



**PETROLEUM
HISTORY
SOCIETY**

ARCHIVES

Newsletter of the Petroleum History Society

September 2005; Volume XVI, Number 5

P.H.S. Lunch and Learn Meeting – September 28, 2005

Speaker: **David Finch** (Author)

On:

**Hell's Half Acre (Turner Valley):
Early Days in the Great Alberta Oil Patch**

This presentation is sparked by David's recently released book. It is the story of the people who lived and worked in Turner Valley, western Canada's first commercial oil field. Beginning in 1914, the oil fields attracted thousands of workers – including many colourful characters – from across North America to the drilling rigs, processing plants and pipeline crews. David will bring to life these pioneering days that set the stage for Alberta's petroleum industry.

David Finch holds an M.A. in Canadian History from the University of Calgary where he studied the history of the Canadian petroleum industry. He is the author of 15 books about the Canadian West. He is the co-author of the Society's "The Great Oil Age" and received the Society's Lifetime Achievement Award in 1999. He currently works with Heritage House.

TIME: 12 noon, Wednesday, September 28, 2005.

PLACE: Fairmont Palliser Hotel (133 - 9th Avenue S.W.) – Marquis Room (check marquee)

COST: Members \$25.00 and Guests \$30.00 (most welcome)

**R.S.V.P. if you wish to attend to: Clint Tippett, 691-4274 or
clinton.tippett@shell.com by noon Monday, September 26**

Additionally In This Issue ...

The Bull Wheel	2
Questions to the P.H.S.	6
Lost at Sea	8
Interesting Websites	9
A Canadian Pioneer	9
Hell's Half Acre Ad	10

Archives is published approximately 6 times a year by the Petroleum History Society for Society members. Back issues are archived on our website at:

www.petroleumhistory.ca

Contacts: info@petroleumhistory.ca

President Clint Tippett – clinton.tippett@shell.com 691-4274

Secretary Peter Savage - p2savage@telus.net 249-3532

THE PETROLEUM HISTORY SOCIETY
THE BULL WHEEL



Next Board Meeting: The Board will meet next on Thursday, October 27, 2005 at noon at the Glenbow Museum and Archives. Meet in the lobby just before noon.

Volunteers: We are always on the lookout for people with the energy and dedication to help us grow and to undertake projects on the Society's behalf. Please contact Clint Tippett (691-4274), Doug Cass (268-4203) or Hugh Leiper (249-0707) if you would like to get involved.

Next Luncheons: Our luncheon slate for the Fall session is firming up nicely and we hope to bring you an excellent series of talks. We are seeking speakers and interesting subjects. If you would like to consider presenting, please contact Clint Tippett, President P.H.S., at 691-4274 or Director Debbie Knall at 780-463-3859 (Edmonton).

Canadian Centre for Energy Information: The P.H.S. has a "Content, Marketing and Traffic Partnership" with the Centre. This arrangement is an expression of the mutually beneficial cooperation that we hope will exist between our two organizations. Please see www.centreforenergy.com for more details. Of particular interest to our members is their on-line historical volume "Evolution of Canada's Oil and Gas Industry" that can be downloaded free of charge.



Canadian Petroleum Hall of Fame: The Hall has just released the names of the most recent group of prominent petroleum industry participants to be selected for this honour. They are: Angus Alexander Mackenzie, J.R. (Bud) McCaig, Ian Nicholson McKinnon, Linden Jay Richards, Ronald D. Southern, Charles Richard Stelck, Vernon L. Horte, Richard Francis Haskayne, Marguerite Flood Mosher, Archibald Wayne Dingman, George Mercer Dawson and C. William (Bill) Daniel. We are pleased to note that the Society and its members were instrumental in several of these nominations. For more information concerning this organization as well as current and past inductees, please refer to their website at www.canadianpetroleumhalloffame.ca.

Historical Coin: One of the latest releases from the Canadian Mint is a shiny new quarter commemorating Alberta's Centennial and featuring a slightly stylized version of the Dingman rig as well as a few cows related to one of Alberta's lesser industries. As profiled in the Calgary Herald on July 20, 2005, the designer of the coin was Calgary artist Michelle Grant whose work triumphed over that of three other artists in a contest that attracted 26,000 votes.

That didn't Take Long!: It was recently reported that memorabilia related to Unocal were being auctioned off by the company scant weeks after its sale to Chevron was finally accepted. Japanese dolls, bronze lamps, fish-shaped vases and green jade sculptures were amongst the items sold. A hand-embroidered silk drawing of a cat was a gift presented to Unocal in commemoration of the start-up of the largest petrochemical complex in China.

