PETROLEUM HISTORY SOCIETY

ARCHIVES

Newsletter of the Petroleum History Society *May 2002; Volume XIII, Number 3*

LUNCH AND LEARN MEETING

Noon, Wednesday, May 15, 2002 at the Palliser Hotel, Corral Room (Mezzanine Level)

Speaker: Andrew Nikiforuk, *Journalist*

THE LEXUS vs. THE OLIVE TREE:

A History of Industry and Landowner Relations since the 1960's and a critical examination of the Wiebo Ludwig Case

"At Trickle Creek in northern Alberta, Wiebo Ludwig thought he'd buffered his tiny religious community from civilisation, but in 1990 civilisation came calling. A Calgary oil company proposed to drill directly in view of the farm's communal dining room. Ludwig hadn't realised that his land ownership didn't include mineral rights. He wrote letters, petitioned, forced public hearings and discovered the provincial regulator cared little about landowners. … This is a taut, careful work of non-fiction that reads like a thriller and raises unsettling questions about individual rights, corporate power, police methods and government accountability. The reader comes to question whether Wiebo Ludwig can be dismissed as a zealot. And to ask "What would I have done in his shoes?"." from the dust jacket of "Saboteurs - Wiebo Ludwig's War against Big Oil" by Andrew Nikiforuk. Andrew Nikiforuk will be addressing our Society about his recent book and the issues that it raises.

Andrew works as a journalist for such magazines as Saturday Night, Maclean's, Canadian Business, Report on Business Magazine, Georgia Straight and Equinox. He has earned four National Magazine Awards, The Atkinson Fellowship in Public Policy and top honours from the Association of Canadian Journalists. Please join us for this talk.

TIME: Noon (receipts at the door), May 15, 2002.
PLACE: Palliser Hotel (133 - 9th Avenue S.E.) –Corral Room (but check marquee on arrival).
COST: $25 Members and $30 Guests (most welcomed) – please note new cost structure.

R.S.V.P. Clint Tippett, 691-4274 by noon Monday, May 13

In This Issue ...

Next fall's schedule begins with a Sept. 18 luncheon presentation by Leroy Field on "Early Developments in Directional Drilling".

if you missed the Annual General Meeting talk…

Global Climate Change – Past, Present and Future
Wednesday, March 27, 2002
by A. M. (Art) Patterson

...enjoy a condensed version of Art's presentation in this issue of Achives

THE PETROLEUM HISTORY SOCIETY
Calendar of Events

Next Director's Meetings: September 4, 2002 at the Glenbow Museum and Archives, Scalplock Room.

Board Strategic Planning Sessions: Your Board continues to wrestle with issues surrounding the future directions of the Society. An outline of our operations and aspirations has been published by the Daily Oil Bulletin. We thank them for picking this up as a newsworthy item and giving us some additional exposure within the industry. Thanks again to Director Neil Leeson for taking the initiative on this communications project.

Future Events: Our September 18, 2002 luncheon will be addressed by Leroy Field on the subject of "Early Developments in Directional Drilling". Details will be available in the September issue of Archives. If you have something that you've been working on and would like to present it at an upcoming luncheon, please contact one of the Board members and we'd be very happy to fit you in.

Society E-Mail Address: All members with e-mail service who have not already done so, please send in your address to Micky Gulless, Past President, Membership Committee at her address "micky@fuzzylogic.ca".

Membership: Membership stands at 105. Please consult your mailing label for the status of your membership. Thanks to Micky for her continuing hard work in maintaining our records!

Donations: Several of our members have generously made donations to the Society in support of our operations and projects. We will be making an effort to thank them individually but wish at this time to express our thanks for their support.

Canadian Society of Petroleum Geologists Convention Booth: The P.H.S. is planning to have a booth at the upcoming convention at the Telus Convention Centre June 3-5, 2002. The theme of the Convention is the 75th Anniversary of the CSPG and our participation is in recognition of this important historical event. We are also planning this event as an opportunity to recruit additional members. We need volunteers to man the booth and mingle with convention delegates. Time slots will be fairly short. As there are a number of our members who are geologists and/or CSPG members, we hope that they will be eager to get involved. Please contact Director Joyce Wright at 252-4143.

Executive and Board Nominations: If you would like to become a Board member – Executive position or Director – please contact President Clint Tippett at 691-4274 at your earliest convenience so that we can try to accommodate you.

