know at the time, that the majority of the formation was under the river in fact?

TW: No. They knew that there was quite a bit of oil on those wells that were on Bear Island. But they had to produce it into a barge or something there, to bring it to the mainland I guess. There wasn't any oil shipped out of the country. It was shipped to the refinery. They already had a refinery there when we got there. And they made all their own fuel, diesel fuel, they made aviation gas, car gas, kerosene and serviced practically the entire

north. Great Bear Lake, out to Tuktoyaktuk and all over the area was serviced from Norman Well.

JW: Was that a pretty sophisticated refinery?

TW: For that time it was real good. They could make anything pretty near, anybody else made. Probably their lubricating oils were brought in but everything else in fuel oil was made there.

JW: Did you ever run into Campbell Ayrd when you were up there?

TW: Yes, Campbell Ayrd was there.

JW: What kind of a fellow was he, if you could recall a little bit about him?

TW: Campbell Ayrd was a real fine fellow to work with. As I recall, he was more in production than in the drilling end of it.

JW: Who was running the whole show up there then?

TW: Vern Hunter. At that time. Then, the next year, Woodrow Wilson went in, Woodrow Wilson put in some time up there. But Vern Hunter was the head honcho and Archie Miller was his second-in-command, tool push, kind of field superintendent.

JW: Archie was pretty young at that time too, wasn't he?

TW: Well, yes, Archie would be, it was 42 years ago, Archie would be probably 32 or 33.

JW: Oh well, he had a bit of experience.

TW: Yes.

JW: You mentioned these Franks rigs, did you only have the 3 rigs the whole time you were up there?

TW: Yes, that was all we had in there. The three Franks rigs and the old cable tool rig that they did their original drilling with.

JW: That was still up there and working?

TW: Still working, yes. We drilled some holes there with it in '42. It was an ideal spot for that cable tool. We could drill right down to production without having to run casing. Most of your cable tool drilling out here, you have to carry your casing as you drill. Up there, the cable tool rig would drill about a 1,600' hole in 8 or 9 days as I recall. They didn't have to run casing. They could drill through the permafrost a lot quicker than the rotary rigs and after they got through the permafrost the formation would stand up. It wouldn't cave on them. They could drill right down to bottom and run their long string of casing and drill into production. This was a real spot for cable tool drilling.

#090 JW: They didn't consider bringing more cable tool rigs in did they?

TW: No, they never did. I often wondered. Because you could drill that surface hole through the frost and they could have just drilled that much of it and set it and drilled the rest with rotary. Brother Charlie works in the Arctic, he's up on the north slope in Alaska. They drilled there for a long time, they had problems drilling through the permafrost and I guess up there, that they have as high as 12 and 15 hundred feet of permafrost on the north slope. Their big problem was casing, frost breaking it and they experimented with strings of casing, one inside the other and circulating fluid in there at a certain temperature. They ran these strings of casing with one string sealed inside the other so that they could circulate between the two of them, to overcome the freezing problem. I

asked him why they never went to cable tool to drill through the permafrost, they could drill a straight clean hole through it and they could probably cement it much better than with a rotary drilled hole. I don't recall that they ever went to cable tools there but I often figured that it would be the ideal way to drill through permafrost. And I believe that they did, Haliburton and different cement companies, did a great deal of experimenting with cement to cement their casing and stuff and also that would set up in the permafrost. Ordinary cement, you can't freeze it. And this stuff would be right against the frost. So I believe that some of their wells leaked too, from not getting a good bond against that.

JW: That cable tool rig up at Norman Wells, were they still making parts for those things at that time?

TW: Oh yes, you could buy parts for cable tool rigs at that time, no problem. The cable tool rig up there, it wasn't a square derrick like we have at Heritage Park, it was more like that water well rig that's there, except it was bigger, it had about a 48' mast on it. It was more like that than the square derrick that they use down here.

JW: You mentioned a little bit about the United States Army there, and then the civilian . . . I guess Bechtel, Callahan, and I can't remember who else, they were building the actual pipeline weren't they?

TW: Yes.

#130 JW: Did you have much relation with either one of those concerns?

TW: No, we didn't have that much, I was just connected with the drilling department and we didn't have that much association with them. I remember, it was after I left there, they were pulling the pipeline across the Mackenzie, it was frozen up, the ice was on the river and they were pulling the pipeline across there and they had cable across the river. There was a guy standing there beside this cable as they were winching this across the river and the cable broke. He was standing there and it cut his head right off. When the cable broke it snapped and it cut his head off. His head actually hit the ice before his body fell over, it was kind of a weird deal.

JW: What kind of communication did you have with the outside? Was there, I guess no telephones, did you have. . . ?

TW: I believe they had a radio deal there. I never did use it. After they got the airport going, when they started on the airport they started working on radio communications. But I believe Imperial had a short wave or something that they could get out with.

JW: The morale was pretty good, was there a good esprit de corps amongst the Imperial people there?

TW: Pretty well, yes, it was all pretty good. They were a pretty good group of men all the way.

JW: Any problems because of the lack of women at that time?

TW: No, not really, we knew that before we went up there.

JW: Was there any sort of recreation, I know you mentioned 12 hr. shifts?

TW: We played horseshoes and we had a kind of a deal there, quoitz???, you throw these into a cup. Some of them got pretty good at it. We had the horseshoes games going. There wasn't any pool tables or anything like that. We didn't have much fishing, couldn't get in much of that but Bob and I took a fishing rod up there with us. This old Colonel Lyman,

he didn't like me too well, I guess I talked back too much, he liked Bob. Anyway, he borrowed the fishing rod from Bob one day and went fishing. He caught some fish, took them into camp there and had them cooked up. He told the waiter there in the camp to take one fish there and give it to Wark. The young waiter didn't know the difference I guess, he brought the fish to me so I ate it. Lyman was just a little unhappy about that. When Bob was walking out he said, how did you like your fish. Bob said, what fish. This old colonel looked around at me. He could have put me in a concentration camp on Bear Island about that time.

#178 JW: He was the U.S. Army sort of overseer of Imperial?

TW: Yes, he was the head honcho of the U.S. Army.

JW: What did you do to become such good friends with him?

TW: When we run out of food there, one day I walked up there and he said, how are you doing there heavy? I said, if it wasn't so many colonel and \$500 guys around here eating our grub we'd be all right. That didn't go over too big with him.

JW: Were there a lot of supervisors just sort of milling around and getting in the way and that sort of thing?

TW: Not really when you look back at it. A few supervisors around but there wasn't that. . . not in Imperial's set up there wasn't. But the Army, well, for the first most of the summer there it seemed like they were spinning their wheels you know, doing this and doing that, just more or less to keep occupied. Moving the pipe from here to there and messing around. It took them pretty near a year to get kicked off where they were going to take off from to run their pipeline. It seemed to me like they spent a lot of time spinning their wheels.

JW: Now though, you plan a pipeline, 5, 8, 10 years sometimes.

TW: Yes.

JW: Okay, you were up there a year weren't you? Could you have stayed if you'd wanted to?

TW: I suppose. No, I had enough of it when the year was over. I didn't leave anything there I had to go back after.

JW: You didn't stay with Imperial then, you didn't retain employment with that company did you?

TW: No. When I came back out, with Imperial, most of their drillers and stuff were guys that had been with the company 5-10 years before they got a drilling job. And when I came back out I went drilling right off the bat with another outfit. So I'd have had to put it quite a bit more time as a roughneck with Imperial in order to get a drilling job.

JW: Did that time at Norman Wells fulfill your military commitment as far as the government was concerned or were you still liable to . . . ?

TW: No, there wasn't actually any commitment. They just classed me as in an essential occupation and as long as I stayed in the oil business they were happy.

JW: But theoretically, had you gone to Norman Wells and come out and not gone back into the drilling business, and done something unessential, you could have been drafted?

TW: Yes, I could have been drafted back in again, yes.

#224 JW: How do you look back at that experience at Norman Wells, do you look back on it fondly?

TW: Yes, it was a good experience. I don't think I'd have wanted to miss it, it was real good.

JW: I know you didn't really carry around a resume but was that a plus in your file of experience for getting jobs later on?

TW: Yes, I think so. I think it was. One of the big things in that deal probably, it give a person notions if he stayed in the oil business he could travel pretty near anywhere. Roger McNarry was up there with me and when he came back out he went over to Egypt. He worked there for quite awhile, then he worked in Peru. He spent probably 15 years or so in the Far East, in fact he did a lot of work in the North Sea or over in Europe on that stuff. I think that was probably started because he went up there to Norman Wells and could see the opportunities in foreign work.

JW: How did you get out, did they fly you out then?

TW: Yes, I flew out from up there.

JW: Were there a lot of changes that you noticed from '42 to '43, when you went out?

TW: No, not really. We hauled our pipe a little bit later one, whereas we used to carry it. We'd carry that pipe and stuff off of the barges and stack it on the shore.

JW: You mean manhandle it?

TW: Manhandle it. We would carry it off. The Army did quite a bit of that too. A lot of stuff was done the hard way, just like mixing that cement in the horse troughs. They had a bunch of those ??? pumps up there. I asked them why we couldn't rig up a couple of those pumps and jet mix this cement the same way but they didn't seem to want to change.

JW: What did you do when you came out then?

TW: When I come back from Norman Wells I went drilling for Newell and Chandler and went down to Taber. Then from there I went to Jenner, Duchess, around there. Then in '46 or late '45 I worked 14 months in a coal mine. Down there at Bow City, I worked in that coal mine there, the strip mine. That's where I got into the cat business, got to running cat equipment quite a bit. I worked in that mine there, the oil field was pretty well shut down for awhile there in '45, '46.

#281 JW: Oh, really?

TW: Yes, it slowed right down. Then I left the coal mine in '47 and I come up here to Calgary and went with General Petroleum and Cody said, he needed me out on a rig out here north of Cochrane there. I worked on a steam rig there and was drilling on that. Then when we were finished that well I brought it into Calgary here and overhauled it at Barber Equipment and then I took it up to the Leduc field. I went pushing tools on the rig up there. I went up there the night March 8<sup>th</sup>, and Atlantic 3 blew out on March 9<sup>th</sup>.

JW: Yes, we'll talk quite a bit about Atlantic 3 I think, next time. Let's just backtrack a little bit. You mentioned when we were talking the other day there was a [voice fades away]

TW: That was John Ware. He was a Negro that came into Canada here in '83 I believe. He was born a slave and he came up here on cattle drives. There's a monument out here at Priddis, he lived out there at Priddis, had a homestead there and there's a monument

there, John Ware. Then he moved out here to Langdon. I believe he married a coloured gal out there at Langdon and then they moved to Brooks. He had a ranch there north of Duchess, right on the Red Deer River. I believe he got killed in 1905, a horse fell with him. John Ware was one of the greatest cowboys that ever was.

JW: Were you drilling on his land out there?

TW: Yes, I drilled on his ranch, I drilled 3 wells there. That was in 1944, '45, right along in there.

#327 JW: Did you get any production out of those wells out in that area?

TW: We hit oil there but it was what we called at that time, a dead oil. We couldn't get it to produce. We cut cores and the cores were just beautiful, they were full of oil, they looked real good but we couldn't get the damn thing to produce. Davies Petroleums was the ones there that were promoting the well. We just couldn't make it produce. I guess they've got good producers along there now but then they've got the modern techniques of getting that stuff out of there.

JW: Was the frustrating for you at the time?

TW: Yes, we just couldn't figure out what the hell we were doing wrong that we couldn't get them to flow. We would run tests on them. Of course, our testing equipment, it was Haliburton testers. You ran that tester in and you had your anchor below the tester, you'd set it on bottom and setting enough weight on there so that you compressed the rubber to fill the hole. Then you would drop a bar from the top, drop a bar down there and open the tester. If the drill pipe was leaking, which at that time there was quite a bit of that, if the 2 joints weren't just tight because your hydrostatic pressure would force the mud in. If you got some mud in the top of the tester then that damn bar wouldn't open the tester. Consequently we made quite a few trips, testing and stuff. From the cores we should have got quite a bit of oil, it was kind of a dead oil. But down in Taber there, on old Russell Shonert's place, we had the same thing, we couldn't get that thing to produce. We run 65 quarts of nitroglycerin down there and shot it off. Charlie Stalnacher, he was the nitroglycerin shooter from Shelby, Montana. He came up there, I was drilling on that rig, he came up and we put in 35 quarts of nitro. . .

