



Newsletter of the Petroleum History Society

June 2016; Volume XXVII, Number 5

# P.H.S. Lunch and Learn Meeting – Wednesday, June 1, 2016 The Oil Sands in Retrospect

by Chris Turner, Author

Chris Turner will be discussing the research process and key themes in his forthcoming book, *The Patch*, to be published by Simon and Schuster in 2017. The work is a broad narrative overview of the life and times of Alberta's oil sands boom, from its origins to its emergence as an economic powerhouse and source of global controversy. The volume is partially based on the results of the Petroleum History Society's Oil Sands Oral History Project, the transcripts of which are archived, for use by researchers, at the Glenbow Museum and Archives in Calgary.

Chris Turner is an award-wining author, essayist and speaker, specializing in energy and sustainability. Born in Moose Jaw, he earned a B.A. in History from Queen's University and a Journalism degree from Ryerson. One of his best-known publications was 2004's "Planet Simpson: How a Cartoon Masterpiece Documented an Era and Defined a Generation". He lives in Calgary with his wife and two children.

Time:	Time: 12 noon, Wednesday, June 1, 2016
Place:	Calgary Petroleum Club
	319 – 5 Avenue SW, Calgary; Cardium Room (but check marquee)
	Business casual dress.
Cost:	P.H.S. Members and Student Members \$30 and Guests \$35 (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.
Editori.	
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, May 30, 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 be sure to get a hold of us. Contact President Clint Tippett at the address indicated on page 3.

**Free Student Memberships Now Available:** The Petroleum History Society offers free membership to full-time students until the end of the year in which they graduate. They will receive the same benefits as regular members – *Archives* newsletters and invitations to our events. Membership applications are available at: www.petroleumhistory.ca/about/index.htm#join.

**The Petrolia Discovery Foundation Launches a Crowdfunding Campaign:** We were recently alerted to this initiative by Dawn Sperling, Chair of the Board of Directors of the Petrolia Discovery Foundation Inc. of Ontario. Her message was *"The Petrolia Discovery Foundation has submitted a proposal to the National Trust for Canada's "This Place Matters" Crowdfunding Platform. The Campaign started May 3, 2016 and will run for 6 weeks. Discovery is hoping to raise \$10,000.00 to help restore the Fitzgerald Rig. The rig is an oil-pumping rig constructed in 1903. It was designed and built by Fredrick Ardell Fitzgerald, the founder and first president of Imperial Oil. The Fitzgerald Rig was originally powered by a steam engine and is now run by a 10 horsepower motor. This amazing, 113-year-old machine still pumps oil today and is a key feature on the Discovery Site. To donate to the Crowdfunding initiative, you can visit: <u>http://bit.ly/21um9F9</u>. Dawn can also be reached at 519-882-0897.* 

**Request for Input on the Canadian Frontiers:** One of the major events that affected the Canadian petroleum industry was the opening up of the Canadian Frontiers to exploration during the latest 1950's and early 1960's. Indeed most aspects of the current situation in the Frontiers can be traced back to land acquisitions that were made during that period when companies simply "filed on" lands and were given exploration permits accompanied by work commitments required to keep these holdings in good order. Several changes in land tenure have occurred over the intervening decades and certainly considerable acreage has been relinquished and selectively reacquired - but many core holdings have been held since this initial land rush, for example in the Delta-Beaufort region. Little seems to have been written on the policy development in the Federal Government that led to this explosion of interest. While the growth of technical understanding in the industry, for example on the prospectivity of deltas, also played a role, someone somewhere must have decided that opening up these vast regions would be a worthwhile activity to encourage. Was this a Diefenbaker idea? Did someone in the Federal bureaucracy wake up one morning with this bright idea? Any comments?

**Calgary Public Library: Discover Land Surveying History at the Library:** This feature was announced in the latest newsletter from the Calgary Heritage Authority. Called "Making their Mark", it is a centennial exhibition of 100 years of land surveying in Alberta. It will be on display at the Central Library from May 12 to June 16. It is described as follows: "*The historical exhibit of land surveying artifacts and an interactive re-creation of an early surveying camp shows the remarkable contribution the land surveying profession has made to the province. The "Making Their Mark" exhibit shows how Alberta developed by highlighting the stories of the men and women who measured and created the boundaries of the land parcels in the province. Without boundaries, land ownership could not be established. Early surveyors were often the first people to see much of early Alberta [other than the First Nations] as they laid out the homesteads and the early urban settlements. Today's land surveyors still measure and create boundaries for the energy industry. Also, like other professionals, land surveyors use highly sophisticated equipment – a far cry from the artifacts displayed in the exhibit. Over the next two years, the exhibition will travel throughout Alberta."* 

