

#### PETROLEUM HISTORY SOCIETY

# **ARCHIVES**

Newsletter of the Petroleum History Society

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# Thrills and Spills Petroleum and the Environment

by David Finch - Historian

hrills are fun, exciting and addicting. In Canada, we fell in love with petroleum and the new prosperity it brought after World War II. Soon we all had cars, shopped in malls, took Sunday afternoon drives and built our lives around the automobile.

Thrills also bring spills. At first, Canadians turned a blind eye to the pollution that accompanied the oil industry. We also ignored the waste from other industrial activity too. Fishing, agriculture, timbering, ranching, mining and every other industrial activity created problems for the environment.

But by the early 1970s, many Canadians were beginning to ask tough questions? Pollution was everywhere. When it showed up in our backyards, we were not amused. Many people quickly blamed the oilpatch for the problems.

Was that fair? Probably not. The oil and gas industry certainly has skeletons in its closet. Improper disposal of waste was common for decades. Pipelines destroyed farmers' land. Gas plants dumped hydrogen sulphide into the atmosphere to mix with clean air. At the time, these actions were legal and socially acceptable ways of doing business.

By the early 1970s, the attitudes of Canadians had changed. Until then, we had expected economic growth to flow from the exploitation of new natural resources. But when we saw the disastrous effects of industrial development, we changed our priorities almost overnight. Pollution became a sin and the petroleum industry was the most visible villain.

Attitudes also changed as a result of many other complex forces. Petroleum has always been just one part of our industrial infrastructure. In the thrilling early years, it seemed like it would create well-paid jobs for many, wealth for all, and raise the standard of living indefinitely. When the OPEC crisis of 1973 showed that petroleum was just another commodity, over which politicians and companies fought viciously, the thrill turned into a chill. Had we fallen in love with a gangster instead of a sugardaddy?

In fact, petroleum is neither. However, the oilpatch did little to discourage the public opinion of it as a magnanimous, wealthy, benefactor in the boom times. When (continued on page 4)

# September Luncheon

by Bill McLellan

he partnership between the Geological Survey of Canada and the Canadian petroleum industry began long before the discovery of oil in Western Canada at Leduc in 1947 or the first significant gas discovery at Bow Island in 1908.

It began decades earlier with the pioneering explorations of the intrepid Survey geologists and their field party assistants, many of whom went on to illustrious careers in the burgeoning petroleum industry. As exploration for oil and gas in Canada took the industry beyond the plains of Western Canada into the Rocky Mountain foothills, the mainland Northwest Territories and the Yukon, then the Arctic Islands and into the marine areas off Canada's eastern, western and northern coasts, the geoscientists of the Survey led the way - on foot, snowshoe, or horseback; by truck, canoe, ship, aircraft, or satellite.

Today, the partnership between the petroleum industry and the Survey is personified in the Geological Survey's Institute of Sedimentary and Petroleum Geology here in Calgary. All in all, the partnership has been a very fruitful one, with many major scientific, economic, and social accomplishments.

# The Geological Survey of Canada and the petroleum industry a partnership of discovery

12 Noon, Friday, September 25th Palliser Hotel, R.S.V.P. to Krista Sippola, 269-6721 by noon, Wednesday, September 23 \$19 (members); \$21, non-members

## **Executive** comment

Following is the text of PHS president Bill McLellan's speech to the society's Annual General Meeting, held on March 31st.

ast year, 1991, the sixth full year of The Petroleum History Society's existence, was once again a very successful and productive one, as we continue to grow and promote activities that increase awareness in the history of the petroleum industry in Canada.

Even in these economically troubled times, membership in the Society continued to grow significantly. Although the number of individual memberships grew only by a modest 8%, corporate memberships jumped over 30% - the result of an aggressive corporate membership drive last spring. This increase underscores the belief that the Society's objectives of collecting, conserving and disseminating information on the history of this industry, are gaining broader public support.

