



## PETROLEUM HISTORY SOCIETY

# ARCHIVES

Newsletter of the Petroleum History Society

January, 1991 Volume VI, Number 1

### Books

## The making of the modern world

How the story of oil defined much of this century's history

Daniel Yergin, *The prize: The epic quest for oil, money and power* (New York, Simon & Shuster, 1991) 877 pages.

**T**he prize is a remarkable book: fascinating, absorbing, authoritative. If Daniel Yergin sometimes unnecessarily gives his story a U.S. slant, his bias is a simple reminder of a universal truth. In history, excellence always falls short of perfection.

A respected petroleum analyst and economist, with this book Yergin has become the author of the definitive history of the world's petroleum industry. He begins

(Continued, p. 2)

### Luncheons

## Making history: The Syncrude story

**"T**he Syncrude Story: *In Our Own Words*" is the story of Syncrude, from the original vision of its first president, Frank Spragins to its present day position as the producer of approximately 10 per cent of Canada's oil supply. It is a personal history gleaned from over 10,000 photographs and 300 interviews involving past and present employees, owners and contractors.

Syncrude's success in negotiating with provincial and federal governments and the oil industry might well serve as a blueprint for launching present-day megaprojects.

Barbara Bellemare, Supervisor of Communications, is an accredited business communicator who has worked for Syncrude for more than five years. Prior to coming to Syncrude she was employed by the insurance industry, a national accounting organization and the Federal Government.

Copies of the book will be available (\$25 per copy).

## Luncheon Presentation:

## Syncrude by Barbara Bellemare

**Time:** 12 noon  
**Date:** Wednesday, January 30  
**Place:** Palliser Hotel  
**Cost:** \$18 for members;  
\$20 for non-members  
**RSVP:** Claire Bane  
269-6721 by noon, Jan. 29th

(See write up on Ms. Bellemare and her topic, this page.)

his tale in the U.S. in 1853, when an American named George Bissell conceived the idea that crude - then known as rock oil, to distinguish it from vegetable oils and animal fats - could provide a good source of light. Bissell interested a group of U.S. investors to fund a well in Pennsylvania, drilled in 1859 by "Colonel" Edwin Drake. That well kindled a booming kerosene business based upon kerosene lamps which revolutionized lighting.

This Yankee history gives short shrift to events in Ontario which slightly preceded American efforts. Yergin would probably argue that his interpretation is reasonable even though it is not chronologically precise. That is because Pennsylvania quickly became the world's predominate supplier of oil. But he does not even acknowledge that, until the mid 1870s, only Ontario seriously offset that state's virtual monopoly on world production.

When the light bulb began to put the kerosene lamp out of business, technology provided the internal combustion engine to pick up the slack. The result? Throughout the 20th century oil has been a strategic commodity of profound importance. For much of the last hundred years, oil has been the world's biggest business. Energy (especially oil) has become the lifeblood of the world's industrial economies. And it has profoundly influenced almost every society. Among the wealth of information with which Yergin peppers every page is an odd and amusing statistic. In the 1950s, men proposed 40 per cent of all U.S. marriages in automobiles.

Yergin's story begins with the tale of how rock oil revolutionized lighting. But it gradually shifts to one in which the world's military powers are willing to go to war over control of prime oil fields. This makes fascinating reading. The author provides a detailed tapestry of economic and geopolitical events focused upon oil. The fabric stretches through the rise and fall of the Standard Oil Trust to the rise and fall of OPEC.

Yergin's chronicles are almost breathtaking in the way they underscore the role oil has played in twentieth-century history. Consider, for example, the activities of the two oil-poor aggressors in World War II. Caucasus oil was the key issue in Hitler's ill-considered invasion of Russia. Similarly, Japan attacked Pearl Harbor to protect its flank as it went after East Indies production. In the last instance, U.S. dominance in oil production gave the Allies the margin of victory.

