

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: Don Campau

INTERVIEWER: Betty Cooper

DATE: September 1982

Betty: This is Betty Cooper and I'm at the home of Mr. Donald Edmund Campau at 915 Canaveral Crescent S.W. in Calgary and it's September 17th, 1982. Mr. Campau, I'd like to start right at the beginning, where you were born and when. Now your name is spelled a little different than sometimes, it's just the a-u at the end and it's c-a-m-p-a-u. All right where were you born and when?

Don: I was born in Detroit, Michigan, July 19th, 1917.

Betty: What did you father do?

Don: My father was an optometrist, my mother was a housewife.

Betty: Had they been in Detroit for quite some time?

Don: The family, my father's side of the family came from Amisburg, Ontario and at that point in time the name was e-a-u but it was changed when they moved to Detroit?

Betty: Why was it changed, is there a story?

Don: I don't know, there's a street in Detroit called Joseph Campau, a-u and whether that had something to do with it, I don't know. But Grandpa, living in Amisburg spelled it e-a-u.

#013 Betty: So your family background really is Canadian?

Don: Yes. The family originally came from Montreal.

Betty: Were you an only child?

Don: No, I had a brother, an older brother, two years older.

Betty: And his name was?

Don: Robert A., Alexander Campau.

Betty: Is he still alive?

Don: He's dead.

Betty: Now, how long did you live in Detroit?

Don: I lived in Detroit until the war, until the beginning of 1941 when I went in the Army.

Betty: So you went to school in Detroit then?

Don: Yes. Up to high school in Detroit.

Betty: If we could perhaps, just say what the schools were that you went to and then what you did after your high school years?

Don: Let's see, grammar school would be Howe on the east side of Detroit and Folks Intermediate and Southeastern High.

Betty: And then when you graduated, what year did you graduate from high school?

Don: I graduated in 1935.

Betty: That was the midst of the Depression, so what did you do?

Don: I got a job working in a paint and wallpaper store as a stock clerk.

Betty: I'm sure you felt very fortunate that you got a job at that time. What were you earning?

Don: \$18 a week.

Betty: Was that considered a pretty. . . .?

Don: It was sufficient in those days for a single fellow to own a car and have money left over to play the horses and a few other things.

#027 Betty: What was it like in Detroit in 1935?

Don: Lots to do really, typical teenage. . .

Betty: Was there a lot of unemployment?

Don: Oh yes. A lot of unemployment but things weren't real bad, they were starting to pick up. There was off and on spurts within the auto industry so it wasn't too bad. But nonetheless unemployment was high.

Betty: Did you stay in that particular job until you finished?

Don: Yes, I stayed in that until I went in the army in April of '41.

Betty: Did you marry before you went in the army?

Don: No, I got married after I got back out of the army.

Betty: What part of the army did you go into in 1941?

Don: I was in the coast artillery, automatic anti-aircraft weapons.

Betty: When you say '41, did you join after Pearl Harbour.

Don: Yes. No, no, no before, I was drafted. I didn't join, I was drafted.

Betty: I see. When you were drafted in the American army did you then have a choice of where you wanted to go?

Don: No. You were drafted, set to a big, let's see what did they call the, reception centre in Chicago and this was at Rock Island outside of Chicago and then you were sent from there to a basic training camp which I think was 13 weeks. I went to Fort Eustace, Virginia and after completing basic training was sent to Camp Stewart, Georgia outside of Savannah.

#043 Betty: Had you done much traveling before that time?

Don: Oh yes. We'd gone to California, my mother and brother and I in 1929. We'd gone to Texas and California and then we came back in 1930. I went to school both in Dallas, Texas and in Los Angeles.

Betty: Oh, just for short times.

Don: Yes, we were gone a year. And so did my brother go to school in those places.

Betty: Because so many people joining, particularly the American army, saw a great deal more of the country than they'd ever seen in their lives with going to the different training camps.

Don: Well, that's the only two we went to and then of course, soon after getting to Camp Stewart Georgia, then was when the war broke out, Pearl Harbour broke out.

#053 Betty: Did you serve overseas with the American Army?

Don: Yes, I served in the southwest Pacific area for about 3 ½ years.

Betty: What parts of the southwest Pacific were you in then?
Don: New Guinea and the Philippines.
Betty: Were you there when they were recapturing or when they were being captured?
Don: We were the first U.S. combat troops to land in New Guinea and contact the Japanese.
Betty: This is when you were retaking the islands then?
Don: We landed on May 3rd, 1942, before the Japanese offensive was stopped.
Betty: That must have been quite a time for you down there?
Don: We were busy. We had a lot of fun though really.
Betty: I think it's funny how after a war, perhaps one of the tragedies of war is you always remember the funny things and you forget the horror of it perhaps.
Don: Yes, I just came back from that reunion down in Atlanta, Georgia and of course, there was fellows there that I hadn't seen since 1943, 44.
Betty: How many people turned up at the reunion?
Don: There was about 160 of us.
Betty: Is that right, out of your group?
Don: Yes. We were in a separate battalion, there was only about 800 of us all together.
Betty: How did you fare in the war, your battalion, did you come through fairly well unscathed.
Don: We had no casualties whatsoever of the older men. We had some of the younger fellows that got hurt but not the older fellows.

#070 Betty: That's interesting isn't it?

Don: Yes it is. And what was really striking was I was in the headquarters of a firing battery and I was in the communications, in charge of the telephones and radios. Most of us in the headquarters are still alive, there are very few of them that are dead that were in that headquarters part including the Captain. I saw the Captain down there in Atlanta.
Betty: When the war was over you came home and you were married?
Don: When the war was over I came home and decided to go to school under the G.I. bill. I enrolled in school in September of '45 and I got married in January of '46.
Betty: What did you enroll in, in university?
Don: I went to Michigan State, at that time they had the basic college program and I went into basic college with a preference for Chemical Engineering.
Betty: What was it like, going back to school after almost . . . well 10 years out of school. This was quite a thing for the returning veteran wasn't it?
Don: Well, it was hard to get the math and the math the hardest I think, geometry and trig was the hardest. So I had to go to special classes to pick that up.

#087 Betty: They had special classes for the veterans?

Don: Yes. This was when the big veteran influx hit the colleges.
Betty: What made you decided to take Chemical Engineering?
Don: Well, I was always interested in chemistry. I used to like it in high school. I was always monkey doodling around with electrodes and this sort of stuff when I was in high school. And I thought I would like it and then I found out I didn't like it, it was too dogmatic. You had to remember everything as it was and there was no deviation.

Betty: So did you change your course.

Don: Yes, I changed to geology after being in one of the basic courses called physical science. ‘

Betty: What did you like about geology?

Don: Oh, the freedom. The courses were more or less open to do what you wanted to do, do your own thing. Interpretation rather than having to come up with the answer as what was in something in chemistry by analytical methods or this sort of stuff.

#100 Betty: You say you got married in 1946, could I have the full name of your wife?

Don: Katherine Straney.

Betty: Was she from your home town?

Don: She was born in Bay City Michigan.

Betty: Where did you meet?

Don: On a summer vacation, when I was up in Bay City in . . . must have been 1937 or so.

Betty: So you'd known each other a long time before you were married?

Don: A very long time.

Betty: And you'd corresponded all through the war I presume?

Don: Yes.

Betty: And you have two children?

Don: Four.

Betty: Could I have their names and if you can remember their birthdates?

Don: I can't remember that, Katherine will have to give you those. There is Katherine Charlotte the oldest daughter, Robert Alexander, the oldest son, David S., the youngest son and Mary Isabella, the youngest daughter.

Betty: Good, I'll get the exact dates.

Don: Yes. Mom will know, I can never remember.

#113 Betty: Typical father. So when you graduated, you would have graduated in 1949 I presume would you?

Don: I graduated with a B.S. in 1949 and had so many courses on my transcript that I stayed on until 1950 and got a Masters.

Betty: You could transfer some of those into your Masters program could you?

Don: Yes.

Betty: So you got a Masters in Geology?

Don: Masters in Geology.

Betty: So you came out in 1950 which was after the major wave of the G.I. people coming in so how was it getting jobs at that time?

Don: Jobs were very difficult at that time. The oil industry was more or less in one of their low phases.

Betty: And you looked for a job of course, in the United States, where did you finally get a job.

Don: While I was in college I worked part time for the Michigan Geological Survey taking care of the well cutting from the wells drilled in the state. We used to wash them and bottle them and luckily I had worked for them and I got on as Petroleum Engineer with the Michigan Geological Survey.

- #126 Betty: So you became an engineer even though you had decided you weren't going to?
Don: It was a regulatory agency and the job entailed the drilling procedures and plugging old abandoned dry holes and/or producers, salt water disposal and this sort of thing.
Betty: This was throughout the state of Michigan?
Don: Covering six counties in Michigan. I had six counties I traveled.
Betty: The people that you worked with at that time, did any of them come up into the Canadian oil patch that you can remember that might be familiar to us up here or were you the lone one?
Don: No, the only one that actually came up here was a fellow by the name of Ed Boltrasides??? It was with Gulf Oil in Saginaw, Michigan, who came up here with Gulf Oil and then quit and went with Dome.
Betty: Did you work with Mr. Boltrasides down there?
Don: No, I knew Ed. He used to come to the university and give talks.
Betty: So he was a little your senior?
Don: Yes.
- #141 Betty: So how long did you stay with the Michigan Geological Survey?
Don: I stayed with them from 1950 to 1954.
Betty: At that time did you know anything about the Canadian oil patch down there. Did anyone ever talk about Leduc or what was happening up in Canada?
Don: No, just what was in the AAPG bulletins and publications that I would get because I was a member of the AAPG since 1950. There was one fellow that was in school with me that had a chance to come to Saskatchewan in 1950 but turned it down because it was so far from home. He stayed in Michigan and became state geologist.
Betty: At that time you would think coming up to Canada was going pretty far north I guess?
Don: Yes. I guess the spirit of adventure hadn't hit yet or whatever you know.
Betty: What made you decide to come up to Canada?
Don: The oil business in Michigan was just kind of fumbling along. It was pretty well drilled out. It had started in the late '29-'30 era and it was pretty well drilled out. Although this has since proved to be false with this Laureate??? play up in northern Michigan.
- #160 Betty: They're now looking at all the old maps again are they?
Don: Yes. The deeper horizons.
Betty: That's very typical of the oil patch though throughout isn't it? A lot of the drilling. . .that the equipment really wouldn't go down as far as. . . .?
Don: It's kind of weak, I always call it tunnel vision, they usually only go to one horizon it seems, at a time. The particular case in Michigan was they usually went to the Devonian Dundee??? and stopped and then later on they had pushed a few holes down into the Scelerian??? and had some indications of hydrocarbons but never found enough until oh, it's been about 10 years now they've been really going after it. It's a reef play.
Betty: So you were with the Michigan survey until 1954, then what happened?
Don: My major professor that I told you about, Dr. Kelly, Bill Kelly from Edmonton had gotten

a call from a fellow by the name of Joe Guyer??? who was looking for a geologist to come to Canada to work for Canadian Stratigraphic Service as a stratigrapher. So Joe Guyer somehow or other got hold of Dr. Kelly and Dr. Kelly got hold of me and asked me if I would be interested in moving to Alberta. And if I was interested this Joe was going to fly in to see me in East Lansing. So I went down and was interviewed by Joe Guyer in East Lansing.

- #181 Betty: Before we move you up into Canada, let's go back a step to your professor Bill Kelly. We haven't got anything about him on the tape. He was one of your professors at the university?
- Don: He was my major professor for my Masters thesis. He was born in Edmonton and did his undergraduate work in Edmonton and then got his Ph.D. from Princeton. Both he and his wife were at one time, Canadians and had migrated down to East Lansing, Michigan.
- Betty: He obviously was quite an influence in your life.
- Don: Yes.
- Betty: Tell me about Mr. Kelly?
- Don: He was just a real good joe. Very easy to get along with and as I say he was my major professor and protected you at the orals and so forth from the . . . what would you call it, the under profs that wanted to get at you.
- Betty: I guess this would be quite a thing when you are doing your orals for your Masters.
- Don: Yes, it's very important to have someone to defend you and change the subject or to jump in and answer the question that you're stuck with, especially if it's ambiguous. The trick is the ambiguous one, where they can keep asking it over and over again, where you can't quite get what they're talking about. You have to have somebody to defend you.
- #199 Betty: What was your Master thesis on?
- Don: Ostracods??? in the Devonian of the Michigan basin going into Ontario across into Michigan. The distribution of ostracods.
- Betty: Would the work that you did on your Master thesis, particularly when they were working in the Devonian area here, in Leduc etc., would that give you an insight as to the strata of Alberta at all or help you at all when you came up here.
- Don: Not really. It would just be a background to look for anything in the cuttings.
- Betty: As you say they had tunnel vision sometimes and didn't always look in those areas.
- Don: Yes.
- Betty: So you came with Canadian Stratigraphic and the name of the man who hired you was Joe Guyer, could you tell me about Mr. Guyer?
- Don: Joe was the originator of the commercial stratigraphic logging service which he started up in Denver and he called it the Denver Sample Log. At that time it was set up to handle all the cuttings, wash the cuttings and sell them to interested companies besides the one that had drilled the well and to make a strip log or stratigraphic log of all the different types of sediments and horizons and to correlate it by age if possible, in the States. And then he decided to open an office in Calgary and at that time was when I told you that. . . Jim Mitchell joined him who was with the old Pure Oil Company in Illinois and he was a

stratigrapher, Jim Mitchell was.

#227 Betty: What year was that, that they set up Canadian Stratigraphic?

Don: I don't know when they started it, did Lou tell you.

Betty: He may have given me the date, I just wondered if you remembered it?