**Throwing (hot) water on Leduc:** As described by Alex Boates in the Devon Dispatch News on April 28, 2016, the Leduc #1 Energy Discovery Centre is jumping into the deep end of renewable energy. They have announced plans to convert an abandoned oil well to capture geothermal energy. Their goal, according to Nick Wilson, a volunteer on the Leduc #1 Board of Directors and a director of the Living Energy Project (the name given to the geothermal energy project), is "to turn the Leduc #1 Energy Discovery Centre into the world's first carbon neutral museum". He explains that "An abandoned well naturally fills up with water, which at depth is warm. We're simply going to pump that around a loop into the building where a heat extractor will take the heat out of it and convert it to hot air ... therefore we can cut our gas bill ... and then the cold water is circulated back around the pipeline loop to the well." The claim is that "such a feat would be the first Canada has ever seen." Apparently the energy to power the pump will be provided by a "huge solar tracker that will tilt to follow the sun, maximizing the potential for solar energy" and that it will be "the biggest in North America and four times the size of a house". The Provincial Government has expressed its enthusiasm for the project though a press release from Energy Minister Marg McCuaig-Boyd. I suppose that one could comment on some of the technical aspects of this project such as the "naturally fills up with water" idea but it is clear that the Leduc #1 crew feel that this is an important new aspect for their facility that is necessary to stay relevant in today's energy world.

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

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## A SMALL TRIBUTE TO A GREAT LADY

### By Helen Turgeon on the previously-reported passing of P.H.S. member Marguerite Mosher

I met Marguerite in 1970 when I joined the Desk and Derrick Club of Calgary. I realized very quickly that she was the "go to" person in the Club. She knew all there was to know about the organization. I can still see this tall, very attractive, immaculately dressed lady, with a deep voice, who was very obviously held in high esteem by the members. It was not long after I joined the Club that I learned from members that Marguerite was one of the charter members and founders of our Club. In case, some of you may not know what the Desk and Derrick is, I should clarify. Desk and Derrick is an organization started by a woman, Inez Schaeffer, who was working for Humble Oil. Inez felt it was important for women working in the industry to gain knowledge and education about the industry in which they were working. The purpose of Desk and Derrick is education, with our motto being "Greater Knowledge, Greater Service". Incidentally, in later years the gender designation was removed from the bylaws and men are now welcome to join.

Marguerite was the first Canadian to become International President of the Association of Desk and Derrick Clubs in 1966. This accomplishment was no small feat - since Desk and Derrick consisted primarily of U.S. members from the big oil centres like Texas, Oklahoma, and Louisiana. While our American Desk and Derrick members certainly treated their Canadian sisters with respect, they were very competitive when it came to holding offices on the Board. The Association had over 12,000 members, of that Canada probably had no more than 1,200. Marguerite was indeed the right person to run for office and win. With her determination to succeed and to make the organization better, she was bound to reach her goal. Her annual Desk and Derrick Convention was held in New Orleans and that Convention still holds the record for most attendees - over 1,500 members attended. Marguerite blazed the trail which only a few Canadian members in the organization's 65 years were to follow. Another highlight of Marguerite's year as International President, which she loved to tell about, was being crowned Queen of the Mardi Gras in New Orleans. How neat was that! I remember seeing pictures of Marguerite looking so regal in her Crown and gown - a distinct honour for a very gracious lady.

