

PETROLEUM INDUSTRY ORAL HISTORY PROJECT  
TRANSCRIPT

INTERVIEWEE: Roy Millice

INTERVIEWER: David Finch

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DF: Today is January 28<sup>th</sup>, 2000 and we are with Mr. Roy Millice at his home at 218. 20 Midpark Cres. in southeast Calgary. Mr. Millice, can you start by telling us where you were born?

RM: Yes, I was born in Mazatlan, Mexico in 1935.

DF: How did you come to be born there?

RM: My father was a Mexican citizen of U. S. parents and my mother was from California and spent most of her life in California. My father moved around a lot as a child on his own a lot and he married my mother in 1934. I was born in '35 as I said, and we returned to Mexico and I spent the next 4-5 years living in Central America, countries where my father was employed by one of the. . . Avianca, the airline outfit. We returned to the States in 19. . . just prior to the second World War and I lived for awhile in San Francisco. My father was in the U.S. Navy at the time. We returned to southern California where I went to high school and then I proceeded on to the University of Redlands in Redlands, California for a Bachelor of Science degree and proceeded then to Wyoming where I go a Masters degree in Geological Engineering. In 1958 I started work for United Geophysical out of Pasadena, California and the reason I went with United was the fact that you couldn't get a job at that time as a geologist, which was a lot of my training, my minor was geophysics. I spent the next six years moving throughout the country for United. I went from California, Oklahoma, Texas, Pennsylvania, returned to Oklahoma and in November of 1963 I was contacted by Pasadena and they said, you have a choice, you can either go to Alaska or go to Canada. And having been to Alaska the one time I opted to go to Calgary as I had two children by that time. A son that was about 3 and one that had just been born, so I figured a little more stable atmosphere would be judicious so I came to Canada and I spent two years, working for United still but I was on loan as a Geophysical Interpreter for what we used to call Pan American which became Amoco. And then in 1966 Amoco got a dictum from Tulsa, Oklahoma that all outside interpreters would be forthwith removed from the premise and I had talked to a couple of the Amoco people and they suggested that I contact Dome Petroleum. And I did this and met with a chap named John Andriuk and was interviewed by Jack Gallagher and John Andriuk and thy offered me a position as they had lost. . their geophysicist had retired, quit, moved on. So I was a one man geophysical position for about six months at which time we started to expand the team. I hired two official geophysicist and from that point on we just started to grow. This would have been 1966, when at that time the Zama Rainbow play was just starting to kick off. And we proceeded to add staff and get a larger budget, exploration budget and as people are well aware, Dome grew exponentially in the next 10 years or so.

So we stuck pretty well to Alberta and western Canada, exploring. However we did have extensive leases in the high Arctic and also in the Beaufort Sea. And we also had time restraints on some of those properties being work commitments to the federal government and to other companies on which we had farmed in on. First off we were the founders I would say of Pan Arctic. If you've done the history on some of these, we initially put a staff together and ran what would eventually become Pan Arctic with a staff of about 4 or 5 Dome people who got it off the ground. And then of course, it was decided it would be staffed. If you remember, Jack Gallagher, at the time, I believe had a running battle, more or less, going with, I can't remember the chap's name, the geologist, he ran his own company, he was involved in the high Arctic. His name escapes me at the present time. He passed on just after we had put the deals together. I'm simplifying this case, it was a lot bigger deal than people really realize. And of course, the federal assistance too, that the Liberal Party gave the program, which was really needed because it wouldn't have been able to be done by private industry. And as history has proven, we did find enormous gas reserves, which of course, at this stage of time aren't marketed. So from an arm's length distance, we had quite a bit to do with that. I initially put the whole geophysical program together and then it was turned over to Bob Merritt, who became Chief Geophysicist for Pan Arctic and he built up his own staff after that.

We drilled three wells on our own properties, one on King Christian Island, one on Meghan Island and . . . we drilled two wells on King Christian Island and that was the extent of Dome Petroleum's participation in the drilling of their own wells. We did participate in the Pan Arctic as a Pan Arctic participant and paid our 2 or 3% on all of the other wells, which led to, I don't know the exact number of reserves that were established but they were significant. Canada's future as far as gas reserves in the high Arctic is established. We had of course, at the same time, we were running a parallel program in conjunction with Hunt Oil. We had made a deal with them on our acreage in the Beaufort Sea which was extensive holdings. Hunt carried out, initially, the first seismic, geophysical exploration program which was an original program just to get an idea.

#072 DF: What kind of coverage, what was the extent of that program, what did they do?

