

# ARCHIVES

Newsletter of the Petroleum History Society

February 2019; Volume XXX, Number 2

P.H.S. Lunch and Learn Meeting – Wednesday, February 27, 2019

## Canada's First Commercial Use of Natural Gas: A Unique Tourist Trap at Niagara Falls

by Andrew Fox, Retired Geologist

Decades before Abraham Gesner's invention of kerosene and the drilling of Canada's first commercial oil well at Oil Springs in southwestern Ontario, a major tourist attraction at Niagara Falls was natural gas seeping from Silurian carbonates. The Burning Springs, located upstream from the Horseshoe Falls, competed with the spectacular cataracts for the attention of tourists. The gas spring was first discovered in the late 18<sup>th</sup> Century during excavations for a mill located along the Niagara River. A few decades later entrepreneurs recognized a commercial opportunity as tourists began to flock to Niagara Falls in the 1820's. The operators of the Burning Springs also enhanced its popularity by inventing ingenious stories of its origin.

Please see page 2 of this issue for a continuation and a brief biography of our speaker.

Time: 12 noon, Wednesday, February 27, 2019

Place: Calgary Petroleum Club

319 - 5 Avenue SW, Calgary; Cardium Room (but check marquee).

Dress: Business casual.

Cost: P.H.S. Members and Student Members \$35 and Guests \$40 (most welcome).

Only cash or cheque at the door. Payment can be made in advance by credit card

or by e-mail. Please advise payment method with reply.

Lunch: Soup, sandwiches and cookies. Gluten-free? Vegan? Advise with reply.

**NOTE: Instructions for registering for the Luncheon:** 

Reply, if you wish to attend, to: Micky Gulless at 403-283-9268 or micky@petroleumhistory.ca by noon, Monday, February 25, if not sooner.

Those who register but do not come, or cancel after the deadline, will be invoiced.

Those who do not register by the deadline may not get a seat.

## The Bull Wheel



**Call for contributions and speakers:** The Petroleum History Society values your input. If you have an article that you'd like to see in *Archives* or if you have a talk that you'd like to give, please get a hold of us. Contact President Clint Tippett at the address indicated on page 3.

**Annual Meeting – mark your calendar:** After our February 27 event, the next gathering will take place on March 27 when we hold our Annual Meeting and Awards Ceremony. Proceedings will commence at 4:00 p.m. at the Petroleum Club. Stay tuned.

**Membership Renewals:** P.H.S. Treasurer Micky Gulless has sent out renewal notices and contact verification requests to our members. Several options exist for payment, as explained on the renewal form. If you haven't already done so, please take a moment to look after this important piece of business. We have maintained the level of our dues for this coming year.

February 27 Luncheon – Abstract (Part 2) and Andrew Fox biography: During the mid-1800's the Burning Springs was a "must see" attraction for tourists visiting Niagara Falls. Among the curious visitors was pioneering geologist Charles Lyell, who recognized that the gas at the Burning Springs likely emanated from "bituminous matter" bedded within fossiliferous carbonates. The Burning Springs was so successful by the 1880's that the owner claimed that he was earning more than \$50,000 per year from the enterprise. The Burning Springs and other unscrupulous tourist attraction operators did their best to separate visitors from their money and to degrade the natural beauty around Niagara Falls. This activity alarmed the Ontario government so much that it expropriated the land surrounding the cataract and created the Niagara Park in 1885. Despite this set back, the Burning Springs continued to operate as a tourist attraction. It was also one of the precursors of an emerging oil and gas industry in Southern Ontario.

Andrew Fox received a B.Sc. from Laurentian University in Sudbury and an M.Sc. from the University of Alberta in Edmonton. He started his professional career as a geologist with Dome Petroleum in 1988 and was subsequently involved in its acquisition by Amoco Canada and, ultimately, by BP Canada. In 2004 he joined MEG Energy Corp. where he was Vice-President - Resource Development until 2012. Andrew continued with MEG as a part time advisor until he retired in 2017. Andrew is an active volunteer with the Canadian Society of Petroleum Geologists as well as Calgary's downtown Knox United Church where he is part of the team charged with maintaining that 107 year old sandstone building. Andrew grew up in Niagara Falls, Ontario - unaware that he was surrounded by some of the best Paleozoic outcrops in North America.

