



Making a Difference

By *Ian Smyth*

Historians have argued for centuries about what makes history tick. A camp at one end of the spectrum believes it is guided by the works of great men and women; a camp at the other, that it is driven by economic and other largely unpredictable forces. While the truth is probably in between, I prefer the first approach. Great people lead history. It isn't pushed from behind by events.

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**Annual General Meeting
Featuring a presentation
by ARNE NEILSEN
Retired Chairman & CEO
Mobil Oil Canada**

Time: 12:00 noon

Date: Wednesday, May 24, 1989

Place: Palliser Hotel

Cost: Society members, \$15; non-members, \$17.

RSVP: Rhonda Boorman 269-6721 by noon, May 19



Much of my bias comes from the oil industry, the individualism of which encourages giants to roam the earth. This industry has always been the product of the ideas, decisions and calculated gambling of forward-looking people -- visionaries, in one sense of that word.

These musings were stimulated not by an academic interest in the philosophy of history, but by the recent retirement of one of Canada's great oil men, Arne Nielsen. Arne's retirement should be accompanied by recognition of the enormous contributions he made to this industry, and this column is my personal testimonial to a friend and colleague.

During the Second World War, Arne Nielsen left the farm to join the Canadian army. He didn't let the fact that he was under age stand in his way then, and he hasn't let much stand in his way since. The war ended before he got a chance to command the army, but he must have been one of the youngest rifle and mapping instructors in the Canadian forces.

Sometime between joining the army and receiving his discharge, Arne's career goal changed from farming to geology. The Canadian oil industry, the CPA and Canada have all been major beneficiaries of that change of heart.

Scarcely more than three years after getting his masters degree in geology from the University of Alberta, Arne Nielsen's name had become synonymous with success throughout the oil patch. In itself, his discovery of Pembina, Canada's most prolific oil field was enough to make him a legend. But it only marked the beginning of a long and increasingly illustrious career.

Arne joined the Canadian division of Socony Vacuum Exploration Company (now Mobil Oil Canada, Ltd.) in the spring of 1950. With little more than two years' experience, he became head of Socony's district exploration office in Edmonton. About one month later, the company spudded Socony-Seaboard No. 1, a rank wildcat about 110 kilometres southwest of Edmonton. Arne had participated in the famous negotiations with Seaboard, had prepared the geological prognosis and had recommended drilling the well. However, his greatest contribution lay in his determination and persistence in exploring and fracturing the Cardium zone, which provided the field's first production.

The well, the field and Arne made Canadian oil-field history. That well was the first in Canada to use hydraulic fracturing, and it marked the first Cardium find in the province. The field was the first large stratigraphic oil trap found in Canada, and at 2600 square kilometres, it became the continent's largest oil field. Total production from the Pembina field has since exceeded 200 million cubic metres -- a great and continuing asset for the industry, the provincial treasury and the Canadian economy. And after 36 years, production from Pembina still exceeds the combined production of the second and third largest Canadian fields.

Arne's next promotion took him to Regina, where he served a stint before becoming the company's chief geologist. In 1959 he was transferred to the U.S., where he held senior exploration and management posts in New York, Denver and Houston.

He returned to Calgary in 1966 as exploration vice-president for Mobil Oil Canada, and became president of the Canadian company the following year. He left Mobil in 1978 to become Chairman and CEO of Canadian Superior, which, with its parent, became a takeover target fewer than ten years later. The purchaser was Mobil Oil, and as the two companies were merged, Arne was appointed chairman and CEO of the new, larger company. As a result, Arne was on the spot to participate in negotiations for Hibernia development with the federal and Newfoundland governments.

Arne is determined and impatient and has a tremendous people talent. In the last 30 years no one else has been elected chairman by the CPA's Board of Governors on two separate occasions. Between and after chairmanships, he continued to work hard for the association -- for example, as chairman of the task force which developed our alternate oil and gas policy and, more recently, as chairman of a CPA group studying and promoting the free trade agreement.

In fact, whenever our industry has found itself in need the chorus has been accustomed to asking, "Where's Arne?" And the answer has always been, "Up front." Arne is one of those people who, by act of will and force of character, provide justification for the idea that history is made by great men and great women. Again and again, his remarkable career has demonstrated the truth of that notion.

Ian Smyth is president of the Canadian Petroleum Association

Update on sale of old drilling rig

The auction sale of the artifacts of the Altamont Museum in Coumts, scheduled for March 1989, was cancelled. You may recall from previous issues of Archives that one of the items in the museum collection is an unusual cable tool drilling rig, manufactured in 1903 by National Supply Company. The Petroleum History Society hopes this rig will remain in Alberta.