RM: That was a regional program and it probably, I would say, probably they did at least 3,000 miles. It was just to get a feel of the basic configuration. Subsequently of course, we had staffed up and added some additional geologists, some geophysicists and then we made lease selections in conjunction with Hunt, it was an alternating situation. Both companies had done their interpretations and then we sat down in the conference room with the Hunts and with Gallagher and with Charlie Dunkley and we made alternating lease selections. And in time of course, we did participate in the drilling of a number of wells. By that time of course, we had staffed up with a group called the Beaufort Sea group. And as you are probably well aware too, this led of course, once we decided to drill, to the forming of an organization called Canmar Drilling. Now I was at arm's length with Canmar but I knew a great many of their people and of course, we were the input for all of the drilling locations that it was led to. From that point on. . . that just gives you a broad scope of the major programs that I participated in over that period from 1966 through and

including 1982, which included also our friend, Mr. Trudeau's NEP, which never set with us quite right in western Canada. Meanwhile too, most of the staff and the fellows that worked with me were carrying on everyday organizations and we were adding reserves. Unfortunately, we didn't have a lot of input into what I've often considered the downflow of our organization. The major expansion due to, what I call the MBA crowd and leveraged buyouts, if you want and over extension of credit. Unfortunately the banks had us by the knickers if you want to call it and they foreclosed on us which led to the demise of Dome Petroleum. I, at that time, had the alternative choice of either packing it up and leaving or of accepting a position from Amoco when they made overtures to buy out Dome's position. Subsequently I decided I would go over there and see what they've got to offer.

#102 DF: What year was that?

RM: That would have been 1988. We had kind of limped along for 4 years more or less carrying on programs, but it was a dog eat dog, tooth pulling exercise. I always had to go with bended knees to get finances out of my counterpart over in exploitation or development. Which became kind of a stressful situation and I believe that for everybody. So this opportunity came along with Amoco and I went over as the Vice-President of Exploration and they had split it into two more or less, divisions. And I subsequently was there for 2-2 ½ years and enjoyed it. It was a different environment politically for me because of the, I call it, major corporate politics that goes on when you are still trying to do a professional job. And the end was in sight in '91 when they came and they said, well we're downsizing and you're old enough and eligible enough for full pension. So I said, well, I'll give it some thought and run some numbers and I could see that on my behalf it was worthwhile so I decided that I would retire and that's what I did, in August 1991. That's just a broad quick synopsis.

#116 DF: Yes it is. Well, let's take you back for a minute to Trudeau's much despised NEP. It's easy to despise Trudeau but you know, Joe Clark's NEP was going to be even more onerous, what do you think of that?

RM: Yes, I'm well aware of that. And actually when I say it was onerous, I say it was onerous in a sense and I think it was maybe a gut movement by everybody. In the long run it's proven that it worked. You do have the national oil company, Petro Can and after their first couple of years, it's been efficiently run. So it's quite easy to cast rocks at people and at that time, that's what I think it was, was the emotional involvement of the industry as a whole.

DF: When you first went into the north, what was your geophysical exploration techniques at that point?

RM: We were using what we call roll along, or multiple coverage. We went in to the high Arctic ourselves, we didn't really know what exactly we were getting into from a mobility point of view. So we took a chance and when I had it bid by 3 companies, I had them bid on the basis that we would use, the first year a chopper oriented program. This of course, as you well could see, could be an expensive venture. And you were also at the mercy of

the weather, simply because if the choppers couldn't fly, you don't work. So we tried it that first year, we were very fortunate. We had big Bell 204's from Okanagan Helicopter. I can't remember the exact date we went in, it was still dark, which would have been late December or early January. You had some daylight when we first moved in and then of course, it went to total darkness but we were able to fly and we got in with the helicopter's and the Hercules. At that time, I cannot remember, the Hercules were flying for Pacific Western and they had a Hercules division. And they flew and they were just superb people. They did a bang up job, they would airlift 10,000 gallons or 20,000 gallons of fuel in. We had big bladders and of course, we needed that and with helicopter fuel you want to make sure it's not contaminated. So you had a lot of problems with it. The first year we used it, we didn't get the coverage that we would have liked, by that I mean the mileage. So when Bob Merritt, by that time Bob had been hired and he'd come from Amoco, England, and we put our heads together and he decided that he wanted to bid it with cats and Nodwells. This was done and it proved to be quite efficient and it worked. You'd walk your Nodwells and you'd walk them long distances and you'd get out on the ice and you'd make sure you had kind of a radar scan in front of you to find the cracks so you wouldn't drop through the ice.