Historical Note: A re-viewing of the series "The Prize" brought to my attention an interesting fact. It was pointed out that in 1920, "Boss" Teagle, head of Jersey Standard, let it be known that oil reserves of any kind were to be acquired by his company. This likely explains why Imperial Oil, a subsidiary of Jersey Standard (Standard Oil of New Jersey, now Exxon) would have entered the Turner Valley Field after the demise of Calgary Petroleum Products to establish Royalite as the dominant and controlling player in "The Valley".

The History of a Book: A book that was recently purchased revealed an interesting chronology of oil industry ownership from its library stamps. The original owner appears to have been "Honolulu Oil Corporation" and thereafter "The Pan American Petroleum Corporation (Canadian Division)". As Pan American became a subsidiary of Amoco Corporation, the subsequent ownership of the book would have been from Amoco to BP-Amoco to BP (who discarded the volume).

Alberta Geological Survey 85th Anniversary: As pointed out in the Spring 2005 issue of "Rock Chips", the A.G.S. is this year celebrating its 85th Anniversary. The landmark event was the 1920 presentation of Dr. John Allan to the Legislative Assembly concerning the mineral deposits of the Province. Prompted by Dr. Allan's report and by growing public interest in developing Alberta's mineral and bitumen resources, the Alberta Government formed the Scientific and Industrial Research Council of Alberta, or SIRCA. It set up shop in 1921 on the campus of the University of Alberta and eventually became the Alberta Research Council. Visit www.ags.gov.ab.ca for more.

P.H.S. Pin Sets: Our pin sets (of 6) have been reduced in price to \$40.00. Please contact the Society if you are interested in buying one or several sets. These make great and original Calgary- or Western Canada-related gifts. Detailed comprehensive descriptions accompany each plush-boxed set.

EnergyWalk: A series of displays called the "The Energy Walk: A Tribute to the Oil and Gas Industry" is currently showing in downtown Calgary on the occasion of the Alberta's 100th Anniversary featuring historical and industrial displays related to the petroleum business. The P.H.S. has played a small role by advising the organizers on the availability of historical resources and by providing material. These exhibits are available for viewing at Fifth Avenue Place, Petro-Canada Centre, the Telus Convention Centre and Bankers Hall and will run through to October 8.

Sandy Gow's Book: "Roughnecks, Rock Bits and Rigs: The Evolution of Oil Well Drilling Technology in Alberta, 1883-1970": This soon-to-be-released book has been highlighted previously on these pages. Through our discussions with its publisher, the University of Calgary Press, we have taken a number of pre-orders for the book and have submitted them to the Press. For those individuals who participated in this offer through the P.H.S., we anticipate that approximately \$5.00 more over the \$25.00 already collected will have to be levied to cover the \$26.97 pre-sales price plus shipping to the Society, handling and taxes. Contrary to our previous plans, copies of the book will be shipped directly from the printers to those who have ordered them and the Society will invoice individuals for their remaining balances.

Earle Gray's "The Great Canadian Oil Patch (2nd ed.): The Petroleum Era from Birth to Peak": The official launch of the book has been delayed until later in the fall in order to coincide more closely with the official date of Alberta's centenary.

P.H.S. Challenge: At the conclusion of his talk, Earle Gray threw down a challenge to the P.H.S. and its members. The essence of it was that with the 150th anniversary of the 1858 discovery of oil by Williams in southwestern Ontario only three years away, we should take it upon ourselves to document once and for all that this event, and not the Drake well of 1859, marked the beginning of the oil industry in North America. Some preliminary discussions have taken place at the Board level but additional suggestions and involvement will be needed. Director Bob Bott has volunteered to oversee this work. Let's get at it as this is truly an historical opportunity!

Successful Field Trip to Turner Valley: On June 19 a group of 28 petroleum industry geologists were involved in a half-day trip to Turner Valley as a part of the Annual Meeting of the American Association of Petroleum Geologists and the Canadian Society of Petroleum Geologists. As will be recalled, the event occurred in the middle of the serious flooding that struck southwestern Alberta at that time. The prime attraction of the trip, as originally scheduled, had been a tour through the Turner Valley Gas Plant but on the advice of the guides and taking into account the state of emergency that had been declared for the Town of Turner Valley, it was decided to visit the Longview area instead. The participants enjoyed (we hope) some audio commentary from President Clint Tippett and Honourary Directory Jack Porter plus some video footage as the bus traveled to that destination where stops were made at the Little Chicago cairn and the Talisman pumpjack. Interesting discussions took place concerning both the technical aspects of the area and its social history. It turned out that one of the geologists in the group had been born in Little Chicago! Flaring at an adjacent well also added to the flavour. All in all it was a trip to remember with bright sunny skies and good petroleum history.