Don: It seems to me it was around '49 or '50.

Betty: So it hadn't been going very long when you joined them? Was this the only service like that available?

Don: The only commercial service available in Canada and in the States really. There was an outfit in Texas that did it but that was a small local Texas outfit. Joe's idea was to cover Western United States and Western Canada because they opened an office here, one in Regina, one in Bismark, North Dakota, Billings, Montana, Casper, Wyoming, Denver was the head office and Durango was the other one.

#245 Betty: When you came up, Mr. Mitchell was your employer then or was Mr. Guyer?

Don: No. Lou Workman was running the office, Lou Workman was the manager of Canadian Stratigraphic. Jim Mitchell came up and trained me. I came up and I was trying to think how long I stayed, I don't know whether it was a week or two weeks, under Jim Mitchell running samples.

Betty: What would you have to be trained, what did he train you to do, what did you have to learn?

Don: To see what you're looking at. In the old days, it would be to pick out the base of the fish, identify fish remains, the plant spore zone, the top of the Mississippian and what it looked like. The Gloconite sand, to look for Gloconite and to be able to identify it.

Betty: You have to have a pretty good memory.

Don: Yes. You need to remember what you've seen and what it is so that if the samples are rather poor then you can look for it.

Betty: Would you have samples . . . like standard samples for you to compare or pictures or . . . did you go sometimes by guess and by god.

Don: No, we would usually have the nearest log to the one you were doing for comparison, to see if what was in. . . for instance if there was any sediments missing or if it was truncated.

#274 Betty: How important was it to have this information for the oil companies? What did it do, how did it help them?

Don: If an oil company was a subscriber then they could use these logs, geologically and geophysically for instance, to pick the top of the Devonian without having to do the actual work themselves. They could make a geological sub-surface map at the top of the Devonian on a sub-sea basis and then the geophysicist can also use that for his isochrones??? or time on the geophysical end of it so that they could see if they could find any reefs underneath the Devonian.

Betty: Without having to go and drill the holes themselves?

Don: Yes, to equate it back to field work, seismic data is gathered in the field, was there any indication of reefing, should there be more detailed shooting done, should they post the

land and have it put up for sale and so forth.

#294 Betty: You mentioned that you were the only commercial organization that was doing this. If companies didn't come to you, where else could they acquire this information?

Don: They could go to the Conservation Board and look at the cuttings if they had the personnel. Usually that ended up being more or less of a one horizon, if the company's personnel was doing it. They would have somebody working the Mississippian, somebody working the Devonian, somebody working the Cretaceous. But this way here, the whole section would be done and it would be available for whoever wanted to look at whatever part of the section or they could look at the total section.

Betty: So this made it much faster for them, would it?

Don: Yes. It made it much easier for companies to. . .

Betty: How much would it cost a company to have this service at that time, do you remember?

Don: I forget, it was minimal. It was a monthly rate of . . . I would just be guessing now, let's say 2 or \$300 a month with a specific number of footage allowed on that and anything over and above it they'd have to purchase at so much a thousand. And the companies that were members of the service, that is had purchased the service, they would get a list of wells that were going to be run and they could also suggest wells that should be run, if they had a specific area in mind that they were doing, say seismic work. They could request that when the samples became available on such and such a well that they would like to see that run and then it would be done for them.

#326 Betty: How many companies, do you think, would avail themselves of this service or did when you first started there?

Don: Oh gee, I think they had about 20 or 30 subscribers I believe.

Betty: That would be enough to maintain all the personnel and the offices.

Don: Well, it was actually nip and tuck.

Betty: That's what I was going to ask you, because it seemed a lot of service and a lot of experienced people with a minimum cost.

Don: Yes. It was nip and tuck. You see besides doing the stratigraphic logging they also sold the sample cuts. Which again was pretty minimal as far as profit went really. I think it ran something like 6 cents a cut, it would depend upon the amount of cuts they made on them. The more companies that wanted cuttings, then the price would go down accordingly. So again it was all minimal. There was no great amount of money made.

End of tape.

Tape 0 Side 2

Don: Joe Guyer and Jim Mitchell were partners and they had the old partnership that if one offered to buy one out, the other one could buy out the other one at the same price that was offered and could not be refused. So Joe Guyer wanted to buy out Jim Mitchell and Jim Mitchell then had the opportunity to buy out Joe Guyer which he did. And in order to finance it, Jim had a friend in Illinois who was an oil producer and quite wealthy, Ed Brem??? who furnished the money to Jim on a loan to buy out Joe. And then in the subsequent years that followed with the rises and sinking of the oil business cycles, Brem kept the whole thing going because he liked Jim Mitchell and he was a friend of his. And that's what kept it actually going, was the money coming in from Brem.

Betty: It was really a subsidized service then.

Don: Yes. It actually was.

#012 Betty: Why would Mr. Mitchell stay with it so. He must have been a very special type of person.

Don: Well, he was a kind of dedicated stratigrapher from Illinois and he'd been with the Pure Oil Co. for I don't know how many years. And he just refused to let go. In spite of say hard time. There was never any real good times, there was just more or less mediocre times and hard time would be about the way it went.

Betty: Was Mr. Mitchell stationed down in Denver or was he up in Canada?

Don: Jim was up here originally and lived up here, I believe a year or so and then he moved to Denver to the head office.

Betty: was there any financial connection between the Canadian Stratigraphic Service and the American Stratigraphic Service or were they run as two separate companies.

Don: They were run as separate entities but I think money would come from one to help the other back and forth sort of thing. It was sort of a subsidy from one end to another end back and forth.

#023 Betty: Did you find working for a company that was running so close to the line a little bit frustrating for you?

Don: Oh yes. Sure. In 1956 I got a chance to go with Sun Research in Billings, Montana so I went down there at that time.

Betty: Because of the financial situation?

Don: Because of the peaks and valleys of the oil industry and the peaks and valleys of the monetary income of the company. It was always peaking and going up and down.

Betty: Before we take you back down to Billings, let's look at some of the people you worked with. Can you tell me about Mr. Lou Workman?

Don: Lou workman was the manager and a very nice fellow and Chief Stratigrapher for the Canadian Stratigraphic. Bill Rash did the paleontology. . .

Betty: Can you think of any anecdotes or incidents that would involved Mr. Workman in the

time that you were associated with him?

Don: Not really. We just used to have lots of fun.

Betty: Doing what?

Don: Oh working, just working.

Betty: What was fun about washing samples?

Don: Oh of course, we didn't wash them, we had a lab in the back that was run by a fellow by the name of Bill Little that did all the washing. They had about 2 or 3 fellows back there, some would be part time, some would be full time. They would wash the samples but sometimes you had to rewash them yourself. They'd either be burnt or dirty and in order to find any specific type of horizon you were looking for

#042 Betty: When you say washing samples, for the sake of the tape, could you tell me what washing a sample meant, what the sample was and how it was washed?

Don: The drill cuttings would come in from the rig in their native state with the drilling mud on them, they would be unwashed. And they would be washed in water and dried in ovens and then put into paper bags so that you could see what the actual drill cuttings contained minus all the contamination of mud.

Betty: And when you say you had to wash them yourself, why would they need rewashing?

Don: Sometimes when they put them in the oven, they would get boiling away and then they'd hit the cup and it would be covered in dust again and you couldn't particularly find what you were looking for. If you were looking for the Exshaw shales, we'll say, which is a specific type of shale, you couldn't see it because everything was covered with dust.

Betty: So you would wash it again, always just with water though?

Don: Just water. Usually cold water.

Betty: Where was your office?

Don: It was on 11th and 6th, across the street from the old Alpha Dairy. It's still there today.

#057 Betty: That would be 11th Avenue and 6th Street West.

Don: 711 - 11 Avenue West.

Betty: And how big an area would you cover, your office?

Don: In this office we covered all of Alberta and B.C. and if any cuttings were available from the Territories. If there was any that could be. . .

Betty: How many floors would you need in this building?

Don: We only had one floor. We had a small office up front, a storage library of cuttings that could be rented out or if you were a subscriber you could take them out.

Betty: What would a storage library look like? What would you take out? The big cores that came out of the

Don: There would be boxes of cuttings in envelopes and if at all possible there would be some core chips. Although the whole core would go to the Conservation Board.

Betty: So they could also go to the Conservation Board and get the same information.

Don: Yes. At that time the Conservation Board was washing samples and bottling them and of course, all the core was kept from all the years.

#071 Betty: So why would they want to come to you?

Don: Well, it was more convenient, they could get the samples, take it to their own office, do their own work in their own office rather than go to the Conservation Board. And of course, the Conservation Board at that time would usually have a great number of people looking at them so they may be short of what you were looking for.

Betty: One of the big things in looking at the core samples is getting the name so that everybody had the same names. There seemed to be quite a number of . . . you'd have your major strata but within that you would have different names.

Don: Yes. The subdivision of the major units was always quite . . . not quite firm because just about every company in town had a different name for it or something. But nonetheless we used to pick what was accepted by the Geological Survey of Canada as being the particular name of the formation.

Betty: How did these names come to be, who decided on the name?

Don: It was done by previous geology. Geologists working on the geology of areas or of wells. For instance, the Imperial group named quite a few of the formations from type wells, like the Leduc formation and of course, the Exshaw shales from Exshaw, Alberta.

#090 Betty: Did you ever do any naming?

Don: No, I always figured there was too many names. Everybody and their brother was trying to name a formation.

Betty: Was it sort of something to have your name. . .to have been one to put a name on a formation, was it something that they tried to do?

Don: I guess so, yes. Everybody liked to do that.

Betty: So what would you do. Supposing Imperial had a certain formation and they called it one name and Gulf Oil had another name for that formation, what would you do?

Don: We went by what was accepted by the Geological Survey of Canada plus what the Alberta Petroleum Geology Society considered an accepted name.

Betty: How did they decide, was there an ongoing committee?

Don: Yes. There was a stratigraphic committee which Lou Workman was on. He was on that, naming formations.

Betty: And then that became the accepted. . .

Don: That would be the accepted industrywise name of that particular unit.

Betty: That committee obviously didn't start in the 40's, it must have started in the 50's would it, in order to get away from this confusion.

Don: Of course, the bulk of the major units would have been named by the Geological survey of Canada by the work that they had done in the 50 years or so that they had operated our here. Crickmay??? was one of the fellows that was out here naming formations up in B.C. If they were valid formations on the surface and could be traced to the sub-surface then it would just carry them on down.

#110 Betty: But the newer names.

Don: The newer sub-surface names that were not exposed at the outcrop would be named

usually, like I said, from one of the major companies. Imperial would name them like, the Beaver Hill lake and the Deverney??? and this sort of thing.

Betty: Who would be the one that you would work with in that area, say in Imperial, was Helen Bellier??? one of the people that you were involved with.

Don: Diane Loringer??? worked for Imperial and so did Crickmay.

Betty: Did you know either of them well?

Don: Oh yes.

Betty: Tell me about Diane Loringer. There aren't too many women at that time in the oil business, what was her position?

Don: Diane was a Research Geologist in the research lab along with Crickmay and they were working on sub-dividing the Devonian. Diane did a lot of work on Ostracods. She worked the Jurassic, she also worked the Devonian quite extensively. Helen Bellier was with the GSC and she worked the Devonian outcrops as pertained to getting them into the equivalent in the sub-surface and working it towards the U.S. border as to what terminology they were using in Montana and North Dakota. And would write papers on it and they would correlate mechanical logs, e-logs, gamma ray logs and so forth in to trying to establish just exactly what part of the section was what in Canada that would correlate with Montana or North Dakota or Saskatchewan.

#130 Betty: Can you remember any incidents that involved Diane Loringer for example. As one of the few female geologists in the oil patch, it would be rather unusual to see these few women geologists at your annual meetings I presume?

Don: They used to go on the field parties too. Diane and Helen used to go to the conferences, the field conferences which would be held in for instance, say Nordegg or wherever and they would attend those. Helen Bellier used to give talks, later on at the Devonian outcrops such as up in Canmore there, where quite a bit of work has been done. They all at one time had little signs on them.

Betty: When women were, more of them starting to take engineering or geology or geophysics, there was always this cry from a lot of people that, well you can't have women as geologists because they can't go out in the field. Obviously these women did go out in the field. Were there any problems?

Don: I don't think so. I remember, I think, Diane Loringer sat at quite a few wells for Imperial. I don't think it was any problem. The only thing was if the camp was isolated, such as what we had later on say, in the foothills, where you had actually a camp where everybody stayed at and didn't go out. The crews didn't change and go to town. But if you were in southern Alberta near Brooks or Bassano or Maple Creek or whatever you were always within distance of a town so you could stay in a motel and eat there.

#153 Betty: I have a name down here, Mr. Wickington???

Don: Doc Wickington, he was quite a boy. He worked for the GSC, I don't know for how long, I think all his life. And he had come across from . . . more or less started in Manitoba doing the geology and worked his way right across to B.C. I believe he was in charge of the office here for the GSC when it was in the old

Betty: Did you have much to do with Mr. Wickingdon?

Don: Oh I used to talk to him quite a bit down at the GSC. I used to be a nut on buying publications down there at the GSC because they were always so cheap and so good and especially along in the cretaceous, paleontology end of it, the dinosaur stuff. There was a bunch of the old timers that were really good, had been here for years and had a definite background on things that you could ask them.

Betty: Can you think of anything in particular in connection with Mr. Wickingdon, any incidents or times when you sat and discussed things with him?

Don: Just at the Nordegg field conference when I stepped on him.

#169 Betty: Oh do tell me about the Nordegg field conference then?

Don: We stayed in the old abandoned mine houses up there that were from the old coal mine from Nordegg or Brazeau??? was the name of the town.

