

ARCHIVES

Newsletter of the Petroleum History Society

January 2025; Volume XXXVI, Number 1

P.H.S. Luncheon – Wednesday, January 27, 2025

Builders from the Oilpatch

By Walt DeBoni, Petroleum Industry Veteran

Please see page 2 for talk abstract and author's biography.

Time: 12 noon, Wednesday, January 29th, 2025
Place: Calgary Petroleum Club
319 - 5 Avenue SW, Calgary (Please check the marquee for the room)
Dress – business casual.
Cost: P.H.S. Members and Student Members \$40; Guests \$45 (most welcome).
Only cash or cheque at the door. Payment can be made in advance by Interac or
PayPal transfer to treasurer@petroleumhistory.ca 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 Treasurer Ian Kirkland via his email
treasurer@petroleumhistory.ca

The deadline for registration is Monday, January 27th at noon.

**Please be advised that those who register but do not attend or cancel after the
deadline, will be invoiced.**

Those who do not register by the deadline may not be accommodated.

These restrictions are related to our obligations to the Petroleum Club in terms of catering
and seating.

Luncheon Speaker's Abstract: Builders from the Oil Patch

The oil industry has been instrumental in the growth of Alberta and in creation of wealth, both public and private. Our speaker will identify several individuals who contributed to the growth of our industry, benefitted from its wealth creation, and shared their time, talent, and treasure for the benefit of the community. Walt will highlight mostly the following individuals: Gerry Maier, Dick Haskayne, Charlie Fischer, Doc Seaman, and Ted Rozsa. The talk will focus not only on the contributions that these men and their families made in building our community but also how their business success was at least in part related to their approach to community. All applied similar business principles to their work and to their philanthropy.

Luncheon Speaker Biography

Walt DeBoni worked forty-four years in the petroleum industry with various companies, including Hudson's Bay Oil and Gas, Dome Petroleum, Bow Valley Energy and Husky Energy with a couple smaller companies sprinkled into the mix. For much of his career he was involved in international exploration and production. While always based in Calgary, he made many business trips to Indonesia, China, United Kingdom, Norway, Iran, Abu Dhabi and Romania. During his final three and a half years, while working at Husky, he was in charge of constructing the offshore production facilities for the White Rose Field, offshore Newfoundland, an engineer's dream job! After retiring, Walt served on several corporate boards. Walt and his wife, Irene, have been involved with Historic Calgary Week for the past twenty years. In retirement, they like to travel and are enjoying and supporting various arts organizations in Calgary.

Editorial Comment: Please note that unless otherwise indicated, all contents of this newsletter have been created and/or assembled by P.H.S. Vice President and *Archives* Editor, Bill McLellan.

***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 <http://www.petroleumhistory.ca/>

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The Bull Wheel

(Contributed mainly by Clint Tippett, President)



Next P.H.S. Luncheon Meetings: Please mark your calendars with our events scheduled for the first half of 2025 (all at the Calgary Petroleum Club). Our upcoming luncheon meeting are scheduled for January 29th, February 26th, May 7th, and June 11th.

Our Annual General Meeting with awards presentations is scheduled for March 26th, starting at 4:00 p.m. at the Calgary Petroleum Club.

Membership Renewals: P.H.S. Treasurer Ian Kirkland will shortly be sending out renewal notices or membership status/contact detail notices to our members. Membership fees will be held at the previous rates of CAD\$30 for individuals and CAD\$100 for corporate/institution.

You can renew your membership by:

(1) pay by cash or cheque at an event

(2) Interac transfer from your bank (no fees to P.H.S.) or PayPal transfer to treasurer@petroleumhistory.ca

(3) mail a cheque to: Petroleum History Society, c/o 19 Roselawn Cres. NW, Calgary T2K 1K7

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 or Editor Bill McLellan at the email addresses indicated on the previous page.

Call for nominations: The P.H.S. will be holding its Annual Meeting on March 26th. At that time, we will be running the election for a new Executive and Board. Nominations are open for all positions so if you are interested in the activities of our Society, we encourage you to step forward. If you know of someone who is or might be, please also encourage them and let us know.

The key to longevity: Your President recently ran across a P.H.S. membership list from about twenty years ago. Amongst the names included were many of our early adherents who had been part of the 1950's to 1970's boom years but are now sadly departed. What was striking about this contingent was their ages at the time of their passings. Although there was a spread, for the most part they were between 85 and 95 years old. The lesson – if you want to live a long time – join the Petroleum History Society or renew your membership!

Staying power: As you know, and as described in *Archives* articles in 2024 by P.H.S. Vice-President and *Archives* Editor Bill McLellan, 2025 marks the 40th anniversary of the P.H.S. whose founding papers were signed on October 20, 1985. Of the seven initial signatories, Bill and Director Doug Cass are thankfully still on our Board. In 1999 a memento was given to Bill in appreciation of his service which was lengthy, even then. In his reply in the October 1999 issue of *Archives*, Bill wrote: *“I would like to thank all members for the plaque presented to me on their behalf. It’s a wonderful conversation starter, and a constant reminder of the many wonderful years I have spent as a Member. The railway tank car with the HBOG name and logo is a nice touch! I must say, however, that although I have been called many things over the years, I have never been called a “pillar” before. I assume that’s a good thing. Thank you again for this unexpected honor. I hope to spend many more years enjoying the activities and personalities of the Society”*. What can we say more than twenty-five years later? Bill, thanks again and keep up the good work!

Ducking, a controversy: Many of you will have seen the graphic book called “Ducks”, written by Kate Beaton (Drawn and Quartered Publications, \$39.95) about her experiences over two years while employed in the oil sands at Fort McMurray. It is an interesting volume and doesn’t pull any punches about many aspects of working life. Some, including Suncor supporter Bert MackKay, thought that it was an unfair reflection of life in the oil sands while others treated it as more of an exposé. The *Globe and Mail* used to have a Bestsellers feature with fiction and non-fiction lists for both Canadian and non-Canadian works. When it first appeared, Beaton’s book was classified as non-fiction. However, between February 11 and February 18 of 2023, it was reclassified as fiction. Bert would be pleased.

Oilpatch calendars: Randal Kabatoff’s Soul of Canada organization has once again produced a number of historical calendars for the new year. Amongst them are “Oil and Gas Well Blowouts 2025” and “Petroleum Pioneers 2025”. They contain a wealth of information. If you are interested in purchasing them, please visit www.soulofcanada.com

Measuring up: It seems like only yesterday but according to a recent Canadian Press feature, 2025 marks the 50th anniversary of the use of SI units in Canada, specifically for temperature measurements. In the late 1970’s there was a task force in the petroleum industry that was focused on conversion of imperial terms into their metric equivalents. We started using metres instead of feet for drill depths and cubic metres for oil and gas volumes. Of course, this caused confusion with our American counterparts who had not made that leap. Rightly or wrongly, the jump fell short in Canada and, as a result, we currently live in a hybrid world of pounds and kilograms, miles and kilometres and Celsius and Fahrenheit.

Packers Plus: This well completion company is celebrating its 25th anniversary. Its focus is the use of its wellbore packers to isolate intervals in wellbores for selective stimulation. While the industry was initially working with vertical wellbores, the revolution in directional and horizontal drilling soon led to wells with numerous targeted zones and today it is not unusual for a single well to include several kilometres of horizontal extent and more than 100 zones separated by wellbore packers.

History of the Alberta Energy Regulator: The book entitled “Steward” by the late Gordon Jaremko relates the history of this important Alberta organization. P.H.S. Past-President Micky Gulleus alerted us to the fact that it is available in a digital format at the following address: https://static.aer.ca/prd/documents/about-us/Steward_Ebook.pdf

Compelling?: The January 2, 2025 issue of the Calgary Herald ran a feature entitled "20 *Compelling Calgarians*". It is not surprising, given the political leanings of the media, that none of those described has any connection to the petroleum industry. Is it any wonder that young people lack role models that would lead them into the real world?

The Social Scene: *Avenue Magazine* has recently contained a couple of articles that take a look at where Calgarians meet and eat. The feature in the September/October 2024 issue was titled "*Still Servin' After All These Years*" and included several downtown establishments that have been important for petroleum industry executives and employees including the Palliser Hotel, Caesar's, and Hy's. The January/February 2025 issue contains the feature "*The Evolution of Exclusivity*" that looks at Calgary's private clubs including the Petroleum Club and the Ranchmen's. Of course, for both restaurants and clubs there are many others that have come and gone, leaving behind the ghosts of partnerships established and deals done.