The latter sections of Yergin's work focus on the Middle East, which became the geopolitical centre of the petroleum industry after World War II. In the last 40 years that region has kindled one crisis after another. The nationalization of Anglo-Iranian Oil in 1951 was the first. In 1956, the Suez Crisis followed. The Six Day War in 1967 led to the closing of the Suez Canal. The Yom Kippur War and the Arab Oil Embargo came in 1973. In 1979-1981, the Iranian Revolution and its aftermath wrought panic in global oil markets. And the Gulf Crisis of 1990-1991 brought the world's wrath down upon a single nation - an

event without precedent.

Impressively, when Yergin writes about this incident he doesn't know its outcome, but still doesn't date his text. He uses the confrontation between Iraq and the world - the first international crisis after the Cold War - to illustrate how oil continues to play a pivotal role in global politics.

In fact, Yergin supports three major themes in this book. The first is that oil led the rise and development of capitalism and modern business in the 20th century. "Oil is the world's biggest and most pervasive business," he says. "No other business so starkly and extremely defines the meaning of risk and reward - and the profound impact of chance and fate."

His second theme is that oil has become "a commodity intimately intertwined with national strategies and global politics and power." Nations have fought over oil. And in wars with other objects in mind - especially World War II, - the control of oil has meant victory or defeat.

His third major theme is that petroleum (including natural gas) has transformed human society. Ours has become "Hydrocarbon Society," Yergin claims, and we have become "Hydrocarbon Man". Especially through the automobile, petroleum has shaped our lives and the cities and towns we live in. It provides the transportation and heating fuels which enable huge cities to exist. It fuels factories. It fertilizes agriculture and enables farm machinery to operate. It provides plastics and chemicals which "are the bricks and mortar of contemporary civilization, a civilization that would collapse if the world's oil wells suddenly went dry."

For the sweep of the story it tells, for the lucidity it brings to vast and complex issues, for the thrall in which the author holds his readers, **The prize** is an exceptional and outstanding book.

*Peter McKenzie-Brown*

## 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.*

## Outdoor oilfield equipment museum

**A**t the last luncheon of the 1989-1990 series, the Petroleum History Society brought Stan Kondratiuk from Edmonton to talk about 130 years of Canadian oil history. Stan is the chairman of the Outdoor Oilfield Museum, which was established in 1979 by the Edmonton Oilfield Technical Society. The museum was officially opened in 1981, and displays artifacts from the petroleum industry dating from the 1860s to the 1960s.

The museum covers most sectors of the oil industry: seismic and exploration, drilling, production, well completion, oilfield transportation and pipelines. During his fascinating talk, Stan showed slides of some of the equipment exhibited in the park-like setting. He gave credit to many individuals and companies who have donated equipment or funds to restore and install the pieces. One of the most ambitious projects involved the restoration of a cable tool rig, which had been abandoned in 1919 at a drilling site located at the junction of the House and Athabasca rivers. In the first and only annual report of Edmonton-based Northern Production Co. Ltd., there is a photograph of the rig and a view to the south taken from the top of the rig. Using this information, Stan arranged for a helicopter to manoeuvre until the view matched that in the photograph. The rig was found about 60 metres away! Although much of the wood from the rig was rotten and needed to be replaced, the metal parts were intact. A full reconstruction of this cable tool rig, which was originally built in Erie, Pennsylvania, is now a featured display.

A stroll through the outdoor museum shows its wide range of equipment. A few of the other displays include an oilfield fire truck used in the 1950s; a replica of a wooden pump jack from the turn of the century; a Turner Valley casing head used during the early 1900s; a spring pole rig, the forerunner of the cable tool rig, that could be used to depths of 140 metres; and a Buckeye 407 ditcher that is typical of those built in the early 1930s to bury flowlines.

In 1988-1989, the Society added a large pavilion, in part to accommodate a library and smaller artifacts and historical exhibits reflecting the oil industry in Canada. The Society is still looking for any equipment, books, old oilfield equipment catalogues and photographs that will help to illustrate and preserve this important aspect of Canadian history at the museum.

## President's report

**W**ith this the first newsletter of 1991, it is appropriate that we reflect for a moment on the events of the past year and the plans for the next one.

