



**PETROLEUM
HISTORY
SOCIETY**

ARCHIVES

Newsletter of the Petroleum History Society

November 2002; Volume XIII, Number 5

LUNCH AND LEARN MEETING

Noon, Wednesday, November 13, 2002 at the Fairmont Palliser Hotel,
Canadian Pacific Room (Mezzanine Level)

Speaker: David Finch, Author

**“AN EAR ON HISTORY”:
THE PETROLEUM INDUSTRY ORAL HISTORY PROJECT**

Who really listens anymore? The PIOHP does and as a result the story of the Canadian oil and gas industry is being recorded, transcribed and used in numerous ways. The brainchild of P.H.S. Director Aubrey Kerr, the PIOHP continues to collect the tales of the oilpatch. Project manager David Finch will give us an update on the interviews that have been done over the last two years and some of the stories and insights that have been gained from them. This is a core project of our Society!

David Finch holds an M.A. in post-Confederation history from the University of Calgary and has worked for more than 20 years as a consultant, writing the history of the Canadian West. He is the author of more than a dozen books, including his recently released “Field Notes: A History of the Canadian Society of Petroleum Geologists”.

TIME: Noon (receipts at the door), November 13, 2002.

PLACE: Fairmont Palliser Hotel (133 - 9th Avenue S.E.) – Canadian Pacific Room
(check marquee on arrival).

COST: \$25 Members and \$30 Guests (most welcomed)

R.S.V.P. Clint Tippett, 691-4274 by noon Tuesday, November 12

Additionally In This Issue ...

Calendar of Events and Interesting Historical Items	2
Leroy Field Talk	5
P.H.S. at the C.S.P.G.	6

if you missed the last luncheon talk...

THE EVOLUTION OF HORIZONTAL DRILLING

Wednesday, September 18, 2002
by Leroy Field, Drilling Engineer

...enjoy a condensed version of Leroy's presentation in this issue of Archives

THE PETROLEUM HISTORY SOCIETY

Calendar of Events and Interesting Historical Items

December Luncheon: Our last luncheon of 2002 will be held on Wednesday, December 11 at the Palliser Hotel. We are pleased to announce that addressing us at that time will be Stan Pearson who will discuss his career with Gulf including aspects of Pincher Creek, Stettler and the Mackenzie Delta.

Next Director's Meetings: November 20, 2002 at the Glenbow Museum and Archives.

Society E-Mail Address: All members with e-mail service who have not already done so, please send in your address to Micky Gulless, Past President, Membership Committee at her address "micky@fuzzylogic.ca".

Membership: Please consult your mailing label for the status of your membership. Renewal notices will be issued shortly. Thanks to Micky for her continuing hard work in maintaining our records!

P.H.S. Website Update: Website coordinator Micky Gulless is continually updating the Society website at <http://www.petroleumhistory.ca>. Tune in from time to time and see what new features and links have been highlighted!

Canadian Petroleum Hall of Fame Special: For the interest of our members, here is a bit of background on Eugene Coste who was recently inducted into the Hall following his nomination by our Society: *"The late Eugene Coste (1859-1940), born in Ontario at Amherstburg and educated as a mining engineer in France, stood out as one of the fathers of the Canadian natural gas industry and as a business pioneer in the early West. Coste prospected for the Geological Survey of Canada, drilled the nation's first commercial gas well in Ontario's Essex County in 1888, discovered the Bow Island Gas Field in southern Alberta in 1909, built a pipeline to Calgary and founded Canadian Western Natural Gas (now ATCO Gas)." (from the induction summary)*

The Bow Island Discovery: *"Spudded in 1908, Old Glory was the name of the discovery well which located the Bow Island Gas Field, the first major discovery in Alberta's early important commercial oil and gas exploration venture. Developing the field led to the first pipeline delivering natural gas to Alberta communities. Construction of a 16-inch pipeline from southwest of Medicine Hat to Calgary began on April 22, 1912, and was completed in only 86 days. A second leg reached Lethbridge on July 12, 1912. The Bow Island pin depicts the celebration in Calgary on July 17, 1912, when 12,000 Calgarians gathered to watch Mrs. Eugene Coste – wife of the man who drilled Old Glory and founded Canadian Western Natural Gas – light the inaugural flare with a roman candle."* (from the brochure accompanying the P.H.S. pin sets that can be purchased through Director Joyce Wright.

Symposium on the History of the Oil Industry (last notice): The Drake Well Foundation, Titusville, Pennsylvania, is sponsoring a symposium on “The History of the Oil Industry” in Shreveport, Louisiana on March 26 to 29, 2003. Full information about the meeting, as well as its talks and field trips can be found at their site <http://www.oilhistory.com>. Abstract deadline is December 1, 2002. Pre-registration cost is \$180 (U.S.), including sessions, guidebooks and field trips and all meals. **Note:** *This is the information that we received but I’m a bit suspicious of the last item. I suspect they mean that the lunches on the trip are included ... but follow up if you are interested!*

History of Geophysics: The History of Geology specialist group of the Geological Society, London, U.K., is holding a meeting on the History of Geophysics at the Geological Society, Burlington House, Piccadilly, London on March 12-13, 2003. For details contact Clint Tippett at 691-4274. We expect the Geophysical Society to be launching their study of the geologists any day now!