End of tape.

Tape 4 Side 1

TW: . . . we put 35 quarts in the first can and we run it down, you had a special hook that you run it on a wire line. We ran that down and unhooked from it. Then we put the second can on and we handled it real careful. It had the 2 time clocks in it, set for 24 hrs. We ran that down and unhooked from it, then we ran the drill pipe in and put in, I forget just how many, whether it was 30 bags of cement, something like that, and pumped it out of the pipe and pulled out of the hole, so that it wouldn't blow everything out of the hole when it went off. It didn't help us. After the glycerine went off we ran back in and drilled that cement out and tried to make it produce but it didn't help it at all. We just couldn't produce it. But they got wells all around it there now.

JW: Well, that's right. Had you gotten production what would you have done with it? Put it in a tank and trucked it somewhere?

TW: Yes, it would be run through a separator or pumped into a tank and it would have been hauled to a pipeline or something, or into a railroad car and loaded on the cars. A lot of that stuff they put in loading stations and put a car there and just hauled it in on that. You'd usually have up to a 500 barrel tank, or possibly 2 of them. When they got full you'd order a tank car and have it loaded right on there, pump it right on to it.

JW: Then did you get laid off, I guess, there was no more work for you in the oilfield at that time?

TW: When I come back from the States down there, that's when I went working in the strip mine. Well, I ran a truck for awhile, hauling casing from Taber to Cat Creek, Montana. After we got the casing all hauled and stuff, then I went working in the strip mine. There just wasn't that much drilling going on right then.

JW: Was that kind of depressing, I mean, you had put in the last . . .

TW: No, it was interesting. I wanted to learn the cat business. I operated all different kinds of equipment and I was a mechanic in the shop. In fact the chap that I was working for was Harry Garriet, that was working up here at Heritage Park. He ran the trains up there, he runs the roundhouse and stuff. I worked for him back then.

JW: Small world. So after your 14 months, is that when you then went over to GP in . . .?

TW: Yes, I went with GP in '47.

JW: '47. I think what we ought to do is stop at this point.

#033 JW: At this point begins interview #3 with Mr. Tom Wark. Today is November 7<sup>th</sup>, 1984. Okay Tom, let's start this afternoon, going back to Taber just one quick question. You were talking about, it was difficult or in fact, impossible to get production out of those folds. That oil was dead oil you called it and you put some 34 quarts of nitro down there.

TW: It was 65 quarts of nitro, two, a 30 quart can and a 35 quart can. We put those down and set the clocks for 24 hours, put a little cement on top of them, let it set. It didn't seem to help us on the production end of it at all, it was shut down as a dry hole. There was oil in the cores but we just didn't have the expertise to make it produce at that time.

JW: What was the danger at that time in working with nitroglycerin, was it a pretty dangerous operation to get that stuff down the hole and so forth?

TW: Yes. The nitro by itself wasn't too bad. When Charlie Stalnacher came on the lease and brought the nitro on, he told all the crew to leave, to take off for the boiler house or get away from the rig. Just he and I did the work. We loaded the 35 quarts in one can and we lowered it down the hole. Then we run the next 30 quarts in the second can. We put the 2 time clocks in with that one. Charlie didn't seem to bother with the first can too much, we just walked along carrying it into the rig. But when we put the clocks in that second one, we handled it with a great deal of care. If anything had set them off it would have been good-bye.

JW: Had you worked with that before?

TW: Just shooting off drill collars and stuff like that. Or stuck in the hole, we would shoot the

pipe off. Charlie would put a charge in a set-up, possibly the size of a shotgun shell. We would put the wire line through a piece of pipe and fasten that pipe up there, run the shot down to where we wanted to shoot off and then we would drop this pipe and it would go down and set off the explosion. It would shoot a drill collar into wherever we could estimate it was stuck we would occasionally have to shoot it off.

JW: So this Charlie Stalnacher, that was his specialty, working with nitro?

TW: Yes, he worked with nitro pretty well all his life. Charlie worked in Turner Valley in 1914 I understand. He died 2 or 3 years ago, at the age of 86 or something like that. He had gone out and done a well shooting job just a year or so previous to when he died. He had a very good understanding of it. Quite a few of the fellows that started out in nitro work had blown themselves up. Charlie was a cable tool driller and in 1917 he quit drilling to join the U.S. Army, to go overseas and when he came back he went into nitro work. He was quite an old gentleman.

#085 JW: Were there many of these people around, the nitro specialists?

TW: No, not that many. Charlie was the only one I ever worked with. There wasn't that many around. He lived in Shelby, Montana and he came to Turner Valley whenever there was any well shooting to do.

JW: One other thing I wanted to ask, how did a driller and yourself specifically, get jobs in those days? Was it just all word of mouth and you knew. . .?

TW: Yes, word of mouth mostly. You went around and whenever there was an opening you would go and apply for it. But if you worked at it hard enough, I mean were a good worker and were really interesting in your job you didn't have any problem getting on when there was work. It wasn't too hard if you had the reputation of being a good worker and so forth, you didn't have that big a problem

JW: Is that different today, or is it still basically the same way?

TW: Quite a bit today. You get a reputation of being a good worker on a rig and somebody that doesn't have to be told everything to do, when he finishes one job will go and find another one on his own and keep busy and do good work. That word gets around that you're that type of a person and you can get work.

JW: After you overhauled that rig at Barber Machine Shop you went up to Leduc. I just wonder, do you recall the discovery of Leduc? Was that a big. . .?

TW: January 23<sup>rd</sup>, 1947 I believe, was when the well came in.

JW: Was that a big event in the. . .at that time did you and your colleagues recognize this was going to be significant?

TW: Yes, it was a welcome event. Imperial had drilled an awful lot of holes and had spent \$20 million drilling dry holes, up until they discovered Leduc. Several companies held that land before Imperial got it. Social Credit government made them, they could hold a lease and they'd have to do so much work or else they'd have to give it up. Imperial just hit that just right, they drilled in the right spot. It was a mile west of Atlantic 3. Atlantic 3 was drilled later but the discovery well was a mile west of it. I drilled the twin hole to Leduc #1. The twin was Leduc 171.



#124 JW: What do you mean by twin hole?

TW: There was 2 zones of production, there was the D-2 and the D-3. If you were producing from a D-2 you could drill a D-3 well. It didn't necessarily. . . there were quite a few of the locations that were twinned, made dual completions on them but there were some of them it was just the D-3, the D-2 wouldn't be drilled on them.

JW: You were working for General Petroleums at that time weren't you?

TW: Yes. I was drilling on this well out here north of Cochrane, Harry Challan was pushing tools on that rig. When we finished that hole they gave the rig to me. Harry went to Leduc and I brought the rig in here and overhauled it and went to Leduc with it, pushing tools on it.

JW: General Petroleum, their board of directors was quite a noteworthy group. I wonder if you could talk a little bit about some of these people that were on the board, or directors of the company. Cody Spencer, Gene Denton, Al Wright, Jim Irwin and Lloyd Stafford.

TW: Cody Spencer and Gene Denton started General Petroleums in 1941. This was with a power rig in the north end of Turner Valley. They kept going until Leduc started up. By that time, the rig I was looking after was rig 19. They had amassed quite a few rigs by 1948. Some of them were steam rigs yet, I believe they were running 2 steam rigs. I looked after 2 steam rigs in '48, one of them they lost in Atlantic 3. The other 2 we were still running in 1949. Lloyd Stafford was pushing tools on Atlantic 3 when it blew out. When I went up with this steam rig I drilled the well just west of it, it was Imperial 48. Set the rig up there and drilled that well while they were fighting Atlantic 3. Lloyd and I were splitting the shifts on the 2 rigs. He would look after my rig and Atlantic 3 for 12 hours and I would look after the 2 rigs for 12 hours. After that, in April, Lloyd left and went with Devon Drilling Co. I was in charge of Atlantic 3 from then on and Imperial Oil took over the operation. Tip Moroney and Charlie Visser, Woodrow Wilson, they were all associated with killing that well.

#174 JW: You got up there on March 8<sup>th</sup> and the well blew on march 9<sup>th</sup>, Atlantic 3, did you actually see it go?

TW: No. When I went out there in the morning it was blowing. When I went out the next morning. I stayed in Leduc March 8<sup>th</sup> and on March 9<sup>th</sup> we went out there and it was blowing oil then.

JW: I wonder if you could just describe it a little bit, what it looked like and sounded like?

TW: Atlantic 3, it was oil spread across the snow there for quite a ways across the field. It wasn't burning or anything, it just blew out. They got it shut in. There was only 192' of surface casing in that well if I recall right. This wasn't deep enough for the surface casing, it was just set in sand. When we closed the well in at the surface the gas pressure just built in up underneath this surface casing and started coming up in the sand. It blew out in Atlantic 1, it blew out the rathole there to start with. Then over beside the road it blew out a seismograph shothole. But then it started bubbling in the mud sump in Atlantic 3 itself because there was no frost there. The ground was froze about 5' deep, which was all that saved it from blowing out closer to the well head, it was frozen there. But in the sump, where the water was, it wasn't frozen and it started coming up in there. Then as the frost

went out in the spring the oil was coming up in cracks in the ground, wherever frost had cracked it, the oil was bubbling and gas was bubbling up through these cracks. It produced oil all summer in the sump there, just cratered up in there. Then later on, the crater started working closer to the well. Eventually it blew out around the casing. The casing dropped down the hole. But right where the rig was sitting, that land kind of rose up there, the whole thing. I think it was an affect from the oil in the ground there, it seemed to swell. I noticed the location looked to be about 6' higher than what it was normally, just from the oil affect on the clay and stuff. Anyway, the rig started to lean from this heaving of the ground and they brought curbers in there and they jacked it up and levelled it again. But then, when the gas and oil started blowing out around the casing the derrick fell over and then the casing went down the hole. It had the high drill and the shafer valve on there and it went down the hole. Then the draw works fell in the hole. The hole became quite a size crater. The draw works fell over and went down the hole and it dragged the steam engine with it. It had a big chain fastened on there and it dragged the steam engine down there with it. Then the kelly, the kelly was standing back in the rathole and it eventually went down the hole. It cratered enough around there to let it fall in too. That stuff is still down there, we never tried to salvage any of it and I don't know how far down it did go.

#236 JW: Why do you think the well blew in the first place?

TW: It was a lost circulation problem. They had drilled down to approximately 5,300' and lost circulation. The mud just dropped down the hole. So they cemented it. They got the circulation back, they put a cement plug on bottom and they got the circulation back and were circulating. Lloyd Stafford wanted them to run some 7" casing to bottom when they got the circulation back. They said no, they'd try and see if that cement had plugged it off. So then they drilled that out. Immediately, they lost circulation again. They cemented and regained circulation 6 more times and each time they'd drill the cement out they'd lose it. Stafford kept after them to run 7" casing. But they thought that they could get it without that. So orders came through to drill it in dry. What I mean is, you're pumping water down there but you're not getting anything up the outside. They drilled approximately another 30' and they just hit a formation that the mud just dropped and that's when she blew. At that time there was no looking back on it. Bill Murray was on tower, he got the Hossmer button in. We had no high drills at that time. The shut off was a split ring that you wrapped around the drill pipe and just set a tool joint on it and that held it in there, it was called a Hossmer button. It done a job of shutting it in. But there was no bleed off line out to the flare pit or if there was, it was frozen. Anyhow, when they got it shut in, it just built up the pressure and flew out underneath the casing.

#280 JW: What was Cody Spencer's role in all this, or was there one?

TW: He was running the company here from Calgary. They had an office and Al Wright and Jim Irwin were. . . well, Jim was tool pushing at that time. Al Wright was the field superintendent. GP were expanding quite rapidly at that time, things were booming for them. I don't know, I can't just recall the engineer's name. . . Clarence Matthews I

believe was the engineer.

JW: Who was not paying attention to Lloyd Stafford? If they had done what he suggested they might not have had the problem.