Mr. Belmore Schulz, owner of the museum, found the rig lying in a field in the Coumts area and acquired it from the land owner. He has advised that he is still planning to sell the museum, preferably intact but may have to resort to an auction sale. Interested parties can contact him at the museum.

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The Publisher

Archives is published periodically by the Petroleum History Society, 3800, 150 6th Ave. S.W., Calgary, T2P 3Y7; (403) 269-6721. Editor: Peter McKenzie-Brown.

Submissions on historical topics related to Canada's petroleum industry are welcome. For information on membership or society activities, contact society president W.R.S. McLellan (403) 290-2840.

Canadian Institute of Energy

The discussion about the so-called "cold fusion" experiments at the University of Utah suggests that cold fusion, if it is ever proved and developed, could have a big impact on the petroleum industry's future. Accordingly, PHS members might be interested in the following "cold fusion" presentation from the Canadian Institute of Energy:

SPEAKERS: Dr. James Jacobs/Dr. Sankar Das-Gupta
Electrofuel Manufacturing Company

Dr. Mikk Anyas-Weiss
Ontario Hydro

"INSIGHTS ON THE COLD FUSION CONFUSION".

Fusion Fever comes to Calgary in May when CIE proudly presents the leading Canadian scientists in cold fusion. Drs. Jacobs, Das-Gupta and Anyas-Weiss will present a status report on their research into this very exciting subject. James Jacobs, a chemist and part owner of Electrofuel, was recently quoted by the Financial Post as having a "better recipe" for fusion than the Pons/Fleischmann process in Utah. His private research and specialized manufacturing firm has already filed patent applications for processes related to cold fusion. Dr. Anyas-Weiss is a nuclear physicist and Manager of Ontario Hydro's Divisional Projects Department. His department is involved in research management studies and in creating research linkages with external organizations in new areas of technology of importance.

DATE: Wednesday, May 17, 1989

TIME: Cash Bar 11:30 - 11:59
Lunch 12:00 - 12:20
Speaker 12:21 - 13:30

PLACE: Westin Hotel, 320 - 4th Avenue S.W.,
Calgary, Alberta

PRICE: Members \$15.00 Non-Members \$20.00

RESERVATIONS: - Phone (403) 252-2158
- Registration limited to 120 people

OPEN TO THE PUBLIC

President's Report

At our Annual General Meeting on March 22nd, I remarked that the past year was a very successful one for your Society. We continue to grow and promote activities that will increase awareness of the history of Canada's petroleum industry.

Over the past year, the Society has seen an overall growth in membership of 50%. We currently have 27 institutional members and 100 individual members. Of these, 4 companies (Alberta Patch Work, Petro-Canada, Texaco and Southam Communications) are sustaining institutional members, having made contributions in excess of \$100. As well, the Society has 22 sustaining individual members.

The enlarged membership has resulted in our noon luncheon meetings being attended by almost 25 of our membership each time, in addition to several interested non-members. Also, the enlarged membership has resulted in a wider distribution of our newsletter, Archives, which continues to be well received by both members and the general public.

To help get more Society members involved in our activities, four new committees have been established: Programme, Publications, Communications and Oral History. The chairmen of these committees are seeking additional members to get involved - providing ideas and helping with the tasks at hand.

Unfortunately, our efforts to get the renewed Oral History Project registered as a charitable endeavour for income tax purposes has been unsuccessful so far. We are currently in the process of establishing a new association of the Petroleum History Society, the Canadian Petroleum Association and the Glenbow to enable us to successfully launch this critically required project as soon as possible.

Recently, the Society Board of Directors has been considering several proposals. One is to produce a series of six high-quality lapel pins to commemorate significant events of Canada's petroleum industry history. Another is to co-produce a series of 10 or 12 radio programmes utilizing the oral history tapes stored in the Glenbow Archives. As well, our involvement with the proposed Hell's Half Acre Interpretation Centre in Turner valley is expected to increase shortly.

All indications are that your Society will continue to grow both in membership numbers and activity, and that the coming year will be even more exciting and successful than the one just passed.

W. R. S. McLellan

New Board Elected

At the Annual General Meeting on March 22nd, the Society elected a new Board of Directors. All incumbent Officers and Directors standing for reelection were returned unanimously. Mr. Tom MacKay was elected Director on the Board replacing Mrs. Patricia Boyle who declined to serve another term in order that she may focus her full energies on the forthcoming election campaign for Trustees on the Calgary Board of Education.

