

PETROLEUM INDUSTRY ORAL HISTORY PROJECT  
TRANSCRIPT

INTERVIEWEE: Gordon Rae

INTERVIEWER: Susan Birley

DATE: ???

SB: [starts in mid sentence]. . . S. W. in Calgary. I wonder, well, first of all I'd like to thank you for participating in our program and I was wondering if you could tell us first of all, a bit about your background, where you were born and raised?

GR: Southwest corner of ??? Australia, about 1904. So ??? ornery old SOB, but not all the time.

SB: Were you in the Air Force in Australia?

GR: Yes, about 1928.

SB: What made you decide to come to Canada, pull up your roots and move out so to speak? Was Canada your first choice?

GR: No, you see in 1940, I was 36 and in a way, this is getting pretty old for a pilot. I'd had 3 years in England and went back to Australia then and was kind of out of step, you know, for appointments and promotion and ???. And I wanted to fly. The whole thought of the Royal Air Force ??? Command, taking aircraft over to England, Africa, India or wherever intrigued me very much and that's what I wanted to do. It didn't matter to me very much what was the actual service I was working for as long as it was in a common cause.

SB: And so, did you come to Canada on one of those missions?

GR: No, the Royal Australia Air Force gave me permission to apply for the ??? Command. They could not do that. They could loan me to the Royal Air Force but could not specify which branch of the service they would use me. But they would let me do it on my own, so I sent a cable, went straight out of his office and sent a cable to Montreal. They cabled back, come over at your own expense and I came over at my own expense and they put me to work.

SB: That's great. How long did you work as a pilot in Canada then?

GR: 2 years, that was the end of the war. It was VJ-Day as a matter of. . . not VE-Day but VJ-Day. Then we were all released then ??? a very nice framed thing, ???.

SB: And where were you stationed at that time?

GR: Montreal.

SB: Oh yes. So you decided to come out west at some point?

GR: Yes. I had some shares in 2 oil companies, and I wanted to know what they were about. I'm afraid one of them was as phony as a 3 dollar bill.

#031 SB: I guess there was a lot of that shares being bought up at that time, or being available?

GR: Likely, yes.

SB: Yes. And so what made you decide to stay out in Alberta?

- GR: I enjoyed it, I enjoyed it very much. And the big discovery, which was at Leduc, in February '47, I suppose, this intrigued everybody.
- SB: So did you say that you were working on oil derricks?
- GR: Yes. At Lloydminster. ??? shallower.
- SB: How did you first find out about that job or get in touch with the people?
- GR: Oh I had shares in a couple of companies around there and when I went to the company head office and met the people. And just in the pool rooms, in the bars, anywhere where you meet people, you met people.
- SB: What company were you working for when you first started?
- GR: I don't remember now. Lloydminster Gas Company I think. Charlie??? Mills was the name of the man. All of your older people who worked around Lloydminster would know him and he was a wonderful guy. I worked on one of his service rigs. Service repairs, ???, it doesn't make any hole, drilling rigs make the hole, they bore it out. This was interesting.
- SB: What was your position on the rig?
- GR: Just a hand.
- SB: So were you taking the pipes out of the ground and . . . ?
- GR: Sometimes yes. No, we didn't handle pipe very much, we were not really a cable tool rig but very close to it. We didn't make any hole. When the rotary thing drilled the hole, ran the casing and cemented that in place, they would leave a plug??? of cement, probably 20 or 30 feet of it, right at the bottom???. Roll down the outside and this plug at the bottom. And we had this ??? cable tool outfit and we'd go and drill out that cement, ???, right at the metal.
- SB: So after that the drilling company could go in and reopen the well, is that how it worked?
- GR: No, they were finished.
- SB: Oh, I see that was when it was finished.
- GR: ??? completely, we completed it. And we had various other ??? but all our ??? were ???. That was interesting, good people. And then I decided to come up to Leduc and work on a bigger rig. Of course, Leduc production was around about 5,000' whereas at Lloydminster production was only about 2,000. So everything was smaller.
- SB: At Leduc, which company did you work for there?
- GR: ??? Petroleum. They supplied drilling rigs. They were not an oil company, not in an accepted ???, they were a drilling contractor. So an oil company, Imperial or Pacific or someone like this, would decide they're going to drill a hole there. That would be an interesting story. When the oil company decided to drill a hole, this would be a financial thing, and it would start off from there. But there would be a whole bunch of people in their office that would actually, how much is this going to cost us and where can we spend it. That's actually a most interesting story right there, which I'm not in, I don't know anything about.
- #075 SB: No. But with your job then, you were still doing sort of the same job but on a larger operation.
- GR: No, because the modus operandi was quite different. No, I became a derrick man on the

bigger rig, much bigger rig. Then you did pull pipe out of the ground or run it back in and it had to be. . . the elevator, the thing that goes up and down and picks up the pipe, that had to be controlled up top. Run up to you by the driller down here but you had to let ???.

SB: How long did you stay with that company or that job?

GR: I think about a year, year and a half, something like that.

SB: Was it really demanding work, were you working 7 days a week?

