

PETROLEUM INDUSTRY ORAL HISTORY PROJECT
TRANSCRIPT

INTERVIEWEE: P. D. O'Brien - Career

INTERVIEWER: David Finch

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DF: Today is the 8th day of August in the year 2000 and we are with Mr. P. D. O'Brien at the offices of the Canadian Society of Exploration Geophysicists in Calgary. My name is David Finch. Could you start by telling us when and where you were born?

PO: I was born in Winnipeg in 1942.

DF: And your education?

PO: It spanned of course, a number of years, but university, if that's the primary focus was at, starting at the Victoria College for a year. I was interested in architecture at that time and I decided to go to Winnipeg, they had an architecture school at that time. When I went through and saw what the architect students were doing, their artistic background, their portfolios, I decided that I perhaps, didn't have all of the attributes of an architect and started more focussing on science. I took a general program at the University of Winnipeg and then came back to UBC, where I got involved in looking at. . . I had been exposed to geology my first year back at UBC and it looked like a good mixture of science. I wasn't interested in the pure physics, pure math, so I got involved in more geology, geophysics and math at that time. I think one of the prime influences on my interest at that time was Jacobs J. Jacobs, who was one of the, I think, more well known geophysicists at the time, was teaching at UBC. He gave a course, more of an overview course on geophysics and I did well in that. He was an interesting character, he was also involved in the sea floor spreading discoveries they were making at that time. I think he and Wilson were both heavily involved in that. He was probably the major influence. He also recommended that Amoco hire me as a summer student that year. So he got me a job with Amoco, it was Pan-Canadian at that time and when I finished my third year. . . my fourth year at that time, it took me a little longer than the average guy. But I went up to Edmonton, worked in their Edmonton office at that time, and then came back and finished my fifth year at UBC and then came to work for Pan-American full time, in 1964.

DF: That summer job that you took with them, what did that involve?

PO: It was really an introduction to what they were doing in geophysics. They put their summer students through an exposure type of program. We went up and worked on a field crew on Pointed Mountain, for about a month and so you saw all aspects of the project. I mean this was a tent camp with tracked vehicles and we shot one or two shot points a day. You were going up and down, it was working in the very rough topography and this was basic hard nosed geophysics on how do you acquire data. Running crews, drills, all the aspects of a field operation in a tough country.

Video Tape #05:04.29:05

#033 DF: So were you watching this or were you actually hands in there, moving the jugs. .? .?

PO: We were hands in there, you'd work a week on the jug line, you'd spend a few days with the surveyors, some time in the recording operation. So you saw all aspects of it, which was nice. It gave you a feel for what was going on in the field. Really important for future knowledge on understanding what's going on out in the field.

DF: So then back to university to finish off the degree after that?

PO: As I say, I ended up in '64 with a bachelor's degree. After that I went through and I've taken courses along the way, probably more in business than in the scientific side of it. I took some computer courses, I took some financial courses, business courses. But more night school, part time and built my background that way, rather than anymore formal education.

DF: Did you graduate with a degree in geophysics then or was it a more general degree?

PO: It was I guess a major in probably math and physics and a minor in geology is what I ended up with and a bachelor's degree.

DF: So tell us about your work at Pan-American then, what was your job there?

PO: In 1964 I started off as a junior geophysicist and they put you through a training program, so that you worked with the experienced geophysicists and you went through the various processing techniques. All of the processing at that time was done analogue. You put in statics with punch card, did your analysis, entered that into the machine and they had their own processing system at that time on which they generated their seismic sections. We spent another month on a crew, getting more experience in the field. Ended up doing first break analysis until you'd never want to do it again. They had a program at that time which was designed to teach you how to do geophysics in a practical sense, but it was originally designed to stretch out over about five years. It was also at a time of transition. I think one of the significant things that was going on at that time was the seismic processing was moving into the office. They finally. . when did stack data come into being. . . but it had to be in the early 60's when it really started to be a force in the industry, rather than shooting 100% data. What that did was that it took the geophysicist out of the field and put him into the office. Because he could no longer do his analysis in the field. There was no sense doing it anymore. So it was a big transition. I think a lot of the fellows that I was training with at that time, they had spent 3 or 4 years out in the field and that's what they did, they ran the field crew, the interpreted the data, produced the first go round of the maps, in the field. Then the data would come back in, it would be reviewed in the office in more detailed analysis done in the office but they'd run it out there. Whereas when I started it was at that transition. I didn't spend any significant amount of time out in the field, which is great to me. I saw too many tales of guys going in trailers from place to place and trying to run the operation and doing the interpretation, that wasn't particularly exciting.

