



**PETROLEUM  
HISTORY  
SOCIETY**

**ARCHIVES**

*Newsletter of the Petroleum History Society*

*February 2005; Volume XVI, Number 1*

**P.H.S. Lunch and Learn Meeting – February 2, 2005**

**Speaker: Mr. Harris Kroon  
The Boundary Lake Oil Discovery - 1954**

This oil field, located in northeastern British Columbia about thirty miles east of Fort St. John, was discovered 50 years ago, in early December 1954. It was the first and, to date, the largest British Columbia oil field. It has produced in excess of 200 million barrels of oil from the Triassic Boundary Lake Zone at approx. 4310 feet drill depth. This is an anecdotal history of the discovery prepared by Mr. Kroon who was, at the time, the geological supervisor for the Northern Foothills Agreement group (the N.F.A., comprised of Texaco, Gulf, Shell and Mobil) who made the discovery.

*Harris Kroon is a native Albertan who graduated from the University of Alberta in 1948 with a Bachelor of Science in Geology. He earned a Master's degree in Geology in 1949 from Northwestern University, Evanston, Illinois. He was employed by Texaco as an Exploration Geologist from 1949 to 1985 and is now retired.*

**TIME:** 12 noon, Wednesday, February 2, 2005.  
**PLACE:** Fairmont Palliser Hotel (133 - 9<sup>th</sup> Avenue S.W.) – Oval 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](mailto:clinton.tippett@shell.com) by noon Monday, January 31**

***Additionally In This Issue ...***

The Bull Wheel 2  
Dave Mitchell Talk (04-03) 4  
Craig Lamb Talk (04-05) 5  
Ned Gilbert Talk (04-12) 6

*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](http://www.petroleumhistory.ca)

Contacts: [info@petroleumhistory.ca](mailto:info@petroleumhistory.ca)

President Clint Tippett – [clinton.tippett@shell.com](mailto:clinton.tippett@shell.com) 691-4274

Secretary Peter Savage - [p2savage@telus.net](mailto:p2savage@telus.net) 249-3532

**THE PETROLEUM HISTORY SOCIETY**  
**THE BULL WHEEL**



**Next Board Meeting:** The Board will meet next on Thursday, February 10, 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:** We are seeking speakers and interesting subjects. If you are interested in presenting, please contact Clint Tippett, President P.H.S., at 691-4274 or Director Debbie Knall at 780-463-3859 (Edmonton).

**P.H.S. Membership:** Micky Gulless, Past President and Membership Director, has indicated that P.H.S. membership now stands at 154.

**Canadian Centre for Energy Information:** We are pleased to announce that the P.H.S. has entered into 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. One of its most tangible benefits will be a greater level of visibility for the P.H.S. and its activities. Please see [www.centreforenergy.com](http://www.centreforenergy.com) for more details.

**Correction:** The article concerning oil shales in the December 2004 issue of Archives was not clear concerning source and authorship. It had been located for the editor by P.H.S. Director Bob Bott but was not properly referenced in Archives. The following correction was added to the E-version and website and is repeated here: *"The item about oil shales on p. 8 of the new Archives is an excerpt from an article, "Oil Shales and Oil and Natural Gas in New Brunswick: Historical and Current Industry-related Activities," by C. St. Peter, Hydrocarbon Geologist, New Brunswick Department of Natural Resources and Energy, Geological Surveys Branch (Fredericton, May 2000). It is posted on the Government of New Brunswick website at <http://www1.gnb.ca/0078/hydrocarbons/publication.pdf> . Thanks to Bob for this information and apologies to all, in particular the author, concerning this issue.*

**Questions:** Some queries for which we invite your input:

1. What is/are the deepest wells in Canada, both drill depth and true vertical depth from K.B.?
2. Where to the names of the streets in Turner Valley come from? About half of them have personal names – Edger, Edward, John, Robert, Raymond, George, Hubert and Archibald.
3. Does anyone know of either Edwin St. George Nobel or Canadian Oilfields Ltd. Co.?

**P.H.S. Pin Sets:** Our pin sets (of 6) have been reduced in price to \$40.00. Please contact Joyce Wright at 252-4143 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.

**Website:** Past-President Micky Gulless has posted Treasurer Doug Cass's updated bibliography on our website – newer and longer than ever before! Check it out. Micky is also in the process of posting a series of photos taken at the July 2004 unveiling of the Little Chicago plaque, as provided by member Penny Colton.