#152 DF: What year is this?

RM: This is all taking place in about, we started in 1969. And it progressively went on, drilling started around 1971 or 72. So we had two or three years of basic exploration and covered a multitude of islands. And of course, then Pan Arctic decided to build their base at Ray Point on Melville Island and it became quite an operating base.

DF: Were you shooting just on land or on the water too?

RM: No we shot out on the water and on the ice. There again it was a very experimental type of thing. We didn't have very good results the first go around. Subsequently we got better at it and the supplied explosive outfit companies worked with us, designing different type of charges. And we did get some results. It wasn't the best but just like anything that you try you're able to improve your product.

DF: Did you get enough results in those first couple of years to show you where to drill?

RM: Yes.

DF: So it was good enough for that?

RM: Yes. We came up with prospects. Of course, the first bunch of wells that were drilled, they were all gas. That was a little disappointing for people and as people are well aware, about the only oil we ever found and that was Pan Arctic was on Bent Horn. And to this day, I think they don't know where the reservoir comes from although I'm sure that some people would disagree with me.

DF: So lot's of gas but that wasn't what you were looking for?

RM: Well that's right. But I think in the long run, now, knowing what we've got with the environmental situation and the reserves that are there. It's just like Russia, Russia has tremendous gas reserves in the northern part of their Canada. And fortunately Canada is in the position where they have them now.

#173 DF: So it was just a matter of time. How did you see the technology for doing geophysics over the years? Were you involved in that evolution, especially in the north?

RM: To a certain degree, yes. All the time that we were working you had an increase from single shot coverage to multiple, to 3-D. And of course, hand in hand went the processing. And the processing was a real key and that's where we saw major, quantum leaps. Computers were a real aid. Once you had that, you were able to define, your resolution became finer and it led to subsequent, where you just weren't drilling a structure. You were drilling and calling the shot for what stratigraphic range and what you considered your reservoirs would be. I've seen, pretty well over the years, almost every major development. And really today I haven't . . . it's been almost 10 years now and I was just reading here recently where they've got a multi-task force, where they've got a geologist, geophysicist and an engineer and they go into a room and they use, what do they call it, the visual type. . . the name escapes me right now. It's a technology that you stand in a room and it's all dark and you can see it all on the wall. I haven't seen it. Pan Canadian uses it and I believe Petro Can uses it and some of the other majors. I still keep abreast of what goes on but I don't have any hands on application.

#192 DF: By the time you got to the Canadian north though, you were in management, you weren't out in the field.

RM: Oh no. I was in the field right from the get go. I was in management in the sense that I was the Chief Geophysicist but I was in the field a lot. I spent a great deal of time in the high Arctic and in the Beaufort too.

DF: What kind of troubles did you run into doing geophysics up there, obviously the cold and the isolation?

RM: Well, the cold. . . and that's primarily the big thing. . . actually human beings perform better in extremely cold weather than machinery will. The first year, we learned, we just left everything run constantly. That goes on in Alberta too. I remember the first year I was in the bush when I came up. They sent me out and I ran a crew up a Zama Lake. It was 1966 and I don't think I've ever seen it as cold. One morning we got up and it was minus 60 and everything was still running. Machines will break, steel cracks when it gets to be that kind of cold.

DF: So you had square tires and all kinds of problems like that?

RM: Absolutely. I remember a crew that was flown in. In fact, Gerry Sykes would remember this, we had a forestry airstrip, it was called 6B, it was in northern Alberta, just west of the highway. And Amerada at that time was still a viable company and they flew in a crew from Mississippi and they brought it out of the swamps out of Mississippi, all the personnel and they put them on a DC-3. They flew them up and I think they had to refuel twice and they didn't let any of the crew off the airplane. They let them off at Zama Lake and they were dressed in T-shirts and tennis shoes. And that was really just ridiculous. They got them dressed in time but some of them just turned around and climbed on the airplane and said, we're going back to Mississippi and they did.

#217 DF: So what did you have to do, did you have to redesign equipment?

RM: Yes to a certain degree. I'm glad you asked that because that first year on Melville Island as I had said earlier we took the choppers. So we developed what we called the dog house for our electronics and we made it circular so it would sling underneath the 204's and it would spin to a certain degree. But we put a stabilizer on it. It worked to a certain degree but in essence, the chopper could lift it. And hooking it up was an experience simply because the downdraft of the prop was enough just to freeze you and blow you away but it was very efficient. But on the other hand, as I said earlier too, you were dependent on the weather. So we had to come up with something later on. It worked, it was very efficient. . .