1914 Promoters: Harry Sanders' new book "*Fairmont Palliser – The Story of Calgary's Most Iconic Hotel*" (Summerthought Publishing, 2024, 160 p.) contains some material about the petroleum industry including the following details of the stock mania that followed the 1914 Dingman discovery at Turner Valley: "*Calgary went oil crazy, and the effect on the hotel was immediate. On opening day, the Wheeler Brokerage and Investment Company established its office in the hotel, and other firms followed. The Calgary Stock Exchange opened a few blocks from the Palliser four days later. Speculators conducted substantial transactions in the hotel; they promoted stocks on the recently installed tableside telephones in the café in such loud voices that the management removed the phones. E. J. Auzley, who presented himself as "President of the Investors Oil Exchange", was among the oilmen who took up residence in the Palliser, but he turned out to be a remittance man and failed to pay his bill.*" Sounds like it was a hectic time. Who knows what would have happened if the follow-up wells had been more successful and the First World War hadn't erupted.

Famous last words: A. David Silver wrote the book "*Entrepreneurial Megabucks: The 100 Greatest Entrepreneurs of the Last 25 years*" in 1985. On page 3, as a part of his rationale for who he picked, he made the following statement: "*Social utility was frequently a deciding point in their inclusion process. Real estate developers and extractive industry (oil, mining) entrepreneurs were excluded because the problems they address – shelter and energy – have been around a very long time and there have been no unique delivery systems or elegant solutions to these problems since prehistoric times.*" Who would have guessed that twenty years later the technology used in drilling and completions would have been so thoroughly changed that entire new basins have been opened up and global geopolitics have had to be recalibrated due to the resurgence of production from previously ignored plays or declining regions, for example the oil sands and the Permian Basin.

Keep your old letters: A one-page typed letter, signed by John D. Rockefeller, Jr., was advertised for sale at a price of \$800.00. Note that this is the son of the Standard Oil founder John D. Rockefeller, not J.D. Sr. himself. The letter was sent by Rockefeller Jr. to William G. McAdoo, Secretary of the Treasury (U.S.) on October 28, 1919 and, interestingly, included an attachment about a talk given by William Lyon Mackenzie King who had just been elected as the new leader of the Liberal Party of Canada, succeeding Sir Wilfred Laurier. My wife always complains about me keeping old correspondence – but who knows – maybe it will be worth something someday!

Little Chicago: I googled this name a while ago expecting to find material about the old settlement in the Turner Valley Field, north of Longview. Instead, I was linked into the “Little Chicago Prospect” which is apparently a “petroleum deposit” on the east shore of the Mackenzie River downstream of Fort Good Hope and south of the Mackenzie Delta. Apparently, a company called Kodiak Energy did some work there and in 2007 claimed that there could be up to 1 billion barrels of oil and up to 600 bcf of natural gas lurking below the surface. Of course, the timing is interesting as it was located close to the planned route of the Mackenzie Valley natural gas pipeline (finally cancelled in 2017). Fair guess that it was some sort of a promotion. Of additional interest is that a travel agency is promoting travel to Little Chicago saying “*Find your hotel in Little Chicago now. Book a flight to Canada and a hotel for your stay in Little Chicago*” despite the fact that the place basically does not exist!

Production in perspective: Oil production from the Turner Valley Field peaked in 1942 at about 9.8 million barrels – that is per year, not per day. So that translates to about 26,800 bbl/d. In contrast the current production from the Tengiz Field in Kazakhstan is 496,200 bbl/d. That makes Turner Valley’s peak only 5% of Tengiz. While Turner Valley was certainly a critical Canadian resource during WWII, it was pretty small potatoes in today’s context.

REMEMBRANCES

(with thanks to the Calgary Herald)

It's been a while since we've said farewell to some of the people who have been integral to the growth and success of the Canadian oil patch. In the March 2024 issue David Finch commemorated the life and contributions of journalist Gordon Jaremko (P.H.S. Lifetime Achievement Award 2000) who passed away on November 28, 2023, while in the June 2024 issue we noted with regrets the passing of author Earle Gray (P.H.S. Lifetime Achievement Award 1997) who passed away on April 2, 2024. We have some catching up to do.

BAMBER, Edward Wayne. Born April 23, 1935 and passed away July 19, 2024.

Wayne was born in Edmonton but spent his childhood on a farm west of Edmonton. This is where he developed his love of nature. His teenage years were spent in Chilliwack, B.C. In high school, he learned to play the clarinet and oboe and played in many bands in that area. He also worked on the local golf course and became a very skilled golfer. At one time, he considered becoming a professional golfer but decided that would be a difficult life.

Wayne returned to Edmonton and enrolled at the University of Alberta as a science major. After four years, he graduated with a degree in Geology. He was hired by the California Standard Oil Company and stayed with them for one year. He was sent north to sit on wells in -40-degree temperatures and decided that this was also not the life for him either, so he continued his education, pursuing a Ph.D. He applied to several universities and was accepted by Princeton University. Before leaving for Princeton, he met his wife, Violet, who became his companion and support for 66 years. Wayne spent three years at Princeton, earning his Master's and Ph.D. degrees, specializing in paleontology.

Upon completion of his degrees, an opening came up in the Geological Survey of Canada in Ottawa. Wayne was hired and spent the next 33 years conducting research and writing many scientific papers, at first in Ottawa for six years and then in Calgary. As part of his research, Wayne spent many summers doing field work in northern British Columbia and Alberta using helicopters. He enjoyed this very much and had many interesting stories to tell about the bears he encountered. After retirement, Wayne stayed on as a Scientist Emeritus and continued his research for many more years.

GOODALL, Bruce Loftus. Born August 31, 1938 and passed away August 13, 2024.

Bruce's father worked for the Alberta Department of Agriculture as a Seed Inspector. He cleared a forested acre of land next to the Mill Creek Ravine in Edmonton and built a charming wood house with a magnificent fieldstone fireplace. As a young boy, Bruce was a paperboy for the Edmonton Journal and eventually became a branch manager. With this money, he bought his first car at age seventeen. He attended Rutherford School and Old Scona in Edmonton and later studied Petroleum Engineering at the University of Alberta, graduating in 1960. In Bruce's first year of university, he and a few of his engineering classmates took jobs in Banff. They proudly strutted along the Banff Avenue strip in their engineering jackets. Bruce noticed a girl who was about 16. There was a dance at the Cascade dance hall that evening, and Bruce approached her and asked if she would go to the dance with his friend. She replied, "No, my father is expecting me home from choir practice." Bruce later explained, "The sale begins when the client says no." Ten years later, he married that girl. A sign in their house read, "A fisherman lives here with the best catch of his life." Eveline really was the love of his life.

Bruce's first job was with Shell and was based on the recommendation of his uncle, Red Goodall, who was trained as a reservoir engineer. He joined the oil and gas department of TD Bank in 1971. Overflowing with great business ideas, he left the Bank and opened Lintus Resources and then Investor's Petroleum Consultants in 1976. He soon assembled a wonderful and talented staff who loved working with him.

Bruce loved camping, travel, and reading, and above all, fishing. Most of Bruce's lifelong friends were fishermen, and he considered himself fortunate to have tested some of the best brown trout streams in the world. He continued to make fisher-friends throughout his life. His favorite trout streams were in Alberta, and his very favourite place to fish was the Fallen Timber. This is where he first taught his kids to fish, and then later, his grandkids. Bruce was involved in the charities Trout Unlimited and the Alberta Wilderness Association. Throughout his life, he was passionately committed to the preservation of fish habitat and wilderness corridors.

P.H.S. President Clint Tippett: I had some interactions with Bruce over the years. Bruce had some business interests in the Jumping Pound West area, amongst other things, that were operated by Shell, my employer. Shell's effort to expand one of the units was contested by Bruce (and others) but ultimately a resolution was reached.

HICKS, William Ross. Born January 17, 1944 and passed away November 2, 2024. Ross' earliest years are shrouded in mystery but after graduation, he had questions about what to do with his life. He wanted to be a ski instructor, but his parents wanted him to be a music teacher as that was his major. The compromise was that he went into journalism where he spent thirteen years, mostly in broadcast (radio/tv) but some print (newspapers were still in vogue then). He eventually decided that he needed a new career path since he had achieved his goals and had reached the top of that lifestyle.

At that point, the public affairs officer for the Canadian Armed Forces came after him and asked him to join them and bring their public relations into what was then the 20th century. As a result, in February 1971, he joined the military through the Direct Entry Officer Program and ultimately retired in January 1999. He received the Canadian Decoration (CD) for service to Canada. During this time, Ross worked mostly in Esquimalt, Halifax and Ottawa (National Defense Headquarters) in all aspects of senior public affairs/communications strategic planning.