#070 DF: So it was the technological change that created the move for people that came after you?

PO: Yes. You weren't doing computer processing but you were doing stacking of the data and the processing of the data in the office. So they had a variety of specialized equipment that would handle the NMO??? and the stacking of the data and the display of the data.

DF: You just couldn't do it in the field anymore, it was too complicated right?

PO: Yes.

DF: Because in the period before yours, the fellows I talked to said that it was really important to be in the field, because you could change from day to day what you were going to do based on what you saw, or reshoot or change the shooting program, whatever, because you were right there and you were examining the records.

PO: Right.

DF: Whereas in the period you're talking about, it's getting too complicated right?

PO: Yes. You didn't have the processing equipment in the field. These were big units, you should look at the old central processing systems that they had back in the early 60's, which were treating analogue systems and now there's no way. So you had to adjust how you did your work and how you laid out your program. You lost a little bit of flexibility but you gained in knowledge. The data quality was much better, you could interpret things and discover things you could never see before. So it was a major change going on at that time.

DF: Was that exciting?

PO: It was when you look at what transpired and the influences it had on the business. The type of people changed significantly from what I could see. Prior to when I joined . . . and I had made a lot of friends and a lot of associates that we made during that. . probably during those five years which were the main periods of influence. But the type of personalities changed and the character of the industry was changing. Because what you had before was a lot of people who enjoyed the field, they worked in the field, they were basically geophysicists but they were raised in the field. They loved that type of environment. They were hard workers, hard drinkers, different type of partying, different type of lifestyle. So you get those people coming into town and now they're in the office. But now you've got a different generation I would say, coming in at the time I came in. We didn't have the field experience, we weren't raised in that environment. So now you've got city folk, rather than field folk and really different personalities in this. And I think you could see the change taking place in how things were done and how business was done.

DF: Working in the city then, in the office, did it also give you a chance to be working more closely with the geologists?

PO: You had that, yes, you had a closer relationship with what was going on. It wasn't a team concept at that time, but you had more input into what was going on. If you saw something, if you were trying to sort through some stuff, you could walk down the hallway and work with these people. So you had closer relationships with what was going on and more input into the problems you were trying to solve.

Video tape #05:12.30:27

#106 DF: What was the next major step in your career?

PO: The transition I was telling you about with the training program and what was going on there and the usual step. In what was it. . . late '65, early '66, the Rainbow field was discovered. That was brought on by the use of common depth point shooting. That was what enabled the reefs to be mapped and reliably mapped. What that did was create a huge demand in the industry for geophysicists. There was a lot of small companies who

were getting into the play and trying to extend it to a variety of different areas, up to Zama, this type of thing. What you had then was, you have a company like Pan-American at that time, huge body of experienced geophysicists and basically what happened was, I would say over half, if not 2/3 of these geophysicists were hired away. They went to all the small companies. They had the experience, they had the knowledge base, this sort of thing. So what happens is that you get a demand, there's no longer a five year training program, this is a two year training program, you're ready to get out and do geophysics. Which was great because we'd had a reasonable amount of training but now we were actually in the thick of it. We were running seismic crews, we were interpreting, we were recommending wells, probably not very experienced at it. You look at what we did relative to a lot of the other guys but you had a chance to learn an awful lot in a short period of time. So what would normally take 5-10 years in experience, to get to that point where you had that responsibility, was now done in 2-3 years. As I said earlier, good and bad because you were doing a lot of things and you didn't have the in depth knowledge on how to do it and some of the problems you run into. It gave you a chance to learn in a hurry.

DF: Did you run into any problems, any stories you want to tell on yourself?