Question: At a recent Board meeting a question arose concerning the production of aviation fuel at Turner Valley during the Second World War – a vital component of the war effort in that it supplied the numerous air crew training programs across the Prairie Provinces. The story is often told involving the Turner Valley Gas Plant and the high security surrounding its operations (guards, searchlights) during that period. This is in contrast to the apparent lack of security at one or more of the refineries that operated in the field using crude oil feedstock from the oil wells in the oil leg of the field. If today's type of operation is valid, one would have expected the refineries to be the source of the aviation fuel, perhaps supplemented with a small component of condensate from the Gas Plant. Was there something special about this condensate? Were the refineries also guarded? If anyone can shed some light on this question it would be appreciated. Replies to the Society will be published either with attribution to source or anonymously.

P.H.S. Website Update: Website coordinator Micky Gulless has recently added an article to the website concerning Alberta's First Natural Gas Discovery in 1883. Please refer to http://www.petroleumhistory.ca/history/firstgas.html

"Notes on Global Climate Change – Past Present and Future"

An address to the Petroleum History Society Annual General Meeting
By A. M. (Art) Patterson

March 27, 2002

To a geologist the current concerns over climate change seem completely misplaced. The climate of the world has always been changing and actually a lengthy period of stability would be anomalous. A diagram of climate change during the last billion years has been compiled by J.J. Veevers of the University of Ottawa. Copeland, Powell and Reasoner of the University of Calgary have shown the retreat and suprising advance of the Opabin Glacier in the general Lake Louise area over the last ten thousand years.

A figure from the 1995 report of the International Panel on Climate Change (I.P.C.C.) shows the "Medieval Warm" period from 1000 to 1350 AD. During that time the Earth was warmer than it is today. Following the "Medieval Warm" was the "Little Ice Age" that decimated the Danish colonies in Greenland and Iceland because they were completely surrounded by sea ice. The "Little Ice Age" also caused crop failures in Europe bringing about malnutrition and illness – and setting the stage for devastating plagues. Well worth noting is that the "Little Ice Age" coincides with the "Maunder Minimum" - a 70 year period in which there were no sunspots. The Sun's radiation is greatest during maxima of sunspot activity. The words "perceived warming" are used in the presentation. Most of the weather stations used to chart temperature trends are located at airports or in urban areas where acres of tarmac and the presence of concrete and brick buildings have caused heat to be absorbed, hence skewing the temperature readings.

In 1988 James Hansen of N.A.S.A. published the concept that CO2 was a greenhouse gas. The burning of fossil fuels was seen as releasing CO2 into the atmosphere and increasing the "Greenhouse Effect". This theory was immediately accepted, the I.P.C.C. was formed and huge sums were spent on research on ways to reduce the venting of CO2 into the atmosphere. Predictions of future climate changes were made using computer models known as General Circulation Models (G.C.M.'s). These results were almost universally accepted with little critical review. Predictions of drastic warming, particularly in polar regions, were made. Various environmental groups seized on the fear of "Global Warming" to enhance their treasuries. The controversy continues today.

These notes were provided by Art Patterson. His talk was illustrated with numerous figures, copies of which have been provided to the Editor. A lively discussion followed the talk. Many thanks to Art for his provocative presentation.

Sour Gas University:

Pioneer Jumping Pound Plant turns 50, Still Going Strong

By Graham Chandler

(Reprinted from the November 5, 2001 issue of Oilweek Magazine (pp. 63-66) with thanks to and permission from Gordon Jaremko, Oilweek and JuneWarren Pub.)

At the junction of two creeks 30 kilometres west of Calgary one morning in 1951, Alberta Mines Minister Nathan Tanner pulled on a pair of gloves and turned a valve. The first official cubic foot of natural gas from Shell Canada's Jumping Pound processing plant hissed its way to Calgary and into the history books.

This year the operation celebrates a golden jubilee studded with firsts for the country's natural gas industry: first gas field discovered largely on seismic mapping, first unitized field production and first sulphur production. Along the way, Jumping Pound pioneered ways of dealing with the industry's most controversial item "sour" gas, steeped in hazardous hydrogen sulphide that are still used today.