DF: So why did you make it circular?

RM: Strictly for the flying purpose.

DF: Okay. And what was the stabilizer, was it a tail or something?

RM: It was just a tail, we tried it and threw it away. We also had an improvisation that I had gotten for the chopper maintenance but it became too bulky and too hard. it was built by an outfit here in town who is probably out of business now. But they made it out of fibreglass. It was an enormous thing and it would come in sections and it was light and you could get it up but to put it up in a high wind was a real problem. So we finally just junked that and told the chopper boys to get their big Herman Nelsons and get a nylon parachute and blow hot air underneath there and have their mechanics work underneath those.

#237 DF: Okay. The Herman Nelsons are a heater right?

RM: Yes, they're a big heater, kerosene driven air.

DF: And then you put just a parachute over the whole chopper and heat up the whole area?

RM: Yes, heat it up underneath and work underneath there. It's still cool but it beats the hell out of standing in open air.

DF: Now the tracked vehicles, I know in the early days they had troubles with the Nodwells. By the time you were using them what kind of shape were they in?

RM: They were in great shape. Big Nodwells were really good machines. And we had our drills mounted on those too. In fact, it was George Bertram, out in Carbon, Alberta, George did a tremendous amount of work for me, not only in the high Arctic. He was innovative. He was a spud islander who came out here and he's done a marvelous job. I've known him for years and still see him on occasions.

DF: You said he's a spud islander.

RM: He's a P.E.I. boy. He came out probably in the late 50's.

DF: What kind of work did he do for you, this isn't the first time his name has come up?

RM: George had his own company called Bertram Exploration. It was a drilling outfit. He was intelligent enough to be innovative enough and be able to. . . he established himself. . .and he could get money from the banks. And so if you had a problem, I don't know who his design engineer was but we'd make modifications and his equipment was top rate. And he'd hire the farm boys. The farm boys were the one that would work for him in the winter. So they'd work all winter and they were also good maintenance people, so his

operation was just first class.

#258 DF: So you contracted then just to do your drilling?

RM: Yes, that's all they were doing, they were doing the drilling.

DF: And somebody else was doing the seismic?

RM: Yes.

DF: So you never had your own seismic crews?

RM: No. We underwrote one, one year at Zama Lake. Dome put up the money for it. It was an outfit called Northern Geophysical, Don Propp. At the time we wanted a crew and the only reason that we put the money up was at that time you could get a crew but you didn't know what you were getting, equipment, men. . . . So we figured we'd put up the money. I ran this by Jack Gallagher and John and they thought it was a good idea because we just couldn't get anybody to do our work. That was one of Dome's major plays in the north, Zama Lake. So they said, yes, we'll underwrite and put up the money for the equipment. The only caveat on it was the fact they would be totally dedicated to us on any job. They could have other work if we weren't doing anything. It worked out fine for over a year. And they it was like an option we gave him and he could buy us out and that's what we did. But we didn't want to be in the business. I know that Shell had been in the business and Imperial had been in the business, running their own crews, it's a lot of headaches. Especially an operation in Canada. It's better, it was at that time, better in the States, where you could run your crew year round. Here in Canada of course, it's a seasonal thing.

#278 DF: Yes, the geophysical industry does have it's ups and downs, companies go under and so on. But reliability is a problem when there's a boom going, getting good crews?

RM: It's about typical of the business. It also pertains to big rig drilling. The business has a habit of being cyclic and it's like a sign wave. The only trouble is the period gets shorter and shorter and the spike gets sharper and the period closes on itself. Historically if you . . . and I imagine you've done quite a bit of interviewing with people, it used to be longer and as you see now, if you take a look at it, remember the last crisis here was a couple of years ago, in fact, last year. When the price on crude oil was so low and now of course, it's out of sight and everybody, they're just like lemmings going over a cliff. Everybody decides that they want to get back in the business. And a lot of the people, now some people are just expert finance people and know how to cope with the business world. Well, others don't. And unfortunately a lot of them get burnt. Over extended and the next thing you know, when this thing starts to tighten up on you, the banks own it, or they're in debt so far that they go broke. So that's why over the years you've seen a tremendous change in . . . not change, but a drop off of companies and another one will start. There's no way around it. I don't know if the situation is greed, people think they can make a fast buck. Some have. I won't go into elaboration on that because I think there's some cases there's been a certain amount of unethical practices done and certain people have benefitted by it but I won't say who or where.