Bloopers: The all-knowledgeable press strikes again! It was reported by the Daily News [of Nanaimo] that the Geological Survey of Canada had estimated that there could be as much as nine trillion litres of natural gas off Canada's West Coast. I think that someone was a bit preoccupied with gasoline prices when they inked this piece. The Prince George Citizen was also trying to talk up the prospect of offshore development when they announced that "the multiplier for spinoff jobs in the industry is approximately 9000". That's quite an effect! Finally, in a bid to get things in perspective, a recent conference on petroleum in B.C. was told that the conventional onshore industry, primarily in the northeastern part of the Province, was the "inshore" part of the puzzle, as opposed to the promised "offshore" part.

Membership Dues: Please note: At the September 15, 2005 meeting of the P.H.S. Board a motion was passed to alter the Society's dues structure as follows effective January 1, 2006:

1. New applications for the lifetime membership category will not be accepted. All lifetime memberships existing at that time will, of course, still be honoured.
2. Individual memberships will increase to \$25.00 per year from their current level of \$20.00.
3. Sustaining individual memberships will remain unchanged at \$50.00 per year.
4. Membership applications and renewals received before January 1, 2006 will handled under the 2005 dues structure.

Company Websites: If your place of employment has a website and you think that it would be OK to facilitate the posting of P.H.S. notices and articles on it, please let us know the name of the appropriate contact and we will make the necessary arrangements to make this happen.

Historical Posters from the C.S.E.G. Convention: Past President and P.H.S. Website Coordinator Micky Gulless has advised that the series of historical posters that were prepared for last year's Annual Convention of the Canadian Society of Exploration Geophysicists have been added to the P.H.S. website. Please visit www.petroleumhistory.ca.

News from the Leduc Devon Oilfield Historical Society: The June 2005 issue of "The Catwalk" headlined their annual "Discovery Days" that were held on August 13 and 14 at the Canadian Petroleum Interpretive Centre, 2 km south of the Town of Devon. Also of particular note was the announcement of a significant grant that had been received by the Society. A one million dollar cheque was presented to the Leduc Devon Oilfield Historical Society on June 21 at the Leduc/Nisku EDA Big Breakfast. The Society, in partnership with the Devon and District Chamber of Commerce and the Town of Devon, jointly hosted the breakfast. This was seen as a perfect opportunity to promote the continuing growth of the Canadian Petroleum Interpretive Centre in the context of supporting tourism in the region. The ceremony was attended by the Minister of Gaming, Dan Claypool – Treasurer of the Society, and the local M.L.A."

Turner Valley Gas Plant Status: Director Debbie Knall has spent some time over the summer discussing the situation surrounding this National and Provincial Historic Site with those involved in the operation of the tours and in the ongoing plans for the development of a more comprehensive interpretation centre on the site. As our readers will be aware, the aggressive erosion that took place during June's flooding did some damage to the berms along the Plant's southern edge and a small amount of residual hydrocarbon entered the Sheep River. This "neon sludge", as it was termed by the local environmental community, does not represent an environmental hazard according to the Alberta Government but just the same there is now pressure for additional testing and cleanup. These developments were reported in the July 31, 2005 issue of the Calgary Sun and the August 12, 2005 issue of the Calgary Herald. The upshot of these concerns is that the historical value of the site may be threatened by the need to do further work at this location. We are concerned that we risk losing sight of the place where the Canadian Petroleum Industry established its roots. While the Town of Turner Valley and its residents are certainly key players in this matter, broader stakeholder groups exist at the local, provincial and national levels. Debbie has urged all who are concerned to contact their local Provincial M.L.A.'s and others to express their concerns.

Oily Cartoons: Alberta History Magazine released in the Spring of 2005 a collection entitled "A Century of Alberta Political Cartoons". While most are agriculture-related, there is a smattering of depictions that relate to the oil industry. Two brief descriptions follow:

1914: Oil Discovered at Turner Valley. "**J'Ever See Such Luck?**" "Merchants cheered with the discovery of oil in Turner Valley in 1914. The cartoon came from the Regina Leader and was reprinted on the front page of the Calgary Albertan on May 23, 1914." The driver of a Model T has just lugged two pails of gasoline from what is labeled Okotoks and is headed for his waiting passengers who say "Now we resume our journey" and "This good fortune seems uncanny" [perhaps an early pun?].