TW: I believe this. He wanted to run the 7" casing and cement it on bottom and, if they needed more casing, put a liner in below that.

JW: Who said, no, I'm not going to do that?

TW: I believe Clarence Matthews was one of the engineers that gave the order to go ahead and drill it in dry. Mind you, this was something new, they'd never run into an instance where the formation was that . . . so much porosity in it that you couldn't hold it, that you couldn't plug it off. This was porosity that had holes in that, probably as large as your finger and that you couldn't plug it off. This was something that was new in the industry really. So hindsight, we could all see just what we had to do. After that, after Atlantic 3. . . of course, there was a shortage of casing, but after that, Imperial Oil, they ran an intermediate string to 3,500-4,000' and cemented that and then ran a liner below that. An awful lot of wells after Atlantic 3 were completed that way. They would drill them down and it was a safety measure. They had enough casing cemented in there that there was no way we could get an underground blow-out like Atlantic 3 turned out to be. One thing was that there was a shortage of 7" casing to go right to the bottom. So we ran 7" casing and then drilled out below that and run 5" or 5 1/2" from there down to the bottom. There was an awful lot of wells completed that way.

JW: Okay, I'm going to turn the tape.

#### Tape 4 Side 2

JW: Were you the driller then, you were a driller on the west relief?

TW: No, I was pushing tools.

JW: Could you just talk about the situation and circumstances that led up to the drilling of the relief wells and especially your involvement in that?

TW: That was a decision that we came to when Imperial Oil took over, that they would have to drill a relief well to kill this. we were either going to kill it through that or try and relieve the gas pressure so that Atlantic 3 itself would slow down. As I recall it produced from 12-15 thousand barrels a day of oil.

JW: They had brought Tip Moroney in hadn't they, at this time?

TW: Yes, Tip Moroney and Charlie Visser.

JW: Were you working with them on this?

TW: Yes, I was running the rig under their orders. We drilled this west relief well, HOMEACO, Houston Oilfield Material Co. did the directional work on the one and the other one was Charlie Smith with Eastman Survey. He drilled the south relief. We drilled the 2 relief wells. Hickman Currans and Chico Coffin were the 2 men with HOMEACO that worked on that well. We got it down to bottom in pretty good time. When we got down there, we'd never had a survey of Atlantic 3 well itself so we didn't know whether it had deviated much or just where we should hit it at. From the directional drilling of the relief wells we could control where they were going but we didn't know where Atlantic 3 had

got to, the bottom of it. It never was surveyed. When we got that well drilled we pumped water, we had a 7" pipeline from the river up to the Imperial tank battery just west of there and we pumped 32,000 barrels of water a day down this relief well. All it did was make it produce better. It didn't slow it up one little bit.

JW: This was on the west relief? Were they doing this on the south relief as well?

TW: No, just on the west relief. We cemented, we put 11,000 sacks of cement down there one afternoon. We had 6 power cement wagons and 1 steam cement wagon. There was 10,000 sacks of cement and 1,000 sacks of quick-set, lime sort of stuff. We pumped them down in about 3 ½ hours one afternoon. It didn't have any effect, it just disappeared and 11,000 sacks is a lot of concrete. We pumped a ton and a half of feathers down there and a ton and a half of feathers is quite a few feathers. We had to mix them up with mud and we pumped them down, it didn't have any effect on it.

#043 JW: Were you just brainstorming at this time, were Tip Moroney, Charlie Visser and you, okay, what do we do next, what do we try next?

TW: Yes. We hauled 2 loads of rock from the cut on the road between Black Diamond and Turner Valley. The shale there is quite a uniform shale, ½" up to 1" but it's quite uniform. We hauled that up there and we put that down the south relief well and never found it. 2 truck loads of it, should have filled quite a chunk of hole but we never found any of it. To start with we pumped a lot of grain and stuff down there. Grain will go down if you can mix it and pump it down there quickly, as it's dry when it goes into these pores down there it will swell up, same as the sawdust. We pumped oats and barley and wheat down there but it didn't do any good. We loaded up, they had a 60' piece of casing there, we loaded it full of jute mats, just like a welcome mat outside the door, these jute mats. We rolled them up. We never tied them, we just rolled them up and shoved them, this 60' of casing full of jute mats, run it in the hole and pumped them out, figuring that they would plug the hole somewhere, and we cemented right behind it. Never done a bit of good, never found them. You could run in there and there just wasn't anything there. Where this stuff was going I'll never know.

JW: What was the feeling like when you were doing this? Was there, first of all, a sense of urgency? Had Atlantic 3, had it caught fire yet?

TW: No, it hadn't caught fire.

JW: Okay. But was there a real sense of urgency and come on, we've got to . . . ?

TW: Yes. The whole field, in the summer was shut down. An entire field was shut down so that they could get rid of the production from Atlantic 3. These gas wells that blow out, some of them are lit on fire on purpose to eliminate the gas and stuff but there was no way you could light this oil on fire. Anyway, on the west relief well we pumped feathers and zonalite???, this insulation material, we pumped mountains of that stuff down. It didn't have any effect on it. After we'd pumped water for a week it caught on fire. Atlantic 3 caught on fire on Labour Day, September 6<sup>th</sup>, it was a Monday. It was about a quarter to six in the evening when it caught on fire. Every road for miles around that place was plugged with cars from Edmonton coming out to see the fire. Pilots in Winnipeg said when they took off from Winnipeg they could see the fire from there, when they got up

high enough at Winnipeg.

#083 JW: Were you still working on the west relief at that time?

TW: I was living right there.

JW: How far away from this were you?

TW: My house was about 800' from Atlantic 3.

JW: Did they let you stay in it when it caught?

TW: Yes. After it caught fire. . .my family was there with me, my wife and the kids. When it caught on fire, there was a huge ball of smoke but there was a huge fire too. It burned for quite some time. That was on Monday. Well, on Tuesday we pumped, mixed up copper sulphate with a truckload of water and we pumped this copper sulphate and water down there. If you look through a prism, one of them many sided glasses, you look through that prism at the flames in Atlantic 3 you could see the copper burning. So we knew we were getting in the right place.

JW: Whose idea was that, to do that?

TW: Tip Moroney's I believe. We looked through this prism, you could tell by the flames that there was copper in the deal coming up right over the Atlantic 3 well bore, we knew we were getting in the right place. So then they pumped 5,000 gallons of acid down there. That cut the flames in half. The only thing I can figure out that they did was, this acid will eat the limestone, break it loose and it was plugging the hole from bottom. That first shot of acid cut the flames in half. The next day, they put 10,000 gallons of acid down.

JW: What kind of acid was it?

TW: It was muratic??? acid or something like that. We pumped 10,000 gallons down and the fire just cut out immediately, just died right down. Then we concentrated on trying to cement it solid down there. We cemented for another 2 months with that thing, trying to get it killed.

JW: It was still blowing but it had quit. . .?

TW: No. It cut most of the production and everything right off. We had the fire out on Thursday night. It caught on fire on Monday, September 6<sup>th</sup> and we had it out on Thursday night. But it was that acid that did it, from eating it out and the pressure just blew this stuff up in and plugged the bottom of the hole. That is my thought on what happened.

JW: What was it like working with Tip Moroney, was he a . . .?

TW: Very good. Very knowledgeable man. Also Charlie Visser. They're 2 of the finest men to work with that you could run into. Both real knowledgeable. There was no problems with them at all, they were wonderful.

#125 JW: What was the point of having 2 relief wells? Was it because of the wind, so one could drill while the other was maybe affected?

TW: They were both drilled with steam rigs, there was an Australian by the name of Ben Quarteye???, he was drilling on the south relief hole, or pushing tools on the south relief well. They drilled the 2 of them, basically, in case one didn't hit the other one might. As I say, we didn't know the location of Atlantic 3, the bottom of the well. It had never been

surveyed up to that time. We didn't know whether we could hit it that close or not. We finally cemented it back from the south relief well, we put an awful lot of stuff down there. I was mixing cement there, we were pumping cement with lime quick-set that you could dip a paper cup out of the box and set it down and in 15 minutes you could stand on it. It would set up that fast. Found out sadly, we didn't get it out of the drill pipe one time, we cemented 105 joints of drill pipe. Just couldn't pump it out fast enough, it set up before it went out the bottom of the drill pipe. So we had to slow down a little on that. We were mixing it with a steam pumping unit, mixing it and pumping her down at the same time and we just couldn't pump it fast enough to keep it from setting up.

JW: Ben Quarteye, he's been characterized as the Australian madman.

TW: Yes, Quarteye was quite a character. He was quite a good well man but a little bit wild.

JW: What was the affect of Atlantic 3 on General Petroleum's reputation?

TW: It didn't hurt their reputation at all I don't think. It was just one of those things that could have happened to anybody and it's one of the things that you change your drilling procedure and so forth just from experience. I mean, the first time it had ever blown out like that from that shallow a depth of surface casing. From then on, the Conservation Board said everything will have 600' of casing. That would cover 10% of the depth in the Leduc field. Or if you were going to drill a wildcat well it would be 10% of your projected depth. If you were going 10,000' deep you would have to put 1,000' of casing in. You had to have at least 10% of your projected depth. If you were going deeper than that then they made you run an intermediate string. But these were all lessons that came out of Atlantic 3. It was right after that that no one was allowed to drill a hole, there was a minimum of 600' of casing. And even today, this last well I drilled up at Boundary Lake, I check the shale as it comes over the shale shaker, if it doesn't look like it's solid and I have enough casing there I can run an extra joint or a couple of joints if you have enough casing there. The outfit I'm with now gives us that option of, if we don't think it's solid enough for the casing shoe we can drill a little farther. Some places we have gravel down there, Red Earth is one of the places they have gravel at 6-7 hundred feet and you should put your surface casing through that.

#188 JW: What was Red Adair's role in any of that or was there at Atlantic 3?

TW: We had a fire fighter up there. His name was Myron Kinley. He was the original Texas firefighter. When he came up there, Atlantic 3 was not on fire, it was just blowing wild. We were going to change and take that Hossmer button off and put the high drill on. So they came up with the idea of just freezing that off with dry ice. We would freeze it solid, take the Hossmer button off and put the high drill on. We had a fish in the drill pipe, we didn't have any small enough tools in order to fish this out, so we sent down to Denver, to McCullough Tool Co., to get the tools sent up or brought up to fish this out of the drill pipe. Red Adair was working for McCullough Tool. He brought the tools up. He worked with Myron Kinley there for 2 weeks. We changed this blow-out preventor, put the high drill on and so forth and Red Adair worked with Myron Kinley. Kinley liked him so he hired him away from McCullough Tool Co. to go firefighting with him. That was Red Adair's first work on the firefighting side of it.

- JW: Well, what happened to Myron Kinley up there, because they ended up bringing Tip Moroney in?
- TW: Myron Kinley had to go back to the States. This well wasn't on fire, his specialty was fire. There was a well had blown out down there somewhere that he had to go back to and Atlantic 3 was not on fire at the time Kinley come up here. He come up just to do what he could. While he was here we changed the well head and so forth. But then, when the production got to such an extent that it shut down the entire field there, that's when Imperial Oil got into it and took over. I guess the government or the ERCB requested it and so forth.
- JW: What was the attitude then, about that, people generally, did they accept that as being reasonable or were they. . . ?
- TW: Oh yes. They were the major holders in the field and there was no argument about it. And, these other companies, drilling companies and so forth, they're not large enough to take on a responsibility like that. Pacific Petroleums, I believe Frank McMahon was owner of this Atlantic set-up and it was agreeable with him, to get this expertise in there to kill it. The production was such that they figured if they could get that thing shut in and get it under control, they'd have the world by the tail.
- #247 JW: And they did, in a way.
- TW: Yes. At that time, when Imperial came into it, we had the pipeline to Nisku, they had one pipeline from Imperial to Nisku. It was pumping full of Atlantic crude, plus we had about 60 trucks hauling in there and it was all Atlantic, the rest of the field was pretty well shut down. So it was to everybody's interest to get it under control.
- JW: You mention there was a problem with getting 7" casing at Leduc, were there other kinds of equipment shortages during that frame of drilling activity?
- TW: Yes. This was right shortly after the war and steel was in demand everywhere. We were running odd sizes of casing for surface casing and it was quite a problem to get enough casing. A lot of companies made quite a few dollars. Any of them that had stock piles of casing could pretty near get their own price for it.
- JW: I heard companies were going as far away as California.
- TW: Yes. There was a big shortage. And a lot of individual companies, smaller companies would go out scouting around and try to find casing and buy it, they could get pretty near their own price for it.
- JW: That's sort of an interesting little anecdote about Turkey Knight's name, with that west relief well and so forth.
- TW: He worked on the west relief, he drilled there. Harry was a real good well man, he left there and went to Drayton Valley and he started up a service station there, Knight Service Station. Then he left there and went to Wainwright and he started up Knight's Oilwell Servicing. He had 3 or 4 service rigs and he sold them out.
- JW: You sort of were involved in the circumstances that led to his nickname though, weren't you?
- TW: No, I wasn't involved in the nickname deal. It was some roughnecks down in Longview that had been drinking. They decided to go out and steal some of the farmer's turkeys.