Roots of the Petroleum History Society: In the Fall of 1986 an article appeared on page 11 of The Cornerstone – a publication of the Alberta Historical Resources Foundation. It was entitled "The Centre for Petroleum Industry History Society". The text was as follows: "The idea for a Centre for Petroleum Industry History arose in mid-1985, after the successful completion of the Petroleum Industry Oral History Project. At that time, many people realized that there was a need for some sort of clearing house for ideas, information, and collections of artifacts or archival materials, like old photographs or diaries, on the oil and gas industry of this province. As a result, the Centre for Petroleum Industry History Society was organized and incorporated in October 1985. A Board of Directors, representing both industry and academics, was established. The next step was to have a feasibility study done to consider such matters as: the mandate for the Centre: clear identification of the need for the Centre and community support: organization and staffing; fundraising plans and costs; and location of the Centre. The Alberta Historical Resources Foundation provided funding of the feasibility study, which is now underway. The report of the study, undertaken by the historian, David Finch, will be completed by September 1986. The Society invites your opinions and ideas in this critical planning stage for the Centre. The educational and research function of the Centre will fill a valuable gap in the colourful, vital and dynamic history of the petroleum industry in this province." The article was accompanied by a photo of the Centre for Petroleum Industry History Society Board of Directors. Of those, David Finch, Bill McLellan and Doug Cass are still Directors of the (sincerenamed) Petroleum History Society. Aubrey Kerr and Jack Porter are deceased. Trudy Cowan, Nadine MacKenzie and Jim Wood have moved on to other endeavors.

**Donations and endowments:** Last month we thanked those generous individuals who made donations to the Petroleum History Society at the time of their membership renewal. After due consideration by the P.H.S. Board, we would also like to ask members to consider adding a small donation to our Society as a part of your estate planning to ensure the preservation of Canadian petroleum history and enable us to promote the contributions made to the Canadian economy by our petroleum industry and by the many dedicated individuals who have been and are involved in it. As you are aware, the P.H.S. does not have charitable status with the Canada Revenue Agency and therefore cannot issue tax receipts – but that does not detract from the worthwhile nature of our endeavors. Thank you for your consideration.

**Oil Patch Mutations:** It is easy to forget that many people in the petroleum industry are entrepreneurs first and oil and gas experts second. As such it should be no surprise that when times get tough on one front, a jump is made into greener pastures. Such was the situation highlighted in the Calgary Herald on September 25, 2018 where the move by oil producer Relentless Resources Ltd. to re-invent itself as marijuana-focused Sugar Bud Craft Growers Corp. was described. I guess both industries are going to pot.

Archives is published approximately eight times a year by the Petroleum History Society for Society members.

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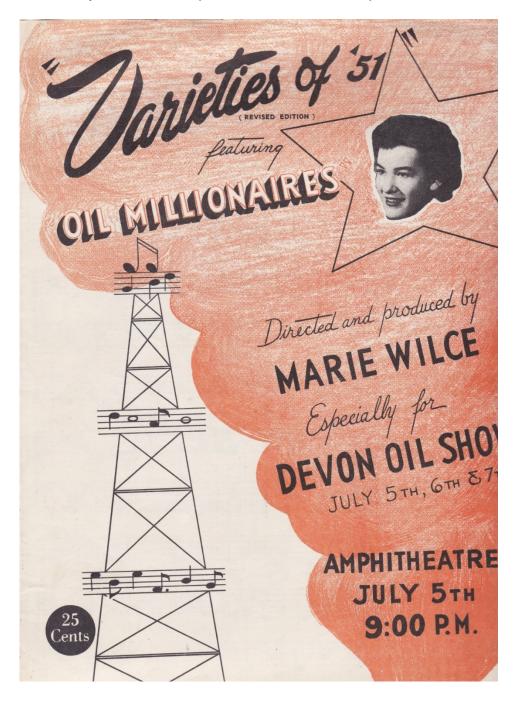
Back issues are archived on our website at <a href="http://www.petroleumhistory.ca/">http://www.petroleumhistory.ca/</a>
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## Varieties of '51

## (Revised Edition) - Featuring Oil Millionaires -

Directed and Produced by Marie Wilce especially for Devon Oil Show, July 5-7, 1951 - performed at the Amphitheatre



A song sheet from this post-Leduc discovery musical production was recently unearthed. Roles are obviously stereotypical but were not out of place at that time. It is unreasonable to think that drillers were becoming millionaires – that was much more likely for the owners of royalties from oil production. Just the same wages were good, employment was secure and the Leduc boom was a godsend for people who had lived through the Depression and the Second World War.