1947: Discovery of Oil at Leduc. "**Another Welcome Shower**". "Strangely, cartoonists appear to have been silent when Leduc No. 1 gushed into production on Feb. 13, 1947. This, in spite of the fact that in retrospect it was a major historic event. Not until the discovery of Leduc No. 2 a few weeks later were their importance acknowledged when John Freeborn provided the Calgary Herald with this cartoon. It appeared in the May 30, 1947 issue." A happy driller is shown clutching an umbrella to ward off the drenching downpour of oil from a Leduc gusher.

QUESTIONS ABOUT THE HISTORY OF THE PETROLEUM INDUSTRY

The Petroleum History Society receives inquiries through its website on a wide range of historical topics. Some are very specific while others are only marginally related to the industry but are of interest just the same. Sometimes we can offer a comprehensive answer while in other cases we draw a complete blank. So as to share these fascinating tidbits of history with our readers, we have established this page in the best "Ask Abby" tradition and hope that they are worthwhile additions to your knowledge. We have, of course, deleted any specific individual names and other personal connections.

Can someone tell me when Alberta first started giving out well licences? It seems I was told it was in the 1930's but, if so, who was allowing the old wells to produce without a licence?

From David H. Breen's book "Alberta's Petroleum Industry and the Conservation Board" I think I can support your belief that well licences began in the 30s - 1931 I think. Page 69 talks about ... "Oil and Gas Wells Act was piloted through the Legislature in late March" of 1931. "... the new bill required that a bond of up to \$10,000 be posted before drilling commenced on any well to insure that drilling operations were conducted in accordance with the regulations."

The rights to the subsurface were only ceded to Alberta by the Federal Government in 1931 or so, hence provincial well licences would only date from that time. Wells drilled prior to that date would have been licenced by the Federal Government. I can only assume that existing federal licences would have been inherited by the Provincial Government at that time and that they would have been re-issued as provincial documents (and not backdated). The same process took place for subsurface leases - provincial ones were issued to supercede federal ones. The bottom line is that wells have always been licenced in one way or another in order to comply with existing regulations, federal or provincial.

In about 1976, while boating on the Athabasca River, I stopped at an old guy's place who was using natural gas from a nearby well to heat his home and garden. He had a brochure describing the history of the well. As I remember, the rig was brought in from Ontario and drilled two wells called Upper and Lower wells. They were looking for oil and found no use for the gas, but capped them instead of abandoning them. Could you tell me where I could get more complete information on these wells?

I turned to my favorite petroleum history book - Oil in Canada West: The Early Years by George de Mille. If not in your local library, this book may still be available from DeMille Technical Books (no relation) at McNally Robinson. See: <http://www.petroleumhistory.ca/history/demille.html>

There is a whole chapter on the Athabasca region starting on page 29. I didn't find anything that fits your description but there are stories that seem close to what you describe. On page 49, de Mille says: "In total some 36 wells were drilled in the Athabasca region between 1893 and 1924."

This question sounds a lot like a reference to the Pelican Rapids well that was drilled by the Geological Survey of Canada in the early days that indeed struck gas and blew wild for many years before finally being brought under control.

I have recently inherited several hundred shares of Twin Provinces Oil Co. Ltd., some dated 1934 and some 1936. I am not expecting them to be worth anything now but I would be interested in learning of the history of the company and how the shares would have been marketed and distributed amongst the rural landholders of Maple Creek.

Maple Creek is in Saskatchewan, 109 km west of Swift Current and 9 km south of Hwy 1 on the edge of the Cypress Hills. I expect the Twin Provinces are Alberta and Saskatchewan. The company is incorporated "under the laws of the Dominion of Canada". Officers signing on 31 Oct. 1934 are: C.L. Hatch, President, D.L. MacLaren, Sec. Treas. and on 22 April 1936 are: W.F. McFarlane, President, Robt. M. Steele, Sec. Treas. In April 1936 the shares were sold for 25cents. The certificate says "Capital Stock 1,000,000 shares without nominal or par value and total capital subject to issue." and "All common fully paid and non-assessable.". In the left hand bottom corner of the document there is a copyright signature of "GOES 59". I imagine this is the company that produced the shares.