Subsequent to the Annual General Meeting, Mr. Kim Coghill, Secretary, was forced to resign. His employer has transferred him to New York City. Ms. Doreen McArthur has graciously accepted appointment as your Society Secretary for the coming year.

Therefore, your 1989-1990 Petroleum History Society Board of Directors are:

Bill McLellan - President
Reubin Nehring - Vice-President
Doreen McArthur - Secretary
Micky Gullless - Treasurer

Directors:
Tom MacKay
Betty Daly
Aubrey Kerr
Peter McKenzie-Brown

All members of the Society wish to thank Pat and Kim for the many hours of dedication and hard work they contributed on our behalf, and we wish them well in their future endeavours.

A Tale of Two Abandonments

Once upon a time, an enterprising Medicine Hat resident drilled a well for a private supply of natural gas. This was a common occurrence in the early days of Medicine Hat, and it is speculated that the owner of the American Hotel drilled this particular well around the turn of the century. When the well was no longer needed, it was abandoned and forgotten - for a while, until it began to leak. Decades later the well had to be reabandoned - twice - and the stories of these two abandonments illustrate our change in attitudes towards natural gas safety and to the role of the Conservation Board in such matters.

The most recent reabandonment took place in the summer of 1972. Tony Chow was preparing to demolish a lean-to at the rear of his property, in order to expand his Canada Cafe in the heart of downtown Medicine Hat. A mysterious vent pipe was discovered in the lean-to and a city Gas Superintendent got off-scale readings on the first sniff of his explosimeter. No gas line leaks were discovered, but the ground under the lean-to was saturated with natural gas and eventually the city found the old gas well, just six feet from the back door of the cafe.

The Energy Resources Conservation Board was notified in late July and mobilized immediately. Brian McFarlane, Senior Technician, went to Medicine Hat on July 22, 1972 to supervise exposing the old well. The well was leaking 400 cubic feet of natural gas a day into the urban atmosphere, from badly corroded casing. Funds for the operation were quickly made available to the ERCB through an Order in Council from the Minister of Mines and Minerals, which was in place by August 15. The old well could not be re-entered because it had three strings of casing cemented to surface with the smallest being only three inches in diameter, a good abandonment attempt. The crew tried to wash over the outer casing to reach the producing formation, but at 40 feet the bit ran into steel, thought to be an old cable tool drilling bit. So a new well had to be drilled, in a tiny space of about 3000 square feet amid the downtown buildings. The cafe kitchen and power poles were removed and, by August 30, 1972, a 70 foot trailer-mounted drilling rig was in place. Under these unusual conditions, it took until September 22 - nearly a month - to drill a 760 foot well and cement off the producing formations.

The cost was \$93 000, which was expensive for a 760 foot well, plus \$45 000 for restoration of the cafe kitchen. It was expected that the gas in the soil would con-

tinue to seep into the atmosphere after the abandonment so vents were installed in the basement of the cafe and the well was monitored for several months.

In 1972 the history of the well, which was being called American Hotel No. 1, was a mystery. However, the Board had abandoned this well before. In 1980, the Board found an old file in their records on the previous abandonment attempt.

The earliest item in the ERCB file is a newspaper clipping from May 31, 1935 which tells of a mysterious explosion on May 30 that broke glass and caused a small fire in stores on Third Street. The explosion seemed to originate in the rear part of the premises, where we now know this well to be, but the cause was never ascertained. Then on June 28, 1943, Mr. R. Beitz, a foreman with Medicine Hat's gas and water department, was checking gas lines when he discovered leaking gas. He notified the Board and an old well, covered with wooden cribbing and soil, was located. Although the well was leaking gas into a heavily populated area, it took over a year before the well was abandoned. Much of the file is correspondence concerning who owned the well, who was responsible for initiating abandonment operations, who should pay for it and who should conduct the abandonment.

The Board maintained that the owner of the land was responsible for the well, under the Oil and Gas Wells Act. The land owner, Mr. Abraham E. Altmayer, had passed away in 1918 in New York state, leaving several beneficiaries residing in the United States. In Medicine Hat, the estate was represented by a local lawyer who said the owners had held the lands for 30 years and never even knew the well existed. He suggested that the Board take title to the mineral rights and undertake the abandonment themselves. The Board rejected that proposal. The city of Medicine Hat also wanted the Board to take responsibility. Months passed, with the well continuing to leak, while the minerals title was checked to see who owned the gas (it was the surface owner as the lands had been sold prior to Alberta becoming a province), the assets of the estate were checked, the lawyer for the estate was repeatedly asked to undertake abandonment and warm spring weather was awaited.