Betty: What year would this have been?

Don: Gee, I think it was '54, I'm not sure. '54 or '55. We had all put all our gear in the house and gone over to have supper and drink beer. Doc Wickingdon was late and he came in and put his gear down in the front room and we came back after dark and of course, there were no lights in the house, nobody had a flashlight so we stepped on him.

Betty: You mention Mr. Crickmay too, did you have much to do with Mr. Crickmay?

Don: Oh, just as an acquaintance. We used to have in the old days, we would have discussions after a paper, especially if the paper was given in the evening at Penley's??? and of course, Crickmay and Gil Rash??? were always arguing about the age of the Exshaw and this sort of thing.

#186 Betty: Mr. Crickmay had a reputation of always challenging statements.

Don: Yes. He always had his opinion and that had to be right and everybody else's opinion was wrong.

Betty: How often did you feel he was right?

Don: I think basically he knew what he was talking about. It was just basically, like I say, a moot point at what you were going to split it. There never has been any exact evidence to say that the Exshaw is Devonian or Mississippian. It just happens to fall in a convenient place on a time break of some kind which nobody really understands to this day.

Betty: Could you tell me about this argument that continued between Mr. Crickmay and who was the other gentleman?

Don: Gilbert Rash, who was a paleontologist and so was Crickmay of course. They were continually arguing whether the Exshaw belonged in the Mississippian or it belonged in the Devonian and the reasons for it were very vague because you didn't have very good fossil control. Since then, what has really happened since then is in, I believe Digby McLaren was going to do this, we always assumed that you had a total section of sediments but actually they have found out that really we don't have a total section any particular one place. It's going to have to be put together. For instance the Devonian, part of the Devonian is missing in Alberta and I believe it's someplace in Europe there's a fuller section that has since been found. So we don't exactly really know the true

thickness of what we're looking at. So we have a tendency to say that Mississippian comes to here and then that's the end of it, we'll go on off into Devonian. That's okay if we have a nice unconformity that we can see but usually we can't see the unconformity. And there might be quite a hiatus in sedimentation time in there that the Devonian may have graded off up in through the other sediments.

#217 Betty: So this was the continual argument?

Don: Oh yes. It went on for years.

Betty: Has it every been settled?

Don: I think everybody still calls the Exshaw the top of the Devonian and the Banff shale, the beginning of Mississippian time. Although there is evidence that some of the more or less. . . they call them spores but they're not, tasmanites??? do grade up into the Banff.

Betty: After you left the Can Strat, you went down to Billings?

Don: I went down to Billings, Montana and joined the Sun Oil company research team working on the Willison??? basin. '

Betty: How long were you with Sun Oil?

Don: I was with them five years doing the study of the total sediments of the Willison basin as pertaining to the sub-crop in Saskatchewan and North Dakota and eastern Montana.

Betty: So you were still working into Canada although you were down in the States?

Don: Yes. We were working the sub-crop because of the oil in the sub-crop in Saskatchewan and then bringing that down into North Dakota and over into eastern Montana, the Mississippian, Devonian sequence and Ordifision???

#236 Betty: What was the purpose of this work that you were doing?

Don: Well, Sun Oil company had quite a land spread in northeastern Montana and did have commercial oil production from the Mississippian and the Ordifision. But at that time, of course, the price of oil was somewhere's around \$3 a barrel. It was kind of marginal for the size of the. . . . We were correlating beds and units and trying to exactly figure out what was going on in the sub-surface along with having. . . .we had a research seismic crew that was working in there trying to find some highs in the sub-surface. We knew that in this particular case at Brorersan??? the Mississippian sediments were fractured with hairline fractures and contained oil. At one time tried to do a huge frack??? job on it, which did increase the oil production but again it was falling down into the quasi-economical part of it. A long ways from market. The price of crude overseas was cheaper and bigger quantities. Sun and Phillips were the big land holders and they walked away from it but since then this Modac??? field that Shell has, has come into it's own and it's quite a good sized field. But that's only because of the world price of oil has made it economical.

#266 Betty: But Sun let their land go did they?

Don: Yes.

Betty: After that five years with Sun in the States, where did you go from there?

Don: I joined American Stratigraphic Service in billings, Montana.

Betty: What made you change?

Don: They were getting ready to close the office down and move it to Texas.

Betty: The Sun office?

Don: The Sun people. So we decided to stay in Billings and I went to work for American Stratigraphic Service.

Betty: The kind of work that you were doing, did it limit the people that you could work for? There obviously weren't a lot of people that were doing the particular kind of research work that you were involved in.

Don: You sort of fell into a niche after awhile. You weren't actually exploring for oil, you were doing basic geology, sub- surface geology.

Betty: How many would there be of your type of geologist in a company?

Don: There was 3 of us there in Billings with Amstrat.

#288 Betty: How many were there when you were working for Sun?

Don: There was 2 of us doing the sub-surface study of the whole Willison basin.

Betty: So this would really normally be one or two people?

Don: Yes, it's kind of limited.

Betty: Did you ever feel that you should perhaps, move into a different area, desire to or think you should?

Don: Well, the thing that controlled that would be the economics of the oil business again. It was so up and down. You couldn't hardly pull up stakes and say go to Texas. And then with a family it's very difficult to move on your own and of course, the consulting business was rather poor unless you had some form of backing.

Betty: yes. Because you would need all these samples and all this

Don: You'd need to do a lot of work, you'd have to make some maps and you can't exactly make those in a day or two. Basically it takes about, we used to figure it would take about a year to a year and a half of time before you could become viable as a consultant. Because it would take you that much time to get the basic work done and to come up with something that would be reasonable, not a cartoon but a reasonable play.

#318 Betty: So you worked with American Strat then. How long did you work with the American Strat company?

Don: Let's see, '61 I started there and I went until '67 with one year out when I did a consulting problem for a small oil company called Mule Creek Oil Company on the northeastern Montana Devonian, "niscue" oil play.

Betty: Why did you leave American Strata at the end of that time?

Don: I went to Alaska to work for American Stratigraphic Co. as manager of the office in Anchorage. The cost of living in Alaska was too high plus being too remote. You had to make such a good salary that you could save something to go on vacation to get out of there. Because there's only one way out, that's fly rather than drive.

Betty: Your whole family was living up there?

Don: No, I went up alone and I decided at the time that I didn't want to move there for these reasons. In the meanwhile I had sent Lou Workman a letter asking him if there were any

jobs back up in Calgary and Lou talked to Michael Woodhead with Canadian Pacific Oil and Gas, who at that time was looking for a stratigrapher to do Devonian work in the Rainbow area. So I wrote Michael Woodhead and got a job offer from Canadian Pacific Oil and Gas. And then as soon as they could get a replacement up in Anchorage to take my job, to run the office in Anchorage then I came back down to Billings, Montana, quit Strat, and came up to Canada to go to work for Canadian Pacific Oil and Gas in '67.

Betty: And you'd be doing the same type of work again?

Don: I was doing the same

End of tape.

Tape 1 Side 1

Betty: This is Betty cooper and I'm at the home of Mr. Donald Edmund Campau, 915 Canaveral Crescent and it's September 28th, 1982. Don, I'd like to start by going through some of your family background, where you were born, when, how many people were in your family, what your father did etc. so would you like to just start back there at day 1.

Don: I was born July 29th, 1917 in Detroit, Michigan and my father was an optometrist, my mother was housewife and I had one brother, two years older than I. He is dead now.

Betty: Did you grow up in Detroit?

Don: I spent all my youth and into my teens in Detroit.

Betty: Did you go to university there or did you take any post-secondary?

Don: No, I just went to high school in Detroit and then after the army and return home from getting out of the war I went to University of Michigan State in East Lansing, Michigan.

Betty: You finished high school in what year then?

Don: In 1935.

#014 Betty: So that was right in the middle of the Depression. So what happened, what did you do when you got out of high school?

Don: I got a job working in a paint and wallpaper store in downtown Detroit and I stayed in that off and on until I was drafted in April of 1941.

Betty: Would you be working selling the goods or did you actually become a wall paperer?

Don: I started out in the stock room unloading trucks and storing the material away and then eventually worked up to where I was waiting on the counter and also filling orders for delivery and answering the phone.

Betty: Do you remember what you were paid a week when you first started?

Don: \$18 a week we were making.

Betty: That was very good in 1935.

Don: Yes, I used to have money left over.

Betty: What were you making by the time you went into the service? Had it gone very much higher?

Don: I can't really remember but I would guess somewhere in the neighbourhood of \$25 - \$30

a week.

- #026 Betty: Being in Detroit and that is the place where they do a lot of automobile manufacture etc., you weren't involved in, not what you'd call war work but pre-war work when they were doing a lot of arms factories going in?
- Don: No, that was just about getting under way. The so-called Chrysler tank plant was built and making arms for the Allies but there wasn't much in the way of, other than say, trucks. You might see army trucks once in awhile and that sort of thing.
- Betty: Were you aware really of the magnitude of the war. They United States were not in it at that time.
- Don: I don't think so, not at that age really. It was more like something else to do rather than work. Go in the army and go through basic training.
- Betty: The American draft started before Pearl Harbour did it?
- Don: Yes. I was in the first draft, in the first group that went from Michigan.
- Betty: Was this a surprise when your name came up in that very first group?
- Don: Well, it's the only lottery I ever won. Free room and board for 4 years or so.
- Betty: How did you feel about the idea of the draft in peace time?
- Don: Well, I think everybody knew that it really wasn't peace time. I can remember going to a show in 1939 when Britain went to war and you could see that there was no way that the United states was going to be out of it for long. I think everybody was well aware of that, even the kids or people that hadn't really given it much thought. I can remember seeing a Fox-Movietone newsreel of air raids in Britain and this sort of thing so I think everybody more or less knew they were going. I'm sure they did.
- #049 Betty: Now when you registered, everybody had to register for the draft right? What could you do to become exempt?
- Don: I didn't try.
- Betty: Were there people who could be exempted?
- Don: I suppose you could if you were going to university or if you were in what they considered to be a vital industry, if you were a tool and die maker or something along that. But I don't think anybody ever really tried to get exempt that I know of. There's a lot of guys like to have gotten out but that was a whole different . . .
- Betty: The reason I'm asking is because there was quite a different attitude with the draft in the 70's.
- Don: Oh, you mean with Vietnam. Of course, that was not really a war. That was a policing action in Korea and Vietnam which don't work. I can see where they wouldn't want to be in something like that.
- Betty: the difference being too, that when you were originally called up in the draft, American forces were not anywhere so when the time came to go you were already involved. Whereas with Vietnam they were already over there and then kind of were catching up.
- Don: Yes. It was a different war really.
- Betty: When you registered for the draft just to get it on your record, when you registered for the draft, could you choose where you wanted to go, the Marines, or the Army or the Navy or

the Air Force.

Don: No, you couldn't choose by registering. You could only choose by enlisting. If you went down to enlist then you could pick a particular branch of the service.

#067 Betty: So when you were drafted what did they put you in?

Don: Well, first you go to what they call a basic training centre.

Betty: But it was the army?

Don: Yes. It was the army and it ended up as being in coast artillery. Which of course, was just at the discretion of where the troops were needed to fill up camps as they were being completed, this sort of thing. So I ended up in the coast artillery and we ended up on an old fashioned automatic weapon for anti-aircraft, a 37 millimeter gun that was not very well designed or it was just in the embryonic stages, it didn't work very good. But we trained on that and did our basic training. By that I mean, the rifle range, the machine guns, learn how to take them apart and put them back together again. I think that lasted 13 weeks and it was in Newport News, Port Eustace, Virginia.

Betty: Then where did you go?

Don: Then after basic training we were sent to a place in Georgia called Camp Stewart and I was put into an outfit, again a coast artillery outfit that was a National Guard outfit and we went into the 107th for what would be basically the rest of the term of your draft, which was, I believe it was supposed to be a year or two years, I can't remember really. Of course, everybody knew it really wasn't so.

#086 Betty: By the time you first year the war was. . . .

Don: Well, I went in April and war was in December so. . .

Betty: What was the reaction where you were when the Japanese bombed Pearl Harbour?

Don: We just couldn't believe it at first. It was on a Sunday and we were all in the PX drinking beer and we were kind of stunned. That's about it.

Betty: Was your outfit immediately put on a war time footing?

Don: The whole camp went on war time footing immediately and then . . .

Betty: What did that mean?

Don: The guards had ammunition, which before that they didn't have ammunition. Of course, the camp was closed, in and out had to be tight security and so forth. But we didn't stay there that long because the outfit across the road from us was the 101 Separate Battalion and it needed volunteers to fill up their ranks because they were being shipped out overseas and there was a group of us volunteered to go overseas with the 101 to participate in this war.

Betty: Where were you shipped then and when?

Don: We left, the dates are kind of vague but we left Camp Stewart, Georgia and we went to Fort Dix, New York and we were supposed to ship out on the French liner, what was the name of the one that burnt. . . the Normandy, we were supposed to ship out on the Normandy but the Normandy burnt. And we shipped out on the Queen Mary from Boston in February.

#110 Betty: That must have been quite an experience, on the Queen Mary in wartime, what was it like?

Don: Well, it wasn't crowded because we only had about 10,000 troops on it. It was still in the stages of being converted to a troop ship. The main dining hall was still there and the rooms were still there. There were some bunks but it wasn't completely converted.

Betty: Did you get into one of the staterooms that had not been converted?

Don: No, we slept on the fan tail, aft. On the main deck, aft. It was originally some form of a lounge that had been converted with bunk beds. We manned the aircraft guns on the Queen Mary, what they had of them, they didn't have very many but our outfit manned those.

Betty: Where did the Queen Mary take you then?