**Personal:**

1. Lifetime member Gerald Maier was awarded the Order of Canada by Gov. Gen. Adrienne Clarkson on October 30, 2004. Congratulations Gerry!
2. Photographer David Campion, who once promoted an exhibition depicting the oil and gas industry through our Society, recently reappeared in the July/August 2003 issue of Canadian Geographic. He is still teamed up with writer Sandra Shields.
3. We note with regret the passing of former P.H.S. Director Reuben Nehring on December 4, 2004.
4. Treasurer Doug Cass brought to our attention the recent opening of the Cam Sproule fonds at the Glenbow Archives. Included are sections on the U. of Alberta (1927-1935), the U. of Toronto (1930-1936), geological field notes (1928-1938), published articles (1938-1968), personal papers (1920's-1973), Sproule Building (1957-1966) and Sproule businesses (1955-1978).
5. Treasurer Doug Cass likewise noted the opening of the Jack Gallagher fonds at the Glenbow Archives that include sections on early records (1925-1952), later records (1949-1991), photos and documentaries (1970-1986), sound recordings (1975-1984) and video recordings (1980-1998).

**Publications:** Two new books are of note:

1. "Secret Riches – Adventures of an Unreformed Oilman" by John Masters. Published by Gondalier, 270 pages. John was one of the founders of Canadian Hunter. The paperback sells for \$39.95 at McNally-Robinson (DeMille section). Apologies to the author but after a quick look at the title I thought it said "Adventures of an Uninformed Oilman"! Sorry about that!
2. "Developing Alberta's Oil Sands – from Karl Clark to Kyoto" by Paul Chasko. Published by the University of Calgary Press. 320 p. Price not indicated.

**Vignettes:**

Review of the November 2004 issue of "Pacific Yachting" revealed an article on "rogue waves" and, in particular, the following note: *"Most large ships and oil rigs are built to withstand 15-metre waves. An encounter between a container ship or an oil rig and a 25-metre wave is thus a potentially deadly scenario. Indeed a 26-metre rogue was the principal cause of the capsizing of the **Ocean Ranger**, a drilling rig that sunk off the coast of Newfoundland in 1982. The Ocean Ranger catastrophe was the worst marine disaster in Canada since the Second World War, with 84 lives lost. A Soviet container ship, the Mekhanik Tarasov, also went down in the same storm, with a loss of 33 lives."*

**Burkburnett, Texas** – as reported in 1959 in the Oil and Gas Journal. *"This is the field where Humble Oil and Refining got its start. The discovery was completed in July 1918 at 1739 feet testing 2200 bbl/d. It was known as "Fowler's Folly" as it never would have been completed if the operator's wife had not pawned her last item of jewelry to finance the final few feet of drilling."*

**ANNUAL GENERAL MEETING PRESENTATION**  
**DAVE MITCHELL – OIL INDUSTRY EXECUTIVE AND COMPANY BUILDER ON:**

**“THE EVOLUTION OF ALBERTA ENERGY COMPANY (AEC)”**  
**(notes by President Clint Tippett)**

Dave Mitchell was suggested to our Society as a possible keynote speaker by P.H.S. Director Hugh Leiper and it was Hugh who coordinated Dave's highly successful presence at our meeting. Dave Mitchell was President and Chief Executive Officer of Alberta Energy Company from the beginning of its operations in 1975 until 1993 when he became Chairman of the Board. He retired as Chairman in 1999. In his presentation, Dave reviewed the history of this prominent company and provided background on its unique creation and activities during his tenure as CEO. Prior to running AEC, Dave was CEO of Great Plains Development Company.

Starting as a four-person operation, AEC grew to become a very large and successful participant in the oil and gas industry. This is the story of an Alberta phenomenon that has many interesting chapters.