They went and stole these several turkeys but the farmer's wife heard them and phoned the police. When they got back to their hotel they didn't know what they were going to do with the turkeys. One of them suggested they get Harry Knight, get his wife up and cook the turkeys and have a feed. So they went over to Harry's and took a couple of cases of beer with them. After a few beers this came up to cook the turkeys, he said, sure. So he was outside, he had these turkeys hanging on the side of the garage and he was picking the feathers off of them when the Mounties drove by. They were scouting around and they turned their spotlight on him and here's old Turkey, just a plucking turkeys there. Harry was just plucking these turkeys. The Mounties come over and pinched him. He didn't want to squeal on the guys that did it. So anyway, they went to court and he got fined, had to pay for these turkeys and stuff, that's where he got his name.

#315 JW: One other thing, I want to talk a little bit more about Leduc but you mentioned Ben Quarteye a minute ago and that brings up a question. Was there a problem with, I guess, drinking or excessive use of alcohol among roughnecks and drillers at that time?

TW: Yes, there was quite a bit of it went on. If you watched when you drank and so forth, it didn't seem to be that big a problem. If you were going to run casing or do something like that you wouldn't want to be drunk out there. I guess I drank quite a bit at that time but I tried to be very careful about when I drank. If I had a string of casing to run or something important at the rig, you just didn't drink. The other thing was that back in those days we had drillers that you could depend on. I mean, most of them had a lot of experience, a number of years experience and you could pretty well depend on them to do the right thing even if you weren't there. Whereas, today, a lot of them just don't have that experience. A lot of those fellows who worked back at that time could have been tool pushes in their own right, you know, they had that kind of knowledge. I was up there, well, I'd left GP and had gone in the construction business on my own the night the hotel blew up in Leduc.

JW: I want to ask you about that but I think I'll turn the tape over here real quick.

#### Tape 5 Side 1

JW: . . . as one of the greatest men some people ever met, ran the best rigs in the industry, most remarkable man, worked 2, 3 rigs at a time, was he really that great? I've heard mixed stories about him.

TW: Cody was a hard worker and he was progressive. Anything new, you would find him trying it out or in favour of it. One of Cody's rigs was instrumental in changing the drilling in the Leduc field. Up till 1948 we mostly just ran 90' of drill collars. It was one of Cody's rigs that picked up 15 drill collars and put them on. They cut the drilling time in half by having sufficient weight on their bit, also stabilization, that type of thing. Anything progressive like that Cody was all for, anything new. Cody and Denton, at one time, were going to drill for potash. They were building one of these larger bits to drill a big enough hole to get down to the potash. Cody did quite a bit or work on that but I think he realized that his company wasn't big enough to handle that type of an operation. But



they had thought about drilling down for the potash at that time. Cody was very progressive and Gene Denton was a good man too.

JW: Would you characterize then, General Petroleum, with these kind of people as one of the better outfits at that time?

TW: Yes, I would. They were the first ones in the field with safety First Aid. A lot of the outfits in there said that they only safety they had on their rigs was being close to a GP rig.

JW: Who implemented that safety program?

TW: It was Cody and Gene Denton. Al Wright was all for it. They hired some safety men, some St. John's Ambulance people to train the drillers, train any roughnecks or anybody that wanted to go in. They held these courses and they pushed it quite a bit. I know Commonwealth, Cantex rigs, they said that really the only safety they had was if they were close enough to a GP rig that they could get to it. But they did run good equipment in my opinion.

JW: The safety program, did that extend down to the roughnecks too?

TW: Oh yes.

JW: Did that set a precedent then in the industry, did others follow after that?

TW: Yes, they did. They started pushing that in '48 and '49, real extensive deal on it. After they seen the results of that, the other companies followed suit right away.

#042 JW: Was that just a general awareness on their part that safety was important or was there a specific event that triggered that?

TW: No, I don't recall any one specific even that triggered it, it was just that there had been quite a few accidents and they were improperly treated just from a lack of knowledge.

JW: Well, you talked about that situation in Turner Valley, that fellow you didn't move.

TW: Yes.

JW: Listen, at Leduc, a different geological environment and the people that were there came up from Turner Valley or from the States, what other kinds of problems or learning experiences did you have to go through there at Leduc with that different . . . ?

TW: Drilling hasn't changed that much really, since I first started, the actual drilling of it. The mud control has changed, the weight of the drill pipe has changed but mainly our bits have improved. To where we can run bits today 125 hours in the hole, where 8-10 hours was a big run for bits back at that time. It's just been a gradual progression of things and changing of, for instance, surface casing depths and stuff like that, that has made it what it is today. Drilling mud. As I stated earlier, in Turner Valley we used to go out and dig the clay and boil it to make drilling mud. If our mud was 11 or 12 lb. we thought it was real good mud. We didn't know that that slowed our drilling down a great deal. Then they started drilling with real light fluids, practically water, and consequently, we had more blow outs and so forth. We were drilling with a fluid that has very little difference in pressure from the formation pressures. This gave us more blow outs. Years ago, the hole could be half empty and it couldn't blow it out because the mud was so heavy, your hydrostatic. Today, if your mud drops 500' in the hole, you've lost enough hydrostatic to let it blow out on you. These are the type of things that are happening today.

JW: But there was nothing specific about Leduc, say relative to Turner Valley that it posed problems?

TW: No, not really.

JW: What was the Leduc townsite like when you got up there in '48, was it a real boom town environment there?

TW: No, Leduc townsite, it was just an average town along the railroad there. When the influx of oil people came in there the town people thought it was out of control. There was a mayor there by the name of Gates. He got on the fight with Imperial, told them that they didn't need any oilfield trash in their town. Imperial said, we don't need your town to live in, we will build our own town, so they built at Devon. Otherwise, the whole operation would have been run from Leduc if they could have got along. But the people and the mayor just didn't want any oilfield trash around.

#089 JW: What kind of reception did you get when you say, went into town for a cup of coffee or a meal or anything, or did you even go into town?

TW: It was good. Most people didn't have that big a problem. Most of the cafes and businesses were tickled to death with the influx of business. The hotel done a whopping business. The people, as a rule, the garage people, everybody were friendly, there was just the higher up element that was arguing over developing a townsite and where they'd have to build and so forth that started the big argument. Then, when they got arguing about it Imperial got stiff necked and said, we'll build our own town then.

JW: Was there inflation when you were there, did they take advantage of the situation?

TW: Not too much, not anymore than anywhere else. Pretty near every town in the country here, when the oil people moved in, if there was any quantity of work, if they had a house rented to some local for \$30, they'd kick him out and rent it to an oil person for \$100, type of thing. That happened quite a few times. But back in those earlier days it took a lot longer to drill a well. It would take 3 months or so to drill a well 5,000' deep or something like that. Later on, they got that down to 2 weeks. So they consequently weren't that long on a job. Then they started putting out camps and pretty soon it was a common thing for every rig to have its own camp. It served several deals, it kept roughnecks out of town to quite an extent and they had no excuse for being on the job. Some of the jobs, they couldn't find places to stay, they'd have to drive 30 or 40 miles. So a camp was the answer to it.

JW: When did that transition take place about?

TW: Camps started, Imperial Oil had some camps and they were just more or less old granaries in the 50's. Then Alberta Trailer Co. Atco, they got into the act in the late 50's and they just never looked back. They built camps everywhere. Today their camps are pretty good camps to live in, they're real modern.

#130 JW: Would you say that maybe that was the advent of camps, in part because, towards the 50's drilling locations got more and more remote and they almost became . . . ?

TW: Oh yes. A lot of the camps, a lot of the drilling up in the north country, there just wasn't the facilities to handle the crews. All of them had camps on their location.

JW: You mentioned when you were on Atlantic 3, were you, what, living in your trailer on the lease then?

TW: I had a shack right on the lease, my own shack. I built that myself and the family lived there with me. But Atlantic 3 had a camp there. Old Ma Ferguson was the cook, a wonderful cook.

JW: Did you wife and family go over there and eat too?

TW: Yes, they could go over and eat if they wished. It was a real good camp. We had it all that summer, and that fall, well, we were killing the well and after Atlantic 3 was killed that camp was moved out on a wildcat somewhere and we didn't have any more camps for crews there. There was enough places at that time, my crews all drove from Leduc or Devon, wherever they lived.

JW: Calmar was another place.

TW: Calmar had quite an influx of people, there was quite a lot of work around there and it was a pretty easy town to get along in. They didn't bother, there was quite a lot of development went on in Calmar.

#150 JW: You mentioned the Leduc Hotel fire, did you witness that?

TW: I was just driving in to town when it blew up. It blew up on Armistice Day, November 11<sup>th</sup>, about 3 minutes to 12. They had put the gas in the town, they had just laid all the new lines and stuff throughout the town. They had a 2" line into the hotel I understand, and nobody closed the valve. They opened the gas on Armistice Day in Devon, to start it through the line. They didn't have that insulation that puts the odour in the gas, that gunk that they put in to detect any leaks or anything. It wasn't hooked up. This gas was just highly processed gas, something in the neighbourhood of 14 or 15 hundred BTU's or something. When they opened that up the gas came into the basement of the hotel. John Megley??? owned the hotel. Somebody went up and rattled the door, he thought it was time it should be opened. The hotel never opened until noon on Armistice Day. Somebody rattled the door and Steve Feniak hollered out, we'll be open in another 3 minutes and that's when it blew. Megley's daughter had come down, they lived in the top of the hotel and she had come down on to the main floor and she was going down to the basement to get some fruit for dinner. When she opened the door and closed it, they had a coal furnace down there and whether the, you know how the draft will jump, or whether the light switch that she turned on ignited this gas nobody knows. It exploded twice, it blew so hard the first time that it didn't catch on fire. Then in a couple of minutes it blew again. It just blew the bottom out of, the first floor kind of blew out of there and the top floor settled down. There was 10 people killed in it. I helped carry 9 of them out of there. 3 of them had been working for me previously on the rig out there. There was Freddie Kincaid and Al Powell and his father-in-law, Art Manville. They were sitting in the hotel. When we found Manville's body he was still sitting in the chair and his arms and his legs were burned off and his head was about half the size what it was, it was shrunk from the heat in there. I was talking to his wife out in the street, she was running around looking for him. There was a lot of people, or quite a few people had got out of it and they'd took them to