Don: We left Boston, we went up towards the north quite a ways and then turned around and went down to the Gulf of Mexico and refueled in the Gulf of Mexico. We went to Rio de Janeiro and refueled in the harbour at Rio and we went to Cape Town, South Africa and picked up the 6th Divvy from Aussie and General Blamey???. It was a group that was being pulled out of the Middle East. We stopped at Fremantle, Australia and discharged the Aussie's, the 6th Divvy and Blamey. And then we went into the harbour at Sydney and disembarked at the harbour at Sydney and went to the town north of Sydney called Brisbane for staging to get the rest of our equipment and move on up to New Guinea.

#132 Betty: How long did all that take you?

Don: We were at sea for 40 days.

Betty: That must have been quite a change from being in Georgia?

Don: It was an awful long trip.

Betty: Why did they go north, to divert?

Don: Well, the Queen Mary always traveled alone and they went north to make the U-boats in the area think they were going to England. And whenever we left harbour, like when we left Rio, we always left at sunset, cleared the harbour just as it was getting dark and they always sent out an unloaded freighter in front of us with it's propellor thrashing so that if there were any U-boats around they would assume it was the Queen Mary making the noise.

Betty: Did it make more noise when it was unloaded?

Don: Well, just the propellor thrashing in the water. But we always traveled alone. We never had any escort except like, when we stopped in the Gulf of Mexico, we had some destroyers around for awhile, while the tankers were putting on fuel and food.

Betty: You'd have to take the fuel on in the water?

Don: Yes. We never got off the ship until we got to Sydney, Australia. We were aboard her for 40 days.

Betty: Were they all Americans until you got the Australians?

Don: They were all Americans on the Queen Mary that left Boston. Like I say at Cape Town, South Africa, we picked up the 6th Divvy from Aussie and General Blamey and dropped them off at Fremantle on the way around.

#152 Betty: In order to keep that many troops, there would be 10,000 plus when you picked up the Australians, keeping them occupied for 40 days. You didn't have a cruise director, what would you be doing?

Don: Of course, it kept everybody busy feeding the other fellows. There was four settings per meal which would be 12 settings in the dining room. Of course, KP would require then, quite a huge staff to wash the dishes and bring the food back out from the kitchens and so forth.

Betty: Everybody took their turn?

Don: Yes. Then there was exercise and of course, you could go up on the promenade deck and walk around. There was movies at night and this sort of thing to do.

Betty: It must have felt in one way, rather luxurious having an opportunity to sail on the largest ship in the world at that time.

Don: Oh yes. It was quite a nice ship. At that time, you know, before they had stripped her.

Betty: When you left you went to New Guinea. Was this to defend New Guinea against the advancing Japanese?

Don: Yes, we left Brisbane and sailed to port Moresby, New Guinea and landed at Port Moresby on May 3rd, 1942. I believe our original destination was to have been the East Indies, Java or someplace in there but it had fallen while we were on the Queen Mary on our way overseas.

#175 Betty: So at New Guinea, you were there to sort of stem the tide.

Don: We were there to protect the airstrips so that they could stop the Japanese advancement. The Japanese had landed as far down as Lai??? and tried to make a landing at Milne Bay and I was in Milne Bay and they were defeated. That was the first defeat of the Japanese advancement and from then on it was pushing them back.

Betty: So you really came in at the time when, although it was defensive, it became the beginning of the offensive.

Don: Yes. We were in a holding position for, maybe the better part of a year. The Aussies were trying to retake Buna??? and Lai and stop the Japanese that were coming over the old Stanley Rein??? and it was also to stop the advance to Australia. To keep the Japanese from landing on the mainland of Australia was the reason everybody was up there. Because once they'd landed on Australia, then of course, they'd have had an awful time getting them off because it was big.

#192 Betty: And were you in New Guinea throughout the war then or did you move up as they started pushing them back.

Don: I ended up at the Philippines, outside of Manila.

Betty: Were you in the first group that foot set back on the Philippines?

Don: Yes. Right after they had taken Manila harbour we went in. They were still fighting and the Japanese were in the hills.

Betty: How close did you get to fighting the Japanese?

Don: They used to shoot at us going between the guns in the Philippines. And of course, they tried to take Milne Bay.

Betty: You wouldn't be like some of the infantry who would have to had hand to hand combat?

Don: No, we were always protecting airstrips. Our guns were anti aircraft automatic weapons.

Betty: Did you have much opportunity to meet the people who were the natives, like of New Guinea and in the Philippines?

Don: Oh yes.

Betty: How were they reacting to this invasion, this 20th century invasion, many of them were fairly innocent, primitive, you might say, people.

Don: The natives of New Guinea I don't think really realized what was going on. They were more or less you could say, childish, being primitive people.

Betty: You mentioned that you were protecting airstrips and I think it is in New Guinea where they used to and still do, have you ever heard of their worship of this plane, waiting for the planes to come back.

Don: No. I know what you're talking about but I don't know where that is.

Betty: You did not have too much association with them around the airstrip waiting for the planes to come in with the supplies.

Don: No, because at Moresby most of our supplies came in by ship.

#221 Betty: I don't want to dwell too much on the wartime. . . .

Don: I know the one you're talking about, it seems to me it's another island.

Betty: Yes. But I thought you might just have come in contact with that. Now, with the victory, you were in the Philippines when the war ended?

Don: No, I became on rotation with points for overseas. I came back in July '45.

Betty: The American army did that when you were over for so many months automatic.

Don: If there were troops available to relieve you.

Betty: I see. How many months did you have to be on overseas duty?

Don: It was on a points system. It was months overseas and months of combat and exactly how it worked I don't know but all of us had enough points, we could all come home, but we could never get replacements until the war in Europe ended. After the war in Europe ended then there was a fair amount of fellows went then. Rotation picked up speed. Up until then it was just. . . .

Betty: You were with the 101 throughout?

Don: 101st the whole time.

Betty: And when you came back where did you come to in the United States?

Don: We sailed from Manila and went through the Panama Canal and landed at Newport News.

Betty: What ship did you sail on that time?

Don: I think it was the General Anderson, an old troop transport.

#244 Betty: And were you then discharged?

Don: We got off and we were at a camp someplace in Virginia and then we were split up going back to your home town. The fellows from Michigan all were sent up to Illinois to . . . now I can't think of the name of the fort at Chicago.

Betty: Then you got discharged from there?

Don: Yes. We stayed there a couple or 3 days and of course, you got new clothes and pay, travel pay and this sort of stuff.

Betty: And after your leave were you then allowed to resign, to get a discharge.

Don: Yes. There was no leave, what they did was they processed you. You were asked if you wanted to re-enlist and if you didn't want to re-enlist then you were just separated. Then you left the camp, you had all your papers, you separation papers and the whole bit with you and your travel pay allowance and it seems to me, I think you even had a train ticket. It seems to me I got a train ticket back to Detroit.

Betty: So what did you do. The war was over, did you go back to your old job?

Don: No. I went to Detroit and I stayed in Detroit for maybe a week, maybe less than a week. I decided that wasn't for me anymore, I didn't like the big city so I went up to Saginaw, Michigan and I stayed up in Saginaw, Michigan. This would be in, let's say in August, I was in Detroit when the war ended, the total thing was ended. So I went up to Saginaw and there was a friend of mine who was in the army in Europe and his mother lived up there. And I was up there more or less trying to find myself in August.

#281 Betty: It would be quite a thing adjusting back to civilian life. You'd been in the army for several years.

Don: Well, this friend of mine, Johnnie Nower??? that I was telling you about, he decided that we should go to school so we decided to go to university. We enrolled in September, sometime in September we went over to East Lansing and enrolled on the GI bill.

Betty: Had you thought when you got out of high school, had you wanted to go to university then had the money been available?

Don: Well, I think I was too young and like all kids didn't know what I really wanted to do. There was certainly plenty of opportunities to go to school be it working and going to night school or whatever. But I had taken a college preparatory course in high school so I didn't have any problem with that part of it but I never gave it any thought.

Betty: What made you decide to go to university then?

Don: Well, Johnnie wanted to go and I thought it was a hell of a good idea.

Betty: What were you both going to be?

Don: Johnnie went into journalism and I went over to go into chemical engineering. You had this basic college you had to go through. So in two years you had basic college with some courses pertaining to what you thought you were going to major in and then after the 2 years of basic college you would go into your major. By that time I had decided I didn't want to be a Chemical Engineer and I had changed over to geology.

#309 Betty: Why did you not want to be a Chemical Engineer?

Don: It's too dogmatic, learning formulas and memorizing this and memorizing that. So I had taken this one basic which was called earth science, which covered the basics of geology.

Betty: Who was your professor?

Don: After I got into college the major professor I had in college was Dr. William A. Kelly who was a native of somewhere near Edmonton. And had graduated from the University of Alberta with his undergraduate work and went to Princeton University to get his Ph.D.

and had moved to Michigan State when it was a college not a university, back I think he landed there around 1928 or 1929. His dad was an old lumber mill operator up around Edmonton plus he also sailed a ship down the Mackenzie in the summer time.

Betty: Interesting that your first geology professor should be someone from Canada and you eventually came here.

Don: Yes, it was really unusual.

Betty: Did you feel that Professor Kelly had a big influence on your decision to stay with geology?

Don: Oh yes. He was so easy going and awful easy to get along with that the courses were very easy under him. In fact, the whole department had a real good outlook.

#346 Betty: It was Michigan State University that you went to?

Don: Michigan State College at that time and has since been changed to Michigan State University.

Betty: The college you would still get a degree, it was a degree granting college.

Don: Yes. It was a 4 year land grant college.

Betty: When you graduated . . . or perhaps before we get to your graduation, could you think of any of the people that were taking geology with you that also went into the petroleum industry.

Don: Yes, but there's none up here. There was quite a few went into petroleum and very few went into what we called hard rock or mining but none of them came up here. Although there are Canadians up here that went to Michigan State University. Harley Hotchkiss??? is one. He played hockey there. He was after me. I graduated in 1950.

Betty: Were you working in the summertime during the time that you were going to u. . . .

End of tape.

Tape 1 Side 2

Don: . . . Michigan being an old oil producing state had a fair size oil and gas division and they also had a mining division due to the hard rock mining up in the upper peninsula, the iron ore in the underground set-up up there at Ishbami??? and Negoni??? and this sort of stuff. So they had a fair sized geological survey.

Betty: On the completion of your university, who did you go to work for?

Don: Upon graduating in June of 1950 after sending out numerous resumes plus being interviewed at the university, there was no jobs forthcoming, I went full time with the Michigan Geological survey as a Petroleum Engineer.

Betty: And what were your duties?

Don: We were kind of a policing agency of the drilling, producing and plugging of all wells drilled in a certain number of counties. Each one of us had so many counties. I had 6 counties I watched.

Betty: So would you be out in the field most of the time then?

Don: I'd be out the better part of the week, usually five days a week out in the field.

#014 Betty: How long did you stay with them?

Don: I stayed with the Michigan Geological Survey until '54.

Betty: Where did you go and why did you change?

Don: There was a fellow by the name of Joe Guyer had started a company called the Denver Sample Log in Denver, Colorado, in which originally he started out just washing and cutting drill cuttings for the industry. And then he decided to make stratigraphic logs of the cuttings of the deep tests or whatever and had promoted this idea and had got a hold of a fellow he knew by the name of Jim Mitchell who at that time was working for Pure oil in Illinois and was a stratigrapher and they became partners and they started this so called Denver Sample Log company. And then they expanded up to Canada, at that time Alberta and Regina which were being fairly well drilled up. And Jim Mitchell came up here and opened the office up and then Jim wanted to go back to Denver so he hired Lou Workman who was a friend of his from the Illinois survey, who worked for the Illinois Survey for 25 years in geology and had done detailed stratigraphic studies in the Illinois basin. And Lou Workman was the manager of the Canadian Stratigraphic, that's when they changed the name from the Denver Sample Log to Canadian Stratigraphic and then they changed it to American Stratigraphic in the States. Somehow or other, I don't really know how it came about but Doc Kelly, Joe Guyer had contacted Doc Kelly. And he had called me and wanted to know if I was interested in coming to work in Canada. So I went down to East Lansing and talked to Joe Guyer. He flew in, he had a little. . .at that time I think he must have been flying a Piper Cub or something. And I talked to him and he hired me and sent me up to Calgary to do some work under Jim Mitchell to see if I was

qualified or had the qualifications to do this type of work because it was monotonous.

#045 Betty: What month was it?

Don: I'm going to have to guess at this. It had to be in May or June that I came up because I moved up here in July of '54.

Betty: What did you know about Canada before you decided to come and work here?

Don: Really not much of anything of western Canada. Of course I knew eastern Canada, Amesburg???, because that's where my dad was born and I used to go down there when I was a kid. And I fairly knew Windsor and what we called the down river part of Canada. It was all just farming communities. Incidentally it hasn't changed, I was there last year and it hasn't changed a bit.

Betty: What were you expecting when you came up here?

Don: I never gave it any thought really. The wife and daughter and I just jumped in the car and we drove out. We were certainly surprised when you start across the Prairies because that had been the first time we had driven across the Prairie. We had been to California a number of times but that was down through Oklahoma and that way which is not quite as bad as is North Dakota, which is barren as all get out.

Betty: Everywhere you look. Not a tree to mar the view.

Don: Nothing and it can get awful hot in July.

#061 Betty: Right. Perhaps we should just backstep a bit. When were you married and what was the maiden name of your wife?

Don: We got married in January of 1946.

Betty: Where had you met your wife?

Don: I had met her years before, before the war, on a vacation up in Bay City, Michigan.

Betty: So you had know each other a long time?

Don: Oh a long time yes.

Betty: And by '54 you had one child.

Don: Yes. We had Kathy.