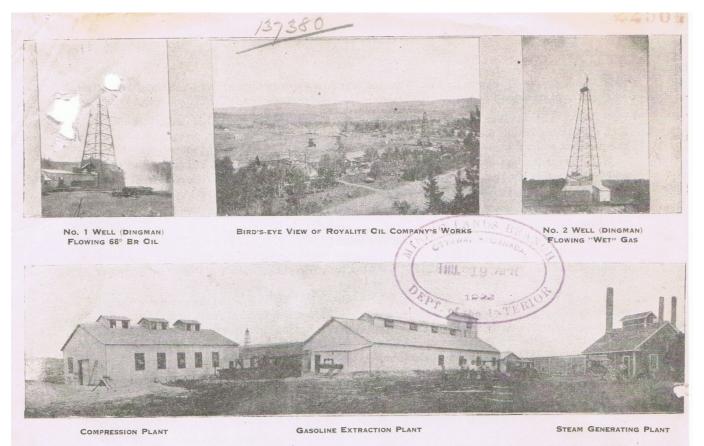
Although I met Marguerite in 1970, we did not become friends until much later. In 1977, the International Convention of Desk and Derrick was held in Denver, Colorado. Another longtime member of Desk and Derrick was Betty Smith - she and Marguerite were sharing accommodation at the Convention and they invited me to share their suite. Being very much a novice of Desk and Derrick at that time, this was a very kind gesture extended to me. I can't imagine what I would have done without them. Once again, I had the opportunity to witness Marguerite's prominence in the organization, and the very high regard she was held in by the members. Over the years I observed this special respect that Marguerite received in the organization.

Marguerite was a staunch faithful member of First Lutheran Church in Calgary for over 80 years. In 1955 she was General Arrangements Chairman for an International Youth Conference held in Calgary which was attended by over 3,000 youth from around the Globe. She was the First President of the Women's League, Calgary Philharmonic Society (formerly the Calgary Symphony). In 1991 she was honoured with the Governor General's Commendation for community involvement in her church and Canada as a whole. In 1971 she was invited to run as MLA for Calgary Centre but declined due to her heavy workload and involvement in Desk and Derrick. Also in 1971 (during Peter Lougheed's term of office) Marguerite served on a committee to study the division of assets in divorces which resulted in the 50/50 split. Marguerite was inducted to the Canadian Petroleum Hall of Fame in 2005, an honour she much cherished. She was an extremely popular inductee. Many of the members of Desk and Derrick attended the Induction Dinner at the Westin Hotel to show their love and respect to a great lady. Marguerite was ahead of her time at her workplace as well. In 1959 she was hired by Northern Natural Gas Company (later to become Consolidated Pipe Lines and Consolidated Natural Gas) where she attained the position of Corporate Secretary and Assistant to the President, retiring in 1981. It was at her workplace where she met her future husband, James Mosher. Jim died in February 2001. Marguerite and Jim were married for 22 years.

In the last several years Marguerite suffered some unfortunate incidents. It was amazing to see her bounce back from some pretty serious situations. Her mind continued to be good, considering her advanced years. Don and I visited her at the hospital and also at Bethany several times. The last time we visited was just before we left on our winter vacation in early January. She was feeling down that day and asked "Why hasn't the Lord taken me already? I told her: "Marguerite, don't rush the Lord. He knows what he is doing and besides you will be here for your 100th birthday." She laughed and gave me that look of hers and said: "Oh, you know that do you?' Well I was wrong, dear friend. I guess the Lord did have other plans for you, dear friend.

# Notes on the following pages:

The exact mechanics of Imperial Oil's entry into Turner Valley through its subsidiary, Royalite, have not always been clear. One sometimes gets the impression that Royalite just came in and picked up the pieces from a failed enterprise. The document concerning Turner Valley displayed on pages 6 through 8 of this issue was filed with the Mining Lands Branch of the Department of the Interior, Government of Canada, on Thursday, April 19, 1922. It is a communication from Archibald W. Dingman, representative for Calgary Petroleum Products, Limited, to the other C.P.P.L. shareholders about the status of the investments made by Royalite [Imperial Oil] in the facilities at Turner Valley to that date. It also formalizes the takeover of C.P.P.L. by Royalite through an exchange of shares wherein the C.P.P.L. shareholders now became shareholders in Royalite, although neither the ratio nor the implied value are stated there. Of interest is the reference to "The history incidental to the progress of the undertaking - "the "Oil Boom", and its regrettable incidents (in which the Company had no part)." It is not clear exactly what this refers to although it might reasonably be interpreted to mean the wild speculation that followed the 1914 discovery. There is also an oblique reference to the First World War and the effect that it had on investment. The Royalite takeover is generally reported to have taken place in 1921. The investments made by Royalite to replace and enhance the infrastructure that was destroyed by fire in the years preceding this final report were presumably made as a part of the original takeover agreement. This was the final coup de grace for C.P.P.L. but it sounds like the shareholders ended up with a worthwhile investment in Royalite which obtained the underlying mineral rights originally held by C.P.P.L. through the deal.