- #202 the hospitals and different places. Old Carl Moore was in there, he had gone hunting and hadn't got back to the hotel. But he was staying at the hotel at that time. Anyway, when it blew, Freddie Kincaid, he was a fireman that worked for me, he was sitting in the coffee shop having coffee. He just ducked and there was a spoon buried right in his skull, you could just see the edge of it sticking out from the blast. His face was laying in his eggs on the plate. Al Powell was at the phone booth in the lobby phoning and when we found him he was laying full length on a bed upstairs. The blast must have just taken him right up the stairway there. Steve Feniak was killed and Alvin Eeble??? was killed. There was another fellow was standing in the bar when it flew and he went right upstairs. When it blew and opened the floor the draft took him right upstairs. The only thing he got hurt, he got a bump on his nose where he hit a timber going through upstairs. There was a woman in the café, when the blast came it upset the cabinet of the dishes there and it pinned her in there and you could hear her screaming 2 or 3 minutes after you couldn't see her for the flames. She died a pretty rough death, that one. Canter, I think, was the name of the coroner, from Edmonton. He came out there and this store across the street there, I don't know whether it was an empty place or what it was but we were carrying the bodies over there and putting them down. So Canter said, who can we get around here that can identify some of these people. Somebody said, go and get Wark there, some of them worked for him. So I went over and went in there and we started trying to identify these people. Manville didn't have anything on him. I'd been talking to his wife and she said, he doesn't have any identification on him but she said, he has blue suspenders. So I got looking at this one body that the arms was burned off and the legs and there was just a little bit of blue suspenders left on his pants, the rest was burned away. So I figured that's who he was. Al Powell, he was a red headed guy. He had been burned upstairs and you could recognize
- #256 one side of his face. He'd been kind of lying face down on there. The other fellow, Freddie Kincaid was the old fireman, he had a wooden leg so I could identify him easy enough. There wasn't too many of the other ones. . .in fact, one of them was buried under the wrong name. He was just a transient more or less and he'd been misrepresented in there. Alvin Eeble was in the bar, he got killed and Steve Feniak. The other fellow, I can't think of his name, he used to work in the other hotel there, he run the bar in the other hotel for quite a while afterwards but he's died since then. But Megley's daughter, she was killed, the one that went down to get the fruit downstairs, she got killed too. My wife went into the city that morning or she was going in. I was driving into town when it blew up so I drove down there pretty close and couldn't see the wife around anywhere. So I went home and she wasn't there. I got on the phone and asked for a number in Edmonton, it was her mother's number and the operator said, I'm sorry, we can't put you through, the phones are all held for the emergency, the hotel blowing up. I said, this is an emergency really, I can't find my wife, if you put me through to a number in Edmonton I won't be long, I'll find out if she got in there. So she said, yes, that's good, she rang the number in Edmonton and the wife answered the phone. So I went back down to the hotel then and I worked there pretty near all night. I went out and got my cat, it was on a location about 3 miles out of there, got the truck to haul it into town and I kept cleaning the garbage and

the bricks and stuff away from there. But if it had happened 3 minutes later, all the Legion, they had been to the Legion that morning and they were all marching down to the hotel, the whole Legion crew. If it would have happened 10 minutes later they'd still be sorting them out. But they never opened until noon on Armistice and John Megley always served free beer for 2 hours on Armistice Day, mostly Legionnaires.

#311 JW: That must have been a pretty traumatic experience for you?

TW: It was. Carl Moore was staying upstairs in the hotel and for some reason or other, when he got off work at 8:00 in the morning him and another young fellow decided to go out and shoot a few birds. The only thing, well, Carl lost a watch, his father's or his grandfather's watch or something, that was the only thing. Like old Carl said, hell, I'm lucky. If he'd gone to bed like he intended to, he'd have been in the explosion. There was another young fellow that was sleeping in the room and it blew him right out the window. They picked him up and hauled him to Wetaskiwin. They couldn't find him for quite awhile, they didn't. . . nobody knew, they thought he'd been burned up too. That happened in 1950, Armistice Day 1950.

End of tape.

#### Tape 5 Side 2

JW: You, I guess, left Commonwealth, when, shortly after finishing that relief well at Leduc?

TW: You mean, GP?

JW: Yes, sorry, GP.

TW: I left GP in '49, about June or July of '49. I bought a cat and went into the construction business.

JW: How come, what was your motivation for that?

TW: Opportunity. It looked to me like I could build up a little company with cat work. You couldn't buy a caterpillar at that time, they were back ordered for so long, they never did catch up after the war for cat equipment. It would be a year in order to get one so I bought an International, DDA14, with an overhead loader and dozer. I started building locations, working in the oilfield, roads, locations, what have you. We were working, busy, working 20 hours a day and turning down work. Work was plentiful. We were only getting \$10 an hour for the cat and operator. So things were going real good and I bought another, there were 2 more cats came up for sale, 2 more International TD18's and I bought them from the sheriff, somebody else had gone broke. I bought them two, then running 3 cats and still busy, all the work we could handle. So we worked around Leduc and various places from '49 till the fall of '53. During that process I took a partner in with me, Pat Patterson. He was a good partner. We built a set of wheels for moving these derricks standing up, a set of bomber wheels. Curtis Hoover built them. We could move one of these triple derricks standing up. We moved one in Redwater and from the time it was released on one well until they were drilling on the next well was 55 minutes.

JW: Pretty quick.

TW: Yes. Well, I had the wheels in. They were swabbing on this well and I had the wheels put

in and everything was hooked up. The pump had been moved, it was a separate pumping unit, all you had to hook up was a shock hose. We had mud pits then instead of mud tanks and the mud had been hauled over and the mud pit was full of mud. The pump was sitting on the mat and I had the wheels in the rig and all ready to take off. The guy came out and said, no more swabbing, the rig's released. We left enough drill pipe in the derrick to sput in with, standing in the derrick, to drill surface hole. So when they said the rig was released we had a cat hooked on and we just hooked the hydraulic hoses on, picked the rig up and took it about 3/8 of a mile, over to the other location. And pulled it on and hit that thing just perfect, it was dead centre on the mat and we just set it down. They just hooked up the shot hose, started the pump up and they never did shut the draw works motor off. They just slacked off on the kelly and went to drilling.

#049 JW: Was this your own innovation, this idea?

TW: No. There was a couple outfits that had Athy??? wagons up there, cat tracks that they used to move rigs with. There was another chap that had a set of these rubber tired wheels for moving rigs, that had come up from the States. Curtis Hoover had built his wheels for him I guess. Anyway, we benefited by all the mistakes that other people had made, we had a superior set of wheels. This one particular rig there that we moved, we did it just to see how quick it could be done. It was a GP rig. We only got \$500 for moving a rig at that time. I moved a rig down at Stettler, no, Drumheller, for GP. It was a fairly heavy rig. They had asked the other fellows if they would move it and they said, no, they wouldn't, it was too heavy. They asked me if I'd move it and I said, yes, I'd give it a try. I was trying to sell the wheels to them guys anyway so I went down there and hooked on to the rig and we moved it a mile and a quarter and pulled it on to the location. They asked me to raise the rig up so they could put 12 x 12 blocks under it. And I don't know why, but I'd pushed enough dirt up alongside of the mat that it was easy to raise it up. I raised it up that high so they said, Jimmy Irwin said, they'd buy the wheels. I trained a couple of their guys how to run them and they took the wheels down to Saskatchewan. They wanted me to go down there for an 80 well contract, to drill 80 wells there. Go down and skid the rigs. But they wanted to cut the price from \$500 to \$250 a skid. I said, there was no way I could do it and still look after the cats and stuff. So we sold the wheels to them. Then in '53. . .

JW: Hang on a minute Tom. How did you finance your purchase of that first tractor, that International?

TW: I had a few dollars and I borrowed a few dollars from my brother and we got a down payment on it and I kept it going from then on.

JW: Was there any problem with General Petroleum about your leaving to do this?

TW: No sir. I got the finest letter from Cody that you'd ever want to see. He said, he was very sorry to lose me as a tool push, that he understood my ambition of going in the construction business, that he'd done the same thing himself and he said, at any time, if I ever wanted to go back on the rigs again to be sure and see him first. He was very good about it.

JW: Who was Pat Patterson that you brought along as a partner later on?

TW: Pat was a salesman type, well, for years he worked for Burns Meat Co. He owned the locker plant in Leduc, the frozen meat locker plant. He was the fire chief in Leduc when the hotel blew up there and stuff. I used to deal with him when I run the camp for GP. He'd been in that business for a long time and he just wanted to get out of it and change to something else. So he bought in 50-50 with me. There's no regrets on that part, he done a wonderful job. He wasn't that knowledgeable about dirt moving and stuff but he was a real good businessman.

#103 JW: What did you call yourself?

TW: Wark and Patterson Construction. It was called Wark Construction for quite awhile and then changed it to, when Pat went into partnership, formed a new company, Wark and Patterson Construction. We run the construction company until 1960. Pat's health wasn't too good, he wanted out of it. He wanted me to buy it out and I said, no, I didn't want to buy the whole thing. We had 12 machines, it was too big for one person to look after and I said, no, we'd better sell it. So we sold out. We went to Drayton Valley in '53, we skidded the second rig that was in Drayton Valley and we stayed there with cats from then to '57. In 1957 we worked on the discovery well in the Swan Hills.

JW: We're going to talk about Swan Hills and Drayton Valley pretty quick here. I just wanted to know, about '49, '50, a lot of people got the entrepreneurial spirit. There was a lot of work and a lot of opportunity. You hadn't really had a business background. How did you and some of the other people fare in that respect?

TW: I had the knowledge of the field work and moving stuff, how to get that end of it done. I was the world's poorest office handler like that, this is where Pat was pretty good at this.

JW: Yes, do the books and . . .

TW: Do the books and purchasing and collections and stuff, he was real good at that. This happened to a lot of people. They were ambitious. . . well, I'd worked in the strip mine at Bow City and learned the cat business pretty well. I was head mechanic there in the shop when I left there. And I'd learned a fair knowledge of the cat business, plus I did quite a bit while I was up in the Arctic. I used to drive them in my spare time, if they needed anything I'd be on one of the cats or something. I had a good working knowledge of what to do, plus I knew the location work, how to build locations and all that stuff. I could do a good job out there. A lot of people started out trucking and various things, but we found out that money is made in the office, it's not made out in the field today in these business, it's made in the office. You can be the best worker out there in the field and if you don't have a good office you're going to go broke. I would have been just as far ahead, just keeping 1 or 2 cats and keeping them working on my own, as going in and working my heart out in that business. Because in Drayton Valley there, I worked 18-20 hours a day, every day. I would help in the office, bookkeeping, all the tickets and stuff I had to okay before they were billed out and I did the foreman work out in the field. On day shift and night shift. I just burnt myself out, that's why I wanted to get out of it.

#155 JW: How many people did you end up having working for you?

TW: We had about 80-90 people working for us, on brushing crews and cat operators and

stuff. We probably had around 15 cat operators and stuff and the rest would be brush crews, clearing and burning brush.

JW: Was that a large concern relative to some of the others, your competition?

TW: Yes, pretty good. We were a pretty good sized outfit.

JW: Who was your competition through the 50's?

TW: Waddell Brothers, McGregor and Johansson, Vern Phillips. They were all outfits that started up the same as I did.

JW: Was it a pretty competitive environment?

TW: Yes, it was. It got that way. When it was booming there was work for everybody. Leduc Construction, they started up in Leduc and they're still operating, they're a real big outfit now. They went into gravel pits and gravelling and road construction. Heslip's??? went into it, into the construction business. They used to be rig building, building these square steel derricks. After everything went jackknife derricks they went into the construction business and they took some road contracts and so forth. Eventually I think they went broke. Things got pretty tough there in the 60's. I was working in the Swan Hills at that time and every so often companies get an efficiency expert in the office that wants to put stuff out for bid and stuff like that. We had been doing most of Home Oil's work in the Swan Hills. This time they put everything out for bid and we didn't get any. There was some outfits that were hungrier than we were. So Jack Hamilton was up there one day and he said, Tom, I'm sorry you didn't get any work this go round. I said, Jack, we bid it as low as we could bid, we aren't making any money so we might as well go back to Drayton. These guys that did get the bid, I don't see how they can do the work as your contract reads and survive. They didn't do it that way, the contractors buried a lot of that brush in the coulees and stuff and covered it with dirt. Made pretty nice looking roads to start with, but after the rain came, washed the dirt out from that brush, the forestry turned around and said to Home Oil, dig out all of that brush and burn it and rebuild your roads. Jack said, we'd already paid the contractors. He said, it cost us double what it cost for you fellows to build it. I said, how is our road standing up, he said, just 100%. I said, any kickbacks, he said, not one. I said, well, they couldn't do it at the price, they had to make shortcuts. It was quite a lesson for them at the time. But there was quite a bit of that went on, they underbid and then would shortcut on the contracts.

#207 JW: 1950 the Tangent Well blew out, you were involved in that weren't you a little bit?