Betty: How many children do you have?

Don: Now we have 4, w boys and 2 girls.

Betty: Could we have their names for the record, I won't ask you for the dates of their birth?

Don: Kathy is the oldest, Robert is the oldest boy, he's next, David and then Mary.

#070 Betty: When you came up here, you mentioned just in passing the fact that they wanted to make sure that you were suited for the work because it was routine and could be boring. Did you ever find the work that you did with the Stratigraphic Service routine and boring?

Don: No, I never found it boring or tedious. Other than it required a person that would have to sit at a microscope roughly, let's say 6 hours a day at a microscope.

Betty: What were you doing at this microscope?

Don: We were examining well cuttings from below the surface casing to TD in most cases and picking out the particular tops that were needed for sub surface control. Let's say, as

required or as determined by the customers or the clients, which would be the oil companies operating in Alberta or B.C. or Saskatchewan.

Betty: Did you serve all oil companies?

Don: Of course, this was a subscription of oil companies to this service. For x number of hours per month, for x number of feet of stratigraphy. There was a fixed amount of footage per month that would be run and turned over to the clients.

Betty: Do you know how much this cost them per month or how much this x number was?

Don: Not really I would be kind of guessing but I would say somewhere in the neighbourhood of . . . maybe 30 - 50,000 feet of stratigraphy a month was what the client got for a subscription fee of let's guess and say, \$300 or \$400 a month.

Betty: How many clients would you have?

Don: I think at one time we had over 20. It would vary with the coming and going of companies.

#096 Betty: Why would the company have your service do it rather than do it themselves or get the information from the government?

Don: Well, the government didn't turn out any strat logs and the Stratigraphic Service covered all of Alberta, all of the important wells in Saskatchewan plus all the important wells in northeastern B.C. So this would be something that a company could not do and keep up with the current deep tests. It would be impossible for say, one man or two men and a company to do this work because it took a fair length of time to run. . . I forget what we used to run. It seemed to me. . . it's funny how you forget, it seems to me we used to have to run. . . there was 3 of us in the office plus Lou and it seems to me we used to have to do about 30,000 feet a month. So when you multiply that by. . . let's multiply it by 4, you were looking at 120,000 feet of stratigraphy a month. Which in those days, if we went back and said, a deep test was, let's say 6,000 feet, that would be an awful lot of wells for a company to have a staff to turn out that material. And this way here it was covering everything. Let's say their geologist that was in charge of B.C. Would be getting all the information and could request wells to be run to be pertinent to their problems that they had and the same way with companies operating in Alberta, either in the southern part or the northern part or in Saskatchewan, that would be pertinent in putting together say, land plays and doing seismic and trying to build up a viable geological, geophysical background as to where the next oil field could be found.

#124 Betty: What company, ??? company that you worked for after you got up here, do you know or did you work for them all?

Don: I never left Can Strat except to go back. . . .

Betty: No, I mean as clients. Some of your customers?

Don: Oh, Imperial, Union, all the majors and not quite what we'd call the small independents because it was too rich for their blood really. They did not have a budget at that time that would allow them to participate. They may buy individual logs at a rate of x number of dollars per thousand feet.

Betty: These would be available to them even though they were not a customer?

Don: Yes. After they had been issued. After the subscribers had gotten them.

Betty: They became public property I mean, public accessible property.

Don: I think there would be a slight time delay, especially if it was a key well and there was a land sale coming up. They wouldn't get it at the same time that subscribers would but they'd be able to buy it after the subscribers had gotten it, let's say after so many days or a month or something had gone by.

#141 Betty: How would this information, supposing it was Imperial, they asked for this, how would you get the samples, where would they come from, how would they get the information back again? Could you give me sort of a routine of what happened?

Don: Well, the Strat Service would request sample cuttings from any well that was pertinent to studying the Alberta basin. Now this would not be necessarily field wells but would be wildcat wells or step out wells. They would request them from the operator and the operator would send them the cuttings from the rig and then if there was going to be a tight hole, it would be a year before they could be used. And in such a case the operator may want a set of cuttings for themselves if they hadn't been catching it on the rig. Or if they wanted to give their partners a cut of a set of samples from a well, it was a wildcat they were participating in, then they would request that they be washed and not sold or circulated through the subscriber notice that the well was going to be washed and cut, until after it was released, which in the case of Alberta was one year.

#158 Betty: When you say cut what do you mean?

Don: This would be, they would send out a letter to all the subscribers or clients saying that a deep test by Imperial et al was done, say in the so-called northern foothills of Greenland and it was being released. Anybody then that would want a set of cuttings from that well would have to answer back and then they would be washed and dried and cut and bagged and so forth. And they would get them in their individual bags, envelopes and in boxes.

Betty: For the record itself, you would have a core so big and you would take pieces off it to give them to give them various. . .

Don: Usually the core went to Conservation Board. There might be some chips taken by the geologist on the well and it would be possible to maybe send some of that out but in any event if you wanted to look at core you would have had to go to the Conservation Board. All core was stored there. And core was not destroyed, it was not broken up or . .

Betty: So what did you work with then, if you weren't. . . ?

Don: We would work with the core if it was sent in for us to do. Then we would have to send the core over to the Conservation Board or we would go to the Conservation Board on some of the older holes, we'll say a year had gone by and they were tight holes for a year and we decided they were key wells in a particular part of the province, then we would go down and look at the core at the Conservation Board and describe it.

#180 Betty: There must have been some very special problems in looking at the strata and determining what was there because there seems to me to be a cacophony of names shall we say, a great many names for. . . you have the major strata names

but then you have the little names all through which people seem to, not quite name them after their grandmother but . . .

Don: We used to follow what was acceptable to the industry as a whole. Now it may not be exactly pinpointed by say, 2 or 3 of the industry but we would use the terminology that was acceptable by the Conservation Board and the industry.

Betty: Were there not times however that a certain part of a major strata would be named by one person one name and another person working independently somewhere else would have their own little name. How did you determine?

Don: In the early days, there wasn't too much trouble with that. In the early days, there were a number of tops that were picked by the GSC that were considered to be authentic, there were a lot of tops picked in the industry by say, like Imperial, who did the original drilling up around Leduc that were acceptable as units, although the exact top itself may differ from company to company. We would pick what we considered to be the top of the formation and call it so and then if the company wanted to change it on their maps it was up to them because there was no way we could satisfy everybody. I'm thinking of say, the top of the Beaver Hill Lake or the top of the Swan Hills or ??? Mountain, when you get into companies sometimes you get into splitting hairs.

#209 Betty: This is what I wondered, if this caused you problems?

Don: Not really because we would pick the tops that appeared to be acceptable by the bulk of the clients and then if they wanted to split hairs in one company they could go ahead and do it.

Betty: There was a committee of which Mr. Lou Workman, whom we'll go into a little more detail in a bit, he was very much involved in this naming, were you eve involved in that at all?

Don: Just through the lexicon that I loaned you there, in gathering this information. Mainly at that time it was to try to put into print, more or less the acceptable formation or subdivision of the formations into type locality, where the section was picked, who named it and the characteristics so that you could recognize it in the sub-surface.

Betty: But you weren't in a position where you had to name names?

Don: No, I didn't but Lou did a lot and Gil Rash did some over in the outcrops.

Betty: Mr. Workman would have done that when he was with. . . .

Don: When he was with Strat, he was quite active in what they called the Stratigraphic Committee in Alberta and did a lot of work in outlining the perimeters of some of the formations.

#233 Betty: This would be I think, very important and an ongoing, if only secondary, responsibility to you all the time you'd have been with Can Strat.

Don: What we always tried to do was make sure we had the top of the formation as it should be by it's type locality. The tope of the Mississippian had a certain criteria and you had to find that in the cuttings before you could put it down there. Along with using the mechanical control, the e logs, the gamma ray logs and this sort of stuff. To pick it relatively as close as possible so that the companies themselves could actually use it

without doing anything. If they wanted to do a quick run through we'll say, of any specific area for a land sale that was coming up to see if there was any viable reason to assume that there was D3 reef or whatever in it.

#250 Betty: Was that material kept on file year after year and is it still on file today?

Don: Yes, the original logs were done by hand and the duplicating logs were sent to Denver and they were typed and symbols put on them. But the original logs done by each individual stratigrapher, as far as I know, are still here.

Betty: You mentioned that you were brought up here by, first of all, Mr. Guyer. Could you tell me anything about Mr. Guyer or any anecdotes about him, the kind of man he was?

Don: Well, Guyer was a real kind of high flyer you know, he liked to fly around in the airplane and attend conventions and this sort of stuff. He wasn't much for business. Lou Workman did all the managing of this particular office here.

Betty: Mr. Guyer only really interviewed you to see if you could come up and put you in Mr. Mitchell's good hands, did he?

Don: Yes, that's basically what Joe did was come back to talk to me I suppose, just to see if I would be the type of fellow that was willing to come up to Canada to do this particular type of work, of which I had done quite a bit of it in my Masters' thesis, I had done quite a bit of. . .

#272 Betty: What was your Masters' thesis on?

Don: It was on Ostracod distribution in the Devonian of the Michigan basin. So I had done a considerable amount of microscope work. Then after getting up here, then Jim came up from Denver and I can't remember whether we spent 2 weeks or a month, I can't quite remember that but it was a considerable time, it seemed to me we did a whole well together. A complete well from top to bottom with Jim explaining what the base of the fish looked like. For instance, the base of the fish, we'll say, what the glauconite looked like, what the top of the Mississippian and what was the criteria for let's say the Trital??? zone on top of it. What the first white specs look like, what the second white specs look like. I'm not going in order but I'm just giving you a rough idea. What the Devonian looked like, what was the criteria for the Exshaw shale, we'll say, plus what was the criteria for the top of the wattleman???. What anhydrites??? look like and how they differed.

#294 Betty: Had you studied all this or were you taking really, an almost, a quick post-secondary course with Mr. Mitchell?

Don: It would be entirely new. The lithology???, fossil material from what I had done on my Masters' thesis. The criteria differs from area to area but again you have to have a background in order to be able to pick this stuff out, you have to have some knowledge.

Betty: I was going to say, had you done a lot of this identification of fossil study at university, extra courses.

Don: No. Just the typical everyday fossils you get in school.

Betty: Did you find this difficult at first, the fossils of Alberta or the identification of various strata?

Don: Not really, you have to more or less be curious about all these things and have an inquisitive mind and to me it was fun.

Betty: There was a recent article I was reading about the fact that as you go from one level to the next that despite Darwin's evolution theory, there seems to be gaps. Did you find this in your studies?

Don: I think there's gaps because we don't have a complete section. What we used to think was a complete section of say, the lower Devonian is probably not complete.

#322 Betty: Would there be areas of Alberta that are complete and other Devonian, just take Devonian as an example, that in looking at it, you'd find that you wouldn't find the same things even though you had identified Devonian and if so did this make a difference as to the probable presence of petroleum, hydro carbon products I should say?

Don: You have a continuous sequence of Devonian sediments from north going down into Willison basin although they get younger as they go down into Willison basin. Your older sediments are up in the north. But the lithology and some of the fossil material stays the same so you're kind of climbing up the geological section with some of. . .

Betty: So you didn't have sections missing in this area of that particular one for instance?

Don: Not that we know of. I think that there probably is because you see between the lower Devonian and the upper Devonian there is quite a change in the type of fossils but they think that we had probably some kind of a hiatus here but they'll never know this until they find a complete section someplace else that fits into it.

End of tape.

Tape 2 Side 1

Don: University being more or less straight forward geology in as much as you go to an outcrop and look at it and you may do some checking within the sup-surface of that particular unit from well cuttings but you wouldn't be doing it as more or less a life business which you would be doing in the oil industry. Usually you get stuck with one particular horizon or sequence of beds that you're studying and it becomes quite obvious then that it's not quite as simple as it was when you were going to university.

Betty: For the record why was it necessary for the various companies to come to you to get this information which was over and above any geological, geophysical information they would be gathering through their own scientists?

Don: Well, they would be getting the total stratigraphy of Alberta as a for instance, of wells that they had not participated in or had no way of having the work done other than send somebody out to the Conservation Board or by the cuttings. This would require a lot of time and a lot of people if they were building maps on say, the Devonian sequence within the Alberta basin and they could plug this material in where the shale edge was, if it was a reef hedge or whatever by buying this material. And if there was any doubt in their mind then they could just do some spot checking.

#019 Betty: How many people were working with Can Strat?

Don: Let's see there was Lou Workman, Gil Rash, George Shoket??? and Keith Fisher when I came up and myself. And then Keith left and we didn't replace him.

Betty: This would be the type of a service that would be quite expensive to offer because you have these scientists working and for the amount of money they appeared to have paid. Were there financial difficulties at all in trying to keep Can Strat going?

Don: Oh yes, it was continually a battle of finances.

Betty: Can you tell me about it and how it was solved or not solved?

Don: It was really never solved because you'd have a certain number of subscribers and then some would drop out. It was nip and tuck all the time. And then I think you're referring to when Joe Guyer offered to buy Jim out and then Jim bought Joe out. Then he had a friend of his, E. E. Brem from Illinois that was wealthy oil producer that loaned Jim the money to buy out Joe and then Brem . . .

Betty: What year would that be do you remember?

Don: This took place in '56.

Betty: Not too long after you arrived then.

Don: I got here in '54.

#039 Betty: So just a couple of years.

Don: Yes. A couple of years. And then Jim bought out Joe and there never really was enough money. Probably locally, say in Alberta there was enough money but not to keep

everything running in North Dakota, Montana, Wyoming, Durango and Denver. Because it was the type of a set-up that you could not duplicate these logs here. It had to be done in some local place where they had a staff that could type these logs and they had graphs and they could graph them. And in order to get the volume out it had to be done for more than say one office or two offices, it had to be done for five offices in order to have enough volume to warrant having all these people. And of course, then the oil itself was never that good, it was never than boomy, it was always into the peaks and valleys all the time and it was a constant battle I'm sure to make ends meet.