PO: I don't think there was anything serious in there. I think it was just gaining knowledge and understanding the geology. I look back now and the geological background I had and trying to do seismic and understand the geology and that, I don't think I had a clue. I knew what rocks were, I had a basic understanding of it but over the years you gain a lot more understanding of the geology and I think that's the biggest thing that we didn't have. And that's what part of the training program that they didn't expand on. If people had an honours program in geology, they came very well prepared, at least a good understanding of the geology but I look at my geological background and it was average at best. The more you get into it and the more experience you have in the business, the understanding of the geology and relating the geology to the seismic information is critical. And I didn't have that at all. We could work with the geologists and try to put it together so it was reasonable but if I would have had a stronger background in geology it would have been far better.

DF: So were you involved in some of these discoveries in this period?

PO: Not in the major Rainbow. By the time I had gotten in there and got involved, running my own crews, we were working on the fringes. We had a few discoveries on the fringe that were reasonable but nothing tremendous. It's unfortunate, it would have been nice to be involved in some of the major reef discoveries. But those things are like picking. . . there was not too much science to it, those things stood out and the key thing was that if you were lucky enough to have the land in the right spot. So that was the key thing. Pretty intense bidding. Probably the most exciting thing that would happen was that you would get up there on the . . . you'd be up there shooting. . . you know, you were shooting for a land sale and you had to get out and you were trying to run a crew and get some seismic in an area and there were five other crews that were trying to do the same thing. And I think . . . what was it, one time, we lost a box of tapes off a helicopter, shunting them back into town and had to go back and reshoot. But that was probably the most exciting thing that every happened along the way. But it was very competitive, huge number of crews working at that time, very healthy for the industry. And good for the oil companies as

well, good discoveries and I think made pretty reasonable money off these things.

Video Tape #05:18.27:09

#165 DF: So that was a boom time, you've probably lived through a couple of the cycles, what happened when all this went bust.

PO: My career, I stayed at Amoco for five years, got restless at that time, looking for different types of opportunities. I've never been, throughout my career, a large company person. It's not an environment that I thrive in and enjoy. I went to work for West Coast Petroleum, which was just starting up at that time, which was in '69. We had a variety of prospects. You know, '69, '70, '71 were reasonable years in the business. So we were exploring in British Columbia, we did some work down in Latin America, in through there. Nothing too eventful, just typically working, trying to beat a small prospect to death, trying to generate something. In a small company you don't have a lot of resources, you don't have a lot of land, so you're trying to squeeze things out of, in general, marginal plays. In '72, I moved over into the service sector. It was more, I think, more along my interest. As it comes out, you see where your interests are, where your tendencies go and that. I've been more interested in people related types of things, I've I think, been good at selling, good at building relationships and this sort of thing. So at that time I went to work for a seismic processing company called Digitec. At that time it was, I think, a fairly significant player in the market and they were going into the digital regime. So they had typical computers at that time and tape to tape processing, but had a reasonable processing flow, good reputation in town. The company was run by Ben Berg at that time. He was quite a character in his own right. He's still in the business now as a matter of fact, he's gone through several cycles of activity.

DF: What did you do for Digitec?

PO: I was their Marketing Manager. Started off in operations, just to get a good feel for what they were doing, how they were doing it. So I was the Processing Manager for about six months and then moved into marketing. Interesting bunch. Hard drinkers, typical of the business at that time, they'd get out with their clients, we'd get out with our clients I mean. It was the days of 3 and 4 drink lunches and you'd go out for dinner, a fair amount of entertaining. You wonder how you ever did any work in the afternoon. I worked with that, went down to Houston, we attempted to open a joint venture office in Houston in '74. The company was also bought out that year, went through some major transitions. I came back and it wasn't an environment that I enjoyed. So in '74 I went to work for Dresser Olympic, which was a seismic data acquisition company. This was really in one of the slowest parts of the industry, or slowest years. The downturn in '74, '75 was severe. Prices were bad, royalties were high. But I started off as the Operations Manager with Dresser Olympic and within six months, because of problems within the company, the General Manager had transferred down to Houston. So I took over the operations. Here was a green geophysicist that had been in the industry, what, ten years, never been involved in field operations, running this. I had been out on crews and this sort of thing, but a little green behind the ears as far as running a business goes but that's the way it happened. And we did quite well within the business. We were able to. . . .we took advantage of. . . they brought their incentive program in that year and we had some, what I think were innovative ways to generate money through shooting data under the incentives, made a lot of money in that area. We were running Arctic field crews at that