The lyrics to the song are as follows:

#### Waitresses:

Good day my friend, we recommend our blue plate number 2.
Our food is the best in the whole wide west,
Oh what can we do for you?

#### Oil Men:

Give us the works cuz' we're making millions in the oil fields.

We're learning to be a millionaire.

Give us the best food you've got girl. We've got money to spare.

#### Waitresses:

We've got a T-bone steak at a dollar forty-five and a nice sirloin tip at a dollar eighty-five. Oh what would you like sir, for what do you care?

I don't really know what suits an oil millionaire.

#### Oil Men:

An oil millionaire? Yes, an oil millionaire.

Most everybody owns an oil well, a Cadillac, sailboat and a mink.

Everybody's making millions, it's not as easy as you think.

We work a twelve hour day and we really put in time 
Just drilling for oil to earn another dime.

#### Waitresses:

We came down to Devon without a dime to spare. We came down to Devon to catch a millionaire.

#### Oil Men:

An oil millionaire? Yes, an oil millionaire. They came here to marry an oil millionaire.

#### Together:

There's an oil well here and an oil well there.

And everybody's learning to be a millionaire,

To be a millionaire.



Left – "Jumping for Joy" at their well coming in.

Right – Family associated with Regent Drilling, Leduc, 1940's



## Pleading with Investors – Leduc Delineation 1948



407 LANCASTER BUILDING, CALGARY, ALBERTA

August 16, 1948.

Dear Shareholder:

By now you have probably received the August 7 issue of the Oil Beacon telling of your company's success at Continental No. 8.

The well, your third producer in Leduc, flushed 70 barrels an hour, more than \$250 every 60 mimutes. No. 8 opened up locations for three more D-2 wells on the new quarter and the possibility of four D-3 wells beneath them.

The No. 8 alone placed Continental among the top-notch independents in the Leduc field.

BUT HERE IS NEWS:

A bulletin from the field dated August 10. "CONTINENTAL LEDUC WOODBEND NO. 3 BLEW IN TODAY FROM THE CRETACEOUS ZONE FORTY BARRELS AN HOUR NINE HUNDRED AND SIXTY BARRELS A DAY FLUSH PRODUCTION. ASSURES EIGHT WELLS ON THIS QUARTER."

That's your fourth producing well in Leduc. It opens up territory for a total of 17 producing oil wells. Besides that Continental has an attractive quarter section a mile and a half south of the Imperial Woodbend wells.

We believe that no other independent is in a position superior to this at Leduc today.

Yet Continental stock is still being offered at 50 cents a share. Maybe you want to know why. The reason is this: Continental MUST have money to develop these new oil lands. A completed well costs more than \$100,000. We not only need the maney but we need it fast. We make no bones about this. If we raised the price of the stock it might slow up the flow of money. We need money now.

Surely now everyone must recognize that Continental is an up and going oil company, a leader in the field. Compare the price with that of other companies producing in Leduc. Where can you buy more for less.

We are enclosing herewith an application for whatever additional Continental stock you may feel able to take on at this time. Please fill in the form and enclose your check at the rate of 50 cents a share. The stock will be forwarded promptly to you.

We believe that this investment in the future of Continental will prove to be one of the wisest you have ever made.

Sincerely Yours, CONTINENTAL OIL COMPANY OF CANADA LIMITED

Secretary and Manager.