TW: Yes. I was in the construction business then, I had a cat. Bud Mould was running Hudson Bay at that time, he phoned me up and asked me if I had a cat and I said, yes sir. He wanted a cat with a winch on it and I said, where do you want it Bud and he said, up at Peace River. I said, my god, there must be some cats closer than this one, he said, do you want to go up there or don't you. I said, yes sir. So we loaded the cat up there and took it up there. We went right up to Tangent, that's where it blew out. It was cold, 45 below zero every day. This well, they had run a test on it and they were pulling the tester and it swabbed the well in and it started to blow. I think in one side of the pipe rams in the blow out preventor, I think they had a 7" casing ram in one side and a blank in the other.



Anyway, it wouldn't work, it wouldn't close. It was blowing salty water, it didn't catch on fire but the gas was blowing this water up and it was 45 below and it just started freezing on the derrick. It froze that derrick pretty near solid to the top. This gas blowing up through a hole in the centre was just like a trumpet, you could hear it for 4 or 5 miles the way it was blowing. They thought they had a pretty big gas well, they were estimating it in the 50 million cubic feet but it was just from the noise and so forth. I went up there, we worked on it, cleaned all the ice and stuff away from around the rig and got it so you could get up close to it with a crane and stuff. I drove into Grande Prairie, I was in the York Hotel having supper, Harry Winnie was the pilot for Hudson Bay. He walked in there and he looked at me and he said, you're from out at the rig aren't you. I said, yes. What do you think of it, I said, they haven't got that much of a blow out, they've got a weather condition out there. He said, oh, have you worked on rigs, I said, yes, I worked on Atlantic 3. I remember when a bunch of the pilots had pooled together and drilled a well not far from . . . oh, it was 3 miles from Atlantic 3, it was a dry hole. I remember, you fellows drilled that well down there. He said, what would you do with this, well, I said, Harry, to start with, if it was 50 million the gas would be blowing out through the top, not going out the side above the run around, it would be going right through the ground. I said, it's just a weather condition, it's froze up solid, I would just bring a crane in there and as soon as the weather warms up to 15 or 18 above the ice will all fall off because it's salty, it's a saline solution. I said, it will all just fall off the rig, I'd just lift the table out and put a valve on top of that BOP and pump some mud down there and kill it. They were talking about directional drilling into it, those guys, they were going to set up some directional drilling. Harry went upstairs and told Rush Brothers of Trinity Drilling, told them what I'd said and that's exactly what they did. They just shut her down, sent me home. They just shut her down and waited a few days for the weather to break and put a valve on there and killed it. It didn't take that much mud. It was only blowing from about 3,600' or somewhere in that neighbourhood if I remember right. So it wasn't that big a job to kill it.

#279 JW: Did you ever miss being on the rigs?

TW: Yes. I liked them, you never know what's going to happen next, you always got to be watching for something. Either making a good well out of it or something, it's always interesting. Watching for a drilling break which will indicate porous formations, production. I like, I can go to the doghouse and talk by the hour if them roughnecks will listen about things that can happen or have happened. I've always found it interesting. If I had it to do over again I would do it the same way probably, except I would probably want a little more education to go along with it. Education, a lot of us started out pretty young and we sacrificed an education to get working on those things, making bigger money younger. But I definitely haven't got anything against education. Education will let a young fellow get to where I am in 10-15 years instead of taking 40 or 45 years. By having an education to go along with this you can get ahead a lot faster.

JW: Yes but you know, you were a product of the Depression, you didn't have that alternative at that time.

TW: Not really, no. We didn't have too much. Although I left school and my folks wanted me to keep on going. I can't say that I didn't have the opportunity, they'd have found some way to keep me in school. It was just at that time there wasn't that many people had even a full high school education.

JW: Maybe we'll stop here Tom and next time talk about Drayton Valley and the Swan Hills a little bit and perhaps finish up.

### Tape 6 Side 1

JW: This is tape #6 with Tom Wark. My name is Jim Wood. Just a couple of questions to start off, following up from our last tape. At the Tangent blow out, if that had happened today I suppose, there would be a big series of investigations and a long series of hearings, somewhat like Lodgepole and so forth. Was that common at that time as well?

TW: No, it wasn't that common at that time. They found out that they had 2 different elements in the blow out preventor, a blind ram and a 7" casing ram as I recall. They found that and it was just a mistake, it was set down to carelessness. It was also a sweet gas well, it wasn't sour gas or anything, sweet gas, so there wasn't that much controversy over it. Today there would be quite a few wrists slapped on account of those elements not being properly tested and stuff when they started drilling. I worked on, killed a well east of Fort Nelson here in 1980. They had expected it to blow out, they had set 7" casing in the limestone and they knew when they drilled it out that they would lose circulation. But they lost circulation and the gas blew on it and it was a sour gas well. They had 3 ½ rams in the bottom part of the BOP and in the upper part, they had 4 ½, they hadn't checked them. And this happened in 1980. They called Pajack??? and found out that I had killed these wells up there and they phoned and asked if I'd go up. I wasn't feeling too good at that time. I explained how they would have to go about killing it. They didn't think it would work, I said, well, there's not much use me trying to explain it to you over the phone to the well if you don't think it will work, I guess I'll have to go up there. He said, would you go and I said yes, he said, I'll have a plane here at daylight. So they had a plane here at daylight and I flew up there. When I got there I found out that they were blowing the gas off through the manifold, the bottom set of pipe rams was 3 ½" which was what the drill pipe was, but the top set, they'd slipped up and left 4 ½ in it. We had to have the top set in order to kill that. The kill line was between the 2 sets of rams. So we opened that thing and changed the upper rams to 3 ½" while the well was blowing out the flare line. It was blowing about 30 million cubic feet a day. After we got the upper rams in, the 3 ½ rams in and I tested it up to 3,000 lb. we started pumping the water to it and it didn't take us long to kill the well. But it was just negligence or depending on someone else to check that type of stuff out. These are the things that can get you into trouble, not being thorough enough on the check. Those rams are supposed to have been tested and apparently they weren't because they wouldn't hold on 3 ½ pipe. It was just one of those slip-ups that happened. The same as what happened on that Tangent well. Of course, back in 1950, people weren't that familiar with blow out equipment.

#051 JW: That northeastern B.C., Fort Nelson area and so forth, it was described to me as almost a frightening area to work because of the volumes and pressures involved in those gas wells.

TW: Yes. There was some pretty big pressures up there. Across the Halfway, the west side of the Halfway River there, there was gas which was a high pressure, low volume type of gas. It was enough to blow your mud out of the hole and burn a rig down and in a couple of weeks it would itself out and there wouldn't be very much gas left there. There was quite a few places like that in that northeastern B.C.

JW: A couple of other questions, I wonder if Lloyd Stafford left General Petroleums to go Devon Drilling, was that because of the problems he had in communicating with Clarence Matthews about the casing?

TW: No, I don't think so. I believe that Stafford had an interest in the drilling company. It was formed by some people from Wetaskiwin, a lumber man there in Wetaskiwin put up some money and I think they gave Lloyd an interest in the drilling company, type of thing, to get him. Lloyd was a good man. He was a good well man, one of the best. They should have listened to him there but it was just one of those things. We hadn't had lost circulation and stuff like that previous to that, didn't have the experience with it and they thought that they could handle it.

JW: A term that you brought up, raised for the first time and then Carl Moore mentioned it again, and that's, oilfield trash. This hasn't come up before, was there a prejudice that you encountered, being an oilfield worker throughout your time in Alberta?

TW: We didn't have that term much in the earlier days. When industry speeded up from the Leduc field there we got a lot of people in the business that we didn't think too much of. Prior to that time, anyone with a foreign name or foreign sounding name, he didn't have a hope in hell of getting a job on the rigs. They just didn't hire them. Then, when the oil boom hit in '48 and things speeded up so much we just had to hire whoever we could get. Prior to that there wasn't a "ski" or a "chuk" in the oilfield that I know of.

JW: You're right, yes.

TW: They just weren't hired. There was a prejudice against them. There was quite a few Swedes and one thing and another but anybody that had a "ski" or a "chuk" in there, he wasn't working on the rigs.

#093 JW: How about yourself, in Turner Valley or Leduc, as an oilfield worker, were the farmers or the local residents look down on you?

TW: No. In Leduc the town people, they got along well with the oilfield, like the store keepers and stuff. Because it was their bread and butter, it was good business and so forth. It was just the mayor and his group that didn't get along with Imperial and of course, that just carried on down. But there was no problem with farmers and so forth. An awful lot of farmers in the Leduc area owned the oil rights. They were tickled to death, there's no way that they could afford to drill it. A lot of them retained 12 ½% of the gross or something and this would be quite a chunk of money. There were some wealthy farmers around there from that. We didn't really have any animosity towards the people in town. I worked out there, of course, I was pushing tools up there and I built my own

skid shack out there on the job and my family lived out there with me. In '49 I moved into Leduc and that's when I started, in the summer I started in the construction business. There was no problem living in Leduc at all.

JW: How about mobile communications, when did they come in and what kind of an impact did that have on the drilling business?

TW: In 1948 General Petroleum brought in mobile radios. They had a central station and we could phone reports in to the office and everything, right from the rig, with our mobile radios. As I understand, they were the first ones to do that too, along with First Aid and different things, they were kind of a leader in that. That's when we first used mobile radios was in 1948.

JW: Did that make a big difference in your job at all?

TW: Oh yes. We didn't have to do so much tearing around and driving and one thing and another. We were always in contact with the office. It's not like a mobile telephone that we have today. We were always in contact with the office and if we needed something we could get the office on the radio and have them phone out. But we could talk to one another on the rigs with the radio set-up. We could talk to any one of GP's hands that had them.

JW: Was that quick to come in after GP proved its worth?

TW: We used it for a couple of years I believe, before very many other people had it. Then other tool pushes started getting it in. I don't recall just when the mobile telephone started in. I don't believe they were until the 60's, probably sometime, when they started.

#140 JW: Okay, when we left off last time then, you were on your way to Drayton Valley. I wonder if you could just describe the scene at Drayton Valley at that time, I understand it was fairly hectic and quite a bit going on?

TW: When we first moved to Drayton Valley there was only around 20 people there, mostly farmers. Mr. Debee, John Mackenzie, Red Fuher had the garage, Mackenzie was a farmer, and Mr. Debee had been a farmer. He lived there, he owned part of the land. There was one store there, Getsinger I believe was the name. All told, there was about 20 people when we moved in. We moved down there, the first winter my brother Don and I stayed down in '53, we stayed down in Violet Grove in just a little shack that we had there. There was a store in Violet Grove and we stayed there that winter and then next spring we moved into Drayton Valley itself. But there wasn't many people around. We just rented a piece of ground, I even forget what we paid, just to set our trailer on. We had a couple of cats up there the first winter. We moved the second rig, it was a Cascade drilling rig and they lost a joint of pipe on their surface pipe and we had to skid the rig 75' for them to sput in again. We had been in that business of moving rigs with wheels, Wark and Patterson Construction. So anyway, we did most of Cascade's work. Fish Allen was the foreman there, or the drilling supervisor and I got along real well with Fish. We skidded that rig and it looked like it was going to be the next field so we stayed there.

JW: So you were there prior to the...?

TW: Yes, I was there on the second hole that was drilled in Drayton Valley. In '54 it rained like you wouldn't believe. That country was wet. We ran a cat train from Drayton Valley

to Violet Grove, hauling groceries or hauling anything. It was the only way you could get through there, you couldn't drive a truck there, had to tow them through. We ran a cat train through there daily for quite awhile in the summer time.

#181 JW: Almost a ??? service.

TW: Yes, same thing. we were doing that for \$11 an hour, was what we got for the cat and operator. They get more than that for the operator alone now.

JW: What other kinds of things were you doing in there, how long were you in Drayton Valley then, before you went up to the Swan Hills?

TW: We built an office and so forth in Drayton Valley and we were in there until 1960.

JW: So that was your headquarters then.

TW: It was the headquarters for our outfit. The office was there and Patterson lived there. When we went to Swan Hills the work had slowed up a little in Drayton, we went up to the Swan Hills. We did a lot of Home Oil's work in Drayton Valley. They moved 2 rigs up there, one into Swan Hills and one Virginia Hills. Those were the discovery wells in there and we moved a couple of cats up there and went to work for them.