As one of the benefits of being in Ottawa, military people were regarded as movable public servants in uniform. As a result, Ross was seconded to several other departments as required. These included the Anti-Inflation Board, Canadian Government Expositions Center, and Dept. of Finance. Eventually, the government transferred Ross and his family to Calgary in the early 1980s to set up regional offices for what was then Energy, Mines and Resources Canada. Through this position he became acquainted with Dr. Walter Nassichuk and the wonderful world of geology at the Institute of Sedimentary and Petroleum Geology near the University of Calgary. As a result, he also got some considerable experience in Canada's north, being able to go on all three Beaufort Sea drilling rigs and getting to know the industry. During this time, he also maintained his position as a military Public Affairs Officer for Southern Alberta, and retired with the rank of Lieutenant-Commander, Royal Canadian Navy. A highlight of this was working with the Buckingham Palace Working Group for the visit of Queen Elizabeth to Calgary in 1990. When The National Energy Board was relocated to Calgary, Ross was invited to join that organization. Thirteen years later, after working on every pipeline project regulated by the Board

and seeing all of Canada from coast to coast to coast, he retired just as the release of the Reasons for Decision on the Mackenzie Valley Pipeline Project was pending.

Ross was a member of the P.H.S. Board of Directors until recently when his deteriorating health led to him stepping down. His contributions are herein acknowledged.

MILNER, Charles William David. Born June 27, 1927 and passed away June 5, 2024. David was born in Toronto, Ontario. His chosen career was as a geologist with Imperial Oil. His work took him to many interesting places around the globe. He had many passions beyond his work that included his involvement in the church, philanthropic pursuits and federal politics. He was an avid reader of literature of every genre and was keenly interested in everything from the tiny ant, to why we exist, to the formation of Earth itself. David pursued many outdoor activities such as downhill and cross-country skiing, camping, and being outside in nature. One of David's great passions was birdwatching, a joy that has been passed down through the generations. David passed away on a beautiful spring evening, while drinking a martini and eating a steak at the Calgary Golf and Country Club.

David spoke to the P.H.S. on November 26, 2014 with his subject being "Libya and Tunisia – then and now" that drew on his experiences in those countries over a period of forty years, both while working as a geochemist for Imperial and ExxonMobil and as a private citizen.

PRICE, Raymond Alexander. Born March 25, 1933 and passed away October 16, 2024. *Note: This description of Ray's life is unusually long but is justified by his critical contributions to our understanding of the Cordillera and its hydrocarbon riches.*

Ray was born and raised in the ethnically diverse and culturally rich working-class "North End" district of Winnipeg. His father, Alexander F. Price (Prysiaznuik), and his mother, Edith Olga (Arlt) Price, were born in Winnipeg's North End shortly after their parents had arrived in Winnipeg from two different parts of eastern Europe. Ray's elementary and junior high school education was in Michael Faraday School, less than one block from his home on Mountain Avenue. There he became fascinated with physics and chemistry. In 1950 he graduated from Isaac Newton High School (the alma mater of both of his parents) with the Governor-General's Medal for academic achievement. At the University of Manitoba, Ray enrolled in the required introductory B.Sc. science courses in mathematics, physics, and chemistry and in an optional introductory course in geology that was presented by a legendary teacher, Professor E.I. (Ed) Leith. It was in that course that Ray met Mina Geurds, his classmate, and future wife.

After completing only one introductory course in geology, Ray had the good fortune to obtain summer employment as a junior assistant in the Geological Survey of Canada (G.S.C.) field crew of Dr. Geoffrey B. Leech. Working and living in the Purcell Mountains of southeastern British Columbia, the 19-year-old 'boy' from the flat prairies of southern Manitoba was intrigued and enthralled by the majesty and mystery of the mountains; and amazed that geologists had no really plausible explanation of "How and Why" the mountains were created. Geoff Leech carefully nurtured Ray's interest in geology by providing him with special opportunities to contribute his own independent observations and measurements to the geological research project. By the end of that field season Ray's focus for future scientific study had begun to shift from physics and chemistry to geology, and to the origin of the mountains of western Canada.

During the summers of 1953, 1954, and 1955 Ray was a G.S.C. field assistant in the southern B.C. Rockies, the Precambrian Shield of northern Saskatchewan, and the southern Foothills of Alberta, respectively. In 1954, after two summers in the mountains, Ray contributed a short article titled "Whence the Mountains" to the Faculty of Science Students' publication "*The Question Mark*". In this article he emphasized the lack of a credible scientific explanation for the origin and evolution of mountains.

Ray and Mina graduated from the University of Manitoba with Bachelor of Sciences (Honours) degrees in 1955; Ray received the University Gold Medal in Sciences; and he also was awarded a fellowship for post-graduate studies in the Department of Geology at Princeton University. During Ray's 1955 field season with the G.S.C. in the southern Alberta Foothills, and his first year of Ph.D. studies at Princeton, Mina was employed as a petroleum geologist by California Standard (now Chevron) in Regina.

During the 1956 and 1957 field seasons, Ray was employed by the G.S.C. to explore and describe the stratigraphy, structure, and geological evolution of a segment of the Rocky Mountains along the Continental Divide at North Kootenay Pass. Ray's Ph.D. thesis was based on this G.S.C. geological mapping research project.

Ray and Mina were married in Winnipeg in September 1956 (after the 1956 field season!). They enjoyed living in the Princeton University geology graduate student community but were eager to have a home in Canada. In the spring of 1958, after Ray had completed his Ph.D. degree requirements, they moved to Ottawa where he began full-time employment as a research scientist with the G.S.C., working mainly on the geological exploration and mapping in the Rocky Mountains, initially in the vicinity of the International Boundary and the Crowsnest Pass, and subsequently northward to Kicking Horse Pass and Yellowhead Pass. He also spent one summer as a participant in Operation Porcupine, the helicopter-supported regional geological exploration and mapping of the mountains of northern Yukon and adjacent parts of the Northwest Territories.

In 1968 Ray began his teaching career in the Department of Geological Sciences at Queen's University in Kingston, Ontario where he continued to work on the preparation of G.S.C. geological maps and structure-sections that were based upon his fieldwork in the southern Canadian Rockies. He integrated this with his supervision of graduate student research projects that involved fieldwork in southeastern British Columbia, southwestern Alberta and also in adjacent parts of the U.S.A. Ray's career included a stint working back in Ottawa in a management role with the G.S.C. after which he returned to Kingston and resumed his teaching activities.

Ray was the recipient of International awards including Officer of the Order of Canada; Fellow, American Association for the Advancement of Science (1997); The Michael T. Halbouty Human Needs Award, American Association of Petroleum Geologists (1997); and The Penrose Medal, Geological Society of America (2012).

Comment from P.H.S. President Clint Tippett: Ray was on my thesis committee when I was doing my Ph.D. at Queens (1976-1980). He was undoubtedly one of the hardest working profs I have ever run across and his knowledge was encyclopedic. I remember him editing technical papers at the same time that he was running a field trip through the Rockies. Several generations of both undergraduate and graduate student benefitted from his tutelage including

many who ended up in either the petroleum industry or parts of the governments that support it. Also notable was the strong relationship that he was able to establish and maintain with leaders in the industry including Shell's Pete Gordy and Felix Frey. By drawing on those sources, he was able to supplement his surface mapping with the voluminous subsurface data, such as wells and seismic, that industry explorers had been accumulating. Ray's careful guidance of students of the Cordillera will be missed.

SPEAR, Herbert Henry. Born February 15, 1924 and passed away March 2, 2024. Herb was born in Calgary and attended Sunnyside Elementary and Crescent Heights High schools. He played football and cricket and was an avid skier in his early years. He was in the insurance business for a while, but ultimately his life was all about aviation. He whetted his appetite for flying by hanging out with his father at Calgary's first public airport, which was in the Renfrew district. With nothing but the great blue skies in his eyes, he left university to join the Air Force and received his wings in 1944. He flew Mustangs with the 403 Squadron in Calgary and remained active in the military reserve for over 50 years.

His life was all about aviation, planes, and flying. He sold planes, flew planes, chartered planes, and worked in flight operations, and health and safety. Herb's resume covered so many aspects of public and private aviation; it would be impossible to list them all. Imperial Oil, Great Northern Airways, Northward Airlines, Arctic Air, LaRonge Aviation, Dome Aviation, Petro-Canada, Ranger Aerial Surveys, and McKenzie Air had him flying DC-3s, Otters, Beavers, and the occasional Hercules throughout Northern and Western Canada. After stints with Continental Airlines, Echo Bay, and Corporate Express, he landed with WestJet as one of the first 200 employees and stayed with them until he finally retired at the age of 90. One of his favourite accomplishments at WestJet was founding the Fear of Flying Program, where he managed to get even the most nervous of passengers airborne.

