

PETROLEUM HISTORY SOCIETY

ARCHIVES

Newsleher of the Petroleum History Society Dalhousie Oil Co. Ltd.

By Aubrey Kerr

day the name Dalhousie is best known for the university founded in 1818 and situated in Halifax, Nova Scotia. That seat of learning has turned out many illustrious members of the Bar. One such personage was Richard Bedford Bennett who made his fortune in Calgary not only as a lawyer but as an entrepreneur. Bennett, remembering his alma mater borrowed the name for a company which had long since vanished from the oil scene (with good reason).

Dalhousie's predecessors Southern Alberta/Alberta Southern (take your pick) were pushed by two promoters Livingston and Pugh. They completed a wet gas well in shallower Mesazore sands in 1916. Production declined to zero ultimately.

These Livingston and Pugh properties could have easily been rolled into Royalite Oil which had emerged

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Dr. John Campbell (Cam) Sproule

rofessional geologist Cam Sproule had an enormous influence on the Canadian petroleum industry.

His early career included stints with the Geological Survey of Canada and with a Standard of New Jersey subsidiary, International Petroleums. His work with International took him to South America for several years. He began working with Imperial Oil just before the Leduc discovery.

Dr. Sproule founded the consulting firm Sproule Associates Limited in 1951. In addition to playing an active role in early exploratory and development in the western provinces, he mounted the first geological parties in Canada's Arctic Islands.

He was a prime mover in the creation of federal policies on Arctic exploration permits. Through sheer determination and faith in the potential of the north, he played a major role in getting government and industry partners to form Panarctic Oils Ltd.

Dr. Sproule was the first Canadian president of the American Association of Professional Geologists.



from the ashes of Calgary Petroleum Products. Despite this, in 1925 the company was given a Dominion charter but controlled by Royalite.

In 1928 with a great deal of fanfare, the renamed Dalhousie #1 was successfully deepened to the Mississippian. The company continued until 1937 ending up with a series of dry holes and a \$3 million debt to Royalite. The closing deficit on December 31, 1937 was \$113,000. It is quite certain that Royalite took full advantage of the loss position which it absorbed and wrote off against its very satisfactory profit in those years. Remember, Royalite had a virtual monopoly over production in the Valley.

Also in 1928 both Dalhousie and J. H. McLeod, its general manager, received a great deal of publicity in the Imperial Oil Review of 1928. In the stilted language of that day: It was almost inevitable that Mr. McLeod should become an oilman and a good one at that, having been born in Petrolia at the time he was born. Indeed if you hadn't worked in Petrolia you weren't much good. McLeod joined Imperial Oil in 1920 and shortly thereafter he was dispatched to the west as drilling foreman and continued to serve in that capacity until March 1921 when Royalite was formed.

Mr. McLeod's description of Dalhousie #1's deepening into the Mississippian in the 1928 Review is no less flowery: The Dalhousie Company being of comparatively recent origin might lead the casual reader to conclude that it (#1) was a social upstart, one of the 'nouveau riche' which had taken a mean advantage of the work of the pioneers, reaping what others had sown. That however is not the case as #1 is a lineal descendant of the patriarch of Turner Valley tracing its ancestry back to the boom days."

After several very difficult fishing jobs including the cable bit being lost at 3600, it was decided to complete the well with a diamond drill, and a giant Sullivan PK machine was secured for the task. Once more the hole was cemented and the diamond drill strutted its stuff. At 3,673 feet, a very hard formation was discovered and before this could be penetrated 4 1/2" casing had to be run. It was thought that these hard beds indicated a near approach to the dolomite but the steep dip was misleading. It was not until 4,410 feet that producing limestone was first encountered. Once satisfied that success was within reach, the string of 3 inch interior upset casing was run and cemented and 'drilling' continued to 4,565 feet where the productive horizon was reached. The tremendous gas pressure encountered made the withdrawing of the diamond drill from the hole hazardous. This difficulty was aggravated by the drilling rods becoming seized".

"By patience, assiduity and ingenuity, the task was finally accomplished and Dalhousie #1 had not only the honour of ranking as one of the elite of Turner Valley but the added distinction of being the first of the Naphtha gas fraternity to be brought in under perfect control. The initial production was 19.5 MMcf per day of gas from which was recovered 361 barrels of crude. Gas pressure and consequent freezing in conjunction with the small diameter of the hole has caused a falling off but #1 in spite of its fluctuations hopes to continue in the big league."

The PK machine was essentially a coring device using diamond studded coreheads with a hydraulic pulldown so as to exert pressure on the drilling string ("rods"). It was thus possible to drill into a high pressure zone, confident that the well would not blow out because of the stuffing box. But with the advent of the rotary drill, this undersized underpowered device which could only be used to relatively shallow depths was doomed and its demise was not long in coming. The author's biggest job was to find someone who had worked on such an ancient device. The late Lloyd Stafford remembered having used it at a couple of wells in the Valley. He described it as 'slow, puny and more of a mechanical curiosity." Macaroni strings were used and because of the slowness there was little wear and tear. Tom Wark also recalls using the device on the southern plains in shallow holes back in the 30's. Thus evolution of drilling took a sideways step with the P.K. but sadly there are no prototypes left that can be displayed in a museum.