ROYALITE OIL COMPANY'S WORKS, TURNER VALLEY, ALBERTA

### To the Shareholders of Calgary Petroleum Products, Limited:

By the conversion of the Shares of Calgary Petroleum Products, Limited, into Shares of Royalite Oil Co., Ltd., the Calgary Petroleum Products, Limited, ceases to function, and becomes non-existent as a Corporation, except in so far as the incidental details of the completion of the "Winding Up," by the Representative, appointed by the Directors for such purpose, may be concerned.

For the information of the Shareholders, I wish to state briefly herewith, the present status of the work being carried forward by the Royalite Oil Co., Ltd., in so far as my general knowledge of the same is available, it being of course assumed, that, as Shareholders in the Royalite Oil Co., Ltd., you will, from the present time forward, receive all such information re the operations of the Royalite Oil Co., Ltd. from the official sources, as in the usual course of procedure.

Calgary Petroleum Products, Ltd., the successor to Calgary Petroleum Products Company, Ltd., had, for its objective, to determine, if the same were possible, the presence in commercial volume of Petroleum, and, incidentally of Natural Gas, within such limits as might permit of the continuous utilization of the Gas, as a fuel, by the City of Calgary and other near-by communities.

The locality selected for the initial development work was an area in the Turner Valley, some 35 miles to the south-west of the City of Calgary, which, under fairly thorough investigation, had given indications of the presence of Petroleum and Natural Gas and that the same might be obtainable in commercial volume by proper development work.

The history incidental to the progress of the undertaking—the "Oil Boom," and its regrettable incidents (in which the Company had no part), the abnormal conditions thereafter prevailing, conditions which seriously affected all industrial enterprises, irrespective of the merit they might possess, and which more particularly applied to an undertaking in which the speculative element so largely Notwithstanding these limitations, Calgary Petroleum Products, Limited, "Carried On," and, with a considerable measure of success, ultimately determining, within the compass of its holdings, the presence of both high-grade Petroleum and Natural Gas, the latter being what is called "WET" or Gasoline-producing Gas, and in commercial volume. A small Refining or Topping Plant was built and Gasoline, Kerosene and other Distillates were refined from the Oil being produced—a ready market for these products being found in the local districts round about.

Gas Lines were laid and Gas supplied to the other companies, then drilling in the field. A Plant—the first of its kind in Canada—for the extraction of the Gasoline from the Gas was constructed and for some thirteen months Gasoline was extracted from the Gas and in commercial volume. This first installation was largely in the way of determining the character, volume, etc., of the Gasoline being extracted, and, the experimental work had not been fully completed when the Plant was destroyed by fire.

Up to this time a very considerable expenditure had been made, on development work, with results sufficiently encouraging to warrant a material increase on Capital Account to further develop and complete the initial projections which contemplated, not only the determination of Petroleum in commercial volume, the extraction of the Gasoline from the Gas, but the utilization of the Residual Gas as a Fuel Gas for domestic and other uses in Calgary.

Calgary Petroleum Products, Limited, not being conditioned to carry forward its development and equipment work as rapidly as appeared to be advisable, entered into negotiations with representatives of the Imperial Oil Co., which resulted in the organization of a "New Company "—" Royalite Oil Co., Ltd."—into which the Calgary Petroleum Products, Ltd. was merged by the conversion of the Calgary Petroleum Products, Ltd. Shares into " Royalite Oil Co." Shares, on a basis as contemplated and provided for by the agreement entered into.

With the factor of available capital supplied, the projected work has been carried forward to completion. A New Absorption, or Gasoline Extraction Plant has been erected; a Compressor Plant regulating Gas pressures and volumes has been installed, and an 8 to 6 inch pipe line, some 14 miles in length, connecting the works at the location with the big Gas Transportation Line of the Canadian Western Natural Gas, Light, Heat & Power Co., at Okotoks, has been constructed, and, these three several or composite sections, completed the interesting and necessary cycle by which the Gas, as it flows from the wells, is piped direct to the Compressor Plant, where it is raised to the pressure required for the Gasoline Extraction purposes, from whence it is delivered to the Extraction Plant, and the Gasoline extracted, then back to the Compressor Plant and the pressure of the Gas again raised sufficiently high to force it into the pipe line at the works. It travels through this line some 14 miles to Okotoks, where it enters the big Transportation Line of the Gas Company at that point, and then on to Calgary for delivery into the local distribution system, supplying Gas to the various users of Gas Fuel.