During the year, the Society continued the popular luncheon guest speaker program, attracting such notable speakers as Roland Priddle, Chairman of the Notional Energy Board. These luncheons continue to serve as an excellent introduction to petroleum industry history for new members.

Over 300 copies of the Society newsletter, Archives, are distributed to the membership, the Board of the Canadian Petroleum Association, and the media.

The Society is making progress with the six significant projects that were underway when 1991 started:

- the Oral History Project through the Petroleum Historical Records Project Society,
- the sale of our commemorative lapel pin sets,
- the establishment of a detailed Publications Policy and Guidelines for Authors,
- the establishment of a graduate scholarship at the University of Calgary,
- the CKUA Radio/Access Network radio series, and
- the Turner Valley Gas Plant Interpretive Centre, also known as the Hell's Half Acre Project.

The Petroleum Historical Records Project Society, formed of representatives from our Society and the Canadian Petroleum Association, has almost completed preparing its submission materials to Revenue Canada with its application for registration as a charitable agency for the purpose of fundraising. It is now hoped that fundraising and other activities relevant to the Oral History Project can begin later this year.

The Petroleum History Society Scholarship, for qualified full-time graduate students at the University of Calgary registered in a master's or doctoral programme, will be available for the first time this year. The Society plans to add additional funds until the endowment fund reaches \$20,000, generating a \$1 000 annual scholarship in

perpetuity. Donations to the Scholarship from individual and corporate members are welcome and will assist us in attaining this goal sooner.

All 26 half-hour episodes are now complete of the highly successful CKUA Radio series "Roughnecks, Wildcats and Doodlebugs" - a popular history of the oil patch and petroleum industry in Alberta. The series was written and produced by Don Hill, a freelance broadcaster.

The first twelve episodes are available as an attractively packaged set, for your personal archives or for gifts to someone interested in petroleum industry history. The sets also contain a print, suitable for framing, by Alberta artist Robert Guest.

The President of the Society continues to sit on the Minister of Culture and Multiculturalism's Turner Valley Gas Plant Advisory Board. A detailed development strategy for the gas plant site has been developed and fundraising has commenced. The Petroleum History Society has proposed that the Hell's Half Acre Interpretive Centre include a Centre for Petroleum Industry History, one of this Society's longstanding objectives.

This Centre would serve the following purposes.

- The manager of the proposed centre would be responsible for providing authoritative documentation and interpretation of artifacts maintained at Hell's Half Acre.
- The Centre would promote research and study into petroleum industry history by:
- establishing and maintaining contacts with professional and amateur historians and with old-timers,
  - training tour guides and making presentations,
  - maintaining an information centre,
  - publishing relevant papers and articles,
- obtaining grants and other funding to undertake research projects, and
- supporting university students specializing in Canadian petroleum industry history through summer employment and participation in research projects.

During 1991, the Board of Directors of your Society prepared an extensive Public Relations Plan and initiated a 4-point program to provide information about the industry to the public and to sell the Society to interested individuals, thereby increasing membership. Monies were budgeted for these projects and volunteer leaders found. One project, the preparation of a historical calender was subsequently deferred to this year.

The three projects actively pursued this past year are:

 To initiate a conference on petroleum industry history, preferably in association with other heritage societies. We were extremely fortunate here in being able

(Continued on page 4)

#### PETRO TRIVIA

### "Firsts"

Miscellany by Norman Hanley-Edgington

y 1812, a Mr. Parsons was skimming oil from the surface of Parson's Pond, Newfoundland, to be used as a treatment for rheumatism.

As early as 1820, it was reported that children in Lake Ainslie, Nova Scotia, amused themselves by driving stakes into the ground, withdrawing them, then igniting the escaping natural gas.

In 1829, well drillers (searching for salt) in Kentucky struck a pool of oil which overflowed into the Cumberland River. The slick caught fire and for 50 miles the stream was aflame. After the fire burned itself out, the oil from the well was bottled and sold as "American Medical Oil".