GR: Yes, probably. Probably 7 days a week and relatively pretty good pay.

SB: Can you remember what the wage was?

GR: No. I know I used to work 200 hours a month, 202 I think, and that included some overtime, because it was 7 days a week. It was hard work but you never had the 8 hours hard or very rarely, extremely rarely. You might go like hell for 4 hours or whatever time you are tripping a pipe and then when that was all done, either all out of the hole or all in the hole, that was the word. You never said you were going to pull pipe, come on fellows, out of the hole. Safety precautions were fairly lax in those days. Drill collars were about this sort of diameter, around 6 or 7 inches diameter and a stand of pipe was about 90' long. Occasionally you would slide down the drill collars and you get down near the boiler and suddenly you find there's little bits of slivers, splinters, of steel, from the strip. They had to be held on a big table here, the round holder and you had to hold the pipe there while you went out and got another one, and made that on. So the strips which held the pipe were sort of jagged in order to hold the pipe but this left little slivers ??? your thighs.

SB: So did you carry on working in drilling for quite awhile?

GR: Oh yes. It was good work, good fellows.

SB: I guess there was a lot of activity around Leduc at that time, lots of companies.

GR: Oh yes. When you're up the tree, which was the word, the way you sell it, from up the tree you could probably see about 40 or 50 rigs around the place.

SB: Is that right. Do you think, have camp conditions changed much since then, like what was your camp life like?

GR: ??? They've improved, yes. But much the same. There were so many things, yes, there are some brand new things but not really in the drilling part. Not a great deal has changed there but has improved.

SB: Which company did you work for after that, did you carry on in drilling with other companies?

GR: General Pete, yes, and Commonwealth and Cantex a little bit. You see, all the ???, all the hands on the rig, all the drillers and so on, they're really paid by the hour. So if you finished a hole, if you don't have another one to go to you don't have a job. Of course, this is not for long. Usually it's not for long, occasionally it can be. It might be 2 or 3 days till you start again. And not necessarily with the same company. If the rig shut down and you're automatically out of a job, not on a payroll, out of a job, you had to scratch your head and try and find out when the rig is likely to go to work. If nobody knows, of course, the knowledge would be here in Calgary not there, and if nobody knows when it's likely to go to work and another rig needs a man, you're liable to take that job. Not only because there is lack of loyalty, it can be just kind of nice to stay eating.

- #137 SB: With Commonwealth, can you remember some of the other people that were involved at that time?
- GR: Gordon Mackay was the head man and Al House???. My god he must have 100 years as a drilling foreman, a wonderful man. There are very few of those people left now. Oh dear, I can't remember. . . Norman. . . Norman's last name I can't remember.
- SB: With the other companies I didn't recognize the names of any of them.
- GR: General Petroleums.
- SB: Yes. Have they become, are they still around or did they merge with another company?
- GR: They merged.
- SB: You were just looking for the name of the company. It was Westburn Drilling you said and that absorbed Commonwealth and . . .
- GR: And General Petroleums, and probably others. Commonwealth and General Petroleums were two of the drilling contractors, with a third one and they were all about the same size. They were quite big and quite solid.
- SB: Do you have any idea how many employees they would have had at that time?
- GR: I can't answer that. But likely 20 rigs with 20 men each, usually. So that's about 400. There would have to be more than that, the people in the yards and so on, 500 wouldn't be an exaggeration.
- SB: So what year do you think you continued on with them until?
- GR: Until I retired about 3 years ago. So where are we, '83. So '79, something like that.
- SB: Is that right, wow. So you saw a lot of changes happening in the patch over that period?
- GR: [With people particularly.]???
- SB: Did you say that you were. . .you didn't stay on the rigs the entire time, you advanced into something else?
- GR: Oh no. I came into drilling muds. When you have been up in any part of the business any time you're known by senior people in the offices. And then you go and ask them if they will use your drilling mud or your drill collars or your rigs or whatever you happen to be selling. And that was in Calgary.
- #179 SB: Were you working mostly for yourself?
- GR: For awhile. I had my own company for awhile.
- SB: What was the name of your company?
- GR: Drilling Fluid Service. Mud is a drilling fluid.
- SB: When you went around to sell it to the different companies were there certain people that you tried to contact?
- GR: Oh yes.
- SB: What type of person would usually handle that?
- GR: He would work for the drilling engineer probably and he would likely be a tool push. He probably would not have an engineering degree, could be but not too likely.
- SB: I was just wondering what kind of educational background you had?
- GR: I had a very little university. So little, I passed first year sociology in Edmonton. So a little bit.
- SB: So you're mostly self taught then, going through the different work. And did you meet, I

guess you met a lot of colourful people through the different companies.

GR: Oh yes.

SB: Who were some of your favourite customers do you think?

GR: That would be a hard question to answer. I'll give you some names that aren't around now because anyone listening or reading would think, oh, I remember him. Bill Alander of Seaboard. Seaboard Oil Company was taken over by Texaco. ??? is still with that same company, Seaboard, he's still around, working for Texaco, ??? senior. Of drilling contractor people, tool pushes and field superintendents and that sort of thing, Swede Black was ???. He's early people and very good people. The spring break-up was always a bad thing for us because you couldn't move rigs when the ground was soft. In the early days one field superintendent who went around to visit the rigs, not work on them, got himself a horse. He could get around through all the soft quagmires you see, and get there and get back again. And of course, the irreverent people like myself officially named the horse the Admiral Barge.