“Oil and Gas in Alberta before Leduc”: Author Frank Dabbs will be presenting a talk about Turner Valley and the early days of Alberta’s oil industry, based on his recently published book on Bill Herron, to a gathering of the Historical Society of Alberta at Fort Calgary Historic Park, Tuesday, November 26, 2002 at 7:30 p.m. Admission is free.

Petroleum History Profile in Calgary: In an attempt to gauge the degree to which petroleum history and those who played a role have a “public profile” in Calgary, we have recently begun compiling a list of locations and features that have a petroleum “flavour”. So far these include: the Eugene Coste Building at SAIT; the McMurray, Viking, Cardium and other geologically-named rooms at the Petroleum Club; the Alexander Lucas, Frank McMahon, Peter Bawden, Robert Brown, Jr., and Senator Lougheed Rooms at the Commerce Club; McMahon Stadium, Dome Tower, Home Tower and “The Field” Bar and Grill. Entries would exclude facilities associated with currently active companies, like Shell Centre. Please send us your suggestions. At some point this list could form the basis for a Petroleum History walking tour in the downtown area.

Petroleum History in the Media: It has recently been suggested that it would be fun (and educational) to look at how our industry’s past is portrayed in the movies, literature and television. Classics include John Wayne in “The War of the Wildcats” and the depiction of conflict between ranchers and oilmen in “Tulsa”. If expanded, this could encompass more current caricatures such as “The Beverly Hillbillies”, “Dallas”, “The Pelican Brief”, “On Deadly Ground” and “The World Is Not Enough”. Oil folks are almost inevitably portrayed as the bad guys – and it is likely that the cultural fallout from this is that petroleum history ends up being “tarred” as a result (a bad pun I admit). One has only to look at how few articles deal with our area of interest in journals such as “Alberta History” and “The Beaver” to appreciate the extent of this isolation. In fact we need look no farther than the difficulties that we have in awarding our University of Calgary petroleum history scholarship to see the meager attention being paid to this area of investigation by academia – at least in comparison to more “acceptable” industries like ranching.

Desk and Derrick Club: Member Helen Turgeon, who has long been active in the Desk and derrick, spoke to one of their luncheons about the Petroleum History Society. As a result several of their members attended Leroy Field’s recent luncheon talk and have since joined the P.H.S. Thanks to Helen for these efforts and welcome to our new Desk and Derrick members.

Volunteers needed!: The Petroleum History Society depends on its members to support its activities – whether by taking the initiative on a project, volunteering to staff a booth at a function or serving on the Board as a Director or member of the Executive. If you have an interest in getting more involved and helping out, we'd like to hear from you – so please call Clint Tippett at 691-4274 and let's make it happen.

Western Oil Museum(?): A news clipping from The Edmonton Journal dated May 8, 1967 contained the following information: *“City Oil Museum Will Show Basin – A model of the entire Western Canadian Sedimentary Basin may be one of the attractions of the proposed Western Oil Museum. This geological exhibit “could be shown in the form of a large natural display through which the public could walk to see the development of petroleum and natural gas from its origin through migration to its final home in the reservoir trap.” said Dr. D. L. Flock, recently elected president of the Western Oil Museum Foundation Limited.”* If any of our members knows what this was about and what might have become of this idea, please let us know. Sounds like a “pore” concept.

Digital Map Libraries: Several recent articles in “GIS World” contained information on historical map collections that likely include interesting petroleum history components:

The first deals with Texas and is excerpted from the November 1998 issue: *“From its Indian heritage and Spanish rule to the Alamo and the discovery of crude oil, Texas history is aptly remembered and illustrated at more than 267,000 historical and archaeological sites throughout the state. Additional literature can be found at museums, universities and government agencies. Such information took a long time to move to the “Digital Age”, but that’s exactly what’s happened. World Wide Web users can find valuable Texas information through Atlas, an online, GIS-based cultural resource and information database at <http://atlas.thc.state.tx.us/>. Developed by the Texas Historical Commission (THC) Department of Antiquities Protection (DAP), Atlas includes site maps, photographs and literature pulled from numerous state organizations.”*

The second is from the February 2002 issue and concerns the David Rumsey Historical Map Collection at <http://www.davidrumsey.com>. It is described as follows: *“Visualizing historical change by way of 19th- and 20th-century maps and modern aerial photos, satellite imagery and other raster-based data now is a freely accessible World Wide Web experience and part of the award-winning David Rumsey Historical Map Collection World Wide Web site. The site features more than 6500 high-resolution digital images from one of the largest private map collections in the United States.”*

Fun Items: Recent items spotted:

1. A memo in Shell's files dated April 1960 requesting that “reports of acid-limestone reaction rates be stated in “man-sized units” that would have more significance for use in the field – i.e. not grams per square cm per minute but rather gallons of 15% acid per foot of pay per minute.”
2. A newsletter entitled “Collectors Items” that turns out to be for creditors and bill collectors.
3. An A.A.P.G. Short Course entitled “Surgical Theatre Review of Exploration Plays”. Ouch!
4. A contest being run through Hart's E. and P. Magazine centering on the presence of a 19th century breech-loading cannon in the oilfields of Kansas in the 1920's or 1930's. Entrants were asked to guess what the cannon was being used for. Any ideas?