- #302 DF: One point that some of the interviews that I've done has brought up is that in the early days it didn't cost so much to put together a crew but now it's very expensive for the instruments and even the trucks and so on.
- RM: Well, that's right. Most companies. . .like United, when I worked with United, we had our own engineering shop. Our own engineers and we designed and built our own recording trucks, built them right up from scratch. As your past interviews have told you it wasn't as expensive. But at that time too, you were shooting just 100%, maybe four shots a mile, the costs weren't that prohibitive. And they just shot, went cross country and that was it. But now, of course, when you're getting equipment, \$500,000-\$600,000 is nothing just to buy, not the truck, just the instruments that go in the truck. So it does get cost prohibitive to start a company unless you really have a bonafide big job to do it. And a lot of people lease now, they don't buy, like Western. . .well, Western is still in business down in the States and I think they are here too. They've been here, they've gone, they've been back. But outfits like United are out of business. They merged, didn't go broke, they were bought out. So you have an amalgamation of some of these companies and that's how they've survived. I've lost touch to a certain degree with the industry here in town. Once I decided to pack it in, I packed it in. I still read a lot but I don't physically go downtown too much and I don't see. . . well, you mentioned Rozsa, I see Ted once in awhile at a funeral or. . . . And he was up here before I was but a long sight, he's one of the old timers that's still.
- #328 DF: Yes, real old timer that guy. When you first started out, let's take you right back to your earliest days back days down in the States, were you on crews then too?
- RM: Oh yes. I started in California. I was trained and then I started. . .
- DF: But you were trained primarily as a geologist right?
- RM: My education background yes. But I was also a minor in geophysics so I knew what I was getting into.
- DF: But how do you go from having a university education to be somebody that's actually in the field doing the work, how did that transition happen?
- RM: That's just part of the training. All the older companies, they hired . . . you were just like a smart ass pup if you want to call it and then they were going to teach you that smart ass pups don't have all the answers. So you got your hands dirty quick. And you learned every bit of the operation, which was good. You learned to pull levers on drills and then you understood what the driller is putting up with. Training in the recoding truck etc. So it was the training as you went along, as you progressed through your employment you were training, you learned all the time. And that was part of the training from United. And I ran crews in Oklahoma, Pennsylvania, back to Oklahoma. I did just a 3 week stint in Venezuela as a replacement. It's just strictly a learning process all the time. And I thoroughly enjoyed it. From the day I went to work I liked it.
- #349 DF: So did you physically handle the paper records and develop them and all that?
- RM: Yes. I see you've talked to a few people. I had experience at that. I know what's going on and how you did it. And I was glad to see it disappear too, putting your hands in those

chemicals. Hanging records, oh yes, I've done all that.

DF: So when you became a Party Chief, tell me. . .it seems to me and keeping a whole bunch of men and all their equipment and their vehicles and accommodations and everything all lined up, to keep them efficient and working would be a logistical nightmare, how did you handle all that?

RM: You find yourself a couple of managers and you put a lot of trust in them. You're a manager and you learned manager skills. And you learn you don't manipulate, you guide people and you put a little faith in one or two individuals who are partnered with you and off you go. People by nature are good workers and if you don't have good workers you get rid of them. That was my philosophy and it worked. I thoroughly enjoyed it. And I hired a lot of people. One of the things poetic about this deal is I have three sons and two of them, they said, we're going into geophysics and I said, I'll kick you right in the backside if you get into that. I said, the business. . .again we go back to the cyclic business and I've often wondered, it's just not a. . .but they've been saying this for years. Oh, it's going to end. Well, that's what I told two of my boys. One of them is down in Texas, he works for Virataz and the other one's a head mechanic for Virataz right here in Canada, runs their whole operation from the maintenance point of view. So who knows? It's in the blood I guess. And I have a step-son who's in the chopper type operations so he's making headway with this. And I can't even go into it because I don't know all the implications and ramifications that he's got to put up with.

#380 DF: As the industry has changed over the years, after you found all the big fields, like obviously Leduc and Redwater and so on were before your time but then Zama and all the big ones, then the industry became. . . you had to go after the harder to find things, but your technology also was changing. . .