Shell Oil Canada bought the Jumping Pound acreage in 1942 when money ran out for celebrated independent oilman R.A. (Bob) Brown, Jr., after he started the first drilling there. Shell's first Jumping Pound well was unsuccessful. But extensive seismic information and the three porous zones it bore through promised significant amounts of hydrocarbons. The second well, 4-24-J, is now the stuff of legend. It penetrated a zone called Madison just as Alberta families decorated their Christmas trees in 1944. The drillers' present to Shell was a three-hour drill stem test that yielded 20 million cubic feet per day of wet gas. This was no mere stocking stuffer. The well hit almost one trillion cubic feet of natural gas, until then the largest find in Canada.

This one was not wasted. In the 1920's, almost a trillion cubic feet of gas was flared at Turner Valley as an unwanted byproduct of oil wells. Neither government nor industry wanted to witness such a colossal waste again. Shell and the chairman of Alberta's Energy Resources Conservation Board, Edward Boomer, set an industry precedent by establishing the first unitized field production agreement in Canada at Jumping Pound: Pool Permit #1.

Shell drilled three more wells but shut the field in for lack of markets. At the end of the Second World War, Royal Dutch-Shell Group faced costly refinery and pipeline rebuilding in Europe and the Far East. Western Canadian exploration was curtailed. Jumping Pound was put up for sale for $6 million. Imperial Oil and others window shopped but there were no takers. The gloom was short-lived. The 1947 Leduc oil strike was quickly transforming Alberta's energy scene and Shell reversed its decision.

At the time, Jumping Pound represented 25% of Alberta's proven plus probable gas reserves. With no exports approved, prices were going nowhere. Many Albertans opposed exports. They wanted a secure domestic supply and were afraid exports would drive up prices. Industry countered that permitting exports would spur discovery of new fields.

By 1949, petroleum and natural gas sales displaced liquor as the Alberta government's biggest revenue source. But still no gas exports were approved. Hank Snow was crooning I'm Movin' On and Shell turned to the local market. Co-incidentally, Canadian Western Natural Gas (now Atco Gas) was shopping for a new Calgary supply. In mid-1950, Shell agreed to sell CWNG up to 20 million cubic feet per day of Jumping Pound gas for an initial 10-year period, at a little over ten cents per thousand cubic feet.

Shell contracted Fluor Corp. of Los Angeles to design and build a processing plant. It was to remove the water and "condensate" or gasoline-like liquid present in the gas as vapour, followed by hydrogen sulphide and carbon dioxide. Then gasoline was to be extracted from the sweetened gas stream. Finally a sales-gas dehydration plant was needed to prevent condensation of water vapours and formation of hydrates. The plant was designed to grow, with capacity installations possible while production continued. Fluor engineers were confident their California experience would serve the Canadian project well.

Construction went smoothly and the plant opened on time, with an initial capacity of 20 million cubic feet per day and 15 employees. By the end of 1951, the plant also served the Canada Cement plant at Exshaw and the town of Banff, and Shell was well into stepout drilling. Two additional wells were sunk, one to the north and one to the south.

The Canadian environment soon gave the plant hard tests. A freak late-spring snowstorm shut down the pump engines at the creek. The process systems scrubbing out the hydrogen sulphide and carbon dioxide, absorbing the liquid hydrocarbons with oil, and taking out the water with silica gel worked only when the climate was decidedly California-like. A winterization program was under way, but when temperatures during the wicked winter of 1951-52 plunged, gas hydrates started freezing up everything in sight. Buildings intended to keep things warm had not yet been completed. Crews worked around the clock with steam hoses and kept the gas flowing into Calgary.

It seemed neither Shell nor Fluor anticipated the power of occasional Alberta deep freezes. "They built it to specifications - they did what they were contracted to do," recalls Bill Fisher, a mechanical engineer hired by Shell in 1952 to help sort out the problems. Fisher, who retired from Shell in the 1980's, arrived as a greenhorn engineer fresh out of the University of Toronto. Jumping Pound was one of the first sour gas plants in Canada and it was a massive challenge. "We were just developing a knowledge of the sour gas industry," he recalls. "It was a new industry. Other companies came up to learn from us, like the Gulf Canada guys from Pincher Creek. People designing new plants didn't really know sour gas."