Outside of the aviation industry, Herb never strayed far from flying. He was a member and director of numerous organizations, including the Alberta Aviation Council, the Canadian Business Aircraft Association, the Calgary Flying Club, Calgary Airport Business Association, and was an advisor for the Mount Royal College (now MRU) aviation department. He was active with the Air Cadet League of Canada and added a WestJet Cadet Squadron to encourage young people to take up flying. He was one of the first YYC White Hatters and served on the Calgary Stampede Band Management Committee for 40 years, where he marched in too many parades to count.

Herb was the keynote speaker at the P.H.S. March 28, 2001 Annual Meeting. The topic of his talk was "Oilpatch Corporate Aviation History: Early Days of Imperial Oil's Junkers in the Arctic to Dome Petroleum in the 1980's". Herb apparently had some mega-scrapbooks containing information about all of his aviation adventures and the companies involved but what became of all of that material is not known.

WIGHAM, Ronald Cameron. Born August 2, 1956 and passed away January 18, 2024. Ron was born in Calgary. His family lived in the Kelvin Grove neighbourhood. Ron attended Henry Wise Wood High School. From an early age, Ron excelled academically and athletically. He was featured in Sports Illustrated as a 10-year-old for holding six different Canadian records in swimming, and he was frequently part of his school's honour roll. Swimming and academics would eventually take Ron to the University of Oregon Honors College, where he graduated with a Bachelor of Arts in Finance in 1978.

It was also at the University of Oregon where Ron was set up on a blind date with the woman who would ultimately be his wife of 44 years, Melissa. Ron and Melissa were married on August 10, 1979, in Eugene, Oregon. Afterwards, they moved to Victoria where Ron attended law school. In 1981, they moved from Victoria to Calgary, where Ron worked as a corporate litigation attorney at Mason & Company (Miles Davison), and partner at Milner Fenerty (Dentons). After several years in the legal field, Ron elected to pursue a different challenge: corporate finance. He gained valuable experience at Calgary Shops First Marathon and Pan East Petroleum before joining boutique Calgary investment dealer Peters & Co. in 1998. Ron stayed at Peters & Co. until he retired in 2014. He remained immersed in the financial world after retirement as a board member for Calgary companies, Tourmaline Oil and Spur Petroleum Ltd.



Photo 26: Workers at Royalite No. 4. Source: Glenbow Archives.

See article about Royalite No. 4 by Dustin Brodner elsewhere in this issue.

How to Know Someone You Never met: The Case of Evelyn DeMille, Bookseller

*A presentation by Annie Murray, University of Calgary Archives and Special Collections, to the Chinook Country Historical Society, December 7, 2024
Summary by P.H.S. Director Doug Cass*

The Chinook Country Historical Society recently hosted Annie Murray, the head of Special Collections and Archives at the University of Calgary, at its annual Christmas luncheon. In an insightful presentation Annie spoke about Calgary bookseller and philanthropist Evelyn DeMille (1919-2013), a well-known figure in the Calgary community. DeMille established a bookstore in Calgary in 1956 and ultimately owned five stores in the city and one in Vancouver. She was the first woman in Canada to found a bookstore chain. Murray noted that many of her clients were, of course, working in the oil industry and she flourished in part through sales to corporate libraries, many of which were located in Calgary petroleum corporations.

Aside from her bookselling business, DeMille was also an avid collector of books and established a long-standing connection with the University of Calgary through donations of rare books and her own personal/corporate archives. Murray was able to rely on this material and an oral history interview the University conducted with DeMille, to paint a detailed portrait of her personality and life.

DeMille was born and raised at Tristram, Alberta (near Ponoka) and, due to family complications, she was largely raised by her grandparents. She attended high school in Edmonton where she lived with her father. This was followed by a move to Calgary in the late 1930s to live with her relatives, the DeMille family. Evelyn soon married her cousin Harry DeMille in 1940. After working for many years in the book department at Eaton's she decided to establish her own firm using her pension from Eaton's, as banks would not lend money to women. DeMille undertook a very active outreach program that included book launches and speaking engagements along with a push to offer titles to corporate libraries. She was the first woman president of the Canadian Booksellers Association and was the first woman approached by the University of Calgary library to deposit her personal and corporate archives (1975).

By 1974 DeMille began to sense that independent bookstores like her small chain were on their way out so she decided to sell to British retailer W. H. Smith, in what turned out to be a bad arrangement. Smith required a five-year non-compete clause in their contract, which DeMille honoured, but she remained somewhat active in the industry through her support for boyfriend Jim Ross in the establishment of Owl's Nest Books. After the five years she opened Owl's Nest Technical Books which primarily sold publications of interest to the oil and gas community. Murray provided a great of insight into DeMille's personality, hard-working ethic and her relationships with her friends and co-workers. Hopefully her paper will someday be shared more widely through publication.

Additional comments by P.H.S. President Clint Tippett with some assistance from Wiki:

As outlined in the promotional material for her talk, "Annie outlined the pleasures and difficulties inherent in trying to know someone through their archive. What expectations do we bring to local figures and their archives? Do they tell the whole story? When and how does a former community member become a historical figure?". These issues are also relevant to much of the

historical work carried out through the P.H.S., in particular the interviews in the Petroleum Industry Oral History Project and related ventures. The notice further related that “DeMille’s archival fonds is held at the University of Calgary’s Archives and Special Collections. As well, the university holds the Evelyn DeMille Collection on the History of the Book and Book Arts. This book collection was donated by Evelyn DeMille over decades and continues to grow thanks to an endowment provided by DeMille”.

This talk reminded P.H.S. Treasurer Ian Kirkland and I of our various interactions with the various DeMille establishments over the years. During my own early years in Calgary, I recall venturing into Evelyn’s ground level bookshop in the Petrochemical Building on 8th Avenue SW. The store was chock-full of technical books and various technical manuals and government directives reflecting the fact that in those days, hard copy volumes ruled as the digital age had not yet dawned. Evelyn sold her business to McNally-Robinson in 2002. That company’s store was on the Stephen Avenue Mall. A corner of the basement - the DeMille Technical Books section within the larger store - always held many interesting volumes not normally found in the larger bookstores. Charlie Perry bought DeMille in 2008 and set up a large shop on 6th Avenue SW the north side of the old Herald Building. He featured many of the photographic products made by Randal Kabatoff’s Soul of Canada organization. With the demolition of that building to make way for Brookfield Place, Charlie moved over to the Standard Life building on 5th Avenue SW and remained there until he folded his tent in 2016. Charlie had an innovative way of mixing new and second-hand books on his shelves along with an array of old equipment. This made shopping more interesting – and often more expensive! His shelves live on at Rick Green’s C.R.E.S.R.C. facility in Canmore.

Finally we should note that both Evelyn and Charlie were honoured by the P.H.S. with our Preservation Award – in 2001 to Evelyn for “Long term support for publications dealing with the history of the oil industry at her store, DeMille Technical Books”, and in 2011 to Charlie and DeMille Books for “The support provided to historical preservation through the sale of books and related merchandise related to the Canadian petroleum industry”.

CELEBRATING SUCCESS – 1956 STYLE

The following article has been extracted from a scan of the front page of the Calgary Herald of Thursday, June 14, 1956. The paper cost 5 cents. It highlights the pride that the industry had for its accomplishments at Turner Valley and features several key personalities in that regard. Many thanks to P.H.S. Member Dustin Brodner for finding this material which was part of a very comprehensive feature about Turner Valley that the Herald ran on that day.

Turner Valley Pioneers Revisit Discovery Well on Eve of Celebrations by Bill Drever (Calgary Herald staff reporter)

A young woman from Toledo, Ohio was Turner Valley-bound on May 15, 1914 when she received information that the No. 1 Dingman well was “a producer”. The Dingman well was the discovery well for the Turner Valley Field, which has held prominence for so many years in Alberta.

“I was enroute to join my husband. He had been working on the well and I was bringing our six children to join him.” she relates. “I guess I didn’t know too much at that time, because when I heard the well was a success, I immediately thought work would cease for my husband. It didn’t work out that way.”

The woman is Mrs. Martin Hovis, 81, widow of the chief driller on the discovery well.