RM: Technology was keeping up if nothing else. That's what allowed us to do it. From a stratigraphic point of view, once you'd gotten over all your structural. . . big reefs and structural plays you went for the stratigraphic and subtle interpretations. We drilled some wells with Amoco that I thought were just marvelous successes and they were all in the complex foothill belt of northern British Columbia and northern Alberta. And they're expensive wells. In fact, in this morning's paper I see where there's a couple more wells being drilled right in . . . and the majors are drilling them of course, because they're 14,000 foot tests and deeper and they're going to run you a bunch of money but the reserves are there. And they're subtle, but as you've just commented, they thing that allows you to do this is the computer and your data. And of course, hand in hand, your interpreters now too, are fully trained in the use and manipulation of data on your PC's. And as I commented to you too, the room in which you can go in and put on these glasses and the three as a team. . .they've increased, I know they've increased production on some of these fields that are established fields. Just by the application of all the technical information they have available.

#406 DF: You said something earlier that I didn't quite understand, when you were in the north and were part of Pan Arctic and so on, you said you would go in with your

data and . . . would you choose one drilling location and another company would choose another, what were you saying?

RM: No, no. If you have your leases. If the leases on the property are yours you can drill anywhere you want, if you've got a prospect on it. And that's what we did, Dome did. When Pan Arctic was formed, the basis of it was that everybody would put land into a common pool. And in that pool the same participants had the option to participate in the drilling of a well. If it happened to be on their lands, they'd have the bigger part of the play or they had the prospect I mean, but all the others, like Suncor, Dome, Petro Can, they had a piece of the action so to speak.

DF: But if it was on your land, you made the decision where to drill?

RM: Yes that's quite right. And they would too. And it would be presented and the option was there, if you didn't want to participate fine.

DF: Okay, that's the part I didn't understand.

RM: If not, somebody else would pick up that percentage. You had the option again, it's an option within an option.

DF: But you as a geophysicist or Exploration Manager would describe why you thought this was a good place and then everybody would . . .

RM: Yes, you'd have a technical review. You'd call a meeting, at the time, I believe Suncor was operating as the . . . not the leader, they were the more or less, chief if you want to call it. They would call a meeting and all the participants would arrive at their office and we would subsequently kick everything around. And Pan Arctic of course, took that roll later. And took it over and then they would send out paper, like they're going to drill on such and such land and you'd look on your maps and we'd review it internally and we'd go back and respond to them. Yes, Dome would participate, no, we won't participate, you have the option to pick it up. And that's how it worked. And the same went on in the Beaufort Sea. And they used the same approach off the east coast too. I had very little to do with the east coast. We did a job off the Flemish cap. That must have been about '75 or '76 I think.

#448 DF: Where's that?

RM: It lies 400 miles off the Newfoundland coast. It's in fairly shallow water, that's why they call it the Flemish cap, the sea rises up. We had leases there in conjunction with an outfit called Voyager I think it was, Voyager Petroleum. This is just as an aside. Sid Kahanoff's group. So we pooled our lands, they had a couple of leases, we had them. We shot maybe 500 miles of ??? and walked but now I see, just recently I saw an article where, I think it was Petro Can was going to do some work in the same general area. Time has proven that there are the reserves out there. My ex-employer, Amoco, they drilled something like 21 wells, never got a touch. In fact, they drilled a well, I think just last year was when they abandoned it. And yet Petro Can and Chevron, they found major reserves. So there's a certain amount of luck involved too. Or you hope that luck's on your side, even with good technical information.

#469 DF: The exploration in the north, what do you think is going to happen up there? Still

more room for finds?

RM: It's obvious right now. Chevron made a major discovery just across Fort Smith. It's just, I think the rules sometimes change or the regulations from the government. The feds haven't been happy, you know, since. . . it's been almost 10 or 12 years since any real major work was done in the high Arctic. By high Arctic, I don't mean high Arctic, I mean the mainland. Yes, it's there. And I think it's just been heated up again by. . . Chevron has a major, major gas discovery. It's obvious from the second well that they've flowed.

DF: Two big wells there, yes.

RM: Yes, the first one was good. And you always hope there's a second well and then they'll have to be drilling another well. They're expensive, they're \$9 million, \$10 million, but the reserves probably warrant it. The future, there's no question in anybody's mind I don't think, that it is going to be gas driven . . . for the environment. No, I think the potential is still there.

DF: But there's got to be better transportation systems.

RM: Well, yes, pipelines etc. are the key to it. And I don't think . . . and I speak only from my own opinion on this, I don't think that you'll ever see again, the federal input that you had in the 70's. You remember there was a credit type basis. Jack was a great Liberal supporter and the Trudeau government did support the plans in the Arctic at the time. I don't think you'll ever see that again. So it's up to the majors I think to carry the pole. The small companies have very good technical people and very good equipment but it's a cost. When you're shooting and then drilling for say, \$12-14 million for one shot, it's a lot of money.