Betty: Did you find that as a scientist, you were underpaid in relationship to what other geologists would be making in the industry, looking at their type of work?

Don: I think we were probably in the median, in the middle of the salary range. If anything, the only thing that would be, as I look back on it now, would be the pension plans, the savings plans and these things were not there, as against working for say, a major that would have all kinds of benefits in the way of retirement savings plans and this sort of thing, which we didn't have. Most service companies now, by that I mean, small service companies, now larger service companies I'm sure, like Slumber Jay and those are different, they had that because they had the volume. But this was rather a small outfit.

#061 Betty: When Mr. Mitchell bought out Mr. Guyer, did everybody stay with the firm with Mr. Mitchell?

Don: Oh yes. Nobody left.

Betty: And when you say buy out, did he just buy out the Canadian operations?

Don: No he bought the whole thing. The American Stratigraphic, which was the parent company of the Canadian Stratigraphic outfit.

Betty: Before we go on too far, can you tell me a little about Mr. Guyer?

Don: Joe was a kind of, what you would call, the type of guy that was a starter of things but never wanted to get involved with the details. He started this and of course, basically his idea was very sound, but when you look back at it the industry wasn't really ready for it or couldn't evaluate it all due to the peaks and valleys of the exploration business. So it was never what you'd call a real big money maker that could grow into a fair sized company.

Betty: Can you remember any incidents that would involve Mr. Joe Guyer?

Don: No. Just like I say, he flew back and hired me and I guess I only saw him about twice after that. He would just kind of come and go you know.

#077 Betty: Right. Mr. Jim Mitchell, you of course, worked for and . . .

Don: Well, Jim was a little different. He was kind of quiet. Jim was what you would call a steady geologist. He would come up and visit and if there were any problems go over it. He was always interested in geology so he always had a bunch of stuff that he was talking about, what had been done in certain areas, fossils that had been identified and the ages put on them and this sort of stuff. Whereas Joe was kind of a flighty one.

Betty: Where had Jim worked prior to coming to Canadian Strat?

Don: Well, just Illinois as far as I know, Illinois for the old Pure Oil Co. I think for quite a few

years and that's where he met this Brem that was more or less the one that furnished the money for Jim.

Betty: Did Brem eventually become part owner?

Don: Well, eventually Brem had put enough money that they had built a new building in Denver and I think he had financed that, they built a lovely set-up in Denver for sample storage and for reproduction work and the whole thing. And then Brem had moved his, I think it was a nephew to kind of manage the overall set-up of the business. In later years, Jim kind of got. . . he was interested in the company and you could still talk to him about geology but he had kind of gotten more or less around to where he would like to play bridge and go to the Petroleum Club and this sort of stuff.

#097 Betty: So what happened to the company, did it just kind of bounce along on it's own or without management?

Don: Dave Underwood ran I think the financing end of it and Keith Fisher was the manager of the geology part of it in the States and after the business went down in Saskatchewan they closed the office in Regina and moved everybody over here and for a long time they handled the whole thing out of here. That was under Dick Anderson after Lou left, and then Dick left and I don't know exactly if they are doing much anymore. They eventually tried to get into computer mapping from all the logs they had on hand. Now I don't know whether that ever paid any money out or not really. It seems like most of the stuff you are doing is so. . . it's limited in saleability is what it amounts to. And if you are to make any money you would have to get so much money for the stuff that you would price yourself out of the market is what it amount to.

#113 Betty: Could you think of any particular anecdotes regarding Mr. Jim Mitchell?

Don: No.

Betty: Did you socialize at all with him?

Don: Yes. We would go to say, Denver to a geological meeting and he would go out with us at night for beers and this sort of stuff. As a whole you usually didn't have that much time to do much of anything. The convention or geological meeting would be say, 2 ½ days or something like that and you would be pretty busy going to talks and maybe talking to other people you'd known throughout the years in the industry.

Betty: Your particular job must have brought you in touch with many people from the industry because they were all coming to you for information.

Don: Locally you'd know just about everybody that was doing any sub-surface work.

Betty: You'd have a pretty good handle on what work was going on and what was underneath the surface throughout many parts of the oil patch.

Don: Not really. Never inquired to what they were doing. I myself have always been kind of foolish, I'd never ask them what they were doing. They'd come in and maybe look at logs and stuff like that. I would never ask them what they were doing or what they had in mind.

Betty: You weren't curious to see where the next boom might be so you could get a few stocks?

Don: No, I always figured it was none of my business.

#132 Betty: Was this a problem in your job, because you were dealing with confidential information I would think, at the beginning. I mean when things came to you, so that information wouldn't come out anywhere what companies were doing?

Don: Lou usually took care of that. He would request the sample and if it was a tight hole it would just be marked so and put back in the back and I really never paid much attention to what came in the back door.

Betty: Did you have to when you went to work for them, sign any kind of document that you would keep everything you know confidential?

Don: No, I think it was just understood. There was no such an thing as any signing of anything about secrecy. If somebody told you it was a tight hole, it was a tight hole, that's it.

Betty: Let's talk about some of the other people that were there, Mr. Workman, you've mentioned him a couple of times and we haven't really taken the time to talk about Mr. Lou Workman.

Don: Lou Workman was just a wonderful guy, he really was, just wonderful to work for.

Betty: In what way?

Don: Easygoing. You knew what you had to do. If you had. . . like I say I can't remember, if you had say, 30,000 feet a month to get out, then you knew that you had to do that. Then that was it you just did it, even if you had to come back on maybe a Saturday morning or maybe working all day Saturday or maybe go down at night to finish a log and get it correlated, maybe on a Saturday morning when there was nobody around. You get to go through Lou and get it correlated and get it all set to ship it off to Denver to be finalized and put on the CPU??? so they could reproduce them . You never had any trouble with Lou, he was just a hell of a good guy.

#157 Betty: Can you think of any incidents through the years, times that you've had together or times that you worried through something or. . . ?

Don: Well, I think Lou in a way was kind of like me as far as personality goes, he was kind of happy go lucky. Lou never worried about nothing and I never worried about nothing. We knew at times that there wasn't enough money to go around and this sort of stuff and we never discussed it or worried about it. We figured well, so. . . you know. . . He really was that way and he was awful interested in geology and was always willing to help. By help I mean if you were stuck with any particular type of problem, you couldn't find it in the cuttings or you couldn't quite come up to where to stick a top for sure, Lou would always be there to help you. It didn't make any difference if it was lunch hour or if he was working on something in his room or whether it was like I say, Saturday morning. A lot of times we used to do a lot of that stuff, maybe on Saturday mornings when we wanted to get the logs done. And of course, with Lou, each individual person that ran the log had to pick the tops and if there was any discrepancy then you'd have to go over them with Lou and if there was something that looked really bad then you'd have to get the cuttings back out and see if you could find out what happened. Were they mixed up, were they out of order, whatever.

#177 Betty: He would be really the equalizer then?

Don: Yes. He was the manager and made sure that everything ran smooth and took care of all the paperwork as such. Getting out the wells that were going to be run. He might come around and ask you if you had any particular ones that somebody had asked you for. And you might tell him or you might be on the street and somebody would ask, when are you going to run such and such, then you'd tell Lou and then he'd put it on the next month. It was all run very informal.

Betty: Did you find because of this and the fact that you were really left to run your own show, that people stayed with Can Strat quite awhile?

Don: Yes. Of course, it all depends, again we always go back to the economic end of it. A lot of times there was no place else to go. The industry being up and down all the time, you may get a bit miffed and think you ought to do something else but there would be no place to go and then gradually that would leave you.

Betty: Would you think it would be difficult to relocate because you were so specialized in what you were doing?

Don: No not really. Again I think it depends upon the person, if you're interested in what you're doing. Now I went from here down to Sun research, did the Willison basin for 5 years, went back to Strat, did the Willison basin and then went to Alaska and did stratigraphy up there which is altogether different and then came back to Alberta and normally, in those days most of the stuff was carbonate rocks, there wasn't much with the clastics??? and . . . I think once you get a background of what you're looking for in all these different horizons it becomes real easy to move. They don't change that much, the type of traps or the thinking doesn't change quite that much.

#213 Betty: And there were enough companies that needed someone working for them with that kind of background knowledge?

Don: Yes. And like I say, mainly to do sample work you have to be a certain type. Lots of fellows are just not suited for it. Just like I don't like sitting on wells, I don't particularly like that, I think that's a complete waste of time sitting out in the toolies because there's too much time on your hands, there's not enough to do. And other fellows just love that. And they wouldn't think of going in an office for the man in the moon. They just love that being up day and night out on a rig. And to me it's boring as heck.

Betty: Can you think of anything else about Mr. Workman that we should be talking about?

Don: No. Like I say, the office was very well run. Again we go right back to, it was an individual. . . you had 30,000 feet to do and if you wanted to goof off and go duck hunting, as long as that was done when the end of the month came around or whenever the date was that it had to be shipped off to Denver, there was never anything said.

#230 Betty: What about Mr. Keith Fisher, how long was he there while you were there?

Don: Keith was only here a short time, less than a year and then he went down to Billings, Montana and became the manager of that office. Because here he was just a stratigrapher. He went down to Billings, Montana, managed that and then he stayed there not too long. Let's see, he went in '55, he was there in '56 when I got there but he left about '57, he

went down to Casper, Wyoming to run that office and he was in Casper about 3 or 4 years and then he went to Denver to run, more or less oversee the whole picture, sort of thing. He didn't have anything to do with the other offices except for getting in line for getting the total subscription footage in, reproduced, distributed and so forth.

Betty: How long did you stay with Can Strat?

Don: I was up here from '54 to '56. And then I got a job offer to go to work for Sun Oil in the Research Department in Billings, Montana.

Betty: And so you took it?

Don: Yes.

Betty: Why?

Don: Well, it was doing a particular problem rather than doing all this general stuff. And we went down there and did a . . . well, it actually ended up 5 years but we did a study of the complete Willison basin, Saskatchewan into Alberta, all of North Dakota and Montana. For the Sun Oil company offices which at that time, there was one in Bismark and one in Billings and one in Calgary. There was one in Regina also. We used to help, any problems they had with the geology, we would try to solve it for them or become part of the problem, one of the two.

#267 Betty: So you were still working very much in the Canadian field as well as the American?

Don: Well, it was roughly the same type of work except it was limited to the carbonates. We did the carbonates from the Mississippian on down, sub-dividing the Mississippian as pertaining to Saskatchewan and North Dakota and getting on down into the Ordifision?? sediments which produce down there. The Devonian at the time was pretty zilch. There was nothing in it like there was up here, it's a different set of rock. There the Ordifision and Celerean sediments had oil in them and we were working on those. I stayed with them until '61.

Betty: So how did you feel going back to the States again and how did your family feel?

Don: We'd never lived in Billings so it was a new experience, a new area, a smaller town.

Betty: Were your children all of school age by this time?

Don: No, just Kathy at that time was going to school u here. And then the 2 boys and Mary were born in Billings. There's quite a gap between the oldest daughter and Robert the oldest son. He was born in . . . I think he was born in '56 in Billings and Kathy was born in '48, so there's quite a gap there.

#297 Betty: When you and your wife were deciding on moving, for instance in this particular case, was the fact that you could go back down to the United States which is the land of your birth, did this have any bearing on it as far as you were concerned.

Don: No, not really. I got a fair raise by going with Sun. By that I mean it was somewhere in the order of maybe \$100 a month more than what I was making with Can Strat.

Betty: At that time that would be a goodly sum more.

Don: Yes, I suppose it would be a fair amount of money more than what. . . . And then, you never managed to save enough money to buy a house so you weren't stuck with that

problem. Later on we learned that really what you should do is buy a house if you can at all do it and we did that in Billings. And then that makes you stay, once you have a house, you seem to want to stay then. And we stayed there quite awhile, until '67. And of course, again the business wasn't that good that you could really have a lot of money left over at the end of a year so it was more or less just kind of going along. About the only thing that kept you going is you have to like geology I guess.

#327 Betty: I would think so. And to really want to get down to exactly what was happening those many, many, many millions of years ago.

Don: When you look back on it you begin to think maybe you were foolish. You should have went for the money.

Betty: Do you think doing it again you would, if you had it to do over. Did you ever have those feelings of. . .mm, I should be going to somewhere else where they're . . .

Don: Yes. I suppose. But after you get children, it becomes difficult to do this.

End of tape.

Tape 2 Side 2

#016 Betty: Who was your boss when you went back down to Billings?

Don: I went to work for Dick Joudrie in Billings, Montana and of course, our head office was in Richardson, Texas, Dr. Cordell was the head of the geological research.

Betty: When you were working there, did you meet many people who came up eventually back into the Canadian oil patch?

Don: Just a few of the fellows with some of the majors came back up. For instance, Continental kind of shut down in the so-called Willison basin and they sent 2 or 3 fellows up here. And Phillips sent one or two fellows up to join Pacific when they shut down in the Willison basin. One or two of them are still here.

Betty: Can you remember any of the, did you know these people well?

Don: Oh yes. Don Lorenz, he's still with HBOG, now that's going by Dome. One of the fellows, Bob Meeks???, he went back and became involved in a small outfit and I think he has his own outfit now in Billings. Most of them are gone. They kind of came up and migrated back down again. With smaller outfits, when things got better going for the small independent . . .

#032 Betty: You migrated back up to Canada though, you did the opposite. Was that after Sun?