In 1851, Charles N. Tripp hand-dug the first oil well in North American at Oil Springs, Ontario. The depth of the "well" was 29 feet.

Carriage-maker James Miller Williams (with partner Charles N. Tripp) dug the first "intentional" oil well in Canada at Enniskillen Township, southwestern Ontario, in 1857 (some say 1858). Williams hit oil at a depth of 49 feet. Two years later, Williams completed a drilled well - arguably the first drilled well in North American.

"Colonel" Edwin Drake drilled the first American well at Titusville, Pennsylvania in 1859. Drake's well reached a depth of 70 feet before hitting oil. The first American natural gas well was drilled by gunsmith Aaron Hart, in 1821 - he hit gas at a depth of 17 feet.

Crude oil was initially pumped at the wellhead into barrels - typically 35 Imperial or 41 US gallons - which were transported by horse-drawn wagon to refineries. The first petroleum pipelines, in reality wooden conduits, were constructed by refiners in the 1860s to beat the teamsters' monopoly on transportation by barrel.

(Continued from page 1) The first modern energy pipeline in Canada is believed to have been a 15-mile, cast-iron pipe, built to carry gas to Trois-Rivieres, Quebec, in 1853. The Chinese are said to have transported natural gas by bamboo pipelines 3,000 years ago.

Nova Scotian Abraham Gesner developed the technique for producing lamp oil from coal and bitumen. He obtained the patent on kerosene and opened his first plant in New York in 1854.

After several attempts, Samuel Van Syckel constructed the first successful oil pipeline from Pithole Creek to Miller's Farm, Pennsylvania, in 1865. The two-inch diameter, five mile-long, cast-iron pipeline was said to have put 300 delivery wagons out of work. Angry team-

sters ripped up the line in protest, but within a year, oil wagons had practically disappeared.

The world's first oil refinery - James Young's Paraffin Light and Mineral Oil Company - was incorporated in Glasgow, Scotland, in 1866. Young patented the process for converting oil from shale into lighting fuel in 1851.

Alberta's first natural gas discovery occurred at Langevin Siding near Medicine Hat. In December 1883, a Canadian Pacific crew drilling for water encountered natural gas instead.

The first producing gas well in Alberta was drilled in the fall of 1884, in what is now known as the Milk River formation. Gas from the discovery well was used, instead of coal, to fire the boiler of the cable-tool drilling engine.

Canada first exported natural gas in 1891 from the Bertie-Humberstone field in Welland County to Buffalo, New York,

Henry Ford built his first car in 1896. Canada's first automobile was introduced in 1898.

Offshore oil was first produced from a pier located in the waters at Summerland, California (near Santa Barbara) in 1897. Production did not exceed two barrels per day. Forty years later Kerr-McGee, drilling 10-1/2 miles off the coast of Louisiana, struck oil - the first offshore discovery.

The first recorded offshore well in Canada was spudded in August, 1943 at Hillsborough Bay, PEI, by The Island Development Company. The well, on a man-made island five miles off the Prince Edward Island coat, was drilled in 21 feet of water and failed to show any oil or gas. In 1966, PanAmerican/Imperial drilled two offshore wells on the Grand Banks of Newfoundland, both dry.

In 1901, John Lineham of Okotoks, Alberta organized the Rocky Mountain Drilling Company and in 1902 drilled the first exploration well in Alberta - in what is now Waterton Lakes National park.

The first commercial gas field in western Canada was the Medicine Hat field drilled in 1901.

The first drive-in gasoline station opened in St. Louis, Missouri, in 1907. Canada's first gas station was built by Imperial Oil in Vancouver in 1908.

The first successful gas well in New Brunswick came in at Stoney creek near Moncton in 1909. The field was still supplying customers with gas in 1984.

In 1914, W.S. Herron and a group of associates Irilled the first shallow discovery well in Turner Valley. (Continued on page 4)

#### New Members

#### "Firsts" (Continued from page 3)

Named Dingman No. 1 after one of the partners, the well produced gas pure enough to be burned in automobiles without being refined.