These several and very considerable installations were accomplished in the space of about six weeks, and the constructive work was carried forward during the most inclement seasons of the year—the late fall and early winter.

A record for thorough and rapid work was established by the Royalite Oil Co. in the installation of the Absorption Plant, the Imperial Oil Co. in the installation of the Compressor Plant, and by the Gas Company in the installation of the Pipe Line from the location to Okotoks. No expenditure of time, money or effort were spared in the fulfilment of the promise to have the Gas into Calgary by the last day of December, 1921, as was required by the order of the Utilities Commission for the Province.

### THE ABSORPTION OR GASOLINE EXTRACTION PLANT

This Plant, in the housing and operative mechanism, is detailed on the latest and most modern lines and methods, as now standardized for this particular character of work. The building itself is steel and concrete throughout, and it contains a mass of machinery, appearing, in its ramifications, somewhat complex to any but the initiated, except in one and that a very interesting detail, the "Look Box," ... ere one can see a constant stream of high-grade Gasoline passing through to the storage 1ks. No source for the production of this energizer for a "World on Wheels" is to be seen outside the Connecting Pipes, Absorbers, Stills and moving machinery.

#### THE COMPRESSOR PLANT

Is similar in construction to the Absorption Plant, being also of steel and concrete with the exception that it is equipped with an overhead lifting and carrying crane for placing and displacing the big Compressors and other heavy machinery. The inside of this building has a fascination, for in it, in perfect alignment, are six huge Compressors, operating without noise or clatter. Power and efficiency are symbolized by these mechanical giants in action. The fascination is in watching the revolutions of the twelve big fly-wheels. The wonder is, that these huge engines are all energized and actuated by the elusive and invisible stream of Residual Gas. The Gas is the "Invisible Life" of the system; the Compressors are the visible expression of its energy when harnessed and directed.

#### OTHER SUBSIDIARY INSTALLATIONS

In addition to these primary units there are the secondary installations, such as the Steam Power Plant, fired by the Residual Gas, the water-sprayed, pyramid pipe-cooling system for cooling the Gas, the submerged and cement-walled water wells, water-pumping plant, electric-lighting plant, Machine Shop, Laborartory, storage tanks, gravity filling and loading station, and the Annex Refining or Topping Plant, etc., all necessary adjuncts to the complete system.

#### THE GAS REGULATING SYSTEM

Across the river, on the south side and adjacent to the Pipe-line, there is a neat and compact building which houses the various Meters, Regulators, Recorders, etc., for registering and measuring the volumes, character, temperature, etc., of the Gas as it starts on its way to Calgary. This is an installation by the Gas Company, whose employees at this station keep the Head Office of the Gas Company in Calgary constantly advised as to these details.

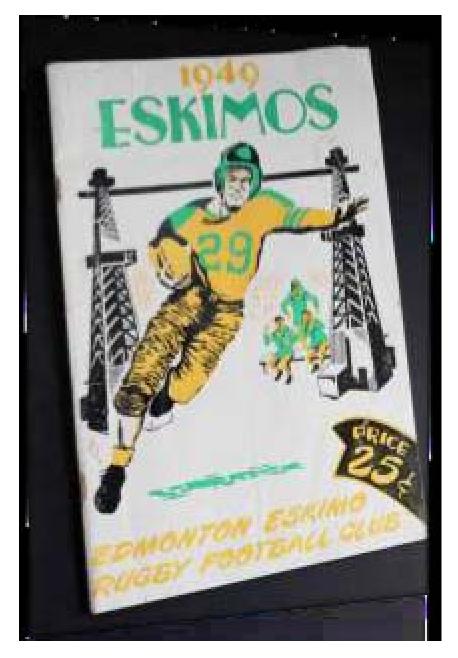
On the south side of the river also, are located a number of neat residences for the married employees of the Company and their families, all these being supplied with light and heat from the Residual Gas. Ready access is had to the works—by the employees living on the south side—by means of a swinging-bridge spanning the river. On the north side on an elevated plateau, to the west of the Operative Plants, are the Local Offices, and nearby is the residence of the Local Superintendent of the Operative Work. A Community Hall, for the social needs of the employees and their neighbors, a general store for the domestic requirements, houses for the single employees and a number of other buildings are in evidence; the whole, altogether, composing a smart little village, picturesquely situated and a "Humming Hive" of industrial life.