Finally the Board took possession of the well to abandon it and an agreement was reached with the city's gas department, whereby the city would supply men and

equipment to work under the direction and responsibility of the Board. On August 25, 1944, over a year after the leak was discovered, Mr. Goodall of the Board was in Medicine Hat to supervise the closing off of the well, then called the Altemayer Estate well. Robert Beitz, of the city, determined that gas was coming up three inch casing and Out of a split 40 feet below the surface in the outer four inch casing, which was capped. During this abandonment, the wells was pressure cemented to 560 feet, and around the six inch conductor pipe in the cellar which was topped with a valve. The entire two-week operation cost \$1118.84 which was billed to the estate's lawyer, and was paid off in three instalments by May 1945.

This abandonment seems to have been successful for some time, but in 1949 a plumber found gas leaks in a basement at the site. On June 7, 1949 Mr. R.H. King from the Board was in Medicine Hat checking the well at the request Mr. Beitz once again. This time there were no de-

lays and the well was immediately excavated and exposed. Mr. King wrote to an engineer at the Board that he was positive that the well was not leaking. He felt that the gas was leaking out of the saturated earth around the well, as the sand had not been vented after the 1944 abandonment. Mr. Beitz, of the city, suggested that the sand be vented, the excavation filled with bricks and covered with wooden boards, then concreted over, leaving the vent pipe open with a stack up to the top of the building. It appears that the city undertook this work at its own expense, and it seems to have solved the problem for the next twenty years.

For more information on the 1972 abandonment, see an article entitled "Discovery of old leaking gas well brings new drilling in Medicine Hat" in the October 2, 1972 issue of Oilweek. I would like to thank the Energy Resources Conservation Board for allowing me to study their interesting files on this old well.

Archibald Wayne Dingman

Except for the strong community traditions unique to "the Valley" and Oilweek's excellent coverage, the 75th anniversary of the Dingman discovery has gone by virtually unnoticed. May 14, 1914: Archibald Wayne Dingman was standing proudly by his new well as the clear natural gasoline poured out. And this first tentative probe into the shallow beds above the Turner Valley motherlode would result in finding (and wasting) billions of cubic feet of gas and millions of barrels of liquid (natural gasoline and crude).

Dingman was born of United Empire Loyalist stock at Greenbush, Prince Edward County, Ontario in March 1850. That area south of Belleville held a concentration of those who had fled the emerging United States back in the late 1700's.

For whatever reason we do not know but he revisited the birthplace of his antecedents, working in the Pennsylvania oilfields. This experience would stand him in good stead.

Dingman returned to Toronto and became a successful entrepreneur in several ventures: coaster brakes for bicycles, Scarborough electric railway in east Toronto and Pugsley, Dingman and Company.

This latter firm manufactured a well-known soap of the day: "Comfort".

What drew him to Calgary? Was it the spirit of adventure? Shortly after his arrival in 1902, he put his experience and skills to work by organizing the Calgary Natural Gas Company in 1905. The next year, he spotted a well just south of No. 8 Highway about four miles west of the 1982 city limits. It spudded on July 5, 1906 using a 23 in. bit. Eighteen inch pipe was driven to 200 ft. At 463 ft. that casing was pulled and replaced with 14 in. At 1,703 ft. the records show very little progress made due to "lost and broken tools and extreme cold weather". September 23, 1907 "gas under considerable pressure was struck at a depth of 2,800 and this gas was still in evidence until the hole was filled in as required by the Department of Indian Affairs".

The hole ultimately got to 3,365 ft. "drilling (was) going well". "When tools stuck 150 ft. from bottom, the cable broke leaving part of cable and tools in the hole. Concluded by directors to abandon".

Not to be discouraged, Dingman moved over to a location east of the Calgary Brewery on the Walker estate (1-24-1-W5M). This hole commenced in August 1908 and was completed in September 1909 at 3,125 ft. It supplied the Brewery, street lighting plus a number of customers in east Calgary.

Once the Gas Company pipeline was built from Bow Island in 1912, Dingman is reported to have stated: "Now that the question of supplying gas to Calgary had been settled, I'd turned to my real objective, the finding of petroleum in Alberta in commercial quantities".

W.S. Herron Sr., along with A.W., R.B. Bennett and other local notables formed another syndicate which ultimately evolved into Calgary Petroleum Products Limited.