#508 DF: It's a lot of money, even for Chevron because a friend of mine is a geophysical technician at Chevron and they drilled that one well last year, that was it and they put all their hopes into that one well.

RM: That's right. It was a \$9 million hole.

DF: So that's a new field then probably eh?

RM: Yes. No question about it. They've had a follow-up well to the original well and they flow rates have maintained so if you've got a flow rate that has maintained it's got pretty good reserves in it.

End of tape.

Side 2

RM: I took a trip with my wife and I stayed here and I've never really regretted that I did. I was sick and tired of moving.

DF: Did you become Canadian?

RM: No, I'm still a U.S. citizen. My wife's Canadian. I think part of that was the fall out. . . at the time I was born you could still have Mexican, so I'm dual that way. I'm one of those type of people that can fortunately go down and buy a piece of coastal property if that's what I wanted to do. I think it was a function of, my dad when he was a kid, he grew up and he moved around all over. Now times have changed, but he said, keep your U.S. passport, it won't hurt you. So I have, I vote absentee in the elections, here or there. My boys are dual Canadian. Two of them were born in the States and one of them was born here and they're dual, both ways, it becomes an individual's decision.

DF: I'm married to an American as well so we have the run of the continent.

RM: It's kind of nice. The choice is here, no problem, I just kept my immigration card, never had any trouble.

#015 DF: When you were first in the north, you said, the first year you did everything with helicopters, that's an expensive way to go, why did you make that choice first, rather than trying land based?

RM: Because we didn't know how. We knew that the choppers had performed before and the reason that we knew that was that CGG, their manager was a Frenchman and they had done work in the high Arctic for Elf, I believe it was, and they tried it and it worked. We didn't want to take the chance of getting heavy track equipment up there and then discovering it couldn't work. I believe Texaco tried that only they poor boyed it and went in with tractors and it was a disaster.

DF: As in caterpillar tractors?

RM: No, not caterpillars, like John Deeres. It was a fiasco. We were learning. If you remember, Dome had drilled a well at Winter Harbour around 1960. That was the first well drilled in the high Arctic. And they learned a lot there, what you were dealing with, the cold, it was Peter Bawden's rig and I think it's still there. The Bawden rig is still there and I think they've even been considered as a national heritage sight, I think. That's where we based out of. We opened up that old Bawden camp, went in there with a chap that had a DC-3, a fellow named Neil Fluker and Eddy Kowalik. Fluker is still alive, Eddy Kowalik was the pilot, he's dead now and there was two other guys that I can't remember. But we went in and literally opened it up and made room to bring in a front nosed opening airplane, I can't remember what they call those. And we brought in a small D-4 cat and opened up the strip and then flew in everything but the herd. So it was quite an experience. And the government on top of that, just as an aside, you're going to have unscramble some of these comments I'm making. I remember going to Ottawa in the same year, '69, and we were planning to start air lifting 3 weeks after we made our trip. And the government people that we went to see, they said, you can never get operational until next year. We looked at them and said, we're operating in 3 weeks. They said, it

can't be done and we were operating and flying in a month. It just goes to show. . . I guess all I'm saying is private industry versus bureaucracy, sometimes, it's a classical example of it. And the fellows we dealt with were actually quite good technically, in Ottawa. But some of the ministers were a pain in the backside to put it kindly and I won't name names. But it was interesting times.

#045 DF: Well that same large bureaucracy problem applies to some of the big oil companies.

RM: Oh yes, there's no question about it. That was really one of the reasons that I retired in '91. I liked the people at Amoco but when I went in to Chicago to a couple of their meetings it was a stunner for me really. I was so used to free wheeling with Dome, with still controls. I'll grant you we did get into trouble but I think financially that was out of my control, I'm not saying I . . . but we were led the wrong way by an individual and we paid for it. But in Chicago it's kind of whose hand you kiss and how you're going to do things. They had technically good people but they'd get lost in this bureaucracy of, nobody's going to do anything without talking to so and so and so and so. Pretty soon, opportunities passed. One thing I will say for Dome, boy when I was working for them, I enjoyed it for the first 20 years, it was marvelous. If we had an idea we could place it in front of people and you would have your engineers, you'd have your geologists and you could get a job done. Over time we became bureaucratic too, as you're probably well aware. And I think that was one of the stumbling blocks for us.

#059 DF: What did you like most about your career, what really excited you?