Hydrate problems at Jumping Pound were one surprise. Hydrates are crystalline compounds formed by the chemical combination of gas and water. They look like snow and can form well above the freezing point of water. In an attempt to counteract them, Jumping Pound operators heated wellhead gas by circulating hot diesel fuel down between the well casing and tubing. But gas hydrates were not well understood, and especially not their behavior in cold climates. Most texts and gas graphs were based on the sweeter gases in the United States. Joe Labuda, Shell's plant corrosion engineer at the time, produced some of the industry's first sour gas hydrate curves in 1952 based on performance at Jumping Pound.

Temporarily, hydrogen sulphide from the plant was incinerated to form sulphur dioxide, which was vented. But months earlier, Shell announced other plans. North American demand for sulphur outstripped supply by 20%. Sulphur was critical to the West Coast pulp and paper industry (20% of its production was sulphite pulp for making newsprint and rayon) and all of it was being imported from Louisiana and the Texas Gulf. But the Korean War and its need for munitions had prompted the U.S. government to restrict sulphur exports. Canada had no indigenous sulphur production. Here was Shell's market in waiting. A contract was signed with Powell River Co., on behalf of a group of British Columbia pulp and paper producers, to take all the Jumping Pound production.

The sulphur plant, also built by Fluor, officially opened on a muddy day in June 1952. It initially produced 32 tons per day of 99.9% pure sulphur. For each million cubic feet of raw gas entering the plant, a process known as the modified Claus method produced 1.5 tonnes of sulphur. Liquid sulphur was squirted into a vat where it was allowed to harden. As the vat filled, the sheet metal walls were made higher. At a certain height the walls were stripped away, leaving a giant yellow block of solid sulphur. But a 4,000-ton chunk was impossible to ship. So it was dynamited, scooped up by front-end loaders, piled on trucks and hauled to the railhead near Cochrane.

Dynamiting activity and the presence of sour gas heightened safety concerns. There were no standard safety procedures or regulations in place to deal with high-pressure sour gas. "I learned to respect H2S after one day I was taking pressure readings," recalls Bill Roman, a long-time Jumping Pound engineer who arrived along with Fisher. "I was using the same gauge for two different places (to minimize error), and when I removed the gauge from the

first valve there was a small amount of gas trapped in the tiny space between the valve and the gauge. Well, I got a whiff of that and I learned pretty quick. It took a couple of hours to recover." Roman says he became an unofficial safety engineer after that. "There was no formal position in those days, but even if there was it would have been useless because you needed to have practical experience with it. We started having safety meetings. It became everybody's business. That's how our safety department grew, out of Jumping Pound."

Many of the procedures the Jumping Pound people first developed have become standard in the industry. When Roman retired from Shell, he became an in-house contractor for Royal Dutch/Shell Group writing up procedures for gas plants from Germany to Oman. "Out of all this came HazOps and technical safety audits," he says. "What we learned at Jumping Pound was how to do them, where to look for trouble. I think we helped avoid a lot of serious accidents." Some of the oldtimers even called the plant “Jumping Pound University”.

The decade of the fifties saw Jumping Pound grow in step with the Alberta natural gas industry. In June 1953, Calgary's evening crowds were lining up to see Marilyn Monroe in Gentlemen Prefer Blondes, but during the day, workers were wrapping up the plant's first expansion boosting output to 35 million cubic feet per day. Wells were stepped out, some north of the Bow River on either side of the original Banff highway (now 1A, the scenic Bow Valley Parkway). Just over a year later the second expansion raised capacity to 60 million cubic feet per day. A Calgary structural engineer named Jack Abugov designed what was the longest pipeline bridge in Canada to bring gas from across the river.

Expansions of the 1950’s included a gas stabilizing unit for higher production of natural gasoline. Shell sold it to local refineries and bought back the finished product, forming the nucleus of the company's gasoline marketing organization in Alberta. By mid-decade its new service stations were filling the tanks of Ford's flashy '55 Thunderbirds.

During the Cold War years, increased gas deliveries to Calgary and southern Alberta meant more sulphur and Shell again found itself Johnny-on-the-spot. The U.S. was building up its nuclear arsenal and Canada was gearing up for peaceful atomic power. Both needed uranium, and uranium needed sulphur to make sulphuric acid to leach the ores. Canada's uranium mining industry was the world's fourth largest and required a ton of sulphur to make every three tons of sulphuric acid. It was a ready market, so in late 1954 Jumping Pound's sulphur plant was extended to 80 tons per day from 30.