The first oil well in Canada's north was drilled at Norman Wells in 1920 by Imperial Oil Limited. The discovery well was located by Dr. T.A. Link and penetrated the first reservoir in North America to be recognized and described as a "reef". O.D. Boggs, geologist for Imperial at the time the well was drilled, described the producing zone, in his Canol Project Report, as a "Coral Reef Limestone Series".

The first major, accessible oil discovery in Alberta was made in 1932 at Turner Valley southwest of Calgary.

Until February 13, 1947, when oil was discovered at Leduc, Canada had to import almost all of its required petroleum.

The first Canadian-made drilling bits were manufactured by Security Engineering Canada, Ltd. in July 1962.

In 1967, the Great Canadian Oil Sands project became the first oil sands mining operation in the Athabasca region.

Canada's first horizontal well was completed in 1978.

#### Executive (Continued from page 2)

to team our effort with those of the Geological Survey of Canada which is celebrating its 150th anniversary this year. We provided three speakers to their Oil and Gas Forum in March and are planning further joint activities for later this year.

- 2. To prepare a new informational pamphlet. This has been very successfully completed.
- To negotiate with other organizations to include our pamphlet with their mailings. This project is underway.

From the foregoing it is obvious that your Society has been very busy and will continue to be increasingly active. We have every indication that 1992 will be at least as successful as the year just past.

This year, the Society has begun two new projects:

- David Campion and Sandra Shields are undertaking, with our assistance, to produce "The Oil and Gas Industry -A Portrait" which will be an exhibition of photographs and text providing an accessible, human look at what often appears to be a cold and technical industry, and
- The publication of a book tentatively titled "The Great Oil Age The Petroleum Industry in Canada". The Canadian Petroleum Association has assigned the copyright to the original manuscript and the rights to this project to our Society and an editorial board made up of David Finch, Peter McKenzie-Brown and Herald writer, Gordon Jaremko, has been established.

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Thrills and Spills (Continued from page 1)

hard times hit, Canadians naturally felt betrayed by an industry that apparently turned on the public, "dehired" many of us, hiked the price of gasoline and failed to thrill us with a booming economy.

How should the industry react? It should remember Canadians have always been emotional about petroleum. Ecstatic when you create wealth, angry when you lay us off. Know your history. Admit that you made mistakes in the past, then show that you learned from them. Even though Canadians blame you for much of the pollution in our society, you can prove you are taking much better care of the environment than you did only a few decades ago.

Most of all, you must know your own story. The law requires that you keep financial records to prove your fiscal viability. Your history is just as important if you want to keep your corporate decisions and priorities in perspective.

Years ago, the oilpatch polluted the environment shamelessly and Canadians did not care. But as times changed, so did values. Now that industry is taking better care of the environment, it is your job to tell your story.

The petroleum industry has always been just one part of the industrial economy of Canada. It mirrored contemporary values in 1900, 1950 and 1990. If it understands that Canadians have always reacted emotionally to its booms and busts, then the oilpatch can proudly tell its story, accept its mistakes and brag about the positive contributions it has made to Canada.

#### **New Board Members**

J.W. Porter graduated from the University of Saskatchewan in geology in 1946 and has spent 40 years in the oil industry, the last 38 years with Canadian Superior Oil Limited. He hasas been chairman of the Archives and History Committee of the Canadian Society of Petroleum Geologist since 1975. John wrote A Backward Glance - a history of Canadian Superior Oil Limited, which was published in 1985.

Clint Tippett works for Shell Canada Limited, and has been involved in exploration in the Foothills, Mackenzie Delta and northern Alberta/B.C. A short stint in Shell's Corporate Strategies Department rounds out Clint's oil patch experience. He has a long standing interest in petroleum industry history and has provided the historical anniversaries which have been featured in the calendar of the Canadian Society of Petroleum Geologists.

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.

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

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