Mrs. Hovis, who lives in Turner Valley district and still drives her own car, probably knows as much about “The Valley” as any woman living today. She wasn’t the first settler in the district, but she certainly knows the history of the wells which made up the field. She learned this through her husband who died in 1954 and through many other oilmen who lived at the Hovis home through the years.

On Wednesday, Mrs. Hovis was at a Bible meeting in Turner Valley when she received a surprise visit from an old friend. He was A.P. (Tiny) Phillips, 83, who brought Mark Hovis to the Turner Valley district from Medicine Hat in 1912 and aided Driller Hovis in getting his start on the well which was to make history.

It was many years since they had seen each other.

Mrs. Hovis recognized Tiny, but was unable to call him by name. He gave her a hint and the pair immediately started talking about “old times”.

“Tiny” had roomed with the Hovis’s during the Turner Valley boom days.

A short time later the pair visited the site of the No. 1 Dingman Well and had their photograph taken by a photographer from the Herald.

Relates Growth

Mrs. Hovis related Turner Valley has grown through the years and the problems with which she had been confronted for schooling her children. In the early days it was necessary to get a governess for the children. That was until a school could be set up.

Mrs. Hovis's youngest child when she arrived in Turner Valley was only 13 months. The oldest was 16 years.

At present she has 22 great, great grandchildren and 13 grandchildren.

Her children are Mrs. Clarice Scruggs, of Peace River; Mrs. Theora Morris, of Camrose; Mrs. Velva Mowat, of Camrose; Robert of Michigan, and Millard of Camrose. Another daughter died in 1919.

Mrs. Hovis is looking forward with great interest to the recognition to be given Turner Valley on Friday and Saturday.

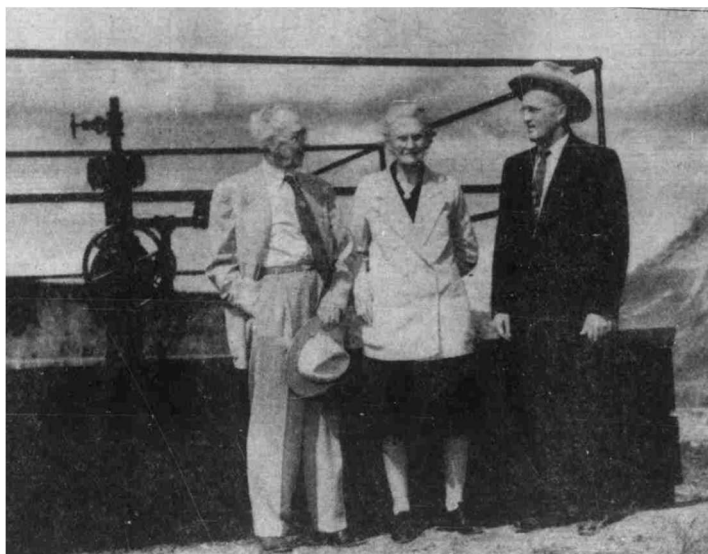
History Relived

The history of the Turner Valley oil field is being recalled this week with a unique two-day celebration in Turner Valley and Calgary.

During "Turner Valley Days", Friday and Saturday, the oil industry is attempting to pay homage to the early oilmen and draw attention to the industry's contribution to the present-day Canadian economy.

Highlights of the celebration will be the unveiling of a commemorative cairn at Turner Valley Friday and a banquet formally honoring the oil pioneers at the Palliser Hotel Saturday.

"The Turner Valley Story" is told in a special edition of today's Calgary Herald, pages 33 to 46 (*Thursday, June 14, 1956*).



Discovery well site inspected

On Wednesday afternoon two old-timers in the growth of Turner Valley made a visit to the site of the No. 1 Dingman well. They were Mrs. Martin Hovis, 81, (centre), widow of the chief driller of the discovery well, and A.P. (Tiny) Phillips, 83, (left), well-known retired oilman. They were accompanied by Doby Snyder of Calgary, (right), whose father drilled the No. 4 well in the Turner Valley Field. The trio are shown above beside the original well site. Photograph for Calgary Herald by Harry Beius.

The following paper was submitted to Archives by the author, P.H.S. member Dustin Brodner. It is an abbreviated version of his oral presentation to the Petroleum History Society at our October 2nd Luncheon Meeting at the Petroleum Club. Part 1 of this paper was published in our previous issue of Archives. This is Part 2.

Royalite No. 4 “Wonder Well” Technical History

100/12-07-020-02W5

By Dustin Brodner

Presented to the Petroleum History Society on October 2, 2024

Part 2:

From the Frypan into the Fire

After 25 days of uncontrolled venting, at 9 a.m., November 9, 1924, Royalite No. 4 ignited and the wooden derrick was quickly consumed leaving only the wellhead in the cellar with the 6-inch x 25-foot handling “joint” sticking up. The flame emanating from 6-inch casing was 100 feet in the air above the casing. There was a second flame coming from the well cellar below, presumably from the venting 8-inch x 10-inch annulus as described by Tronson Draper on November 24.

Northwest Company manager, Tronson Draper, speculated that the gas flow must have ejected a shard of metal that hit a metal derrick cross box which would have created a spark – the ignition source for the fire. Memoirs from the Carby and Flathers families reported that the ignition occurred at the Dalhousie No. 1 boiler house just to the north of Royalite No. 4. Either way is plausible, and the result would be the same – Royalite No.4 was a raging inferno. The fire illuminated the clouds in the sky and could be seen from Calgary and Lethbridge.



Photo 1: Royalite No.4 on fire and rig is burned down. Source: Glenbow Archives.

Well control experts from Oklahoma were summoned and local oil workers began hauling equipment to the site in preparation of fighting the fire.

William Stewart Herron took his boys, Harold and William Jr. (a.k.a. Bill Herron), out of school to haul equipment to the location using horse teams. The boys were told not to go near the well, but Bill carried something towards the well and was gassed with H₂S. He was dragged to safety and spent several days recovering.



Photo 2: Royalite No. 4 flames from cellar and out the 6-inch valve can be seen at floor level with a flow tee below. The 25-foot joint above is the "handling joint". Source: Glenbow Archives.



Photo 3: Royalite No. 4 out of control. Source: Glenbow Archives.



Photo 4: Royalite No. 4 burning at night. Source: Glenbow Archives.

Locals Albert E. Smith and Harry Dinning used a slip scoop or Fresno scraper on a long cable between two opposed horse teams to pull earthen material into the cellar to smother the lower flame. This attempt was unsuccessful. How did they ever keep horses calm in that much noise?



Photo 5: Slip scraper or Fresno. Source: Internet.

A battery of seven boilers were hauled to location to provide a large volume of steam to fight the fire. When the Oklahoma well control experts (Richardson and Downes) arrived, they brought with them asbestos suits and Foamite – a fire additive for the boiler steam.



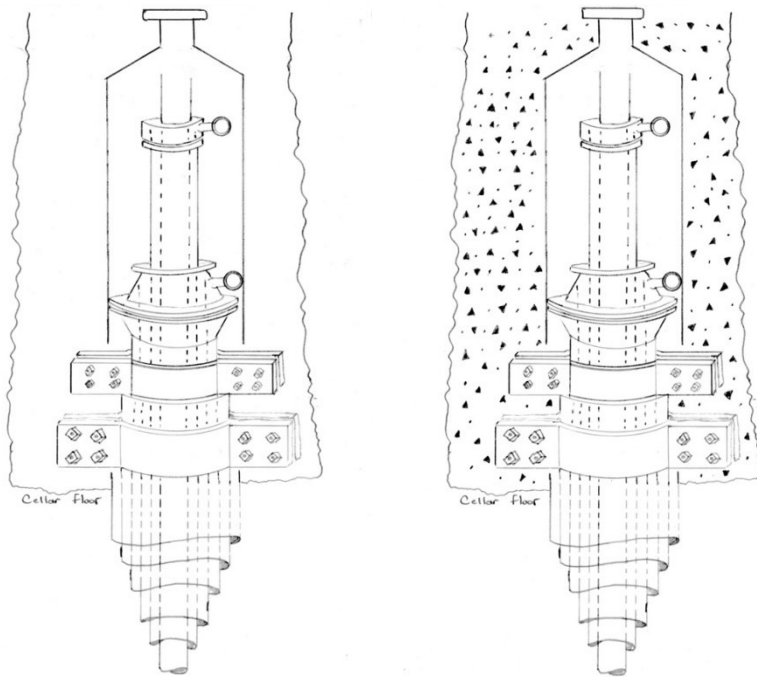
Photo 6: Foamite was added to the boiler water. Source: internet.