Don: After Sun. Then I worked for Strat Service until '67, from '61 til '67, then I went up to Alaska to manage the Alaska office at Anchorage.

Betty: When you say Strat Service, you mean American Strat? Right. And then you went up to Alaska?

Don: I went up to Alaska to manage the office up there and I didn't like it.

Betty: What didn't you like about Alaska?

Don: Oh the money part of it. It was awful high cost of living and really nothing to do. You're land locked, you either got to fly out or drive for a week to get down the Alaska Highway. I didn't particularly like that.

Betty: Whereabouts in Alaska were you living?

Don: anchorage.

Betty: Were you doing the same work there?

Don: Yes. And then moving the office, building a new office to get out of the place they were at. So I contacted Lou Workman. I wanted to know if there were any jobs in Calgary. This was in '67 and Lou talked to Michael Woodhead with Canadian Pacific Oil and Gas and then Michael wrote me, sent me an application form. I filled it out, sent it to him and he wanted me to come and see him, so I quit up in Alaska, went back to Billings and then came up to talk to Michael and then got hired by Canadian Pacific Oil and Gas. That was in June or July I guess, of '67.

#047 Betty: Had your family moved up to Alaska when you moved up there?

Don: No. The conditions were really, let's say high, money wise, my house was double what it was in the States and you weren't making the money. There was no way the salary you would make would allow you to buy a house, it was just out of this world. So I decided we'd be foolish to sell our house and move up there. There's just no way you could make ends meet, unless you did something else. You'd have to get into business for yourself and make some money that way because there was no way you could get out of there.

Betty: Coming back to Canada in '67 and back to Calgary, had there been many changes here in the oil patch?

Don: Not at that time. At that time it was still relatively small, not booming. About the biggest building of course, at that time was the Husky Tower, which is now called the Calgary Tower. And the town was fairly much the same as when you left it, maybe a little larger in area for housing, there was new subdivisions.

Betty: A few more people here?

Don: Yes. Bu other than that, the big boom wasn't on at that particular time.

#061 Betty: Was Mr. Michael Woodhead your boss.

Don: Yes. He was Chief Geologist for Canadian Pacific Oil and Gas.

Betty: Did you have much association with him?

Don: Oh yes, every day.

Betty: Could you tell me about him?

Don: He's another great one. He had come over and was working with Imperial in the early days, in the 50's and then he'd gone back to England because he thought he'd like to live back in England. He didn't like the frontier areas and of course, he found out he couldn't make a living back in England so he came back to Canada. Much like all the rest of us. You kind of go from one place to another. He was a nice fellow.

Betty: Can you think of any anecdotes that involve Mr. Woodhead?

Don: No, he was another one that was very easygoing and left you alone. I mean, you never say Michael much.

Betty: Was he a tall man, short man, thin, fat?

Don: He was a tall skinny fellow. Typical British, almost sound like a 1930's movie you know.

#074 Betty: And the work that you did with Canadian Pacific, was it the same as you had been doing with Can Strat?

Don: Yes. I started out doing Rainbow work for Canadian Pacific because they had missed the Rainbow play due to the fact that they had concentrated mainly on their own lands, the railroad right of way lands, the fee lands. And so I did a couple of wells in the Rainbow area that were cored totally in the Carbonates. And was putting together that sort of material for the Rainbow basin area which they had some land up in there.

Betty: And they then. . . of course they didn't have to go try and acquire the land they already had it.

Don: No not up there. What they had done, they had stayed in southern Alberta, they had a lot of land in southern Alberta that was acquired through their fees, fee lands from the railroad but they had not moved up into the provincial lands. So they had lots of gas and heavy oil on their own land in southern Alberta but they were looking for other areas to get into. And at that time, that's what we were doing was in the foothills and the Jumping Pound out here sort of thing.

#090 Betty: From the information that you could give them, from these samples, would that be the final arbiter on deciding whether they would bid perhaps?

Don: Well, of course, it would be run through geophysics as well as geology. It was the same as any major company, geophysical.

Betty: How close did you get to knowing, to having the say or being involved with the discovery of some of these areas. I know that it was from the wells that they were doing, these would be wildcat wells that you would be looking at.

Don: Yes. Well, Rainbow had already been found. So they were just looking for other types of reefing within the Rainbow basin.

Betty: Did you find some?

Don: No they never did find anything. They drilled I think, one well when I was there but it was a dry hole.

Betty: So then where did you work with them, what area did they move into?

Don: Then in '68 they put together a field party group and we were going to basically study all the carbonate sections in the mountains and bring them into the sub-surface. We started up in the Territories at Nahani Butte and worked the Devonian and Mississippian up in there in '68 and came down along the Alaskan Highway and worked the Alaskan Highway part of. . . .

#110 Betty: When you say you worked it, you then went out in the field?

Don: Yes, we were gone for three months, in helicopters, measuring sections.

Betty: That would be quite an exciting change for you wouldn't it?

Don: Oh yes. It was a lot of fun really. We had a lot of fun doing that. So we started up roughly at Nahani Butte, north of Nahani Butte at what they call the Ram Plateau and worked our

way south. And this was during the time, right after Pointed Mountain and these so-called big gas fields that Amoco had found in B.C. were kind of in the news. We eventually came all the way down to the Saskatchewan River from the Territories. '68 we were up in there, '69 we worked out of Jasper. We did from Grande Cache up to Grande Prairie up to Wapiti Lake and then in '70 we came down and worked south of the highway at Hinton. Down as far as the Saskatchewan River Crossing.

Betty: Now you would go for 3 months at a time?

Don: Roughly we were gone for 3 months, yes.

Betty: Starting what month?

Don: Usually in May. We'd go in May, we'd be gone, what is it, Victoria Day. We'd usually go around that time, as soon as the snow would leave the high country.

#127 Betty: So who else was on this team?

Don: Kirby Eckles??? was in charge of it.

Betty: And who else.

Don: Actually what we had was more summer students. We'd have one or two, possibly three from the company and three summer students.

Betty: Were any of the summer students, did they eventually go into the oil patch, any of them that you can remember?

Don: Oh yes. Larry Macdonald and . . . who the heck else.

Betty: They're probably still active in the oil patch.

Don: Yes. Brian Macbeth, he used to be with Dome. Actually they were great for being able to study, these young fellows. To get them on with the company. And Pan-Canadian did hire a bunch of them, the hired Larry Macdonald one year and they hired Brian Macbeth and they hired one Chinese fellow but then he wanted to keep on going to school so he went to the University out here and since then has moved to Denver with Sundance Oil.

#142 Betty: So you would go out in the summertime. Can you talk about one of these expeditions, there must have been some rather interesting experiences?

Don: What we did was we measured the sections.

Betty: How would you measure the sections from the helicopter?

Don: No, we would land on top and walk down and measure them and sample them all the way down. We took 3 samples every 10 feet and we would do a preliminary study in the field and then we would do a detailed study after in the winter in town. And of course, we worked 7 days a week. We didn't take any time off unless the weather got bad and then we would have to shut down and use that as time off.

Betty: Where did you get your supplies from, your food?

Don: When we were up at Nahani Butte it was all flown in. And of course, we usually liked to stay alongside a highway. We stayed at Toad River along the Alaskan Highway. We stayed right at a motel there. The next year we stayed at Grande Cache and we had our own vehicles. We stayed off that road that goes to the new road to Grande Cache.

#157 Betty: Did you come back to your headquarters every night?

Don: Yes. We'd go out in the morning and back at night. And we'd always tried to, after we got down out of the Territories we always stayed on a road. Like, when we went out of Grande Prairie we were on the old forestry road, not in the lumps. We were where you could drive in and out if weather got bad. And the same way in '70, we were at Hinton, we stayed just on the Greg??? River, just outside of Hinton and again, you could drive into town for supplies.

Betty: What were you looking for?

Don: We just were doing the stratigraphy of the Devonian sequence, of the Mississippian, Devonian sequence.

Betty: And what was it going to be used for do you know? Why was it important to do that at that particular time?

Don: We were just trying to get Canadian Pacific into a position where we could take the outcrop section, put it in a sub-surface and look for some areas that may have potential.

Betty: How successful were you?

Don: It never got completed. Unfortunately they did away with it.

Betty: Why?

Don: Well, it was a management decision I guess. I never got. . .

Betty: They never told you?

Don: No. We never really got it completed into a phase where you could push it off into the sub-surface and they split us up. Let's see what did I go into. . . I just went back into the sub-surface. I worked northeastern B.C. and northeastern Alberta and then I got into . . . another fellow and I, Tom Wallace got into. . . .

#182 Betty: When you say, you worked it, you were now back working it from the office or did you go out there?

Don: Yes.. No, just the office. And basically doing exploration geology as pertaining to land sales, as to wherever we had any land, was it possible we could drill a well and get. . .

Betty: You never think too much of CPR as having to worry about land sales because they have a great deal of land in this area.

Don: Of course, that's all southern Alberta and that's all the shallow stuff and what we were looking for was stuff up in northeastern B.C. and northern Alberta along what is called the Mississippian sub-crop for gas. CP was at that time, very gas prone.

Betty: Why?

Don: They had the big gas fields down south and they also owned part of Trans-Canada. At that time, gas was easy to market and oil was not as easy to market. It was a time when there was lots of contracts for gas and each year there was a slight increment in the amount of gas that could be exported. It was before all this rhubarb about saving it for the Eskimos and So we pursued that for. . .

#204 Betty: So this is why they would be going down the foothills area because it's gas prone and it has. . .

Don: Yes. Gas prone, looking for sour gas for the gas plants and this sort of stuff.

Betty: How successful were they?

Don: Well, they found a little bit out here at West Jumping Pound. Nothing really big. They also found some stuff up on the Grande Cache road at . . . just south of the town of Grande Cache but it wasn't a very big field.

Betty: So did they eventually abandon this pursuit?

Don: No, they're still working the foothills. I don't know, it's expensive to drill now so there's not that much drilling going on now anymore but they did drill quite a few holes there. They went after some what they thought was D3 reefing and missed that. Got some structural gas in . . . I can't think of the name of the town. It's just south of Grande Cache anyhow. It's the Pinto area, in through there.

Betty: Did you go out again, out in the field work again?

Don: Not until '75. We went to Severe Desert basin. Kirby Eckles and I and Jeff Smith and Judy Clauson???. We went down to do the overthrust belt. We were looking at the overthrust belt in Wyoming which at that time was coming into it's own.

#230 Betty: This was with. . .

Don: At that time it would be Pan-Canadian then.

Betty: Yes. Was this the first time they had ventured into the States?

Don: Yes. The first time we took a field party down. We went down there for 5 weeks and did the whole Severe Desert basin.

Betty: Why would CPR go down there, you think of them really more Canadian, although they're not necessarily a Canadian company but you think of them. . .

Don: Oh but at that time they had changed their name to Pan-Canadian, they also had a company down there. Pan-Canadian Oil Company in Houston.

Betty: When did the name Pan-Canadian come out?

Don: Gee whiz I forget that, '69. Let's see it must have been '69 or '70 it became Central Del Rio, which they already owned. And then '71 or '72. . . .

Betty: So they owned Central Del Rio but they had not amalgamated it but they amalgamated at that time.

Don: Well, it was a stock takeover. Actually Central Del Rio took over CP O&G which in turn then was changed to Pan-Canadian.

#248 Betty: What difference did that make to your job when you were taken over?

Don: Nothing really because management stayed the same, there was no change in management.

Betty: What happened to the Central Del Rio people, they didn't become part of you?

Don: Some quit and some stayed. Then later on some of them retired. Like, Hardy??? was the head of Central Del Rio, he stayed and then retired.

Betty: CP had more people at that time working for them than Central Del Rio?

Don: Oh yes. They were much bigger than Central Del Rio. Central Del Rio was a small outfit. They only had like, say, maybe 4 geologists and 2 geophysicists and this sort of stuff, whereas Pan Canadian had quite a few.

Betty: It's very difficult for the smaller company, when an amalgamation takes place.

Don: Yes because there's that management fight. You end up with surplus executives.

Betty: Who was Chief Executive of Canadian Pacific at that time?

Don: That would be John Taylor. John Taylor and Mike Rogers and Hardy I think was the head of CDR. And then of course, they had their own VP's under him. And of course, there was this time to fit

Betty: And then did they change the name a little bit later to . . . ?

Don: Just after they got all the paperwork done on that then they turned around and called it Pan Canadian. Again, I forget the year it was done in.

#277 Betty: And became more international oriented?

Don: Then they got interested in the States and they opened an office in Houston. They had a company and I think it was called Pan Canadian Petroleum Company, I think. And then a fellow by the name of Lou Stevens, who was over in England working for Pan Canadian over there came back and they got interested in what they call the Wyoming overthrust and so forth. Then I went into that part of it. I went into watching the U.S. part of it, I watched about 75% of the U.S. for . . .

Betty: What year would that be?

Don: Gee, I can't remember.

Betty: Would it be '75?

Don: Yes. I guess it would be around '75. Well, we went to the Severe Desert in '75.

Betty: So would it be shortly after that?

Don: Yes.

End of tape.

Tape 3 Side 1

Don: Then from up here, they ran the 3 parts, they had Canada, International, Michael Woodhead moved to International, Canada and then they had the U. S. part which we watched from up here except for the Gulf Coast which was watched out of Houston. Then we went to the Severe Desert and did that, a five week study checking out all the surface. Again that never got completed to the sub-surface.

Betty: Why not?

Don: Well, then they changed it all around again.

Betty: Who is they?

Don: Management.

Betty: Up here?

Don: Yes. And then they put together. . . .

Betty: Why did they decide to stop, did they ever give an explanation?