In 1957, Shell finished a third expansion, to 90 million cubic feet per day, supplied by 11 Jumping Pound wells and new production from the Sarcee Field to the south. Jumping Pound had produced over 75 billion cubic feet of gas. The industry was humming and Shell had a new discovery at Waterton.

Jumping Pound experience made crews into sour-gas plant experts. The two intrepid engineers, Bill Fisher and Bill Roman, were sent to San Francisco to consult with Bechtel Corp. on design for Shell's new Waterton gas plant. Waterton gas had a much higher sulphur content. A new method for dealing with hydrogen sulphide, called Low Temperature Flashing, was designed. "After our lessons at Jumping Pound, we designed Waterton to operate down to –90 degrees F," says Roman. "Locations of valves, control systems, emergency systems like remote shutdowns were all learned from Jumping Pound." On Feb. 23, 1962, the Waterton Gas Plant went into production, putting out 180 million cubic feet per day for California.

California soon gave the world hippies, daisies and demonstrations. As the Baby Boomer antics spread, Jumping Pound sat quietly back and produced, year after successful year.

Eventually, like the Boomers, the plant started to show its age. Electrical and control systems were worn and no longer state-of-the-art. Safety and environmental concerns were on the rise. New markets were developing for sulphur, ethane and liquids. A massive modernization, begun in 1981, saw a complete electrical system upgrade and new emergency power generator. A new control system enabled operators to manage the plant from one command room. A new sulphur plant converted 360 tons a day into pea-sized pellets for nascent Far East markets. Topping it off was an ethane recovery facility and improved propane and butane recovery.

Shell Jumping Pound Gas Plant 1951

Current design processing capacity **Actual amounts processed (Sept/2000)**

Sales gas
6000 million cubic metres/day 3700 million cubic metres/day
- shipped via pipeline to two distribution companies (ATCO and TransCanada)

Condensate
550 cubic metres/day 260 cubic metres/day
- shipped via pipeline to refineries for to be manufactured into gasoline

Propane
180 cubic metres/day 140 cubic metres/day
- shipped via truck to supply residential heating needs in central Alberta and B.C.

Ethane
525 cubic metres/day 110 cubic metres/day
- shipped via pipeline to the Alberta Petrochemical industry at Joffre

Butane
150 cubic metres/day 370 cubic metres/day
- shipped via rail car to Washington State for use as refinery feedstock

Sulphur
619 tonnes/day 450 tonnes/day
- shipped via railcar to Florida for use in the fertilizer industry

Production information courtesy of P.H.S. Member Laurieanne Lynne, Shell Canada

A Visit to a Wooden Rig

By
Debbie Knall, P.H.S. Director

Last fall, at the September 2001 PETROLEUM HISTORY SOCIETY lunch and learn meeting, Garnet Edwards talked about the development of cable-tool rigs and their use in the early petroleum industry. This was my second opportunity to hear Mr. Edwards share his enthusiasm for the old wooden rigs, and as he spoke, I realized that I had a great deal yet to learn, about the science, art, and history of Alberta petroleum production.

In 1920, my great grandfather came from the oilfields of southwestern Ontario to work at Turner Valley, but only recently have I begun to comprehend the tremendous labour and skill that he and his fellows invested in the industry.

At the Palliser last September, two of Mr. Edwards' comments did register with me. One was his suggestion that audience members visit the original Calgary Petroleum Products (a.k.a. Dingman #1 and Royalite #1) rig on display at Heritage Park.

Hoping to better understand some of what Garnet had talked about; I headed to Heritage Park and came closer to a rig, cable or otherwise, than I had ever been before.

Many other people strolled by on that golden September Sunday, and some stopped at the cable-tool site. Their attention was caught by the rig's enormous bull wheel, some 20 feet in diameter, and noted that this huge yet simple machine, transferred energy to the distinctive walking beam, and then to the drill cable.

But what, some wondered, drove the belt moving around the bull wheel? Then the site interpreter would point to the engine house where, in cable-tool days, coal was heated to produce steam. For safety reasons, steam production actually took place 50 feet or more from the rig, but at Heritage Park the steam house stands just a few feet from the rig, where an electric generator now provides power.

Eager to understand the work that had occupied three generations of my family, I asked the interpreter question after question. Finally, Mr. Roussell brought out a rough display he had created. On old, flattened-out, cardboard boxes were glued photocopies diagramming a cable-tool rig and all the equipment used in this drilling process. Typical of schoolteacher resourcefulness Mr. Roussell had employed in his previous job, the displays were strung together with twine. But, whether because they lacked sophistication or, because they did not fit curatorial guidelines, Park staff had asked Mr. Roussell to put away his displays.