Can't offer you any joy on this one. I looked in both the active and inactive (precursor and defunct) listings from the Financial Post and there isn't a company by this name. Given the timing that you mention I would guess that this was some sort of a promotional or speculative venture that never got off the ground (if it was ever intended to) or somehow failed early on before it was properly registered. 1936 marked the discovery of the major oil accumulation at Turner Valley so this would logically be when any company involved in exploration and worth its salt would have been raising money from the public to pursue new riches.

P.S. Don't throw out the certificates. They may be of some historical interest. If you want to just get rid of them you could always donate them to our Society. Alternatively you might be able to sell them to an antiquarian book store. There is one here in Calgary called Aquila Books that has a collection of old certificates for sale. Actually there are lots of stories around about people using piles of these worthless certificates as wall paper. One bar in particular was well know for this decore! I have a copy of a stock certificate from the "Mount Stephen Oil and Gas Company Limited" issued in 1914 on my wall in the office.

I have shares in Union Pacific Oil and Gas Company Limited issued in Alberta in 1914. What can you tell me about this company?

This company was incorporated in Alberta in 1914 by John Engman of Calgary. He merged six or seven of the little Turner Valley companies and altogether the firm drilled five wells. A good deal of their money came from investors in the U.S. Midwest. By 1916 the company had found no production so it was liquidated. It was struck from the companies register in 1921.

For your information, there was a big stock boom in 1914 after the Dingman discovery in Turner Valley, Alberta. Many speculators got in on this little "gold rush" but most companies failed. The Petroleum History Society regularly gets requests to trace companies from this era and we seldom find one that is still in existence.

We reprinted a newspaper article from the 1914 boom in one edition of our newsletter. The link below will give you a choice of a PDF or HTML version of that newsletter where you can read the article: *Early Calgary Oil Excitement* - from the Calgary Herald of May 21, 1914:

<http://www.petroleumhistory.ca/archivesnews/index.html#01sept>

If you are interested in this history, use Google to search for: Turner Valley, 1914, Dingman, boom, bust - and you will find plenty of information.

I am doing some research on the wartime era and I have been informed that there may be records held in Nova Scotia concerning the Anglo Saxon tanker *Sepia*. Can you help me?

Anglo Saxon Petroleum was a subsidiary of the Royal Dutch Shell Group of Companies. If one wishes to pursue this connection, the query would best be directed to Shell in Europe. A bit of investigation should uncover their website.

I did run across one reference to *Sepia* in a book entitled "SeaShell - The Story of Shell's British Tanker Fleets 1892-1992" authored by Stephen Howarth and published by Thomas Reed Publications Ltd., ISBN 0 947637 32 X. The reference is a picture on page 107 of the volume captioned "*MS Sepia*, product carrier, en route from Madagascar to Seychelles in 1942."

I am looking for data on the number of rigs in use, by type and by year. Baker Hughes has data for rotary rigs back to 1949. Where do I find data on cable tool and spring pole rigs?

As far as I know, there were never statistics kept on the number of cable tool rigs and spring pole rigs existing or in use at any given time. Rotary rigs represent a big capital investment and there are (or initially were) less of them around - hence the Baker-Hughes stats. As well, rotary rigs are mobile whereas the older styles were often built and left in position afterwards for wellbore work. "The History of Oilwell Drilling" by John E. Brantly may give scoping numbers but detailed statistics are likely not in existence.

LOST AT SEA – HISTORICAL RIG AND PLATFORM SINKINGS

In some discussions it appears that many people have the impression that sinkings of offshore rigs and platforms are fairly common. A bit of digging at www.emergency-management.net, however, indicates that this is not the case and that such accidents are extremely rare. The historical record of such events is as follows:

March 1980 – Ekofisk Field, North Sea. Accommodation rig Alexander Keilland lost a leg due to fatigue fracturing and capsized, killing 123 people.

October 1981 – South China Sea. U.S drill ship sank, killing 84 people.

September 1982 – Grand Banks (Hibernia), North Atlantic. Semi-submersible Ocean Ranger capsized killing all 81 aboard.

July 1988 – North Sea. In the world's worst platform disaster, 167 people were killed when the Piper Alpha platform exploded following a leakage of natural gas.

September 1988 – Offshore Borneo. A rig exploded and sank, killing 4 people.

March 2001 – offshore Brazil. The P-36 production platform, capable of handling up to 180,000 barrels per day of production, listed and ultimately sank following a series of explosions. 10 people were killed.