More than 300 copies of **Archives** are being distributed to the general membership, the Canadian Petroleum Association Board and the media. Also, the noon luncheon meetings have been quite successful. The Society enjoyed the presentations of such notables as Earl Miller, Stan Kondratiuk and Roy Lindseth. Former Oilweek Editor Frank Dabbs was the guest speaker at last year's Annual General Meeting in March.

Membership in the Society continues to grow. At year-end, there were 33 Institutional Members (8 of these are Sustaining) and 114 Individual Members (35 of these are Sustaining).

The Society was active in several major projects over the past year: advising in the Interpretive Centre at Turner Valley project; launching the Oral History Project; underwriting the CKUA Radio series, **Roughnecks, Wildcats and Doodlebugs**; establishing standards for publishing by the Society and endorsing the publications of others; and continued sales of our commemorative lapel pin sets.

A goal set last year was to increase public awareness in our Society through an aggressive membership drive. A small pilot drive was undertaken in the fall with surprising success. The full scale drive will commence in January of this year.

Projects which will be undertaken this year will include establishing a scholarship fund for petroleum industry history research at the University of Calgary; increasing public awareness in our Society through special social events and the media; and launching a campaign to identify and, where appropriate, collect oil industry memorabilia, including corporate history texts, brochures, photographs and equipment.

In retrospect, 1990 was a busy and significant year for The Petroleum History Society. With the activities planned for 1991, this year should even be better.

*W.R.S. McLellan*

### New Members

#### Institutional

PanCanadian Petroleum Limited

#### Individual

Donald McMorland

## History goes on radio

**T**he radio series, **ROUGHNECKS, WILDCATS & DOODLEBUGS**, underwritten by the Petroleum History Society and produced by the ACCESS NETWORK/CKUA Radio, will air commencing in January 1991. The producer and host for the series is the well known Alberta broadcaster, Don Hill.

The series will be broadcast on CKUA in Alberta (93.7 on FM) on Tuesdays at 2:00 p.m. beginning January 15th. If you miss the programme on the Tuesday, it will be rebroadcast on Saturdays at 7:00 p.m.

We know you will find the programme series interesting, so be sure to make it part of your radio listening.

## Society acknowledges corporate members

**T**he Board of Directors of the Petroleum History Society has decided to institute a new program. At each of our noon luncheon meetings, prior to hearing from our invited guest speaker, we will be making a formal acknowledgement of the support given our Society by our corporate members. We will be inviting a representative from each company, one at a time, to attend a luncheon meeting at our expense. The representative will be introduced to the audience and the Society President will say a few words of acknowledgement. Subsequently, a short article acknowledging each corporate member's contribution will appear in the next Society newsletter.

Although the Canadian Petroleum Association is technically not a corporate member, its steadfast support (especially during our infancy) has been invaluable. Consequently, to start the new program, the Society will be honouring the CPA's efforts on our behalf at our January 30th luncheon.

## Forty-four years later

*To commemorate the 44th Anniversary of the discovery of Devonian oil at Imperial Leduc No. 1, February 13, 1947, Aubrey Kerr submits another excerpt from his forthcoming book, LEDUC. This episode describes the events leading up to that memorable day.*

**H**ow can one visualize the primitive conditions of those days ... narrow rutted dirt roads, party phone lines, the cars with blankets over their hoods, and above all, the "no oil" mindset prevalent in the faltering industry of 1946? The Alberta Society of Petroleum Geologists boasted less than 100 members, many of them not even earth scientists ... Canada was considered a foreign assignment ... The only oilfield supply stores were in Okotoks.

No wonder Walker Taylor, Imperial Oil's Western Producing Manager was cautious that frosty February afternoon, "it is much too early in the life of the well to make any statements of its production abilities". Even though that light gravity crude was spewing out of the flare line, it was difficult to believe that the drought had ended and a whole new era was beginning, but how many gathered for the occasion realized what it would ultimately mean?