SB: I guess he was one of the only people who could get through then.

GR: Yes.

SB: Did they make much use of things like Bombardiers or Skidoos or things like that, or anything at that time?

GR: Very little.

SB: When you were working selling drilling mud, did you have a circuit or how did you decide where to go?

GR: In the field?

SB: Yes.

GR: Well, distances limited you there. You had to have a man here and there, but not close together. They would drive out to the rigs in their area.

SB: So did you mostly coordinate the sales from Calgary?

GR: Yes.

SB: Oh I see. What were some of the fields that you were supplying?

GR: Most of the Joffre field, ???, Judy Creek. Are these names familiar to you?

SB: No, well Judy Creek, yes.

GR: Joffre, just east of Red Deer.

SB: Oh right, now I remember.

GR: It was mostly Great Plains Oil Company.

SB: Were there many other people doing the same type of work as you?

GR: Oh yes. Dave Mitchell was the engineer for Great Plains and gradually went up until he became the President I think. And he's now the President of Alberta Energy, a tremendous job.

#240 SB: Who were some of the bigger customers that you had during that time?

GR: I don't remember now. Great Plains was the, they were good customers for a long time. Of course, there was only the 2 discovery wells in that field and 75 miles further west, at Eckville, at the same time. There were really 2 fields, really 3, 2 at Joffre at different depths and 1 at Eckville. And all about the same time. ??? Evergreen was drilling at the

same time and one of the oil company engineers on the rig was saying that there was a wonderful job ??? in that area. He said, lots of girls would come to Red Deer-Sylvan Lake during the summer for holiday you see, and of course, you had to be very careful, extremely careful. What you had to do was impress the hell out of a girl whose father owned the mineral rights. I can't say that was par for the course. It was one of the irreverent things that. . . .

SB: What were some of the more significant events that you saw in the oil fields during your career?

GR: Oh my gosh, I don't know.

SB: I guess Leduc was one of the first. . . ?

GR: Oh yes very much so. ??? and I didn't fully understand what it meant, all the things involved. I didn't understand how much greater the production was from that sort of depth and that sort of formation than from the shallow wells, relatively shallow sand formation ???. Much more profit, much more black ink from the deeper wells. And of course, bigger rigs. More cost of drilling but the end result was more black ink. I didn't realize all that at the time. I was wondering why everybody was, you know, dancing in the streets and so on and they were.

SB: You were talking about the changes in the type of drilling equipment used, going from the cable tool. Can you remember when those came in and what kind of a difference it made?

GR: Really, see I started in '46 in the oil patch and it really happened in the 5 years before then I think. I was working on a cable tool rig but not for drilling holes, for servicing holes, repairing.

SB: So the cable tools were mostly phased out by that time.

GR: Yes, precisely.

SB: Oh I see.

GR: ??? they had a bit, a thing they called a bit and it was ??? and about 4' long and about this round, about 7 or 8 inches diameter. The bottom end of it had to be, not pointed like that but more like a chisel. You did this by heating the thing to red hot, to a glowing heat and then beating on it with a sledge hammer or a slam hammer. That was called dressing tools and this was quite a thing.

#305 SB: So the people that were working on the rig actually had to keep. . . was that how you sharpened it as well?

GR: Yes, that was sharpening yes.

SB: And were there many changes in the type of drilling bit that was used after?

GR: Oh yes, then they became rotary. Like a ??? bit pretty well, like a carpenter uses. ???, that sort of thing. The jargon was fun. On the cable tool thing, the ??? cable dresser with a crown and down the hole and the driller is probably standing back as far as that door across the hall.

SB: About 15'.

GR: Yes, or 20, somewhere like that. My job was holding on to the wire which would be pulled up and down you see, and ??? was happening all the time and Bull Morrison was my driller, the man I worked for. I'd be standing there for a minute or two feeling every

stroke of this thing and he might say, what's you doing Gordon and I'd say, reaching for it. It wasn't really hitting hard, reaching for it.

End of tape.

Tape 1 Side 2

SB: So you were just explaining. . .

GR: So we're drilling now, we're making hole, that's the work. If I were a stranger on a rig, a salesman perhaps, coming on a rig, the tool push of course, is the man I'd have to work with. But the driller is on the brake??? all the time. This is what lowers the whole pipe and drill collars and big down the hole a bit more, a bit more, a bit more. And he's got a weight indicator that shows him what the pipe is weighing and the more is buried on the ground at the bottom, the less it weighs. So he knows what it weighs in air right, what it should show on there, and that he's got to back off on his break until something less, a measured amount less is shown on the clock. In other words he's got to be there all the time, watching that clock. So he's drilling away and you've got 5 or 10 thousand feet of pipe, going down and rotating at anything from 60-100 rpm and it's not impossible. . .that was a good illustration wasn't it. . .I'm pretty smart. . . twist off is the official word. What they would say in the vernacular. ??? So something ??? communications from the field to the office in Calgary basically takes place about 8:00 each morning. If there are 30 or 40 rigs in the field you've got to wait your turn on the telephone. You had to then, you probably wouldn't today. But it doesn't matter, you have to report to your man in town here and he reports to the seniors in the company.