JW: So in Drayton Valley then, you were what, clearing well sites and moving rigs around?

TW: Yes, we had a big bush crew. At one time we had about 80 men working on the bush crew, clearing and burning brush. And we built roads and leases.

JW: You were, was it at that time, sometime during that period, you were on jury duty for a rig accident?

TW: Yes, I served on a jury 3 or 4 times in Drayton Valley. This one chap had got wound up in a cat head and he got killed.

JW: Who ran these inquiries, was this the ERCB?

TW: No, it was just the local magistrate there that they had. The Compensation Board wanted to know, from usually, 6 people on the jury, they wanted to know who was responsible in our minds and try to pin these things down to some known factor. In order more to prevent things, it seemed to me, rather than to fix blame on any person or anyone. It was more just to find out how it happened and what to do to prevent it, type of thing.

#226 JW: Were you selected because you were quite knowledgeable, yet not associated with any particular drilling or oil company?

TW: Yes, I was quite well known in the area and they used to pick out anyone around there, truckers or Harry Knight, he was a garage owner there but he had been working on; that was Turkey Knight, he served on the jury several times there when I was there. I thought it was more, it didn't seem to me that we were expected to put the blame on any person, it was more to establish what had happened and to prevent such things. The Compensation Board was quite prominent in all of those hearings. Some of them would draw Compensation for quite a time, or their family, type of thing.

JW: You know what Carl Moore the other day, said about Drayton Valley, he said it was the busiest place but so little got done because it was so chaotic. Was that your impression as well, people running around but not that much really getting done?

TW: Yes, there was a considerable amount of that. There was a problem building roads and

stuff in the muskeg area. Some areas were quite wet and you'd have quite a time building a road through them. At that time they didn't seem to want to worry about the cost of it so much as, get it done. There was a fellow by the name of Wright got into the cat business up there. One time he had 90 cats working there for Staniland, building a road to Lodgepole and stuff like that. I noticed in the paper last week he went bankrupt, just went out of business here last week. He lost out in the cat business and then he got into an oilfield rental deal, renting generators and light plants and pumps, all that sort of stuff and I noticed here in the paper last week that he's gone bankrupt. They're selling him out. But up there, as far as roads were concerned, some of the roads there cost up to \$60,000 a mile to build. The muskeg, they would cut all the trees off and throw them into the middle, right where the roadbed would be. Then they had a drag line on each side of the road and they would come down working off a mat. They'd pick up a mat and swing it around in front of them and move the drag line onto it. They'd have 3 or 4 mats and they'd just keep moving them ahead. But they would dig the muskeg out and throw it out in the field side. When they got to the clay it was pretty wet but they would throw it onto the road, on top of this brush. And just stack it up on there. After awhile they'd get a D-4 or small cat just to level that off and let it dry on top of the brush and logs and pretty soon you'd be able to have enough there to hold up scrapers. You could haul on there with a cat and scraper and doze it ahead with cats. And some of those type of roads cost as high as 60,000 which was a hell of a lot of money back in those days. But you'd sometimes dig 1/2 a mile or 3/4 of a mile of road with 2 good drag lines on each side, just making the ditches. Of course, after a month, that would drain out pretty good you know. It would drain underneath where the road was. And you had your ditches already made, if you were in 3 or 4 feet of soft muskeg, you'd have to throw it out until you got into enough clay. Some of those ditches were 7, 8, 9 feet deep. Probably 12' wide. That's the way they'd get the dirt out and get them started.

#311 JW: How long would a road like that last then?

TW: Oh, it would stand up.

JW: Really.

TW: If it had good drainage, once these ditches were dug on each side, it was good drainage and they would stand up after that. Get enough clay up there so you could start hauling and build them up with scrapers. There was an awful lot of that road built up in Fox Creek area, built that way too. Quite a bit of it, we built some of it in the winter time but it didn't work out too good. It took several years to get those roads so that they would hold up. If you built them when the frost was out a lot of times you'd have, if your road was 3' above the level you'd have about 7' of dirt in there because it would pack down, you'd have 4' pushed down in the muskeg. And it would take a tremendous amount of dirt. But once you built them that way, they were pretty good.

JW: Did you get into pipelining at all?

TW: No. I didn't get into pipelining. I wanted to put pipelines through the brush up there. In muskeg and stuff I was going to have a ripper tooth and fasten the pipeline on to a shoe behind the ripper tooth and just bury it under the muskeg, just winch that ripper across

there. I had that idea back in the 50's for putting in pipeline and I figured we could bury them 36-40" deep fairly handily. In that wet stuff we could probably pull a quarter mile or more through the muskeg. It would be wet and slippery and we could just pull it right behind the deal. I wish I'd have gone ahead with that. That is the way that they're burying all their cables and pipelines today and I had the idea. I just talked to a few people about it and they didn't think it would pay out.

JW: You were ahead of your time.

TW: Well, that's right. Because this same idea, by putting a shiv down in the bottom of that ripper tooth, you can just feed that cable down through there and bury miles of it. This is what put in all the telephones and everything throughout the country.

End of tape.

Tape 6 Side 2

TW: . . . deals and they were making their money the other way. I thought that we could weld a quarter of a mile of flow line, most of it was 3" at that time, and just have this ripper tooth there with a big bell type on it and a pipe fastened right in behind it. I thought we could sink that down there and put enough power on there just to tow it through, we could put all that pipe down under the muskeg fairly easily. For some reason or other, it never was followed up on and it was quite a few years after that again, when they started burying cable and stuff throughout all the rural area with the same idea.

JW: Hang on a sec [coughing] Okay, you had sold your skidding wheels then?

TW: Yes, the wheels that we used for skidding rigs in Leduc and Redwater and Stettler and Drumheller areas, we sold those to GP. Because when we went to Drayton Valley the country was much too rough there to skid any rigs. So that's why we sold those wheels, we just wouldn't get enough work up there with them.

JW: Listen then, in 1957, you went into the Swan Hills for Home Oil. There were no roads up there at that time were there?

TW: No there was no road. They had a trail in from Fort Assiniboine to the Swan Hills. From Fort Assiniboine to the Swan Hills, there's over 600 turns in that road. It was the crookedest piece of road I ever seen. Just more or less a trail to get into the forestry tower and so forth. We went in from, just straight across country from Whitecourt. Old seismic trails and made new trails to get in to Virginia Hills. I built a few bridges in there to cross the rivers. There was another outfit in there, King and Butcher, from Whitecourt and Wark and Patterson. We made a lot of the first roads that were made in the Swan Hills. We had a camp up there, I watched the traps there for Al Oeming for grizzly bears, we had some grizzly bear traps there. If there was any grizzlies Al Oeming would come up and measure them and so forth and turn them loose again.

#041 JW: So live traps?

TW: Yes, they were a type of . . . made out of a 36" culvert, with a trap door that, when they pulled the bait inside, would close. We caught several of those the first year we were up there. Then Home Oil built a camp and we still had ours. We worked there till '59, then

they put all the work up for bid and there were some pretty hungry contractors out on the prairies, or outside. They underbid us so we moved back to Drayton.

JW: But they encountered some problems then, when they went with some of those low bids didn't they?

TW: Oh yes. They underbid us and we weren't making that much money at that time. They underbid and of course, they had to shortcut on their contracts. Instead of cutting the brush and burning it, they just buried it with a bulldozer. When the rains came Home Oil had to dig it out and do it properly and they'd already paid the contractor so it got to be a pretty expensive project for them. But we had moved back to Drayton and we worked there for awhile and then we decided to sell out. I had purchased a farm at Lac Ste. Anne, Alberta Beach prior to that. I kept one cat when we sold out, I kept the one cat and worked around Alberta Beach there, the farm for awhile. Then I traded that cat off and got a new 7 and went up to Fort St. John and worked up there for quite awhile.

JW: You were up with Jim Anderson's lodge and . . .

TW: Yes, I stayed up there at Jim Anderson's lodge. That was the old Beaton River Lodge. It burned down about '77 or so, along in there. Jim, he was the local pilot up there and he was a hell of a good one. He flew a Piper, Super Cub there. We built a location up on the top of Pink Mountain. The contractor was . . . they lived just north of Fort St. John there . . . a bunch of brother. They had the contract to build the road up there so they'd drove these 2 cats up to the top of Pink Mountain. There is a flat spot up there, about 300' one way and about 500' the other way, on the top of Pink Mountain. The cat contractor asked Jim, he said, the cats are going to be up there tonight to the top of the mountain, I wonder if you'd fly up there and bring the cat skimmers back down. Jim said, sure. He said, you can go up there in the afternoon, they should be up there, bring them back down. Jim clean forgot about going up there and it was after dark. One of the waitresses down there at the lodge walked out on the porch and she came back in the lodge and she said, funny, there's a fire up on top of Pink Mountain tonight. Jim said, damn it, I forgot to go and get those guys. So he went out and got in his plane after dark and flew it up there. They'd cleared this kind of a short runway there, they'd cleared that off and when these cat skimmers seen the plane coming; they'd set the dozers there and built a fire in front of the dozers so that they could keep warm during the night. And when they seen the plane coming they got on one cat and put it over at the one end of the strip, at the edge of the mountain and put the other one back here. Old Jim flew in there and landed that plane after dark. Picked one of them up and he flew him back down to the Beaton Airstrip and he just had car lights down there. He dropped him off and went back up and picked the other one up after dark.

#103 JW: And 500', that's not much runway.

TW: 500' of strip, yes. But he was a terrific pilot, he had more feel of the air, flying in those mountains and hills than any man I ever rode with. I flew with Jim quite a bit. I had a pilot's license of my own but he was one of the best I ever was with. Al Oeming hired him up there to catch, or to round up some caribou. The deal was he was supposed to give Jim this Piper airplane or so much money for each caribou. They'd caught this caribou up



there in the mountains, in these traps that he herded them into with his plane. They loaded the one up and put it in the back of his Super Cub.

JW: A caribou?

TW: Yes. A young one. They put it in the back of this Super Cub, they tied it up. So Jim always carried a revolver with him when he was flying up there. Anyway, getting down there, took off with this caribou in the back of the plane and getting down there by the airstrip and the caribou got to fighting and got loose in the airplane. Jim thought, damn it, he could shoot him but it was like throwing \$1,000 out the window. So he reached around and grabbed hold of this caribou and held him with one hand and landed that plane with the other one. It's incredible, some of the things he did.

JW: Well, I'll say, because you've got controls in the back seat too, of that thing.

TW: Yes, there's a set of controls there. If you pulled a stick out you'd still have your rudder stuck if he got his feet on that. But he wrestled this thing down and brought the plane in and landed it, didn't have to shoot him.

JW: When did you get your license?

TW: I got my license in '56 I guess.

JW: Just a private?

TW: Yes.

JW: Were you planning to go commercial and do something?

TW: No. I got my license when we went to the Swan Hills, it was just too far to drive there. And the road was too long and too crooked. You'd just be driving along there and come around a curve and meet one of them trucks and you'd head for the ditch and then you'd have to drive a couple of miles to get your hair to lay down again and then you'd meet another truck so I figured I'd live longer with an airplane.

JW: What did you buy, did you own one?

TW: No, I just got the license nicely and rented a plane for awhile, then we moved out of the Swan Hills so I really didn't have any use for one. Money wasn't that plentiful. I think a Cessna 180 at that time was worth around \$21,000, something like that.

#146 JW: They're over 100 now.

TW: Oh yes.

JW: You were working for what, Pacific Pete up there in the Fort St. John area?

TW: Yes. I worked for Pacific Pete and we did work for Union Oil when I was in the cat business. I worked with the Waddell brothers, Pat Waddell and Calvin Waddell when I had that cat and went up there. I was foreman and Brian, my son, did quite a bit of the cat driving. Then I got rid of that cat and I went consulting for Pacific Petroleum and I did quite a bit of consulting up there in Fort Nelson. And Wabasca, just wherever they needed me, Fox Creek, I did quite a bit for Amoco.

JW: So drilling consulting?

TW: Yes. Then in '67 I went overseas. I went to Australia. I was pushing tools in Australia and before my full year was up in Australia they had problems in Indonesia, in the jungle, getting locations ready. I was the only one over there with construction experience so they asked me if I'd go to Indonesia. I went over there and I was there for 5 years, in

Indonesia.