Sometime in late September 1946, Jim Ziegler, Heiland's seismic party chief was confirming a vague anomaly uncovered earlier in the year by a Carter Crew. Imperial Oil's Division Geophysicist, Ray Walters called him in to 606 - 2nd Street S.W. to meet with Jack Webb, Exploration Manager. They made the right recommendations for the wrong reasons, because no one dreamed what this hickey would really mean. As one Carter senior geologist was reported to have said, "who ever heard of finding oil in a coral reef?"

Don Hunter, Edmonton oil executive remembers when he was just a school boy driving over from Provost to a spot west of Leduc with his dad in October. They were to meet with Walt Dingle, Imperial's surveyor and Mike Turta the farmer on whose land the hole would be located (5-22-50-26W4M). Vern had earned his title of "Dry Hole" because he was just finishing up his umpteenth abandonment at Provost. "We knew darn well if we got up right near Edmonton we'd never find anything". It was for this reason that



Vern agreed with Mike Turta that the access road should merely go through the farm yard making it easier to move the rig out after abandoning this 7000 ft strat test.

A standard derrick (such as the one now gracing the Devon skyline and erected with Don's leadership in the summer of 1990) was brought in and bolted girt by girt.

Winter had started to set in with a vengeance delaying rig-up. The stand pipe froze up but fortunately live steam from the boiler house provided "19 1/2 lb heat". The well spudded November 20th. The Cameron single ram mechanical blow-out preventer which took three men to wheel open and shut (no hydraulics!) was described by Fin Lineham, one of the drillers... "There was only one set of rams with two bleed off lines, one running out to the sump and the other over to the boiler house. The BOP would sand up and had to be cleaned out every once in a while. There were no ERCB regulations regarding installation let alone testing schedules.

One of the main targets was the Lower Cretaceous sand. The location was believed by Lewis G. Weeks, Jersey's guru, to be along a hinge line, the fancied locus of thick sand deposition. Early in January 1947 the well drill stem tested 4 mmcf/d of wet gas. The Weeks faction must have been jubilant. It was at this time (through Weeks' influence?) a down dip step-out was planned. The results from that follow-up well (Imperial Leduc No. 2) would far over-shadow anything that would happen at No. 1.

Drilling resumed and it wasn't long until the anhydrite and red beds (Darling Silt later termed Graminia) showed up. George Tosh, one of the drillers, recalls McClintock one of the well-sitters, a veteran of Saskatchewan lithologic columns throwing his hands up. "We hit these red beds. And ... he came out and looked ... 'God, another Saskatchewan, yep, it won't be any good'". ... George McClintock had mistaken this zone for deep Devonian in Saskatchewan below which there would be no hope.

But despair quickly changed to joy when Vern described what happened next ... "I can remember that night. He (George) was looking at the samples. 'Gosh it's good porosity, looks like oil staining. It has a drilling break ... let's core'... Well I sure agreed with that ... I was pretty disappointed, there was no oil bleeding out of the core but there was good porosity" ... The D-2 test confirmed the importance of this brand new zone when oil almost flowed to the surface... Vern remembers further ... "Just to keep on coring and

testing and so we would take 20 ft of core and test again ... everybody started to get scared." "We had maybe a 100 ft opened up, and (it) would make a good well."

Steve Cosburn, another of the well-site geologists, gives his version of the discovery ... "Late one cold afternoon at 5029 ft, drilling speeded up and I gave orders to circulate till I had a look at the bit cuttings causing the change ... showed porous dolomite with clean yellowish fresh oil in the pores ... as I dashed into Leduc looking for the tester, I met Jim Tod, our mud man, sitting in the writing room of the Leduc Hotel. I told him we were going to test. Jim looked at me and said: 'For Christ sake Cosburn, you are another Sproule' (Cam Sproule, Saskatchewan Chief Geologist had a predilection for drill-stem testing.) I think I made a quick exit although I always like and respect Jim and figured he was one of key men in the discovery."

"At a total depth of 5066 ft it was decided to complete barefoot, that is, hang the seven-inch at top of the D-2 (5029 ft). This would obviate the need to perforate or acidize. Used (not new) casing, as stipulated on the license application, was run the night of February the 6th. It was cemented by Dowell. Bill Wedderburn (hired November 1946, who went on to become Manager at Nisku, now retired) recalls that night, "Nearly everything froze up ... to make matters worse, the cementing head had to be flown in by Roy Graves (Manager). The load was far too heavy for the light plane and the ski sank in the deep snow; we had to drag the head over to the well-site on a sled."