Events of note mentioned during the presentation are as follows. In 1973 Dave was approached by Peter Lougheed and Don Getty, while on vacation in Wakiki, Hawaii, to head up an Alberta-based and provincial government-funded company primarily, but not exclusively, focused on the oil and gas industry. He agreed on the conditions that there would be no direct government interference and that there would be a specification of 50% public ownership. Recalling that this was the era of major provincial-federal confrontations and the establishment of Petro-Canada, Dave enthusiastically pursued this latter goal with an initial 1975 capitalization proposal of \$150 million split evenly between the Province and the public. He was then on the receiving end of numerous proposals for how these funds should be invested – ranging from 7-11's and liquor stores to dirigibles. Luckily sense prevailed. The actual mechanics of the 1975 offering were complex and required careful negotiations with the brokers as they initially did not think that more than \$40 million could be raised. Individual holdings were restricted to 1% of the issue. The issue was oversubscribed even at the \$75 million target! Over the years significant assets came to be parts of AEC's portfolio including a share of Syncrude and the operations in the Suffield and Primrose military reserves. Coal, forestry and petrochemicals all played parts at one stage or other but eventually fell to the wayside during divestments. By 1993 the privatization of AEC was complete and the role of government, by then just an artifact from the interventionist days of the 1970's and early 1980's, was over. Dave concluded that the mandate he had been given had been fulfilled.

Dave remains active in the Calgary business community and has been prominent in a number of business and community activities including many industry associations such as IPAC and OTS. He is a recipient of the Order of Canada.

For those members who wish to pursue the details of AEC's activities prior to its amalgamation with PanCanadian Petroleum in 2002 to form Encana, please refer to Oilweek Magazine's feature article "Celebrating 25 years of Growth (1975-2000)" of September 4, 2000. As well, Dave was interviewed during the Petroleum Industry Oral History Project and that the transcript of that interview is available through the Glenbow Archives (contact Treasurer Doug Cass).

Dave was thanked on behalf of the P.H.S. by Lifetime Member Bob Erickson who had been an employee of Dave's in the past at Great Plains.

**LUNCHEON PRESENTATION – May 19, 2004**  
**CRAIG LAMB – CHIEF GEOSCIENTIST, HUSKY OIL OPERATIONS LIMITED**  
**On:**

**“Schlumberger’s Contributions to Exploration and Production in Western Canada”**

Craig Lamb joined us on May 19, 2004 to provide an overview of how this major service organization had been involved in E&P activities in Western Canada over the decades. Craig was previously employed by Schlumberger and had given this talk at technical conferences before moving on the Husky.

Craig’s presentation followed the format of breaking down Canadian petroleum history into major eras and then describing the evolving tools and technologies that accompanied each, as follows.

The period before 1927 was marked by significant discoveries such as Oil Springs and both shallow and deep Turner Valley gas. There was little petrophysical input involved in these finds. The era ended with the 1927 running of Schlumberger’s first electric log in France.

The 1930’s included such finds as the oil leg at Turner Valley. During this time the SP log began to be a standard while the practice of well logging spread across Canada and the U.S. Recording technology evolved as well.

The 1940’s saw an explosion of activity in Canada and involved fields such as Leduc, Redwater and Jumping Pound. Technology now provided the opportunity to perform sidewall coring, to run gamma ray and early neutron tools and to try primitive dipmeters.

The 1950’s saw Western Basin activity take off and the addition of a wide range of reservoirs and fields to the roster including Pembina, Midale, Swan Hills, Virginia Hills and Waterton. Petrophysics added the microlog, laterolog, sonic and formation test tools.

The 1960’s and 1970’s were not slouches either with the broadening of activity to include Mitsue, Rainbow, Sable, Elmworth, Hibernia and many discoveries in the Mackenzie Delta-Beaufort Sea. Many of these more challenging environments or reservoirs benefited from the new neutron porosity and density tools.

The 1980’s and 1990’s saw a further maturation in the Western basin with continued activity in the frontiers leading to the Hebron-Ben Nevis, Terra Nova, Caroline and Liard discoveries. Petrophysics took major steps on the imaging side through the introduction of the FMS/FMI tools, acoustic and oil-based mud imaging devices and NMR technology.

Craig finished his presentation with an overview of where the well logging industry is headed and the role that Schlumberger is taking in that progression. This company has significantly broadened the slate of services that it can provide for its customers – a role that has been aided by both acquisitions and internal growth. New possibilities have opened up in Western Canada, for example through the use of coiled tubing rigs as an alternative to conventional drilling and service rigs. More cost effective, these new types of equipment also often have positive environmental side benefits such as much smaller footprints. Smaller pools can become economic to pursue.

Craig was thanked for his slide show and answered a number of questions from the audience.