#033 SB: And what was the position of the one in town, what was he called?

GR: Probably drilling engineer or something.

SB: Oh right.

GR: But those were the things. I was a drilling foreman for Amoco for a few years and Art Dixon, who was a prince of a fellow, was the man I reported to, my immediate superior if you like. You'd phone him and he'd know ??? but he might have half a dozen people phoning him about that time. So you'd say, good morning Art, how's your morning Gordon and always from him, how's your business. Oh Christ Art, we're running ???.

SB: Would it make any difference when you hit a different type of formation, would it go faster?

GR: Oh yes, that could happen. The odd formation was quite known to be a potential twist off as you drilled into it. Coal particularly, a seam of coal in the general Pincher Creek area, down around 12,000'. I think it was the Livingstone formation. ??? would know much better than me. I don't remember him working there but he's a geologist. ??? Of course, you couldn't see any connection, neither can I, as to why a geologist should be called a gigolo.

SB: Were there any jobs that you had that you enjoyed. . .oh, sorry.

GR: Down there in that Livingstone formation at Pincher Creek, at 12,000', as you drilled into

the coal seam, which was more horizontal, that was a really bad place to either ??? or to get stuck. When you can't pull the pipe up or push it down. Then you're really got to work. Maybe for weeks, to get out of the hole.

SB: Is that what you call fishing?

GR: Yes, it can be. When you ring its neck, you have no connection anymore. Then you've got to fish. And in the knowledge book, not log book, knowledge book, always knowledge book, that knowledge ???, in the knowledge book, when you got hold of your fish with an overshot, an overshot was more or less like that, ???, with any luck you could work with being out of the hole. Then you'd put in the knowledge book, landed fish. That meant you could get back to work then.

SB: But sometimes, did you ever have to abandon a well because of getting something stuck?

GR: Yes.

SB: And would you try to drill right beside it or what was usually done then?

GR: Oh, I don't know. Sometimes we went right down along side it and ??? twist around that pipe and could easily get you into trouble again. There was a different thing called whip stocking. This was a long thing, at least as long as floor to ceiling and about 8" diameter. It filled the hole and mostly we drilled 9" diameter hole. The whip stock was that long and there was enough ??? you could run down the hole. And down the front face of it there was a groove much like that and there was a ring on the top. And on the surface you ran the bottom end of your pipe through that ring and made up your bit onto it, which was smaller than normal. Then you put in a 1", through the bolt, all the way along, through the whipstock and through the sub, sub is a little thing like that. . .

#082 SB: Like a ???

GR: Goes in between sort of. And that had a hole in it for this screw thing, same as the ring of the whipstock had a hole in it so the whipstock was actually stuck, fixed to the ring, the ring of the whipstock was fixed to the sub which was on the bottom of the drill pipe. So the face of the whipstock was, ??? it's fixed. So you could actually set the whipstock facing that way or that way or that way or that way. You could face it the way you wanted to, if you were any good. And you say, why all that song and dance about a whipstock. Well, we've got a fish in the hole. It might be a drill collar, pretty well filling the hole, it might be 2 or 3 drill collars, it might be 100' long or several hundred feet long. And you can't get it out, you can't get hold of it anyway, you can't get into it at the top, nor can you get an overshot over it. So you have to give up so you cement the whole thing in, you pour cement on top of it and let that set hard. Then you set a whipstock a little bit higher, and you set a whipstock on top and then you bend the hole around the fish. You actually bend it. Or the age of your producing thing is over there where that little ??? is and we can't set the rig up any closer than here. Nor can we set it up over there. So we've got to bend the hole over to there, another distance and direction.

SB: And you can continue drilling after it's been diverted?

GR: Oh yes. Yes, you ???, you've got to, that's what it's for. So the things you can do with, what's the word, educated understanding, educated is that the word. I haven't got a good phrase for it. But you know what you're doing.



SB: And that's what you're there for.

GR: Yes. ??? living, educated guesses. But damn good guesses. We were working for Imperial on the east side of the Devon field, on an Imperial rig. We were going to do some drill stem testing in the D-2, which is say around 5,000', maybe not quite, it's not important. But to do the drill stem testing, you know these things do you?

SB: Not really.