And what of J.H. McLeod? At the time of his death, June 12, 1944, he was president of Royalite and production manager for Imperial Oil Ltd. The Herald obituary described him as "one of the leading figures in the Canadian oil industry." and "a pioneer, having been associated with A. W. Dingman and W. S. Herron." We can be grateful for his having provided a written account linking long, forgotten events and equipment to a company nobody remembers.

The Publisher

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Submissions on historical topics related to Canada's petroleum industry are welcome. For information on membership or society activities, contact society president W.R.S. McLellan (403) 290-2840.

Tar on his Boots (An Account of Oil Sands Scientist Dr. Karl Clark)

Dr. K.A. Clark spent the major part of his professional life -- from 1920 to 1950 developing the science of producing oil from the Alberta oil sands. During the first decades of the Alberta Research Council -- the first research council to be established in Canada. Clark showed remarkable insight in developing an astute understanding of the fundamental position of the hydrocarbon in unconsolidated sands. This led ultimately to a classical example of industrial technology transfer when Clark, as a very special scientist, with tar on his boots, saw his discoveries lead to the first mega project of Western Canada in the late 1960's.

Dr. Gordon Hodgson, Professor Emeritus of the University of Calgary, will present a talk on Dr. Karl Clark, pioneer oil sands scientist, at the next Petroleum History Society Luncheon on Wednesday, November 29th at 12:00 noon in the Palliser Hotel. Dr. Hodgson has had a long association with Dr. Clark, beginning in 1944 when he worked as a summer student under Dr. Clark at the Research Council of Alberta.

Dr. Hodgson has had a distinguished career in his own right. He worked at the Alberta Research Council for 23 years, during which time he rose to become head of the Petroleum Research Division. In 1967 Dr. Hodgson went to work for NASA as a Senior Research Fellow in the Apollo Space program where he performed analyses on moon rocks. Since 1969 he has been a member of the University of Calgary faculty. He is also a Senior Research Associate of the Arctic Institute of North America.

President's Report

won't repeat the discussion of this society's projects in progress from the last issue, but a couple of items nonetheless deserve review.

More than 300 copies of Archives are distributed to the society's general membership, the CPA board and the media. Also, the noon luncheon meetings have been quite successful. Last year the society enjoyed the presentations of such notables as James H. Gray, Arne Nielsen, Larry Clausen and Gordon Hodgson. Oilweek's one-time phantom cartoonist was the guest speaker at last year's annual general meeting.

Membership in the society continues to grow, standing at 27 institutional members (six of these are sustaining) and 96 individual members (31 of these are sustaining.)

Bow Island (The first in a series on the topics used for the association's historical pin series.)

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he Bow Island gas field was the first big discovery in one of the earliest commercial oil and gas exploration ventures in Alberta. The field proved capable of large scale commercial development and resulted in the first long distance pipelines to transport abundant, inexpensive natural gas energy to communities in southern Alberta.

In 1908, drilling began at the Old Glory discovery well at Bow Island (SW 1/4 15-11-11 W4M). The well was cable tool drilled by W.R. "Frosty" Martin and H.P. "Tiny" Phillips, under the direction of Eugene Coste for the Canadian Pacific Railway Company. In February 1909, the well discovered gas in great quantity from 1898 to 1915 feet, measured at 8.4 million cubic feet a day. This was just the second well drilled in Eugene Coste's program for the Canadian Pacific Railway Company. The drilling program continued and enough gas was found to make pipelines feasible.

On February 14, 1911, Eugene Coste incorporated The Prairie Fuel Gas Company, Limited and on April 1, 1911, this company took over the wells and drilling from the Canadian Pacific Railway Company. On August 9, 1911, The Prairie Fuel Gas Company merged with A.W. Dingman's Calgary Natural Gas Company and The Calgary Gas Company, forming The Canadian Western Natural Gas, Light, Heat and Power Company Limited -- now called Canadian Western Natural Gas Company Limited. The new company was bound by agreement with the Canadian Pacific Railway Company to continue the drilling program and to construct and maintain pipelines to supply Calgary and Lethbridge, and eventually other communities, with natural gas.

Construction of the 16-inch pipeline to Calgary began on April 22, 1912, and was completed in only 86 days. Another leg of the pipeline reached Lethbridge on July 12, 1912, and public celebrations were held in both places.

The Bow Island pin depicts the celebration in Calgary on July 17, 1912, when 12 000 Calgarians gathered at the intersection of Ninth Avenue and the Canadian Pacific tracks to watch Mrs. Eugene Coste light the inaugural flare with a roman candle. Distribution of natural gas to Calgary consumers began on July 24, 1912.



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Questionnaire Petroleum History Society Lunches	
I. How interested are you in attending bi-monthly	v lunches and listening to guest speakers?
II. How frequently would you like to see lunches four times per year	held? every two monthsmonthly
III. What topics are of interest to you? 1General exploration 2General production 3Major pools 4Company histories 5Well-known individuals 6Significant events 7Government/industry relations 8Service industry 9Other (please describe)	
IV. Is the location of the meeting (Palliser Hotel)	satisfactory?
V. Additional Comments:	We have developed this questionnaire to help with our programming during the coming year. Please fill it in and send it to Petroleum History Society,
Your name (optional):	3800, 150 6th Ave. S.W. Calgary T2P 3Y7



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