SUMMARY OF:
“THE EVOLUTION OF HORIZONTAL DRILLING”
A LUNCHEON TALK PRESENTED TO THE PETROLEUM HISTORY SOCIETY
SEPTEMBER 18, 2002
BY
LEROY FIELD, DRILLING ENGINEER

Mr. Leroy Field, a native Albertan, graduated from the University of Alberta in 1954 with a B.Sc. in Petroleum Engineering. During his career he has worked for a number of companies involved in the oil and gas business as jug hustler, roughneck, salesman, serviceman, engineer, onsite supervisor and other operating roles. He completed 25 years with Amoco in various capacities culminating in Drilling Manager. Since 1989 he has been providing engineering consulting services in drilling operations. He has been a leader in developing new technology and procedures in the drilling business and has been providing training in this discipline throughout his career. Leroy joined us for this luncheon to give us an overview of the evolution of horizontal drilling technology. This summary is not intended to be a comprehensive outline of the actual technologies that Leroy discussed but rather to highlight those points that are of historical interest.

Leroy began by pointing out the advantages of the “unified” Canadian oil and gas industry whose cohesive E. and P. activities and centralized service industry have allowed joint developments to proceed for everyone’s benefit – both in Canada and as exported worldwide. He also pointed out that it was somewhat ironic that much of the technology that ultimately allowed us to drill horizontally originated through efforts to drill straight hole! [As background, readers are asked to recall the stories that Garnet Edwards recounted to us about plugging back crooked hole with a mixture of “field stone” and knotted drilling cable!]

The six steps that allowed the industry to make horizontal drilling a routine operation were low solids drilling fluid, modified bottomhole assemblies (that allowed for both rigidity and intentional bending), continuous directional surveying, bottomhole motors, sophisticated computer applications for both trajectory planning and operations and, last but not least, experience. With regard to the last, Leroy pointed out that “good judgement comes from experience – but you get there by bad judgement!”

Advances have included increased recovery efficiency, higher rates, fewer wellsites (through pad drilling), lower production costs and continual technology advancements that have made this approach highly economical. Related technologies include multilaterals, coil tubing drilling, solid state bits (no internal rotating parts), underbalanced approaches, completion and workover technologies, computer applications, new equipment and, once again, experience.

Benchmarks have included:

- 1948** Knuckle joint drill pipe – apparently pioneered on a Madison Lime test near Del Bonita where three tries got the Northland driller out about ten feet!
- 1965** Drilling research efforts
- 1969** Low solids drilling
- 1970-1973** Solids removal (centrifuges, hydrocyclones)

1974-1977	Optimized drilling
1978-1981	Bending moments and bottomhole assemblies
1982-1984	Mud motors and measurement while drilling (MWD)
1985-1987	Computer applications (heavy oil and at Norman Wells)
1987-1990	Technology synergy
1991-1993	Experience and coil tubing drilling
1994-1996	Assimilation of results
1997-2001	Multilaterals and steam assisted gravity drainage (SAGD)
2002	Horizontal drilling is now seen as “conventional”

Thanks to Leroy for the presentation. Thanks also to Hugh Leiper for running the luncheon and to Joyce Wright for videotaping the talk so that your editor could write this without having been there!

The Petroleum History Society at the 75th Anniversary Convention of the Canadian Society of Petroleum Geologists



In May 2002 P.H.S. Director Joyce Wright (pictured shyly above) took on the challenge of organizing a presence for our Society at the C.S.P.G.'s Annual Convention being held at the Telus Convention Centre on June 3-5, 2002. A booth was provided to us by the CSPG (our thanks), partly in recognition of the role of the P.H.S. Oral History Project in supporting the writing of David Finch's book on the history of the C.S.P.G. Our table and booth featured a range of petroleum history publications, including an assortment of Aubrey Kerr's books. Joyce was present throughout the three days and was assisted by volunteers Neil Leeson, Debbie Knall, Wes Abel and Art Dixon. Other contributions of note were the donation of ten sets of his novels to the Society for sale by member Dick Shaw and the donation of a copy of "Torn in the USA" to each new member by Director Leeson. Thanks to all! Joyce and company signed up 14 new members (welcome!), sold a number of books and also sold some of our Society pins.