**NED GILBERT LUNCHEON PRESENTATION**  
**“Story of a Genuine Black Box” DECEMBER 1, 2004**

Thanks to Ned who was kind enough to provide us with the text of his luncheon talk, as follows:

Somehow in writing a few words for the P.H.S. to use to encourage you to come to this talk, one of us dropped a comma or something because I did not intend to say that I personally had found oil with this device. In any event, to set the scene, I want to tell you that way back in 1947 I was the only employee of Sun Oil Company now Suncor. So I was Manager. A few years later George Dunlap was brought in to be Manager and he gave me the choice of being Chief Geologist or head of the Land Department. I chose Land. Then many years later in about 1967 I again became Exploration Manager but this time with a staff of 65. It was then that I first met up with this Black Box but it was in about 1988 that I became Industry Director of the Petroleum Land Management program at the University of Calgary. While I was there they wanted me to write a book and suggested I write up my diaries which I had kept following my departure from Sun in 1972. By that time they more than filled a shelf in my office. Instead I interviewed some 80 landmen as well as a few Exploration Managers and studied a few transcripts at the Glenbow archives. I wrote those up as a book.

I have here in this bag a genuine Black Box but before I tell you where I got it I want to tell you a story about one of Canada's most famous geologists, Dr. George Hume, at one time Chief Geologist of the Geological Survey of Canada.

When I was searching for stories in the Glenbow collection I encountered the following one in an interview of Charles Dunkley who many of you knew and who was, with Jack Gallagher, the early management of Dome Petroleum. George Hume visited with these men at the Dome office and told them that he had this Black Box and that with it he was able to find oil and gas and differentiate different geological formations.

The two men then got a map and data for the East Calgary Field and they put George Hume in the back seat of their car. They drove around and across the East Calgary Field and they found that the results George was reading from his box coincided very well with the data they had. So Jack said “Charlie, fly up to that well we are about to drill north of Lesser Slave Lake and we can compare George's results with our drill results”.

The following day with Charlie in the co-pilot seat and George in a back seat they headed north and, along the way, George said “I have never used the box in an airplane so I will set it up”. Soon after they flew over the east end of Lesser Slave Lake and George said, “Charlie I am getting a strong oil reading”. So Charlie told the pilot to circle down and they tried to see if there was any oil activity. They saw none and there were no roads so they went on to the well site. Here George made his examination and recorded his box's report on the well site. They again got into the plane to fly back to Calgary, but George said “Charlie could we again fly over the east end of Lesser Slave Lake”. This time George's records showed a quite long north / south feature that was not very wide. When they returned to Calgary Charlie spoke to his exploration staff. He explained that George Hume believed there was a prominent oil feature at the east end of Lesser Slave Lake. Could they please take a look at their data and see if we should pursue it?

Well, in due course, the Dome well was drilled and the results did not match up with those given by George Hume. Also the exploration people could not find any reason to explore at the east

end of Lesser Slave Lake so Dome forgot the whole matter until Charlie was interviewed by the Glenbow and asked for any stories. We of course now know that the field at the end of Lesser Slave Lake became the Mitsue Field discovered by Chevron.

George Hume joined my church, Riverview United. Our visitation committee had a form that we took when we visited new comers. This form asked questions such as, "Do you have any hobbies that you might teach our scouts?". Since I knew George quite well I chose to visit him and when I asked that question he said, "Ned, I have known you a long time and I do have something I would like to show you but I do not think it would be suitable for the scouts." He went on to say "I have a Black Box would you like to see it?". Well of course, I did, so we went to his basement where I saw this box or one like it. George told me that he could locate oil and gas and could determine depths to different formations.

My company had drilled a well and had found oil but could not find extensions of that discovery. I asked if George would go with me to a location of my choice. He said "do not tell me the location just the quadrant of the province". But he also said, "I have a partner and we have decided that we would no longer visit properties unless we receive a royalty on any lands acquired as a result of our work." I told him it would be hard for me to get permission for the royalty but I would see. Over the next few weeks I persuaded my boss to let me make the royalty agreement and over the complaints and irritation of my exploration staff I gathered the well data and e-log to take with me. The following weekend, a beautiful fall day, my wife packed lunch for the two of us and we headed out to the northeast. As we were driving along George had set up his instrument and as we drove up a hill he called out that he was getting a gas reading. At the top of the hill there was a sign pointing to a gas well. Some time later when we were very close to the intended test George called out he had an oil reading then that he was out of it so we stopped and backed up and the total reading was less than an eighth of a mile wide. Then we drove off the highway and down as close as we could drive to the well site that was in an alkali flat. We got out of the car. George carried the box and as we approached the well, he again got an oil reading. We then walked on past the well and very soon were out of the oil reading. Next we went back and sat on the block on which the pump was mounted. Here George determined the depths to various formations and even picked the oil and water depths in our producing zone and in my opinion they were as accurate as those I had on my cards even though I had not shown any of my data to George.