As the further development, as now under way, progresses, it is hoped and expected, that, in the near future, there will be a material expansion of this New Industry, through the increased production of both Oil and Gas. Such increase will mean much to the City, not only by the increased volume of Gas which will be available for fuel purposes, but also through the opportunities which will be opened up for the location here of other enterprises having co-ordinate interests with these pertaining to the production, refining and utilization of these Great Natural Products.

In conclusion, I may add that the considerable amount being expended in the further development of the properties should result in a very material increase in the production of both Oil and Gas, and, as a sequence, in the value of the Shares in the New Company—"Royalite Oil Co., Ltd." That which, may now appear as a fraction of no moment, may determine to be much more than a negligible quantity in the near future.

#### A. W. DINGMAN

Representative for CALGARY PETROLEUM PRODUCTS, LIMITED.



Edmonton Eskimo Football program from 1949 - note the goalposts

Gamble on Black Gold by Ken Linddell Originally from Alberta Revisited 1960 and reprinted in Chinook Arch – A Centennial Anthology of Alberta Writing 1967, pp. 286-288

A visitor to the Leduc fields today, perhaps nurturing a mental picture of the oil country of yesteryear, is surprised to find no derricks against the skies and no flares to light the night. Just the pumps and pipelines and tank farms that in great numbers all over the Province have changed the economy of Alberta and even the population from predominantly rural to urban. Leduc was followed by the adjacent Woodbend, Redwater to the northeast and Drayton Valley to the west to make Edmonton a brightly-lighted ship on a sea of crude.

When the discovery well was brought in it justified Imperial Oil's faith over a quarter century. In that time it had punched 133 holes and it hit the jackpot on the 134<sup>th</sup>.

The tool push, a rather inelegant name for the top man on the job, was Vernon H. Hunter, appropriately enough a native Albertan, born in Nanton and the son of a Baptist minister. In the years since joining Imperial Oil as an office boy in 1923, he had worked on so many costly and unproductive projects that he had become known in the industry as Dry Hole Hunter. These jobs had taken Hunter all over the prairies in the years that followed 1926, when he left inside work because of a re-arrangement of office furniture that left him terribly confused. At least that was his story. As a somewhat self-taught accountant he had just learned to remember the debit side of the ledger was the one next to the window when he arrived at work one morning and found his desk had been moved to the other side of the office. So Hunter left the inside for the outside, which was his first love, anyway, to learn the drilling business from the ground up – or down, if you wish.

His crew at Imperial Leduc No. 1 went far down, to 5085 feet in the D-2 zone to bring in the producer. One producer does not make a field. When two step-out wells became producers on the same day, May 21, 1947, on at 4370 feet in a third Devonian zone of dolomite, the gamble of a quarter century paid off.

To Anton Turta all of this was "very funny," in the sense it was difficult for the immigrant from the Ukraine to understand, not in the sense of being humourous. Crews began drilling all around Tony Turta. The lights on the rigs twinkled in the night like tall Christmas trees, but all was inky dark outside the window beside which the old man sat, shading his eyes from the glare of a single oil lamp as he read his newspaper spread out on the oilcloth-covered kitchen table.

In the history of the Leduc Field, Turta, who as a young man had walked from Edmonton to his homestead, became a man whose future destiny Albertans watched with the interest people show in a sweepstake in which a neighbor has drawn a ticket. The Turta family had shared in the exciting glow of discovery of oil because the discovery well was on property of a son, Mike Turta, who in a hasty check of records discovered that he held only the surface rights. The family became curious when the 160 acres occupied by the father, Anton, remained so dark in a land that at night looked like a vast area of midway towers.

A search of land titles office records revealed the quarter section, which Anton purchased in 1910, had been transferred by the CPR to Mike Podgotny in 1908. At that time a registrar had reserved only the coal rights to the railway. When this was discovered thirty-five years later a land titles clerk had changed the certificate of title to show the railway had rights to coal and oil. On that record the railway had granted an option to Imperial Oil to lease the oil and natural gas. Turta in the meantime had entered into an agreement over petroleum rights with a trust company. The case dragged through the courts for seven years and in the process became as exciting as a horse race as it concerned a possible fortune for a one-time immigrant who was now seventy-nine years of age.

The final round went to Turta when the courts decided that the land tiles clerk had exceeded his authority in changing the certificate.