According to Jeannette Tyle, Heritage Park's Manager of Funding Development, story-boards at the site do provide enough information for the casual visitors to whom the park caters. However, ENCANA (formerly Pan Canadian) and other generous sponsors of this Site might see value in providing a display such as the one hand-crafted by Mr. Roussell. Diagrams included in Jack Porter's 1995 paper would also enhance understanding of the site.

Rather than detracting from the historical "feel" of the park, a small, but permanent, descriptor would enhance interest in our petroleum history. People who stop to read about this history may actively participate in its preservation. Thus, in on-going efforts to expand PHS membership, Heritage Park's cable-tool rig site would be an excellent place to make available Petroleum History Society brochures.

People interested enough in petroleum history to spend a sunny September Sunday looking at an old cable-tool rig may very well support other petroleum history projects in the dead of winter.

Of course, interest in cable-tool rigs is not new to the PHS. In 1995, Society members had an opportunity to take a trip to the Heritage Park site. For this event, honorary director Jack Porter prepared a paper detailing the operation of the "American Standard Cable-Tool Drilling Rig". Unlike rotary drills, cable-tool bits pounded and churned through rock, and Porter describes the frequent stops necessitated to bail cuttings from the drill hole.

Jack noted that, “before the advent of subsurface stratigraph(y)”, experienced drillers were able to determine “the nature of the bedrock as the bit passed from one rock type to another". He wrote that, as the cable moved up and down, a driller would intermittently place his hand on the cable and so be able to feel the drill bit repeatedly impacting the bedrock.

Industry people familiar with current day exploration and drilling practices may be skeptical about a man’s ability to virtually sense when oil-bearing rock has been reached. But Porter’s paper states that cuttings taken from the drill hole were regularly examined by cable-tool drillers who even kept rudimentary logs:

> uncanny descriptions of sedimentary rock types, although primitive by today’s standards, (which) are nevertheless strikingly interpretive. Bentonitic shale was described as ‘rock putty’ or ‘soapstone’, sideritic concretions as ‘ironstone’, red or ferringinous shale as ‘fireclay’, porous friable sand as ‘quicksand’ … fossiliferous limestone as ‘lime shelly’, …

When visitors at the Heritage site ask whether early drillers studied rock samples, Roussell directs their attention to the samples on display. Then, striding over to the rust red cords of the cable, he rests his hand on the iron rope rising steadily up and down. Almost reverentially, he reiterates what Porter and Edwards have said before him. This was the real test. Hands on the pounding cable, an experienced driller could feel when oil-bearing rock was reached.

As many know, one of Garnet Edward's undertakings through the years has been to build models cable-tool rigs. At one time, Garnet himself was even an interpreter at the Heritage Park site. Now, he told the Petroleum History Society audience, a retired teacher was doing an excellent job.

In fact, interpreter Louis Roussell has studied everything he can get his hands on about cable-tool rigs and like all good teachers, he responds to people on their terms, listening, and explaining only what a particular individual wants to know.

Both my understanding of cable-tool rigs, and my respect for the men who operated them, grew that day. On May 11, Heritage Park will again open its gates to weekend visitors, and from the long weekend in May, until Labour Day, the park is open daily. For the first, or the hundredth time, you may stand before a structure of simple yet ingenious technology, recalling a bygone time when, with little but hope and stoicism, men laboured to find oil.

Visiting the cable-tool rig site alone is worth the park admission of $11.00. With old friends, or young children, you may stand before the original Calgary Petroleum Company Cable-Tool rig and contemplate a time when the monotonous process of cable-tool drilling was tolerated, and the wisdom of those without formal education was valued.

Then, you might consider the second thing that stuck with me from Garnet Edward’s talk. It may be trite, but after having spent an afternoon at Heritage Park, I think it is true: in the oil fields of eighty years ago, said Garnet, it was the rigs that were built of wood, and the men that were made of steel.

Postcard image on next page courtesy of P.H.S. member Bob Rintoul. Original is from noted early photographer Lane, High River. For other examples of his work, visit the Twin Cities Hotel, Turner Valley Field, Longview, Alberta.


View of Turner Valley, Alberta