Don: No not really. Nothing that you could lay your hands on. Then about this time was when the overthrust came in, in Wyoming with the big gas wells, the big ??? wells. And Lou Stephens was interested in that and they put together a 5 company group to look into the possibilities of getting into the overthrust. Let's see, there was Pan Canadian and there was Williams Brothers, Santa Fe Minerals, Ashland??? and Mapco???. They formed a group to look into the possibility of buying land or getting into the overthrust and then we went back down again and did the overthrust part of Wyoming.

#024 Betty: You physically went back down?

Don: Yes. We went down without a chopper this time. We went down in a car and did the outcrop of the overthrust belt.

Betty: How long were you doing that?

Don: We did that, each time we went down was about a week, we did it twice, we went down there two different times.

Betty: So it was very quick?

Don: Yes. Studying the faults, the thrusting and this sort of stuff. Then again, I went back into doing the sub-surface detail. I went down and I went to Denver and studied the discovery well at Reichmann??? Creek which was cored and I did the core, the samples on that and I also did the ones at Pineview that was drilled by Occidental.

Betty: What were you looking for when you were doing these studies?

Don: Why the accumulation was there. What was the source.

Betty: Were you able to discover this?

Don: Were you able to discover this. And again this one fell flat. Nothing was ever done.

Betty: Should it have been, do you feel that there was. . .?

Don: Oh yes sure. But they never could put their act together.

#036 Betty: Why do you think that was?

Don: I don't know, just crazy really. It's just unreal.

Betty: Who was the manager still at that time?

Don: Well, we had this five group outfit and of course, we could get three to agree and two wouldn't. That's the way it went all the time and of course, we missed the whole thing by that.

Betty: So that is still waiting to be exploited?

Don: I think they got rid of it. No, it's all drilled up now. There's quite a few fields in there now. They finally disbanded this five group outfit and Pan Canadian now has an office in Denver.

Betty: Did you find this frustrating?

Don: Oh yes. Especially when you knew why I was there. Yes, it was frustrating as heck because I came back and did a report and tied it in with surface work that was done by Geo??? Photo and we had the whole thing all figured out and they still wouldn't buy any land or we couldn't get any land, let's put it this way. But they probably could have farmed in but they never could make up their mind. They were always waffling so to speak. So they ended up Chevron and Amoco and Anshutz??? and that bunch had it all. The land was tight but there were still places they could get in but they never did so they missed the whole thing.

#051 Betty: What would happen to your report in a situation like that?

Don: I think it's in the library down there.

Betty: It wouldn't be available to the other competing. . .?

Don: We gave it to the other partners, the other five.

Betty: Yes. But other than that, it would have to be all reworked, someone else would have to look at it all. So when that fell through what happened, what were you doing then?

Don: I was still working. . . what they had me doing was watching about 75% of the States. I'd gone back to Michigan and done some work on the Celerean reefs, looked into it and came back and reported to the manager on that and of course, nothing was done with that. About that time, this would be '77 I guess, I decided that they weren't going to do anything because they never seemed to . . . you'd tell them but nothing ever happened. So then I decided to see if I could get on with Candel???. I forgot to mention that, Candel. . . when was that. . . when was that energy kerfuffle?

Betty: which one?

Don: the first one, remember the first kerfuffle, was that in '75?

#064 Betty: Well, there was '73, there was. . .

Don: Okay '73 then. About that time a friend of mine I had a friend of mine worked as Chief Geologist for Candel and I had gone over to see him and I had gotten a job all lined up with Candel and then this kerfuffle started and they didn't hire anybody. So about this

time that we were in this other kerfuffle in '77 lo and behold there was an ad in the paper for Candel wanted a geologist. I answered it and of course, they still had my application over there. So I went over and talked to Don Erickson and I got the job.

Betty: Was your friend still there?

Don: No, he had died in the meanwhile. Bob had died in '75 I think.

Betty: So you changed over?

Don: Yes, I left in '77 and went to Candel.

Betty: And what was your position in Candel?

Don: I was a senior geologist and I was doing the same thing. I was watching northeastern B.C. and northern Alberta roughly from Edmonton north, all the lands that Candel had. They had quite a land spread. And I was watching that and making maps and recommending drilling and this sort of stuff. And then . . .let's see, that would be '77, not long after I got there was when Can Hunter and Sulpetro??? had drilled the deep basin gas wells. They'd had a couple of wells up in there, back west of Grande Prairie and Bill Lushener???, who was President had talked to Gus Van Weligin??? and Sulpetro wanted to sell 25% or half of what they had in the Wapiti gas area. And at that time there was only 2 wells and a gas contract with Trans Canada. And so I had to do the geological work on the whole thing and recommend it to the Board of St. Joe??? Minerals that we participate in this purchase of buying into this play. And at that time it was quite a bit of money. We were looking at 40 million I think, somewhere in 20-40.

#096 Betty: Did you recommend they did buy in?

Don: I recommended they did buy in. We had a meeting of Lushener, Smiley Rayburn??? who was Chairman of the Board, Erickson, the Vice-President of Exploration, Doug Church, ??? Production, and Gogol??? who was chief Geologist and myself and we had to convince Smiley that this is what we wanted to do. I think at that time it was 20 million which was the initial outlay. And then Smiley had to go to New York and convince St. Joe that this is what we wanted to do.

Betty: They were. . .?

Don: They owned Candel. They owned 95% of Candel.

Betty: Yes. This is what I really wanted to get straightened up. Candel was really the Canadian arm of St. Joe.

Don: So then the Board of Directors came up from St. Joe and I had to sell it to them.

Betty: Did you manage to do so?

Don: Yes.

Betty: Why did you feel this was such a good thing for them to be into?

Don: Candel has the big gas field at Cessford, half of it. Again of course, it's being depleted. And this had the geological prospects of being a big gas field, as big or bigger than Cessford and it would be the second step in the company. In other words, in the 30 years that they had been in Cessford, this was the sequel to Cessford that would continue for another 30 years or so.

#116 Betty: Where was this area located approximately?

Don: Just south and west of Grande Prairie.

Betty: And did they drill successfully?

Don: Yes. We took the deal of the 25% with the idea that they would spin off 12½ and keep 12½. That was what St. Joe put on it. So we got into it and we drilled 60 gas wells I think since then.

Betty: How many were successful?

Don: I only got about 3 dry holes out of the whole bunch.

Betty: That's quite an average isn't it?

Don: Yes. So what happened was we got into this thing and we were going along and we had got enough gas to build a plant. The plant was in the process of being built. At a min day it was going to take 50 million and St. Joe still wanted to sell 12½, half of what they had. Imperial approached us and wanted to buy in and they wanted to pay, I think it started out at 10 million and they got it up to about 16. And again we had to go to another meeting and I had to tell them no way, don't sell it, keep it. Which they did. And so we ended up with 25% of the big gas field.

#137 Betty: How much did you save them?

Don: Millions. Millions of dollars. In fact it turned around, when Sulpetro bought out Candel, Sulpetro had spun off part of their 25 and we were the actually the major stockholder in the field. We had 25 and nobody else had anywhere near that.

Betty: This would make up for your many frustrating times down in the States?

Don: Yes. What it was, it was really nice to be in on the ground floor, make the original maps and then follow it through until this year when we had our second gas redetermination, in which, I can't remember now. . . I drilled six gas wells, no dry holes at all.

Betty: That would be a very exciting climax to your career.

Don: Six gas wells and one oil well.

Betty: An oil well too. So that was an added bonus then. Because gas is what they were expecting.

Don: Yes. That's what we were looking for.

Betty: So you stayed with them until, was it compulsory retirement?

Don: Yes. 65. August 1st was the date. It was the same set-up where you have to be in the pension plan 10 years or reach 65, otherwise you're not vested. So I had to stay until 65 because I was just there five years.

Betty: This changing around from company to company would make a difference with pension plans I would think.

Don: Well, actually I was locked in at Pan Canadian. You get locked in at a certain age, 45 I think it is. So that was fine and then I just started another one at Candel and finished it. But the best five years of my life was at Candel. The best four years I had to put a year in the ??? program.

#162 Betty: It's very exciting to come to that at the end. Are you doing any consulting at all? Do you intend to?

Don: I'm not going to do anything for the rest of the year then look into something you know.

Betty: Looking back on your career which spans quite awhile in the oil patch, what would you think. . . well, obviously your last five years would be the most exciting.

Don: Oh yes. Just to be in on that play and to see it completed with two gas redeterminations for the contracts and to see the reserves that have been proven and to be able to participate in picking up land along with what land was originally held and to be able to outline the field itself, the conglomerates was just wonderful. And especially to be able to do it all by yourself without anybody else bothering you. I made the locations and I didn't have to argue with anybody.

Betty: Isn't this unusual in this day and age, there's so much teamwork today?

Don: Yes. When we were at Candel we had a very small unit and there was no paper work, it was all verbal. If Sulpetro called up and they wanted to drill a well then I would look at my maps, I would put down the pins???, I would go see the VP and I would say this is what Sulpetro wants to do and I think it's great. Have we got any money in the budget and then we'd just go on it. That's all there was to it. And fortunately when I got over to Sulpetro, they were in such a mess, the same thing happened, I had to make I can't remember, 6 or 8 locations for this gas redetermination which Hunter is in on, Can Hunter is in on it. I mean, they operate one part and Sulpetro operates the other. So we drilled 6 or 8 locations that I picked and they all hit. And then Hunter drilled 2 or 3 and I think one was a dud, one was a well and one we never got completed. So it really was satisfying. It's funny, we had this secretary that used to work for Kissinger and she says, Jesus what an act to follow because we just kept getting gas well after gas well after gas well. And we of course, proved up a lot more acreage. We had some step outs there.

#201 Betty: So there's still a lot of gas there?

Don: Oh yes, it's a hell of a field. I forget how much we had, I lost track. I can find out for you, I can call Klassen??? and find out but when I was with Candel, a fellow by the name of Bob Forgie??? did our gas reserve determinations and redeterminations. And we used to just use a map and colour it in in red as we went along. So we kind of would just guess at it. We used to say, that's a section or a section and a half and this sort of stuff. And when you get mixed up. . .like, Sulpetro, they get carried away with this stuff and get everybody and their brother in the act.

Betty: How did that involvement come about, did they swallow up Candel?

Don: Yes. They bought out Candel. I went over there in '81 and they took us over there and we moved over there in July of '81.

Betty: Where is moving over to?

Don: To Bow Valley Square.

Betty: And what is Sulpetro short for?

Don: I think it's an abbreviation for Sulphur Petroleum. Gus Van Weligin originally was in sour gas because nobody wanted it. And he had one company called that before and he kept the name and he sold it out and then he started it again. And I think that's what it is an abbreviation of is Sulphur Petroleum.

#227 Betty: Did you maintain you same position with Sulpetro?

Don: Well, not really because before I dealt with VP's and later on I just went through a Chief Geologist or a Manager but before I dealt with just the top brass. Either the President or the Chairman of the Board.

Betty: Who was the President?

Don: Of Sulpetro?

Betty: No, of Candel.

Don: Lushener started out as President, then he went up to Chairman of the Board, then Mike Williams made President. I mainly worked later on with Doug Church who was the Senior Vice-President in charge of Operations.

Betty: Can you think of any stories, for instance, when you were trying to seal them this location, can you recall it at all or any incidents?

Don: Well no except that Lushener never really said. . . . he said, the Board is coming up or something and we want you to talk to them and he really never said what I was doing you know. And I just had to make a whole bunch of darned maps and I had to sell them on the thing because we were looking at either 20 or 24 million dollars was the original investment in it.

#245 Betty: This is a lot of money for this size of a company.

Don: It was a lot of money then too. It would be in late '77. It was a lot of money in those days and Smiley Rayburn is an ultra conservative and when we had this original meeting with Smiley and Lushener and the rest of them, Smiley started out by saying, there's always a better one coming down the road. You don't want to get carried away by something that is not as good as you think. So I want you to think about this. But as it turned out there was never another one come down the road. That was it.

Betty: Did he ever comment to you afterwards about the fact?

Don: No he was another one of these easy going guys. He'd walk in and he may want to ask you a question and then he'd apologize for bothering you. If you'd tell him what he wanted or if he wanted a little map made or something, you'd make it for him and he'd be just as happy as hell. No they never bothered you at all. You'd just do your own thing, whatever you wanted to do. And of course, I was busy keeping the maps up. I had 15 maps I think that I kept up all the time, every week when the daily Oil Bulletin would come out and when the licenses would come out. I would put on the new locations and if they were gas wells I would change them to gas wells and I kept them. . . .

#271 Betty: Where would you keep these maps?

Don: They were little ones and I had them on a clipboard and I would continually change as I got the contours so the maps looked like hell. They looked like. . . they were all ragged, I would use spaghetti for contouring the conglomerates and this sort of stuff, all the different pays around there. So you could look at it and you could tell, this is exactly what was going on.

Betty: You could tell exactly by all the spaghetti wiggles, not everybody else. Looking back on your career, can you think of anyone you feel was a particular influence on you?

Don: I think old Doc Kelly because he was the one that got me kicked off on my Masters

thesis. He was great. Like I say, they were all easy going, these fellows were all easy going fellows.

Betty: What about people up here in the oil patch. Is there anyone in particular that you feel gave you particular encouragement or assistance or was interesting to work with?

Don: Well, like I say, I really didn't have the end product until I got with Candel and that was with Lushener. Lushener and Doug Church and Smiley Rayburn and that changed the whole thing.

#294 Betty: A happy change of events for you.

Don: Yes. We got into something, we did it, we completed it. It's on stream, it's kicking out. I think they're taking 100 million a day out of it now and that's something.

Betty: It is indeed. Thank you very much for spending the time with me, Mr. Campau, it's been very interesting.

Don: You're welcome Betty.