The No. 1 well located in Isd 14-6-20-2-W5M spudded on the 25th of January 1913. Many "trials and tribulations" bedevilled the operations. It was shut down for a number of months during the winter after hitting "oil-bearing sandstone and a small quantity of very light oil at 1,556 ft." With cable tools, one had instant results, either pleasant or unpleasant. Six inch production casing was set at 2,378 ft. and drilling proceeded until the Home sand was contacted at 2,718 ft. It was this Lower Cretaceous horizon that would provide the impetus for many other wells prior to Royalite No. 4 tapping the massive Mississippian fault block in October 1924.

The success of No. 1 and the ensuing boom were quickly obliterated by the "Guns of August". To quote Barbara Tuchman, "1914 was the birthday of us all, the moment when the clock struck...The war that followed was the chasm between our world and the world that died forever."

Calgary Petroleum Products' primitive separation plant caught fire in 1919 and threatened to wipe out the firm. Without the plant there was no revenue, liquids being the only source of money. At that time, Dingman was living at 522 - 19 Ave. S.W. and his offices were in Room 423

Lougheed building, just down the hall from R.B. Bennett. It was the latter that rescued the company by making a deal with Imperial Oil.

It was said that after Imperial took over, A.W. visited the field very rarely. Nevertheless, he recovered to create two other companies in the early thirties: Highwood Petroleum Company, later known as Highwood Sarcee with resultant success in the south end of the Valley.

In his prophetic comments before a local club: "We are only in the beginning of an industry that will make Alberta the richest province" and "Turner Valley is only one small field in the immense oil and gas area in Alberta". His slogan was "carry on. We want and need more crude oil".

The Western Oil Examiner of July 9, 1955 stated that Dingman was still working up until about two weeks prior to his death at the age of 85* and had ten years work planned out. His death on March 7, 1936 did not allow him to live a few months more to see his prediction come true when Bob Brown Sr.'s crude oil "discovery" came in on June 16 in the south end of the Valley.

*At that time residing at 420 Roxboro Road, Calgary.

EXCERPTS FROM "CORRIDORS OF TIME", copyright Aubrey Kerr, 1989.

History with Humour at the AGM

The Annual General Meeting of the Petroleum History Society took place on March 22, 1989 in the Boardroom of the Canadian Petroleum Association. Don C. Smith, the phantom cartoonist of Oilweek, was the guest speaker.

With an acerbic wit, Don C. Smith presented a survey of the petroleum history in the 1970s. It was a time of turbulence in the oilpatch, with dramatically increased provincial royalties, rising federal taxation and federal and provincial conflict. The situation begged for some irreverent commentary. That's what Don C. Smith provided in his cartoons.

The cartoons were unique in several ways. The cartoonist's identity was unknown, even to the publisher. Ideas for cartoons often came from conversations with unsuspecting colleagues at the "Linoleum Club" at the Bay cafeteria. There was an added wrinkle: "How to cartoon when you can't draw." Don finally settled on a very effective cartooning technique, the use of silhouette. While

some silhouettes were generic, in his words "lumpy people", others, like those of Pierre Trudeau, were easy to draw and instantly recognizable. Trudeau and Marc Lalonde became favourite targets, as Smith expressed his frustration over the effects of the National Energy Program on western Canada.

The cartoons had a format: a heading, a factual statement usually, but sometimes fictional; a drawing; and an ironic or humorous punchline. One of his most memorable cartoons showed an aching goose (the oil industry) that had just laid a big egg (royalties and taxes). The heading was "Ten years of federal provincial conflict over oil industry revenue sharing". The famous punchline: "It only hurts when you produce!"

Don's cartoons are an important contribution to the history of the oilpatch in the '70s. And he can finally get full credit for his wit and insight into the political climate of the last decade!

The Petroleum History Society gratefully acknowledges financial support from the following institutional members:

Alberta Chamber of Resources
Alberta Natural Gas Company Ltd.
Alberta Patch Work
Amoco Canada Petroleum Company Ltd.
BP Canada Inc.
Canada Northwest Energy Limited
Canadian Oilfield Stimulation Services Ltd.
Canterra Energy Ltd.
Chevron Canada Resources Limited
Clarkson Gordon
Coles Gilbert Associates Ltd.
Esso Resources Canada Limited
Gulf Canada Resources Limited
Home Oil Company Limited
Independent Petroleum Association of Canada
Norcen Energy Resources Limited
Petro-Canada Inc.
Ryerson Oil and Gas Limited
Schlumberger of Canada
Shell Canada Limited
Southam Communications Limited
Syncrude Canada Ltd.
Texaco Canada Resources
TransCanada PipeLines
Ultramar Oil and Gas Canada Limited
Westcoast Petroleum Ltd.
Western Decalta Petroleum (1977) Limited
and the
Canadian Petroleum Association