This letter was sent to shareholders in Continental Oil Company of Canada Limited on August 16, 1948 asking for additional investment capital to allow the company to continue to develop its properties in the Leduc Oil Field. Its Number 3 well had flowed 960 bbl/d from a shallow Cretaceous zone. Its Number 8 well had flowed 1680 bbl/d from the Devonian opening up the possibility of multiple locations in the Nisku (D2) and Leduc (D3) Formations. Well spacing at

that time was one well per legal subdivision (LSD) or 16 per section (1 square mile) – for each formation so that was a lot to fund. Continental was offering shares at 50 cents. They say in the letter "Continental MUST have money to develop these new oil lands. A completed oil well costs more than \$100,000. We not only need the money but we need it fast. We make no bones about this." Inspection of oil field maps shows that basically all the wells that could be drilled were drilled. Although the field was ultimately unitized, early production was faced with serious competitive drainage (the good old "I'll drink your milkshake" of "There Will Be Blood" fame) and hence every day of non-production was another day when some other company was draining the oil from under your property. And of course the royalty interest holders were on your case to produce as soon as possible because their income was also impacted – both immediately if wells were not in place and down the road due to a diminishment of the remaining recoverable oil. Looks like they were successful in getting more investment as a new well Number 9 (below) came to life in April of the next year.



Continental Leduc No. 9 blowing in April 19, 1949. Photograph by Harry Pollard, Calgary

## **Bill Gallup and Turner Valley**

(extracted from the book "In the Light of the Flares" 1979, pp. 72-73)

W.B. Gallup – My Turner Valley Story: During the "Thirties" everyone who came to the Turner Valley did so looking for work, or so it seemed. I was no exception except that having spent the summer in northern Saskatchewan prospecting (I had decided to look into the possibility of switching from "Hardrock" to "Softrock" geology), I still had my summer's stake. Many of the fellows, whom I was to meet later on, arrived there broke and slept under the flares subsisting on part time work such as running casing and moving jobs which really gave them only a few hours at a time. This was in October of 1938, fine Foothills weather. I was certainly taken with the place. The Twin Cities Hotel had been open for a couple of weeks and I was staked enough to stay there for a few days. However, I did not land anything then but I did get some things lined up to my satisfaction in Calgary.

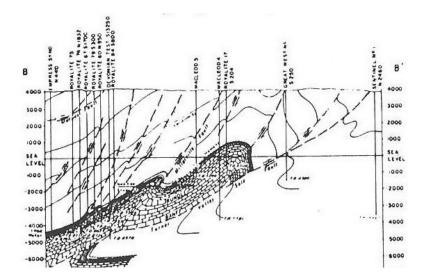
I went back to Saskatchewan and worked on a ranch for a while to save my money. Then early in January I got a telegram from Grant Spratt of Anglo Canadian and was off for "Little New York" [Longview]. My job was looking after the samples from the drilling rigs and logging them. I also tallied pipe on casing and tubing jobs and did some rodding for the Anglo surveyor, Ronnie Grisdale. I was there for a little over one year and it was a lively place. We, the bachelor staff, slept in rooms over the Anglo office and ate up at Big Mary's Café in the Twin Cities Hotel. Mary ran a dandy place, the food was good.

At one time during 1939 there were 13 cafes operating in Little New York. Some did not last long but Mary, George Gibb and Tom Kee (the first) were there for the duration.

One blizzardy morning while I was going through that day's samples Ralph Will came up to me and said "Take your microscope, go out to Twin Dome and take a core of the Grit Bed". I did not have a car, had only vague ideas about both Twin Dome and the Grit Bed and was not all that sure about coring. I packed a bag and my microscope and caught a ride out with "Big Red" MacLauren about an hour later. That was my introduction to wildcat geological work.

The winter of "38-'39 was cold with guite a bit of snow. A lot of the fellows with their young wives and children were living in shacks that were not much more than granaries. For a lot of the people in Little New York that winter casing jobs were the main stay. Of course everyone knew these were coming up and was after them. Bill Ferris was pushing his own rig for Anglo then and he was a bit soft hearted so he got me trapped into arranging his casing crews which meant notifying some and turning down quite a few more. Finally I was doing this for all the Anglo pushes at times. It certainly made me realize what a thin time some of these people were having in those early days before the employment situation was stabilized. For a while when the drilling was pretty well concentrated in the South End the activity went on pretty well around the clock. There was always some traffic and a certain amount of activity at all hours. The flares turned night into day and guite number of the inhabitants went along with the idea. The beer parlors opened at 8:00 a.m. and closed at 10:00 p.m. So nobody, no matter what shift, had to go thirsty. There were movies and plenty of dances all over the area. For the gamblers there was always a game somewhere and most of these places were easy to find. There was a crap game that never seemed to stop on the counter of the White Owl Café in Little Chicago. There was also a dog out on the street in front that kept about the same hours chasing cars. He was a coyote looking creature and Shorty Chandler had a standing offer of \$100.00 for anyone who

could run over him. I had a '32 Ford V8 coupe that summer that seemed a lively little vehicle but was not quick enough for that dog.