GR: They have a rather thing of them about this long and there are different ways they can squeeze down the hole so that it butts up hard against the formation and makes a seal. Then one way or another you can take the mud pressure, that takes the mud pressure, the mud is outside the pipe. Because you've sealed off the mud from the formation then if you . . . you can't put a vacuum on it but you can. . . the formation has its own pressure ????. And if you can remove all pressure from it, then automatically it implodes right. That's called drill stem testing, with the ??? leading it up the pipe and out the top, they can measure how much gas or oil per minute, per day, that's testing. Now we had to test the D-2 and you couldn't run a packer, full gauge down a hole, not really. We've got a 9" hole all the way down here, you can't run a 9" tool down it. ??? So when they're testing they drilled a hole of smaller diameter, in this case through the D-2, which is a limestone formation and they drilled a 7 5/8 diameter hole and they could run a 7 5/8 packer down the 9" hole you see, and we fit pipe in there. So I don't remember, 200' of 7 5/8 into this limestone and tested and then another 100' and tested that and then we had to ream it all out to 9". This was a slant hole, going over there and now where were we. . . we had to ream the whole hole out to run the casing, the whole thing had to be a 9" hole to run the casing was the point. So we had to run a 9" bit and ream it all out from 7 5/8. And the driller didn't understand, he had to crowd the thing and make the bigger bit follow the smaller hole and ream it out. And we sidetracked that hole, we started to build a new hole which wasn't in the same land. So they had problems. We tried to get around it as best we could, finally we had to set another whipstock and drill, bend the hole again. And we had to bend it in the direction of the edge of the reef, of the production.

#152 SB: How could you control the direction that it went from on top like that, just by. . .?

GR: You could sight the thing in, there was a clamp that clamped around the pipe. And you could do this at the whipstock and into the clamp you pushed a long sighting bar, as long as my stick there and it went up there with ???, sighted down with a small telescope until you brought this round to wherever the telescope up there told you to do it. That was initially, put it in place, relative to ????. You see. And then you put your clamp on it and lined it up, then that was fixed, then you could put the ??? clamps on, there from now on. You ??? all the way through so you knew just about, almost exactly where your whipstock was pointing. Then when you were drilling off the whipstock you could run on wire line, a compass, a directional compass that would actually tell you where you were heading. So it was quite an accurate thing. And quite interesting.

SB: Were you ever involved with any wild wells?

GR: Yes. Atlantic 3. That was scary. They're quite scary.

SB: How did they try to control that one?

- GR: Usually by snuffing the thing out with ???, usually. Sometimes they'll drill a slant hole here. If that is a wild well, of course, you rarely know where the bottom of it is. If that's the rig is the bottom might be anywhere . . .
- SB: Oh I see, yes.
- GR: That might sound funny. You do surveys every 3 or 4 or 5 hundred feet on the way down. This is more to see that you don't get too much of a dog leg.
- SB: Oh right. When it bends too many times.
- GR: Yes. And ???
- SB: Oh right. So you can have one bend in but if it bends back again. . .
- GR: No, no. A dog leg is. . .
- SB: Oh, an angle.
- GR: When you bend a hole you limit it to 3 degrees per hundred feet, you see, it's a gentle thing. Well the pipe's not going to bend ??? rotate. So a dog leg is. . .
- SB: A sharp angle.
- GR: Yes, it's ??? thing and it's a bad thing.
- SB: So you never really know exactly which way the pipe is going. What would be the variation, would you feel within a hundred feet you would know. . . ?
- GR: Three degrees. Three degrees of angle. But a dog leg might be anything because it's a haphazard thing, completely haphazard. Every survey instrument to measure doglegs, which are normally used, there's no direction involved. Whereas in ??? hole, of course, direction is very much involved. It's very interesting.
- SB: Well, a lot of people don't see that part of it so it's valuable knowing. . .
- GR: Right. They know what's happening but they ???. Maybe they never met Mr. Trigonometry. ??? elementary trigonometry that they use. May I come back to the hole? We sidetracked our ??? accidentally, set another whipstock and I think we only drilled about 25 or 30 feet from there where we set this whipstock and it was midnight. And Slim Ellery??? was the driller who came on duty then. And as each driller came on duty I wore out a thick stick of chalk on the floor or the wall or something, explaining what I figured was happening, my educated guess. I remember very clearly with Slim, where we got about 20' more to go and you can measure 20' down on the ???, you know, you have a 5' yardstick with you, from the ??? or chalk line and you can measure of 20' very easily. About 20' to go and I think we're going to drop back into the old hole and ???. We had run the bit on a 3½" pipe where basically ???, basically we were using 4½" and 4½ was much more stiff, much stiffer, much more rigid. The 3½" is more flexible and could go, the bit could lead us and the drill could follow. I said, at about 20' you should drop into the old hole or come into the side of the old hole, something like that. He said, how will I know, I said, I don't know, I've never seen it happen. But I imagine your bit will chatter on the side of the hole like that, that side's solid, this side not, I imagine you'll chatter and rattle with your table there ???. And I did. About 3:00 in the morning one of the hands came over and woke me up, I remember sitting up, sat up and eyes wide open while he was talking for 2 minutes, didn't have a clue what he was saying. He said, we think we're back in the old hole, will you come over. So I got dressed and come over and there we indicated, we are back in the hole and it was 19½'. So we decided we'd pull out of the

hole and run a thing called a hole opener, which was like a drilling, you know what a drilling bit is like, 3 or 4 cones, 3 I think. Well, this was a hole opener and much the same sort of thing. It had a stinger coming out of the middle of it. And the stinger would be about as long as my arm and ????. It wasn't a modified bit, it was built as a hole opener with the 3 cones, like a bit has and the stinger ahead. The object of that was to lead the way down the hole you wanted to go and the 3 cones on the outside to ream it out. So we ran that and we were in the old hole. We'd saved all kinds of ????. That ??? hole was worth about \$15 a foot. So you saved time. . .