time. We were probably the major operator up in the Arctic Islands, through those two or three years and that's what really carried us through. But we had one operations there where we . . . it was Pacific Petroleum had run their own crew up there for a couple of years. They wanted to get out of it. We bought their crew, made a deal to buy their crew, they would pay for one year of operations up there, they had a program laid out. And we gave them a turnkey price to buy their crew, do their seismic and we got up there and. . . If you're up in the Arctic, if you leave your crew, in the summertime when you finish your winter operations, if you leave it on top of a hill, all the snow blows around it. If you leave it in a little gully, it just fills in. They left their crew in a gully. Our guys got up there when the weather was 30-40 below. You basically go in in small planes and having to dig out this equipment. They had never seen the equipment before, they didn't know what it was like, didn't know where anything was. But these guys went in, dug it out, got it sorted out, you try and . . . you know, I mean, you have no heat, you have no resources, you've got to get in and get this stuff and get something warm before you freeze to death. These guys are crazy, but they got up there, they did that. We not only shot the project for Pacific Petroleum but we ended up extending the project, turnkey price. We made a bunch of money, owned a bunch more equipment. It was a great project. But these guys, they're super, they work hard, they play hard. Unusual group that work up in the Arctic Islands. We also expanded the business, we got involved in seismic data processing, we started a proprietary data division. We ended up shooting a lot of programs on spec, did very well in that area. The business is such that if you. . . part of the nature of the beast, if you just depend on doing seismic data processing or data acquisition, it's very hard to build a business. You don't create any assets. Your only asset is you three month job in the winter where you have to make money. If the next winter comes along and there's no work, you have no assets. Yet you have to invest, what at that time, you could probably put out a crew for half a million to a million dollars. And you do that on a three month job. So you've got all this investment and you just hope like hell that something is going to come through. Now, it's \$10 million to put out a seismic crew. Same thing, 3 month job. So the way you create assets in the business is by generating seismic data assets. You go out and you shoot data, you try and get them underwritten and now you've got something you can sell. So that's what we started to do and generated a pretty significant seismic data library which carried us through some of the bad years and enable us to grow and prosper. Went through, what was it, by the time we got to '78, '79, we were back into a very strong cycle at that time so a lot of activities. And when I started, the winter of '74, '75, we had one seismic crew working in Alberta for half the winter. That was all the work we could find. We had three crews working in the Arctic and I think, '78, '79, I think we got up to 9 crews. We had our seismic data processing, we were doing spec shoots, so really quite a successful business and it kind of maintained at that level until 1982, when I transferred down to the U.S. The company had gone through two different ownerships by that time and it was then Grant Geophysical and I went down to the U.S. to look after the Canadian and Rocky Mountain operations for Grant at that time.

Video Tape #05:27.51:20

#269 DF: What would you say have been the highlights of your career in Canada, I know you're still working down in the States but what stands out in your mind as what

you enjoyed most about your experience up here?

PO: I think it was the people that we were involved with. We had great relationships with our clients, Dave Miles at Chevron is probably one of the stand outs in the operations. Great guy. He had a lot of . . . you know, he worked on relationships and he put faith in you and you had to get the job done. He was that kind of a guy where he had a lot of trust in you and you know, you make mistakes along the way but you get them fixed and you go on and you do it better the next time. So it's people like that that really made the enjoyment and the people we worked with within Grant as well. I think my operations manager at the time was Lorne Munt. Just a very strong field guy, came out of the oil patch, he worked with Amerada before he joined us. But managed people very well and just knew the field operations and could run it very well. That's what made my job easy was having good people around you and guys that could get the job done. And you have ideas where. . .like, the spectator projects that we were putting together and see those come to fruition and get out and sell that. With what we were doing, with the size of the operation, I was probably the main marketer as well as running the operation and that was very satisfying as well because you had strong people to get it done so you could get out and sell and stand behind what you sold. Those were very interesting times.

DF: Good. At this point I'd like to take the chance to thank you for sharing us this part of your career and on behalf of the CSEG and the Petroleum Industry Oral History Project, we'd like to thank you ver much and we'll end this part of the interview at this time. Thanks a lot.

PO: You're welcome.