Of course for every most severe accident there are many with lesser impacts. The industry takes all such incidents very seriously and has had a far better record since the 1980's.

INTERESTING WEBSITES

“The Canadian Cordillera - A History of Who, What and When” by Dr. Chris Yorath of the Geological Survey of Canada, Pacific Geoscience Centre, Sidney, B.C. This is part of the “Pioneering Geology in the Canadian Cordillera” section of the B.C. Government’s Ministry of Energy and Mines website, comprising BC SB Open File 1992-19.S.

www.em.gov.bc.ca/Mining/Geolsurv/Publications/OpenFiles/OF1992-19/Whowhatwhere.html

“Online tool provides comprehensive information about thousands of historic sites nationwide [U.S.]”. As described in the January 2005 issue of *History Now*, the American National Trust for Historic Preservation has established two websites relevant to thousands of historic sites, projects and activities that have benefited from the Trust’s mission to preserve American heritage. To access the Preservation Atlas, visit:

www.nationaltrust.org or www.preservationatlas.org

What’s New in the Library and Archives Canada – New Books Service? According to the January 2005 issue of *History Now*, visit this site and find out:

www.collectionscanada.ca/whats-new/index-e.html

A chronology of the Canadian Oil Industry can be found at:

www.nickles.com

Another history of the industry is available at:

www.geohelp.net/history.html

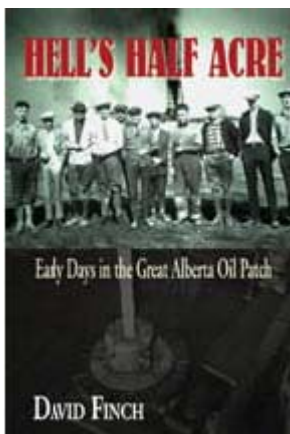
A CANADIAN PIONEER

Excerpted from “The Oilfields of Galacia” [Poland] by Morten Saebo, as published in The Petro-Philatelist, Winter 1998. “In the 1880’s the Canadian William MacGarvey introduced new drilling methods. About the same time the engineer Stanislaw Szczepanowski started reorganizing the oil industry that soon changed its nature from that of a cottage industry to becoming a major modern undertaking. MacGarvey went into partnership with Austrian John Bergheim and, in 1884, established the “Compagnie Bergheim et MacGarvey” later known as the “Galizische-Karpaten Naptha AG”. The oil rigs of Galacia were big wooden structures of the so-called Canadian-Polish type, for the Canadian engineers that were hired to supervise the field development. To protect the workers from the cold, wind and snow during the harsh winters, derricks featured wooden walls with windows and were equipped with a central heating system using steam. The pyramidal towers were usually around 25m high and often included a pump to lift the oil to the surface from the 1400 to 1500m deep wells.”

HELL'S HALF ACRE

Early Days in the Great Alberta Oil Patch

David Finch



1-894384-82-2
Alberta History/Natural
Resources
HERITAGE HOUSE
5 x 9 208 pp
40 b & w photos 1 map
\$19.95 CA \$16.95 US

David Finch's new book, *Hell's Half Acre*, gives the reader a close look into the story of the people who lived and worked in Turner Valley - western Canada's first commercial oilfield, located southwest of Calgary.

Beginning in 1914, the oil fields attracted thousands of workers from across North America to the drilling rigs, processing plants, and the pipeline crews that dug the first trenches. In addition to the beginnings of an oil industry, Turner Valley provided Alberta with a rich historical legacy of epic proportions, along with a cast of very colourful characters.

Finch draws on contemporary accounts and dozens of interviews with Turner Valley pioneers, as well as probing the vast visual history of archival photographs, to capture the life and times of an exciting era in Alberta history.

Imagine natural gas flares so plentiful and powerful that night turned into day and the glowing sky could be seen from Calgary. The smell of sour gas and its deadly effects were a constant danger, as were the primitive work conditions associated with the early years of oil exploration. But on the workers toiled, constructing massive drilling rigs out of huge timbers, working day and night in a relentless search for black gold. Then the Second World War brought an unprecedented level of urgency and tension to Turner Valley when the national treasure became a military target.

Hell's Half Acre relives these fascinating times, and reveals in entertaining detail the people, the companies, the booms, and the busts.

David Finch holds an M.A. in Canadian History from the University of Calgary, where he studied the Canadian petroleum industry. He is the author of 15 books about the Canadian West, including *R.M. Patterson: A Life of Great Adventure*. David lives in Calgary with his family.