#252 SB: Sorry. Was that pretty unlikely that you. . . was that really a stroke of luck that you hit it?

GR: ???

SB: Oh really.

GR: I remember it's like a ???

SB: Yes. That's really interesting. So you were saying, continuing on with going down the hole.

GR: Yes. Once we had reamed out the hole with this hole opener then we could run a 9" bit. And there would be the length of the stinger that wasn't reamed out. ??? was the driller and George Kirkpatrick was the tool push.

SB: And that was on Imperial's well did you say?

GR: Yes, on the east side of the field. And the old Dutchman, you probably haven't heard of him, I'm afraid he's dead now, Charlie Visser, he was the rig??? superintendent, the Dutchman. Wonderful guy. I liked him very much. But any of the Imperial. . . ??? worked for Imperial, he'd know all these people. I bet I'm putting things back in his mind he hasn't thought of for years. I don't know where ??? is these days. I think he owns one of the catering, rig catering things. If Imperial were going to drill out at, oh, Benjamin Creek out here in the foothills, out to Cochrane and up the Forest Trunk Rd., then off to the side somewhere, well, it's too far. There are 4 or 5 men going in there every 8 hours, too far, too costly, too. . . not practical. So they put a camp out there, that's easy. Atco can make them a camp and rent them or sell them. But they're still got to have cooks and chow, some of that good stuff. So there are several catering companies. I think George Kirkpatrick our tool push now owns one of those catering companies.

SB: Oh I see. You were saying that you belong to the Oilfield Technical Society.

GR: Oh yes.

SB: Could you just run through some of the activities that that society is involved with or the people?

GR: I don't know anything of it, other than the old timers thing. And that's ????. You don't see these guys. Now wait a minute, this is an annual thing. The last one was the 22<sup>nd</sup> and there were 545 old timers there. There was some beer but no great amount. And a nice dinner, a lot of speeches.

SB: You're a 30 year member of that organization.

GR: And we were something between 6 and 10, 60 year members and god knows how many 50 members and hundreds of 40 year members and lots of 30 year members. There's all

the history and people and it's wonderful to see those fellows again. At the dinner they also read out a list of all the old timers who died.

End of tape.

Tape 2 Side 1

SB: ??? isn't always for discovery.

GR: Not always. Information is the other side of it. There are many reasons obviously, ??? the edge of a field. Texaco, Wizard Lake field was in the news the other day. This was on a fairly high mound of limestone, porous. I suppose all limestone is porous, I don't know. And I can remember talking to one tool push when the geologist came up to him and said, I'm sorry, I forget, his name will come back to me in a minute, and the geologist said, I'm sorry, I can't tell you when you'll hit the top of the reef, I can't tell you at what depth you'll hit the reef, we're not on the top, we're down the side somewhere. And that might be 400', it was somewhere in there but I can't tell you, I don't know.

SB: Would you like to just run through how the geologist analyzes what's going on in the well?

GR: Basically from the samples, which he looks at through his microscope and identifies and determines if there is porosity or permeability, not quite the same thing. And if there's probability of gas being there or oil travelling, sort of things. He can tell a certain amount from drilling ??? in a known field.

SB: The mud plays a very important part you were saying, in . . .

GR: Yes. But when you're drilling in the Mississippian ??? so it's really hard, drills very slowly and then you break into a porous limestone, very porous, with ???, if ??? is the right word, you know, I can stick my thumb into then you can drill like hell. So you've got a drilling ???, you know, time per foot or 6" or whatever, but per foot mostly. And in some fields there was a very big danger of lost circulation, that is, the mud you're pumping down the inside of the pipe, and up the ??? outside it, through the ??? disappearing. You're pumping it down but nothing is coming up.

SB: That's because it's going so fast through ??? the formation.

GR: ??? the formation. Fractures perhaps, in the limestone. ???. It depends on the weight in pounds per square inch exerted by that 5,000 column of fluid, 5,000' from way down the bottom of the well, that extends up 5,000' and ??? in that column of fluid. And that holds down the gas. If that disappears, all disappears into fractures or crevices or caves, they happen, then you've got nothing to hold down that gas and you might easily have a wild well. In fact that would be the most likely way of getting a wild well. The other would be of course, that the driller forgets to fill the hole, pump the mud into the hole. When he pulls the pipe out the fluid level goes down then you've got to replace it.

#044 SB: What can you do in a situation where the mud is just disappearing like that?

GR: Just keep ???.

SB: Have you ever tried pumping anything else down the hole to try to hold it down besides

mud?

GR: Oh yes. You've got to stop the mud getting away so you pump down all kinds of stuff. One well, and that was a fairly shallow lost returns, shallow ???, only around 800', north of Rimbey or south of Pigeon Lake. What's at the south end of Pigeon Lake, Ma-Me-O Beach, in between Rimbey and Ma-Me-O Beach. I'm not quite sure, ???, thereabouts, Aubrey will remember, and you're not going to believe me. We pumped down in the mud, a whole bunch of . . . well, I can see you're not going to believe me. . . ping pong balls. Light, bulky.