Bill Gallup's 1951 cross-section through central part of the Turner Valley structure

For many of us living in the South End the Highwood River was an important part of our lives. If we were not in the Twin Cities drinking beer in our spare time we were up the river with a case of beer, so Eddie Deelan got to us anyway, fishing or exploring around. The road up there was just a trail which deteriorated somewhat westward. I had become friends with Neil Webster and Roddy Macleod who ran the Red and White store in Little New York. I was going up the river quite regularly every weekend taking grocery orders up for Webster and Macleod who had all the ranchers up the river as customers. It naturally followed that I would pick up the mail and often bring down letters for mailing. I was well rewarded for these slight efforts for if Guy Weadick's stories alone were not sufficient I became friends with the Weikles, Jay and his wife, Mac at Eden Valley Ranch and spent a good many wonderful weekends there. Frazier Hunt owned the ranch then and there I met Helen Keller who was a guest of the Hunts.

Early in 1940 the Anglo Canadian drilling program was pretty well completed and I was laid off. That ended my residence in the South End. I next was with the Conservation Board in Black Diamond where I remained for a month when I got back into geological work with the Home Oil Company was a well site geologist on the Home Brazeau well west of Nordegg.

In the late summer I returned to Turner Valley, the North End this time, to continue with Home. I bought a little house in the town of Turner Valley, moved it to the Home lease, got married and settled down, for a while. My wife was Margaret Watt of Nanton, she was the niece of George and Alma Gibb who had a fine little café in Little New York and it was there that I met Margaret.

In the spring of 1942 I became resident geologist for Royalite and moved to Turner Valley. Our two sons, James and Brian, were born in the Turner Valley hospital, attended by Doctors Lander. Never was a community blessed with the care that these two doctors gave us.

The war years were a busy time in the crude oil development. Gasoline was needed right here in Alberta to fuel the Commonwealth Air Training scheme wherein men from all over the Commonwealth were trained as air crew in hurriedly built stations mostly throughout southern

Alberta. I believe that there were twenty rigs running much of the time. A good deal of activity was at the North End but there were several wells drilled at the extreme South End, across the Highwood. There were also a few wildcats drilled in the area to get all the oil possible for the war effort. It was my good fortune to be there at that time and to have the opportunity to work out the complex geological structure of the North End. At this writing I am again doing well site work in the foothills using knowledge and experience gained during those years in the Valley.

During the war years many of us took no holidays and only a day off when the opportunity offered. This was no hardship, at least we were at home, and we were all deeply involved in our work. Finally by 1949 the crude oil area of the [Mississippian] "Madison Lime" was drilled up.

Since then, in recent years, Gulf has gone back to drilling for "Brown Sand" [Jurassic] crude production with considerable success. We recognized in earlier days that there was crude in this sand but the technique for developing production from such sand did not then exist.

Turner Valley gave the oil industry the men of expertise that were needed to spread through the vast expansion that took place with the Leduc and Redwater discoveries. For many who went to the South End during the depression simply because there were jobs there this became a way of life. Today, going on forty years later, there are still old Turner Valley hands scattered around the "Oil Patch"."

Editor's Notes: Bill Gallup went on to work with Gulf and published the definitive paper of the subsurface geology of the Turner Valley Field in 1951. In 1953 Bill organized the annual field conference for the Canadian Society of Petroleum Geologists - in that year to the Crowsnest Pass. According to Finch (2002), "geologists piled into dozens of cars and filled the trunks with beer for the two day excursion." Bill then became President of the C.S.P.G. for 1954.



(L-R) Bill Gallup, Bill's wife, Felix Frey (with pipe, Shell), Rein deWit (Gulf) and Pete Gordy (Shell) share some drinks in June 1975 after the Foothills field trip that was a part of the joint Exploration Update'75 Convention held by the C.S.P.G. and their geophysical compadres of the Canadian Society of Exploration Geophysicists. (C.S.P.G. Photo Collection)