Photo 7: Battery of 7 boilers used to fight the fire. Source: Glenbow Archives.

In most history books and the newspapers, the Royalite No. 4 firefighting and well control methodology is not described in any detail. Only that the fire was extinguished using steam. However, the author found answers in a speech given to Montana and Wyoming oilmen by Imperial Oil geologist, Neil McQueen, in 1926. In his speech McQueen indicated that a joint of 15 ½" casing was swaged down to 6 inches at the top. This is often referred to in well control circles as a "hood". The 15 ½" casing was inserted over the gas flow directing the flow out the 6-inch top. The "hood" simply collected and redirected the gas flow from the 10-inch annulus and the 6-inch main gas flow. Then the fire was reported to have been extinguished using steam and Foamite chemical. After the fire was out, workers anchored the casing strings and cemented the "hood" in place in the well cellar.

Because there are no known records of this specific operation, the finer details do not exist or have not been found yet. Examining the historic photos of the well once on production, it can be deduced, with certainty, that the Oklahoma well control experts would have removed the 6-inch landing joint, the 2000 psi valve and the flow tee below it prior to installing the "hood" over the wellhead. The well cellar would have been re-excavated to remove the earthen material pushed into it by using the slip scraper as already described. There had to be room for the ~25-foot "hood". Also, a suspension device (crane, gin poles or gantry) would have lifted the 25-foot steel "hood" over the flow and lowered into the cellar. Those small details have not been discovered anywhere yet. There are no known photographs of the operation either.



Hood installed over wellhead (Left) and Hood cemented in the cellar after fire was out (Right).

Neil McQueen's description of the well control operation was somewhat corroborated by Albert E. Smith in his memoirs. Smith had worked at the Royalite No. 4 site throughout the well control efforts. Smith indicated that the Oklahoma well experts installed a large "funnel" over the wellhead while it was burning and injected steam into it to attempt to extinguish the flames. Smith added that the steam did not work to extinguish the flames. He indicated that famous well shooter, Charlie Stalnaker, of the

Independent Eastern Torpedo Company, detonated an explosive charge near the wellhead to "snatch out the flame". This rendition of the story was repeated in the Calgary Herald on August 28, 2013, with more detail. The Herald article entitled, "*Snatching Out a Fire in the Oilfield*", indicated that Charlie loaded a canister with dynamite and attached it to a long cable. He then pulled the explosive laden cannister toward the flame coordinating the fuse timing with the position of the cannister. The explosion robbed the flame of oxygen momentarily and extinguished it. The article went further to indicate that steam was administered to prevent re-ignition. His story is plausible but cannot be confirmed with any literature written at the time. Further research is required.

Other historic wells have been brought under control using "hoods".

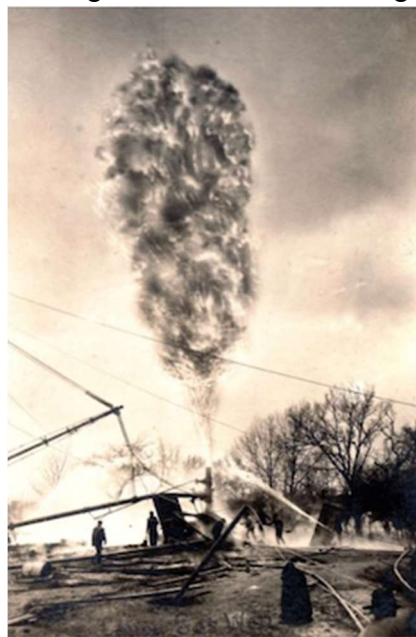


Photo 8: The Caney Kansas disaster 70 million sft³/d was put out after using 4 different sized hoods. Source: Internet.



Photo 9: Santa Fe Springs California 1921. Source: Oilystuff.co.

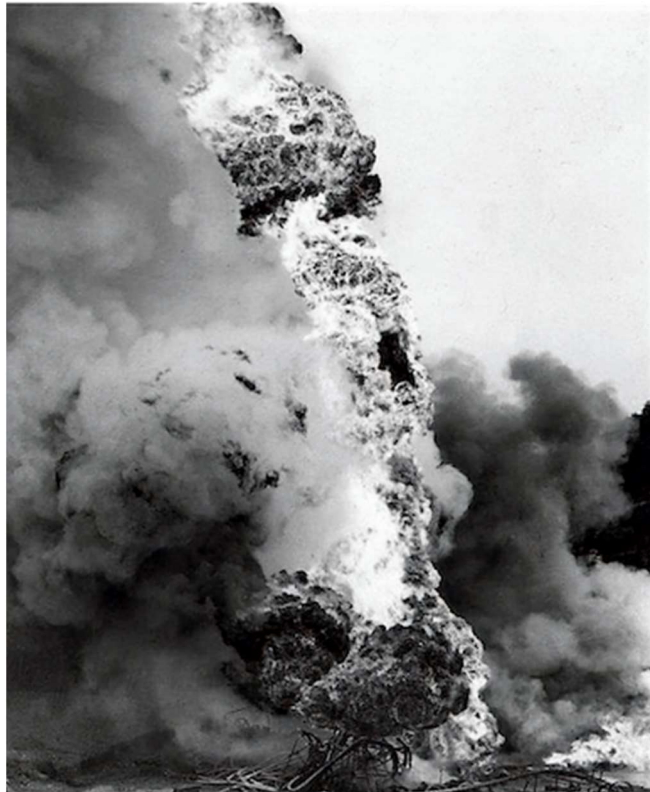


Photo 10: The "Torch of Moreni" in Romania 1931 claimed 15 lives. Source: Oilystuff.com.



Photo 11: Hood that Myron Kinley cemented in place on the "Torch of Moreni" Romania in 1931. Source: Oilystuff.com.



Photo 12: Oil containment dome used by Wild Well Control at BP Deepwater Horizon disaster - Macondo well 2010. Source internet images.

On Thursday November 20, 1924, the fire was extinguished after 36 days of uncontrolled flow. The well "hood" was equipped with the necessary fittings to direct the gas through a 6" flowline to a ravine just south of the well. There the gas was wasted in an inferno that came to be known as "Hell's Half Acre". The exact origin of the name is not known nor who named it. It could have been named after the Hell's Half Acre Scarp in Natrona County, Wyoming. Also, there is a historic Hell's Half Acre precinct of Fort Worth, Texas, a notorious red-light district dating back to 1870.



Photo 13: Hell's Half Acre. Source: postcard.



Photo14: Hell's Half Acre. Source: Glenbow Archives.



*Photo 15: Looking south from Royalite No. 4 to Hell's Half Acre - flare line covered in frost.
Source: Glenbow Archives.*

Understanding this well control technique answers the question: *Why was Royalite No. 4 gas continuously flowed to flare?* The arcane answer is now obvious. Throughout its life, gas from Royalite No.4 was produced utilizing a “hood” housed over a severely compromised wellhead.

That externally cemented “hood” could not withstand the high pressure that would be exerted should the flow be shut in using it. If it was allowed to build pressure it would likely blow the hood and cement out of the ground. Clearly the thought process at the time would have been - keep the well flowing so the surface pressure does not build up. And that is what they did.

The author ponders the severity of this well control situation often. It is a miracle that nobody was killed. In 1924, well control techniques as we know them, were non-existent. The art of wild well control was in its infancy. **There was no way to control the well other than to work on the well directly!** Worker protection was limited to cartridge gas masks that were ineffective after only a few minutes. The only drilling technology available was cable tool drilling so relief wells were not a possibility as it would take over a year to reach the productive zone. Directional drilling had not been invented yet nor were directional surveys taken on the well in peril. Building a new wooden rig beside an inferno was not an option. It was quite a predicament to be in ... in the remote Canadian countryside far from major U.S. centers of oil service... in 1924.

Royalite No. 4 is on Production

It was reported that the well was given a 500-psi maximum surface pressure during its productive life. The well was manned 24 hours a day. In the historic photos you can see pressure relief valves installed on most of the outlets and each has a dedicated line to the flare. There is also chart pressure recorders monitoring the surface flowing pressure.