SB: How did they get a big enough supply I wonder to. . .

GR: When you're desperate, those things don't matter. And they were desperate. But things like oats or wheat, the whole. . . ??? weeks. Has not someone been through this before.

SB: No. Well, I remember reading about one well that they had to do that but no one else that I've spoken to has been involved with it.

GR: There were a lot of hours spent on the floor of the rig, and that's oh, usually about, perhaps 20 x 20 but that would be a big one likely, watching the flow line where it was cased and the casing was brought up, oh, about 15' above the ground surface. Then there's a flow line welded on to the top of that, not quite to the top but just below the top of that casing, running up to the ??? and so forth. And many an hour has been spent watching that just to make sure we don't lose returns on the circulation.

SB: Did you continue working as a mud salesman right up till when you retired?

GR: No.

SB: What were some of the other positions you had?

GR: Not really sales but. . . sales, but not in the sale department. Sounds silly doesn't it.

SB: What did that involved?

GR: This was for a service rig company, Sunalta??? and a very good one. And mostly very big rigs. There the rig was not rented by the oil company on a so much per foot basis, which was the whole how, probably almost certainly, had all been made. It may have been producing for several years and there might be a break in the casing and it could be repaired. Okay, you need a rig, a special rig, not a drilling rig. Well we could make hole with almost half of our rigs you couldn't make hole at a competitive price with a drilling rig who did nothing else. But our rigs could do the repair work of different sorts, better than the drilling rig that specialized in making hole. So my job was to get work from those companies that hadn't given us any work in 5 years. So I was in sales but not in the sales department. That is what the Harvard business school called a development salesman, as opposed to a maintenance salesman.

SB: You were mentioning that you've worked in various areas of Alberta and. . .

GR: I think I've driven just about every road in Alberta. And up the east, the Saskatchewan side.

SB: Would you like to just. . . you still, you did some flying for you were saying Dome, or was it. . .?

GR: No, this was the ??? Mud Company. ??? mud up near ??? Lake. We were supplying mud up there and I had the company airplane up there and ???. And we landed on a ??? airstrip.

SB: Oh I see. And that was near the Rainbow Lake area was it?

GR: Yes. A little bit further on but not much. About 30 miles sort of thing.

SB: And it was a separate field from Rainbow Lake?

GR: Yes.

#102 SB: You were saying that you've also worked in the Swan Hills area, what companies were you working for then?

GR: I don't remember.

SB: Was that in the drilling mud business as well?

GR: Yes. Then later I worked a lot for Amoco as a drilling foreman. About a year in Tepee Pole Creek, have you ever heard of Tepee Pole Creek, that's a wonderful name really. It flows into the James River and the James River runs right alongside the James River Ranger Station. Art Dixon and Otto Dusterhoff??? were the 2 people I reported to as a drilling foreman out there. We drilled a hole up on top of a small mountain called Old Smoky. We were using Cascade Drilling on that hole and Brinkerhoff Drilling were drilling another hole 4 or 5 miles away, down at the foot of the hill. There were all kind of bears around there, not grizzlies but brown bears.

SB: Did you have any troubles with them coming into the camp?

GR: Not really. But close to the camp. We've known them to walk along the corridor, which was an open air corridor, between ??? on both sides. And the tool push had a shotgun and he would pepper one in the backside, with shot, not a solid projectile. But when he hit the male, which was nearly every time he shot, the male would ??? and then take off. And he did that with 2 or 3 bears around the playpen, and they would all take off and go down to Brinkerhoff and horse around there, eat their garbage. And then in due course they'd come back to our camp, I don't know why. Not because our garbage was any better. I don't know if the Brinkerhoff group also had a shotgun, I don't know. But we had to go to the James River ranger and ask him to come and shoot a bear because it was being too much of a nuisance. I think he probably took ???. He was a ???, Jim Young. He was up at . . . further north now, north of James River, just west of the town of Caroline, I can't think of the name of the place now.

SB: You were saying that there were different nicknames you had for different towns. What was the name you had for Drayton Valley?

GR: Oh, Dreadful Valley. I think it's because of the mud. Mud, mud, mud everywhere.

SB: You also said that you were on a couple of discovery wells. Was it something that really stood out in your mind when the discovery came in or was it just. . .?

GR: No, not really. We almost didn't even know about it, if we hadn't been there, at the moment when production was proved. You see, casing had been run, not necessarily, you had a pretty good idea what it was drilling and it probably was tested in open hole before the casing was run so you'd know there was production. But the final production was after the casing was run and I was never there then. They weren't using mud then. Not normally anyway, unless you're using it to hold on a lot of gas or something like that. That was on Joffre and ???.

SB: So right up until the time that you retired, what were some of the later jobs?

GR: That was in the sales part. Or making customers.

SB: So were there any people that stand out in your mind as interesting?