Conditions were now perfect for Imperial to do a P.R. exercise and, with this in mind, Vern Hunter was asked to pick the day to officially bring in the well. On the designated date, chosen by him after consultation with Walker Taylor (Feb. 13, 1947), Hunter quipped, "It's always a mistake around rigs to say you are going to do anything at a particular given time - something always happens."

Rousted out of bed in the middle of the night (this is not quite right, because another version said he was eating bacon and eggs) Hunter got word that the shaft of the swabbing unit had broken. This is not surprising because there never had been any occasion to use it (all dry holes). Maurice Paulson, engineer was out there trying to repair the unit.

Lew Minkler (then truck driver, now retired from B-J) recalls a mishap that also delayed the swabbing.

"... Alex Baillie (deceased) and I went to load

up the spare sand line over at No. 2 well and brought it over to No. 1, ... and I had hitched up in the approved manner - to come up over the roll - and Alex, 'Suck! ... it was an old spool .. and got almost over the roll when one side of the spool fell off. You know what happens to sand lines when they're ... 'cat's-assed'. So we had to lay the sand line and spool on its side on the rotary table .. just turn the table slowly and haul that line up over the crown, spool it on to the draw works drum (no sandline drum on Vern's rig). It took quite a while."

George Tosh, driller at No. 1, in a 1984 interview, describes the big day ... "We got everything all ready to go ... they invited a bunch of dignitaries out ... they had it all set up to open the valve. But things didn't go quite as good as we planned on. We had just a half broken down swabbing unit stuck in the corner of the rig. We just got nicely started to swab and the swabbing unit broke down. So we had to take the drilling line, lay the blocks down and take the drilling line off from the draw works and re-spool it on a spool and take the sand line off the swabbing outfit and spool it on the draw works drum to swab with. So everybody was standing around. Every once in a while Mounted Police or somebody would run up, "When's the well coming in?"

By noon a crowd had gathered. By four

o'clock the less hardy had shivered their way back to town, but the faithful saw a beautiful ring of black smoke go floating skyward - a good omen of the oil industry in Western Canada. Vern Taylor, the Operations Manager for Western Producing Division present at the ceremony ... "I distinctly remember we got 41 barrels the first hour."

Vern Hunter knew Leduc would "come in". Headquarters was jubilant ("the guys in overalls don't get too excited"). "Nobody realized the significance." Hunter was pooped out, skipped the celebration party at Edmonton and went home to bed, having played midwife at the birth of the modern petroleum industry. However, he saw to it that the hands at the rig had enough booze for a party.

Hunter philosophized in his 1983 interview with the author: "As a matter of fact, I would say that the biggest problem we had when we hit Leduc No. 1 was that we had become experts at abandoning dry holes, but to bring in a producing well we had to start thinking back to what we did in Turner Valley under different conditions. Some of the drilling crew were actually disappointed when we hit Leduc No. 1 because it meant they were going to have to stay in one place. A lot of them were young, and they'd get tired of the girls in one town so they would want to move on and meet some new ones."

## Membership renewal notice

**H**appy New Year! It's time once again to renew your membership in The Petroleum History Society, if you have not already done so. Each year we build upon the successes of the preceding year and 1991 will be no exception. Your Society continues to work towards renewing the Oral History Project, is developing a set of standards to govern future Society publications, and continues its program of noon luncheon meetings with guest speakers. Starting in January, we will be acknowledging one of our Corporate Members at each luncheon meeting. As well, beginning January 15th, CKUA will be broadcasting the first in the series of radio programmes - ROUGHNECKS, WILDCATS AND DOODLEBUGS - underwritten by your Society.

Please make use of the Application for Membership/Renewal form included in this issue of *Archives* and renew **TODAY**. We are a small but increasingly important society, and every member is critical to our success.

**PLEASE RENEW NOW!**

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

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