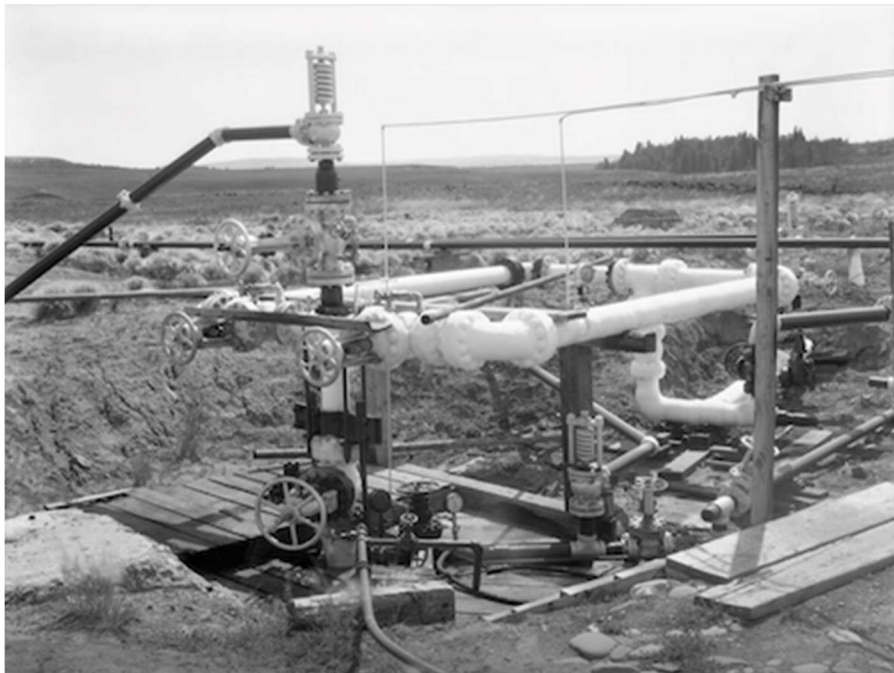


Photo 16: Royalite No. 4 on production. Note the pressure control valves. Source: Glenbow Archives.

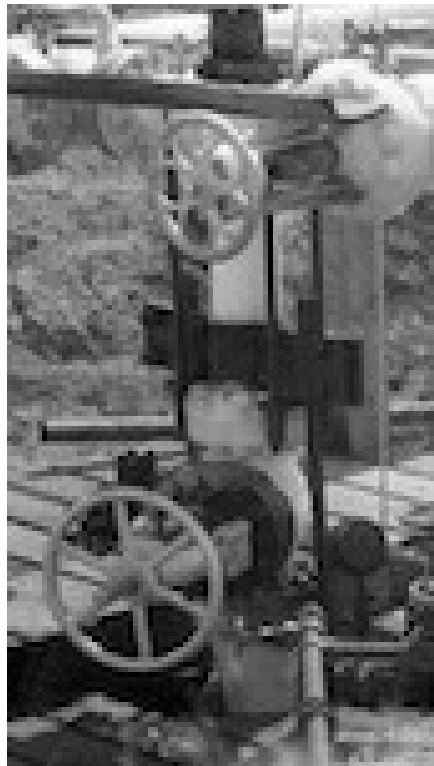


Photo 17: Look closer and you can see clamps and metal rods used to anchor the wellhead - The pipe coming up from the cellar flanged to the first valve is likely the top of the "hood". Source: Glenbow Archives.



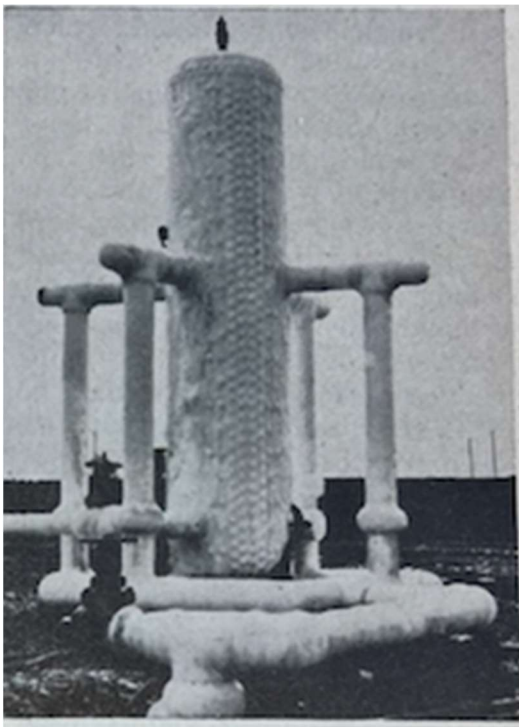
Photo18: Later photo that includes the pressure monitoring charts and full frosted wellhead. Source: Glenbow Archives.



Photo19: Looking North right to left Dalhousie No. 3, Dalhousie No. 1 and Royalite No. 5 (rotary rig).
Source: Glenbow Archives.

Immediately after the well was somewhat controlled, on December 20, 1924, Royalite did attempt to sell some gas from the well into the CWNG main line. They only put 2 million sft³ of Royalite No. 4 sour gas into the system hoping that the dilution of the Royalite No. 4 “sulphuretted gas” by the Bow Island sweet gas would be acceptable to Calgary consumers. CNWG immediately received many complaints about the foul-smelling fuel from Calgarians. As a result, Royalite was forced to waste all the sour gas in Hell’s Half Acre until a scrubbing plant could be built and in service. Royalite did install specialty equipment at the wellsite to recover the naphtha. Two Smith separators were brought in from Tulsa, Oklahoma for this purpose. These separators had a baffle arrangement inside them that caused a pressure drop in the gas flow resulting in further cooling effect which removed the maximum amount of liquid naphtha

from the gas stream. These vessels were always very cold and the outside was always covered in a thick layer of frost. The flare line was frost covered right to Hell’s Half Acre even in the summer months. Eventually these separators were moved to the plant site and used to remove naphtha before the scrubbing plant.



Royalite No. 4 produced at 22 million sft³/d and ~500 barrels of naphtha a day. The well’s production was reported as being cyclic. It is likely that the downhole restriction of the two lost tools strings always created a freezing and thawing cycle especially when the well was new. It was reported that naphtha production was slightly better in the winter months due to the cold ambient temperatures aiding in the recovery.

Photo 20: Smith separator covered in frost at Royalite No. 4.
Source: Calgary Herald.

The flaring would light up the sky and the common local comment was “you could read a newspaper in your backyard at night”. Light pollution from Hell’s Half Acre mesmerized birds. Into the “Hungry Thirties” people that came to Turner Valley in search of work in the oilfield would camp beside the ravine to keep warm. Wildflowers, even crocus would bloom year-round in the continuous light. Rabbit hunting at night became a popular pastime. In 1929 Winston Churchill visited Turner Valley during a cross-Canada visit. He toured a few rigs, ate lunch at the plant and visited the spectacle of the Hell’s Half Acre. Winston Churchill was quoted as saying “*far more demons have been loosened than can be harnessed*”, a very accurate description.

In late 1925 Royalite began building a scrubbing plant beside the absorption plant at Turner Valley to remove acid gasses (H_2S and CO_2) from the gas stream making the residue gas fit for public heating use. The plant was designed and built by C.F. Braun Company of Alhambra, California. It utilized the Koppers Company’s patented Seaboard process. This was the second Seaboard scrubbing plant in Canada, the first being installed a year prior in Port Alma, Ontario for the Union Gas Company. The gas entering the scrubber from Royalite No. 4 had a sulphur content of 700 grains per 100 ft^3 and discharged to Calgary with 10 grains per 100 ft^3 . Also at this time, a 10” gas pipeline was installed from the plant directly to Calgary near the present-day Glenmore dam to better handle the high-pressure gas. In August 1925, Royalite built a 4” diameter liquids pipeline from Turner Valley to the new Imperial Oil refinery in the Ogden area of Calgary to transport recovered naphtha. This was Canada’s first oil pipeline. Prior to its installation, 5 trucks with tanks hauled 73 Baume naphtha from Royalite No. 4 to the C.P.R. siding in Okotoks where it was loaded into C.P.R. train cars then railed to the Imperial refinery. That product was so volatile that a good percentage of it evaporated during transport – the pipeline solved that issue and was duplicated in the 1930’s for added capacity.



Photo 21: Royalite's first scrubbing plant with 3 Smith separators in view. Source: Glenbow Archives.

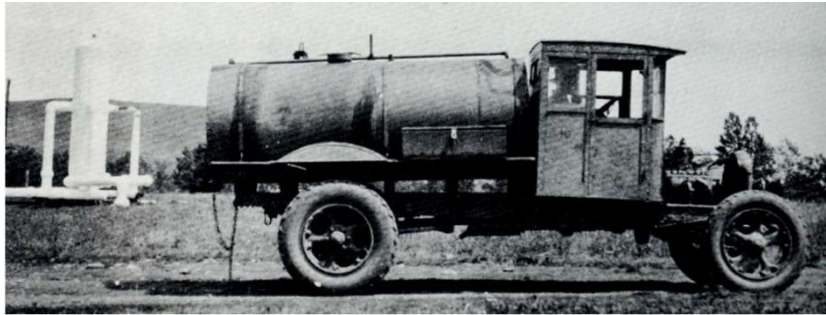


Photo 22: One of the five trucks that hauled naphtha from Royalite No. 4 to rail cars in Okotoks 24 hours a day. Source: Ed Gould – Oil: The History of Canada's Oil and Gas Industry (1976).