JW: This isn't really western Canadian petroleum history but I'm just curious, did you find a difference say, between oilfield workers in Australia or Indonesia and say, here in Alberta?

TW: Not that much difference. They work at a slower pace in all those areas. One thing that put Canadians in demand pretty near all over the world was there hurry, hurry attitude of getting things done. They seem to get twice as much done as anybody else. And they seem to get along better with people, they seem to be able to get more work out of them with less problem.

JW: The Americans sometimes are a little more arrogant.

TW: Yes. You can't push those Aussies around, that's for sure. The truck drivers and stuff over there are a pretty independent bunch. And they're a breed by themselves. When we were over there they never heard of chains and boomers for fastening stuff on a truck. They tied it on with rope. They'd have a crane there and load the blow out preventors on the truck and they'd tie it on there with rope, never heard of chains and boomers. I just about died the first time they loaded about 4 tier of pipe on one of them trucks and just tied it on with rope. I thought, my god, if Boomer Kapchinski could see this, they'd be able to hear him right back here in Canada. But they could do it, they could tie more knots or different kinds of knots and tighten ropes with it. They had a knot I never did learn how to tie it, but they could actually break the rope with it. They'd break a 3/4" rope the way they tied that knot there.

#198 JW: Just the way they cinched it.

TW: It would cinch it in like you wouldn't believe. They never lost any of that stuff. And to drive in that sand out in the desert, that is an art of its own. You just don't spin those wheels. The first time they spin they're dug down and that's about it. It's an art all its own, driving in desert sand.

JW: How did you get involved in offshore work then?

TW: I had cored for coal when I worked in that strip mine down there. The owner of the strip mine had wanted to find out where was the best place to strip. Gordon Westgate was his name. He asked me if I could core that coal, he had a little coring machine there, Boils Brothers coring machine, and I said yes, I thought I could. So he asked me if I could core that stuff and find out how much coal was in. There was about 30 odd feet of overburden above the coal and as I recall, about 6-7' of coal. It was nip and tuck at the price of coal, whether you could make it pay or not. We would sell 200,000 ton of coal per year in that strip mine. Getting back to the coring, I did a lot of coring there with that deal and this project came up offshore, the Nova Scotia Department of Mines and Devco Coal Co. were going to run a shaft 5 miles out under the ocean for coal mining. They started on land at Glace Bay and they were going to dig this shaft and go 5 miles under the ocean. They decided, maybe they better find out if the coal was out there before they built that shaft, that was \$300 million. So they contacted Pajack Land and Offshore to do the coring and manage the drill ship end of it. The first year they worked there in '77, they had a drill ship. I wasn't connected with the deal. They had a drill ship there that didn't have

compensator on the drilling blocks. You see, your drill ship raises and lowers with the tide or with the waves. As your waves come in your ship will go up and go back down again. Well, they had a compensator set of . . . oh. . . a slip joint down at the drill collars. This slip joint would handle 12' of rise and lower on the deal. You had a set amount of weight on your bit. Well, whenever they hit the coal then this slip joint would let it drill down to the bottom, it would just go right through the coal and it wouldn't get a good core, it would just crush it. So I was talking to them in the office that winter, the first year, they didn't get a very good sample of coal. I went in and I said, no, you'll never get a sample that way, you've got to have a compensator, compensated blocks on your drill rig, so that you can give it a certain amount of weight and it won't feed off. This compensated blocks is air over hydraulic, which your ship can still move up and down but your blocks will stay there with a given amount of weight on it. So they asked me, have you done this coal coring and I said, yes, I'd done this other stuff down there. They said, we've got to go down there again this year, you can go down and manage it. So that's how I wound up on the offshore work was from the coring experience and so forth. So I was sent down there to represent Pajack '78 I had the Glowmar??? Grand Banks there, and we drilled 9 holes offshore. We had a pretty good run there, I went down in May and came back the 1<sup>st</sup> of November. In '79 I went down and we had the Odeco??? Ocean Tempest. We got 97% recovery on all our cores, of coal. The coal was just about the way the geologists had it figured out and at the present time, I think that they've probably got that shaft in there. They were going to start the next year to put the shaft out under the ocean.

#290 JW: You know, you've mentioned periodically this Lou Pajack, who was he?

TW: Lou Pajack was raised up there at Entwistle. He got into the oil field, started in about 1951 or '52. Started at the bottom, he was the son of a coal miner, Tom Pajack mined coal. He was Polish nationality and he mined coal at Evansburg, when that coal mine was running. Then there was 3 or 4 boys in the family, or 5 boys. Lou got in the oil business and he worked at various outfits. He was an exceptionally smart man. He was ahead of everybody in their thinking in the oil business. He got to drilling for Peter Bawden and then he became tool push for awhile, then he was made drilling superintendent for them. Lou was one of the first ones that started blow out prevention courses. Pajack Land and Offshore ran the first blow out courses. He designed, along with some people in Edmonton, he designed the blow out prevention course that the government is using today. I have 3 or 4 tickets of Pajack Land and Offshore. We used to take the course there, we would have to write the exam, Pajack was licensed to teach it and to give the exams and to issue certificates. When it was seen that it was definitely a step forward in the drilling business so many other companies wanted to set up their own blow out prevention courses and techniques. ERCB said no, they would teach it. That if every drilling company had its own teacher and could license its own people, that there wouldn't be enough control of it. So eventually ERCB took it over entirely. Pajack could still teach the courses but he couldn't issue the certificates. The exam paper had to be written at ERCB and the ticket had to be issued by them. It was not that they didn't like

Lou's work or anything, but it would be unfair to allow one outfit to do this without the others. There was a lot of consultant outfits that were getting into the business at that time.

End of tape.

Tape 7 Side 1

JW: Is that then, more or less the beginning of the Petroleum Industry Training Service, that PITS?

TW: Yes. Lou had a great deal to do with designing that course. Lou was an exceptionally smart person. In '72 or '73 there was a well had to be drilled out up there and I was working for Pajack at that time. Lou told me what would happen. The man that was in charge of it for the company came up to the office and Lou explained to him and he and I had already talked this over. They sent me up there in charge of this as a drilling superintendent. The well blew but we killed it with this water feed set up. Lou said, it's got to work or there's no reason it won't work. I couldn't see how it would. But it worked exactly the way he had it figured out and it was the first time it had been used. That's what I used to kill this well in 1980 up there, the same method. Lou just seemed to be that far ahead of everybody on this blow out. He drilled that well in Hudson Bay down there. I believe he had quite a bit to do with that mining set up in hard rock mines. They would have to run a shaft from one level to another one in order to feed their ore down and Lou said, we'll drill that with a smaller bit down there. Drilled it down through that lower level, then they put on a big bit down at the lower level and fastened it on the pipe and they had a hydraulic deal. They just rotated it and hydraulicked this big bit and it chewed up from the bottom. Because you couldn't use fluid or you'd fill your mine full of fluid to drill it that way. So by drilling a small hole, and then after they got the pipe through, they fastened the bit on at the bottom and drilled up. And all the cuttings would fall right down and they were all dry cuttings. You could cut a 36" hole or a 24" hole to feed all your stuff down. They had their conveyors running from the one level. Lou helped with that type of thing. He also did quite a bit of work in the Beaufort Sea for different people. Lou had a heart attack down there. He was a man that would work 25 hours a day, just too hard on himself. If he thought of something he just stayed with it until he got it straightened out. Lou died February 16<sup>th</sup>, 1980. He died over at Gibson's in B.C., that's where he lived. But the oil field lost a hell of a smart man when he died. The company still carries on, Sid Robertson and Terry Dexter are operating the company. I've been working for them 12 years or so, ever since they were formed. I'm one of the oldest hands that they have.

#046 JW: You sort of went full circle then, in 1980. You went back to cable tool rigs at Heritage Park didn't you?

TW: Yes. I went up there. I knew old Ben Toon that used to look after the rig there and Ben had become crippled up, he was in his 80's I guess, almost, when he quit working on the rig. He couldn't get around well enough and the rig was shut down for awhile. I went up

and asked them if they would like somebody to take over the rig. My wife was ill and I didn't want to work too far away from town here. I thought that just running that day shift I'd be home most of the time here and was close enough that if they wanted to get hold of me they could. So I worked there and I've been working. . .well, last year was my 4<sup>th</sup> year I thought, maybe I started in '79, I'm not sure. I thought last year was my 4<sup>th</sup> year. I enjoy it, I meet people from all over the world. There's a lot of things that the old timers knew that we're forgetting today. There's a lot of those old fellows didn't have a grade 2 education but they sure had a brain and they could use it. I think that there's a lot of stuff that we probably won't have to use again hopefully, but it could get the job done if a person had to. I believe that you got a lot of that explained at the rig up there when we were working at that deal. Anyway, I really enjoy it up there. It's a good pastime.

JW: Looking back on your career in the petroleum industry, Tom, I wonder who might have been the most influential in your career, is there 1 or 2 people you can single out? You've mentioned several.

TW: I started when I was roughnecking. I roughnecked for quite awhile and then I got a chance to go drilling. I asked a friend of mine, old Corky Ballway???, he was a driller at that time. I said, Corky, I'm going to go drilling pretty soon, I don't want to be just another driller in the oil patch, I want to be the best one in the oil patch, what should I do. He said, do you know anybody in the oil patch that's a real good hand, somebody you'd like to be like. I said, yes, I'd like to be like old Woodrow Wilson, then he said, pattern yourself after him, think, what would he do in this situation. If you get into a problem, he said, don't panic, just go and sit down and think it out, now what would Woodrow do in a case like this. Try to pattern yourself after somebody like that. And I tried to do that. I used to have quite a . . .if I disliked somebody I just didn't want to have anything to do with them, that was it. But I decided that if I was going to be drilling, if a man was a good man, I may not like him but give him credit, if he's a good man you've got to work with him. And I think I pretty well got over that attitude. Just from that thought with old Corky Ballway. It was just through that type of thing. I also took that Dale Carnegie course when I was in Leduc field. I took the Dale Carnegie course, it's a public speaking course really, but there's so much public relations connected with that, that I took the course a second time. It was just one hell of a good course. I took it a second time, I believe I got a lot of benefit from it.

#105 JW: Also, that makes you feel good about yourself too.

TW: This is right. It's a wonderful course, even if you don't intend to be a public speaker as such, there's so much just public relations and good humanity in it that I'd recommend it to anyone.

JW: What would you think might have been a high point in your career? You've been to much of the world and different kinds of activities.

TW: It's kind of hard to answer a question like that. Up at Heritage Park many people say, you've been in this all your life, when was the biggest changes you've seen. It's been gradual, there hasn't been any one significant thing. The rotary rigs we worked on years ago were slow and it's just been a gradual change right from the first day. And they're

changing more rapidly today. One of our problems is that we are not training our people to keep up with changing drilling techniques and stuff. It's getting too sophisticated. We're employing tactics in the drilling business that there's too few people understand them. Some things that they're using you have to send halfway across the continent to find somebody can repair this stuff or somebody that understands it. I think this is one of the problems that's in the oil industry today. We're drilling too close to the border line, we're using water to drill with and gas, you can blow it out too easily. Years ago, the mud would be 12 lb. to the gallon. We'd be, god, that's good mud tonight, hell if the hole got half empty you still couldn't blow it out. You know, we just didn't know that much about it. Today, to increase the drilling rates and so forth, they're just drilling with water. And if you drill with air, that much faster. You can drill way faster with straight air drilling in certain formations. We're just not keeping up with our drilling techniques. Too much of it's done right in the offices and so forth and our people aren't trained.

JW: We're about to the point where we can wrap it up Tom. Anything else that you'd like to add here that maybe we haven't covered?

TW: No, I can't think of. . . probably will think of a lot later on but I would have to make notes on it if there was something else that came in. It's been a good life, I'd do it all over again I think. I've enjoyed it. I'm probably going to do it all over again because, as I say, I'm going to live to be 148 and find a good looking school ma'am and bite her on the ass and get lockjaw and get dragged to death. So I've probably got time to do this all over again.

JW: Okay.