RM: Meeting my wife.

DF: She just walked into the room.

Mrs. M: Listen to that, but it's true.

RM: You were saying?

DF: What excited you about the process of looking for oil?

RM: I don't even know how to explain that, I kind of got into it. . . you know, you're a typical freshman in college, you don't know what you want to do. . . so I just happened to take one course in geology as a freshman and I thought, geez, this is pretty good, you get your hands dirty and you're rolling around in the soil. At the time, the idea was. . . but that really sent me on. . . and I enjoyed the sciences anyway, chemistry and physics and all that but the geology really appealed to me. It was just a natural step, I made some enquires, found out what it was all about, spent a summer up at Bakersfield, California, working as a roughneck and I thought, well this is for me. Travel. . you know how you. . you're not tied down. And I thought, this would be good. After awhile travel gets old. Which is the way I settled down here. But I enjoyed it from the day I finished university to the day I walked out. And I could have, I actually thought of doing consulting work and then I decided I don't need it so I just walked.

#076 DF: The days with Dome, especially those early days must have been pretty heady, you had a charismatic, visionary leader and then walking along behind him, you had

the whole scope of things you could do.

RM: I had an extremely good boss too in John Andriuk. And charismatic is a good word simply because all of them were that way. There was one or two individuals in the corporation that I thought got wrong balled and I think that over time it was proven. A couple of people that should have been put in charge weren't put in charge, they subsequently left and were very successful at whatever they did. One of the individuals that stayed with us unfortunately, I think, was part of our problem and part of our downfall. And I won't mention any names, people can read between the lines if they're going to.

DF: Yes, I think we all know what you're talking about there. Any regrets about your career.

RM: No, none whatsoever, I'd do it all over again. The only thing as I said earlier was the fact that I think, and of course, that comes with hindsight, the older you get, would you repeat what you did. I think probably with the training that you have accessible to you in the universities now, it could give you a real background and you could take off in the same pursuits. However I think, as I mentioned earlier, the cyclic nature of this business would tend to push you off I think, into some other. . . the sciences I think are ideal to still be in. But I think geologists as the geologists, all of us that are now retired knew it as a different ball game. We may be like the dinosaur in a few years. But I've been hearing that for years. There'll be no more oil found. Well gosh they are making some major discoveries in the Gulf Coast, off Sudan, Uganda and so on. Although I saw yesterday's paper, there was a guy that's projecting, he's one of these futurists, he's saying by the year 2050, there's be no more oil or gas. Who's to say. I guess if I was genetically strong I might still be around to argue with the guy. But no, I don't regret it a bit. I met marvelous people. I don't think . . . I might have one or two people out of the thousands that you meet that I never cared for if I never saw them again. That's very few when you consider the number of people that you work with. And you enjoy it. Yes, I'd do it over again.

#103 DF: Any areas you wish you could have gone into geographically? You were in the north pretty early.

RM: Yes. I got exposed to it. I was over in the North Sea for a very short time. We had a position with a couple of farmouts we took. I was in New Guinea, down near what they call Vogelcop which is southwest New Guinea. It's a small, it sticks into. . . I'm trying to think of the sea that it sticks into. Anyway there was major Myocene reefs and we had an opportunity, it was presented to our Denver office and we went down and took a look. Intrigued. Phillips I think eventually had it, Phillips produced . . . And as you're probably aware too, there's a great deal of exploration goes on, you know, on the northwest coast of Australia. That's a big oil producing zone too around the straits and the islands. Like I say, the North Sea, I had exposure there, a stint there in Caracas. So I was in there, that was with United too.

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

RM: I don't think so. I don't have much more to say other than the fact that I enjoyed it thoroughly.

DF: Well, that's not a bad thing.

RM: I even met guys like Gerry Sykes. I'll get even with you Sykes. I see Gerry every once in awhile, he plays golf. He's a duffer and they call me up to come out and play with them, Bertram, I mentioned George, all those chaps, they've got a group that they call the Gunchers.

DF: Gunchers, what does that mean?

RM: They're pretty poor golfers. They've worked at it over the years. So I go out and sub once in awhile when they don't have somebody, they're short one of their boys. I just go along because I know all those guys and enjoy them. They're a great group of people.

DF: Well, Mr. Millice, on behalf of the Petroleum Industry Oral History Project, I'd like to thank you so much for spending this time with us and sharing a bit of your life story and your perspective on the geophysical industry in Canada and we'll end the interview at this time. Thank you very much.

RM: I certainly appreciate it.