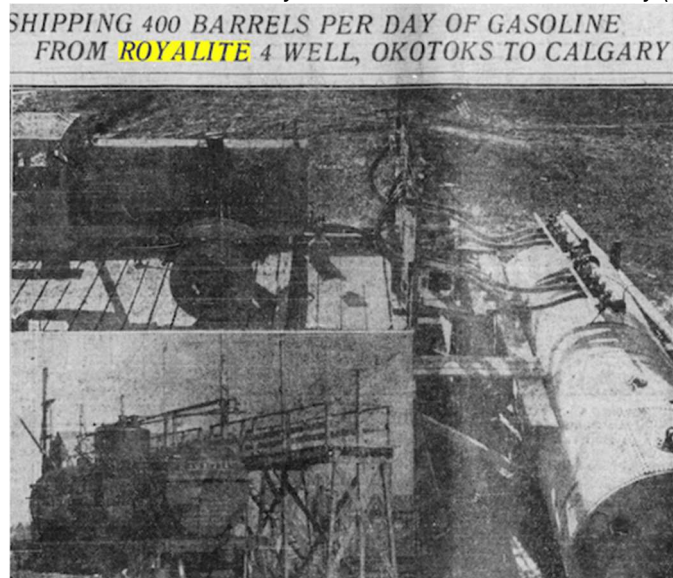


Photo 23: Loading 73 Baume naphtha into train cars in Okotoks. Source: Calgary Herald Archives.

The unfortunate era of waste

In the following years, other wells in Turner Valley were drilled into the Mississippian limestone porosity. Most were collecting naphtha and wasting the gas to flare – many in Hell's Half Acre. There was only a small market for gas and Royalite provided most of the supply for C.W.N.G. The lack of a viable market for all the gas meant the only way operators could make money was to sell naphtha. This was era of waste in Turner Valley. It lasted for close to 12 years.

It was estimated that during this period 600 billion sft³ of gas was wasted to recover naphtha. At one point over 500 million ft³ was produced per day of which only 40 million sft³ was put into the C.W.N.G. line and used by consumers. In hindsight, producers were wasting \$10.00 worth of natural gas to obtain \$1.20 worth of naphtha. It should be noted that this was not a unique scenario to Turner Valley. In the U.S. and abroad, most fields wasted “excess” gas, and it wasn't until there were markets did that change.



Photo 24: Photo looking north to Hell's Half Acre at night shows the aerial plume from the flare. Source: private collection.



Photo 25: View of the light from Hell's Half Acre as seen from Calgary. Source: Glenbow Archives.

It wasn't until Turner Valley Royalties No. 1 discovered crude oil in 1936 that regulators could implement conservation measures. Such measures included prorationing and unitization to curtail the waste and distribute fair shares of production amongst all the well owners.

Later Production and Abandonment

The production at Royalite No. 4 began declining in the late 1920's and by 1934 it was abandoned. Driller, John Eaglesham and tool dresser, George Bennett, were tasked with decommissioning the well. There must have been a derrick rebuilt during the life of the well possibly for well work purposes. There were reports from the fall of 1930 of workovers to free hydrates and mill on the parted 6-inch casing. They were attempting unsuccessfully to get deeper into the well. These operations would have required a rig. The details of the abandonment, conducted June 11 – September 3, 1934, are the only reports that the A.E.R. possesses. By 1934 any regulatory responsibility was now that of the province of Alberta. The regulator in 1934 was the Turner Valley Conservation Board, and that group was in its early days. Detailed regulations on well abandonments were non-existent and the independent producers were still against any form of conservation that would adversely affect their business. The Turner Valley Conservation Board lost court cases against the Independents (led by Spooner Oils Limited) and had little control over the industry until 1938 when the Petroleum and Natural Gas Conservation Board was organized by Royal decree.

The abandonment on Royalite No. 4 was done in a way to recover casing. It was a common practice to re-use casing – a valuable and expensive commodity. The practice also gives us a clue as to the cause of the casing issues experienced when the well was initially shut in. We know from the PNGCB list of wells the casing configuration of the Royalite No. 4 well. This document appears to agree with what was reported in the Calgary Herald by Imperial Oil officials, at least the deeper strings.

20-inch casing	surface to 90 feet – no cement reported
16-inch casing	surface to 702 feet - no cement reported
13-inch casing	surface to 1192 feet - no cement reported
10-inch casing	surface to 1957 feet - no cement reported
8-inch casing	surface to 3053 feet - no cement reported
6-inch casing	surface to 3450 feet - no cement reported

They easily recovered a total of 1188 feet of the 6-inch casing. This would indicate that a 6-inch casing failure occurred at 1188 feet from surface which was expected. The 8-inch casing parted at 24 feet from surface when pulling on it. This is likely where it came free when the 6-inch and 8-inch casings lifted out of the well when the valve was closed. The document goes on to detail the abandonment process but that is outside of the scope of this paper.

The significance of Royalite No. 4

1. Royalite No. 4 was the first well in Alberta to produce petroleum from the Paleozoic Mississippian carbonates. Geologists long thought that any porosity in the limestones would be water filled and were devoid of hydrocarbons. This well changed that theory and paved the way for so many other carbonate explorations and successes. The first being the oil column at Turner Valley was discovered in the same geology. After that, Leduc, Woodbend, Redwater, Wizard Lake, Golden Spike, Big Valley and countless more prolific reservoirs in Western Canada were discovered in Mississippian and Devonian carbonates.

2. Royalite No. 4 was a hugely profitable producer. In 1925 it alone supplied one third of Alberta's gasoline. Also in 1925, Royalite No. 4 produced 166,000 barrels naphtha which exceeded the combined production of all other Canadian wells that year.
3. Royalite No. 4 started the second yet quieter boom of activity in Turner Valley. Between 1924 and 1935 over 180 wells were drilled. Over the same period, naphtha production from Turner Valley totaled 6,453,089 barrels. Royalite No.4 produced over 1,000,000 barrels in its 10-year life. With this increased activity, Canadians were becoming skilled in drilling wells. Prior to Royalite No. 4, the wells were drilled by mostly Americans because they had the expertise. Canadians learned from them and since hundreds of thousands of Canadians have had gainful employment in the Western Canadian petroleum industry.
4. Royalite No. 4 started the period of largest energy waste. (As mentioned, this was not exclusive to Turner Valley). More importantly, it also started the advanced learning of a petroleum industry in Western Canada. The industry has demonstrated continuous improvement ever since these early days. New technologies emerged such as gas scrubbing, LPG recovery, rotary drilling, oilfield H₂S safety.... Each having their own innovations over decades that brought us to the current world class industry we know.
5. Royalite No. 4 provided a starting point for the regulations via the Turner Valley Conservation Act and later the Petroleum and Natural Gas Conservation Board (P.N.G.C.B.). As mentioned, there was no significant regulation in 1920's however it was later obvious that it was required to maintain reservoir capabilities, safety, and minimize waste. So much was implemented, learned, and refined into the regulations. The regulations are a meaningful, respected and integral part of our industry. Royalite No. 4 and the wells that were drilled after were a big part of that story.
6. Royalite No. 4 put Calgary on the map as the Canadian center of the petroleum industry. Prior to No.4 the industry in Alberta was relatively small and after No. 4 the industry started growing and Calgary became the hub of the activity.
7. Employment surged and the industry thrived for years (with the exception of the "Hungry Thirties".) Countless people and families have been involved in the Turner Valley experience and more in the Alberta industry experience that was all accelerated by Royalite No. 4.
8. The Canadian experience with high concentration sour gas truly started with Royalite No. 4. Western Canada's first gas scrubbing plant was at Turner Valley and through many iterations of sweetening processes, Alberta has become a leader in these technologies. Safety and our understanding of H₂S has vastly improved since the Royalite No. 4 blew "sulphuretted" gas uncontrolled. Much of Western Canada's raw gas production contains H₂S. Eventually H₂S became a source of elemental sulphur for so many industrial and agricultural processes. Sulphur handling and transportation was developed in Western Canada. Canada is the largest exporter of sulphur in the world due to the abundance of H₂S.