The remainder of the day we drove every useable road over two townships and as we drove we each separately recorded oil and gas as George received the readings from his box. The picture that developed was of a long sinuous oil field with a gas pool to the east of a part of it. I tried to get my Sun Oil staff to recommend drilling on this structure but they and the company research staff were unwilling to support a project they felt was so foolhardy. In latter years I tried several times to sell my prospect but when one mentions a Black Box, eyes of geologists generally gloss over and the answer is an obvious negative. At the end of the day that had been very pleasant, I dropped George at his home. A few days later we had a very heavy wet snowfall and George died of a heart attack after shoveling this snow from his driveway.

Some years later I had learned who George's partner was and as I knew him well also, I asked him to take his box out to another field to see if we could determine the extension of it. George Cloake was this person. He was not able to get suitable readings, however a friend of mine was in the back seat, ostensibly taking pictures out the window but he did get several shots showing

how the box was being used. Not long after this trip occurred, this partner of George's also died. I entered into many long discussions with Mr. Cloake's wife and eventually she permitted me to look through the hundred odd garbage bags into which she had put her husband's reports on a variety of different projects. I was able to recover a lot of reports by George Hume but no clear explanation as to how to use the box. I did recover several instruments similar to this one. The reports that I found were sufficient to fill an entire drawer in a filing cabinet. These were reports of various areas or prospects that the two Georges had studied.

Over the ensuing many years I have periodically tried to use the box and have shown it to several people. I once hired a technician to give me an opinion and he was so completely negative that I next tried it on an electrical engineer but he was equally damning. In both of those cases I had told the examiner what the box was used for. Recently I again hired a technician to examine it without telling him its purpose. I asked him to tell me what he thought it was used for. His answer was that he could not determine a purpose and he refused to charge me. In all of these cases they commented on the high quality of equipment used in the box and wondered why such expensive equipment was used when similar but much cheaper items would seemingly have been just as useful. I have loaned one of the boxes to a friend in England who has taken it to a dowsing group and their opinion was that it was some form of a radio transmitter.

Amongst the papers we found in those many garbage bags there was correspondence that showed that the original instrument had come from a person who worked in one of the California movie studios. He had taken that instrument to a geologist who worked for, I believe, Cities Service. He in turn had seemingly brought it to the attention of a man who at the time was Chief Geologist of the U.S. Geological Survey. From there it had come to the attention of either George Hume or George Cloake, either one of whom brought the other into the project. George Cloake supplied the money to hire a technician to build different models of the instrument and of course George Hume supplied the ability to determine the results and to determine how to adjust for different geological conditions. George Hume told me that he could even use the box to determine whether coffee had sugar in it.

The instrument was operated by the operator who fitted a small silk glove over two of his fingertips just as I am doing now. Then he rubbed the sleeve backwards and forwards across this plastic rod while turning one of the dials with his other hand. When the sleeve stopped sliding and effectively squeaked that would indicate that the horizon that was being sought had been reached. As one set of dials clearly indicates depth I presume that another set of dials was used to set the known figure for the horizon or substance that was being sought and it would be the depth dials which would be turned while passing the silk sleeve over the rod. As a result of the negative reports by the technicians and the fact that I cannot make it work I decided to tell the story of my Black Box and see if there is any one who can or wishes to meet with me after this meeting is concluded to try for an explanation of how Charlie Dunkley's story and my story fit with this box which I am told can not possibly work. I am sure that our chairman has additional things he will want to take care of before you may come up and view my black box further. Of course you may all be like my staff and your eyes have glossed over and you will run not walk to get away from here. You have heard my story and conclusions and although it does not work for everyone, it did work in some cases. Before I conclude my few words on this subject I wonder whether any of you might have encountered similar instruments in your work and perhaps know how they worked?