GR: I think there were ???. When I retired I used to take production foremen, who were probably engineers, or production engineers, to lunch quite frequently. I don't mean any one once a month. I don't think that frequently but nearly every day I would have somebody for lunch. After I retired and went out to Victoria, one of them. . . names, names, names. . . an ex engineer for BP Oil Company, he and his wife came out for a holiday and took me to lunch, which was a wonderful thing. He told me that when I was back here and he wanted a rig, they never had one to spare, they nearly always were all busy. They're supposed to be. But after I had left and he called for a rig, he said that he'd given the company, Sunalta, \$440,000 worth of business. So I think I did some good selling.

SB: Yes, sounds like it. Are there any periods that you were involved in the oil patch that you enjoyed more than others that you can think of?

GR: No, I enjoyed it very much. I enjoyed the ??? work very much. Do you know any man that has never been scared, I mean really scared. I don't. I think every one of these white hairs is one time when I've been really scared. ??? It maybe something for 2 or 3 minutes, maybe not that long. But there's no mistaking the feeling. That occurred mostly when I was in New Guinea, with the Royal Australian Air Force and Australian Army and the American Army. And of course, the Japanese Imperial Army and Air Force.

#193 SB: So in contrast your work in the oil patch. . .

GR: I didn't mean it quite that way. I meant that in entirely different circumstances the fellows there were still damn good fellows, same as in the Australian outfit. I wasn't the only one scared, that has been scared, no way.

SB: Are there any other things that you'd like to add about the oil patch, this was sort of a summary of your involvement with it?

GR: Well, the people. I could mention Cody Spencer and I've forgotten the name of his partner. It's nearly on the tip of my tongue but it's not quite there.

SB: Did you work with him?

GR: Yes. Spi Langston would know these names very well indeed. What the hell were we doing . . . swabbing. You run the casing and cemented that in place and it stayed for several days to let the cement set, then you run tubing, which is about 2-2½" diameter stuff inside that screwed together. And then you perforate it and allowed access for the oil to come in. But you've still got a hole full of mud, which gives more psi at the bottom than the pressure of the formation. It better otherwise you're not safe. And so you've got to swab, you run a swab down the inside of the tubing, on a wire line, and pull this out fairly fast and so reduce the pressure inside the tubing, and eventually the hole will flow. So we're swabbing and Spi Langston is the well site engineer at that moment. We run this down the hole, Commonwealth rig #1, a great big steam rig, a tremendous big rig. It was too difficult to hook up to water or gas ??? all those things, as opposed to running diesel. They modified it into a diesel rig, shortly after, a few months after this incident. Charlie

??? was the driller on tower. I ran the swab down the tubing and then Charlie cranked the old big steam engine wide open and this thing came out of the hole. Now, this is ??? going down the hole, of course, much bigger, and you put a flag on it. Charlie hadn't put a flag on it. So the first thing we, that's Spi and him and me and another boy, knew, Al Watson, my memory's not too bad, Al and I were standing on the ground and the floor of the rig was higher than the ceiling here. So we were on the ground and Charlie and Spi were up there, no, I think Spi was out on the pipe wreck and Charlie of course, was on the brake. The first thing any of us know, the damn swab comes out of the hole at 60. Charlie just threw the brake down and hoped that it would catch. I don't think it did. Al and I on the ground, we just turned our backs and ran. We didn't get an Olympic medal for it but I think we deserved it. I looked back over my shoulder and up around the crown, at the top of the derrick where the tubes are, there is a mass of ???. Pieces of ???. Thicker than my walking stick and about this long, just like a swarm of bees. Meanwhile Al and I are 2 or 3 hundred yards away. But Charlie is still there. One piece of ???, about 20' long came down and went right through the 3" planking of the rig floor and into the 3" planking of the sub floor and right out the bottom. Spi apparently walked in from out on the pipe wrack and said, damn it all Charlie, you know better than that. Of course, that tells you where you're at. You put this on, but not 10' above but 50 or a hundred feet above, you swab. ??? it's time to slow down, slow right down ???.

SB: So there were a lot of high rides like that I guess?

GR: Spi will remember. And he'll be happy ??? . Because nobody got hurt actually. But it wasn't pretty. Things like that happen.

#275 SB: You said that the safety precautions back then were more lax than they are today. I guess that could still happen today though eh?

GR: Probably. And with Atlantic 3, which was a wild well. It was the first big wild well that most of us ever saw. It was just south of. . . in the southeast side of the Devon field. It was gas, it was a wild well putting out oil and well. Gas of course, was ??? in the air and the oil on the ground and they built dikes, you know, dams, to stop it from running over everywhere. And apparently the driller went over to the ??? toilet, it wasn't a 2 family, 3 holer, it was just a plywood toilet. And I guess he wasn't thinking but he lit a cigarette. With all that gas around. That was the fire of Atlantic 3. Things happen. Aubrey will remember that. Maybe he'll know better detail than that. I have deliberately not remembered the driller's name.

SB: I think maybe that's a good point to stop for today. I'd like to thank you very much for all these interesting stories and thanks for participating.

GR: No problem, I assure you. Just bragging.

SB: All right well thanks very much.

GR: You're welcome my dear.